
12. INDEPENDENT MARKET RESEARCH REPORT

(Prepared for inclusion in the Prospectus)



VITAL FACTOR CONSULTING

Creating Winning Business Solutions

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12 March 2004

The Board of Directors
Boon Koon Group Berhad
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Seberang Perai Selatan
Pulau Pinang
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Dear Sirs/Madam

Independent Assessment of the Rebuilt Commercial Vehicle Industry in Malaysia

The following is a summary of the **Independent Assessment of the Rebuilt Commercial Vehicle Industry in Malaysia** prepared by Vital Factor Consulting Sdn Bhd for inclusion in the Prospectus of Boon Koon Group Berhad (herein together with all its subsidiaries will be referred to as Boon Koon Group) in relation to its proposed listing on the Second Board of the Malaysia Securities Exchange Berhad.

1. Background of Boon Koon Group

- Boon Koon Group operates within the Rebuilt Commercial Vehicle Industry and is principally involved in:
 - Manufacture of Rebuilt Commercial Vehicles
 - Manufacture of Reconditioned Commercial Vehicles
 - Manufacture of Bodyworks for Commercial Vehicles
 - Trading of Commercial Vehicle Parts, Components and Accessories
 - Value-added Reseller of New Chassis Cabs and Equipment
 - Provision of Repairs, Maintenance and Administrative Services
 - Provision of Financing and Insurance services.

- For the financial year ended 31 December 2002, the Group recorded total revenue of RM59.8 million. The manufacture of Rebuilt Commercial Vehicles provided the highest revenue contribution accounting for 54.4% of total revenue.

2. Industry Overview

- The Rebuilt Commercial Vehicle Industry falls under the total umbrella of the Automotive Industry.

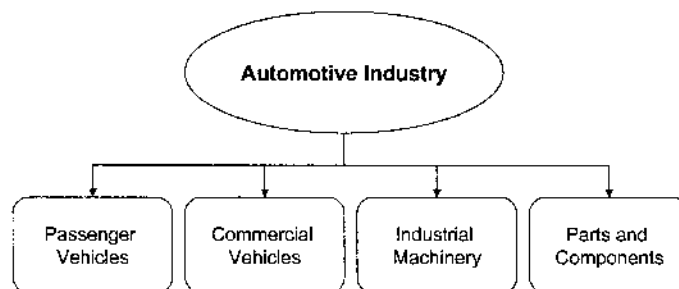
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- The Automotive Industry comprises the following sub-sectors:
 - manufacture of motor vehicles;
 - assembly of motor vehicles;
 - manufacture of composite bodies or sports cars;
 - manufacture of parts.

(Source: Automotive Unit of Industries Division, Ministry of International Trade and Industry)
- The Rebuilt Commercial Vehicle Industry is part of Malaysia's Automotive Industry and plays a role in providing stimulus and support to the Automotive Industry cluster.
- The Rebuilt Commercial Vehicle Industry helps achieve Malaysia's aim to promote indigenous products and industries. As such, the success of the Rebuilt Commercial Vehicle Industry would reduce imports as well as meet the needs of a segment of the business community that are looking for alternatives to new Commercial Vehicles.
- The Automotive Industry comprises four segments as follows:



- Commercial vehicles are primarily used for the carriage and transportation of goods, and mass transportation of people. Commercial vehicles include, buses, vans, lorries, trucks, prime movers, and specialised commercial vehicles, for example, road sweepers and fire-fighting trucks.
- The Automotive Parts and Components Industry is an important element within the Automotive Industry. Policies such as the Local Material Content Program and various incentives including pioneer status consideration and investment tax allowance were implemented by the Government to encourage the development of Automotive Parts and Components Industry in supporting the Malaysian Automotive Industry.
- At present, the parts and components manufacturers still source some of the sub-component parts and raw materials from overseas. Since the launch of the two national car projects in Malaysia, a number of small and medium size parts and components manufacturers have emerged. This represents a movement towards establishing significant foundation for further development of the Automotive Parts and Components Industry in Malaysia.

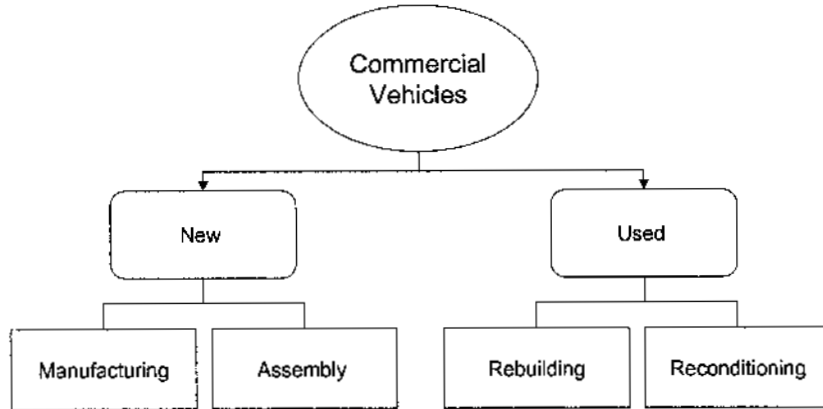


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3. Structure of the Rebuilt Commercial Vehicle Industry

- The Rebuilt Commercial Vehicle Industry, which falls under the umbrella of the Automotive Industry, can be segmented as follows:



New Vehicles

- New Commercial Vehicles refer to vehicles that are manufactured from new components and parts that involve the production of chassis as well as the assembly of complete vehicles.
- Establishments that are involved in the manufacturing of vehicles generally manufacture or source bodies, parts and components by themselves. Local establishments, which are classified under this category, include Proton and Perodua, which are primarily involved in the passenger car sector.
- The assembly of vehicles involves the installation of parts and components excluding bodies, engine or gear box installations.
- Imported vehicles or machinery in the form of completely knocked-down (CKD) involving assembly, fall under the assembly of vehicles. These types of vehicles are assembled utilising assigned parts and components of the exporters. The establishment of vehicle assembly plant involves local and overseas partnership and include the following companies:
 - Swedish Motor Assemblies Sdn Bhd assembles Volvo;
 - Asia Automobile Industries Sdn Bhd assembles Peugeot and Mazda;
 - Tan Chong Motors Holdings Berhad assembles Nissan cars.

These companies assemble both passenger and commercial vehicles.

Used Vehicles

- Used Vehicles are primarily categorised into two areas:
 - Second-hand Commercial Vehicles
 - Rebuilt and Reconditioned Commercial Vehicles.

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- Second-hand Commercial Vehicles has very little value-adding and primarily involve the transfer of ownership for an agreed sum of money.
- Rebuilt and Reconditioned Commercial Vehicles, however, undergoes significant value adding in extending the useful lives of Commercial Vehicles.
- The following processes are generally used to extend the useful lives of used vehicles and machinery:
 - **Reconditioning:** Primarily involves the overhaul of engines and components, replacement of faulty and worn-out parts, and recalibration of other working parts.
 - **Rebuilding:** Rebuilding involves four processes of refurbishment, reconditioning, reengineering and reassembly. Refurbishment includes repainting works, installation of reconditioned accessories, parts and components such as seats, upholsteries, and the redecoration of cabin interior works. Reconditioning involves the overhaul of engines and components, replacement of faulty and worn-out parts, and recalibration of other working parts. Reengineering involves redesign and modification works, including, where required, modification of chassis engine capacity and cooling system, and fitting of turbocharger, intercooler, and electronic control system. Reassembly is the final process where all the engines, parts, components and accessories are reassembled and installed according to customers' specifications and in compliance with Road Transport Department and Motor Vehicle (Construction and Use) Rules 1959. A Rebuilt Commercial Vehicle would have its odometer reading starting at zero and its date of manufacture would be the date where the Rebuilding process is completed. As such, from a regulatory viewpoint, a Rebuilt Commercial Vehicle would be treated as similar to a new Commercial Vehicle.

4. Industry Life-Cycle

- The life-cycle of the Rebuilt Commercial Vehicle Industry is in its **growth** stage. This is mainly substantiated by the following factors:

Local Production

- The sales value of the manufacture and assembly of Motor Vehicles increased from RM3.7 billion in 1998 to RM12.4 billion in 2002. This reflects an average annual growth rate of 35.7% in sales value between 1998 and 2002 (*Note: Sales value of manufacture and assembly of Motor Vehicles does not include rebuilding and major alterations of vehicles. Sales value includes both passenger and commercial vehicles*) (Source: *Monthly Manufacturing Statistics, November 2003, Department of Statistics*);

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- Between 1998 and 2002, the production quantity of the manufacture and assembly of Commercial Vehicles grew strongly at an average annual growth rate of 38.4%. In 2002, production grew by 15.3% over the previous year (Source: *Monthly Manufacturing Statistics, November 2003, Department of Statistics*).
- Between 1998 and 2002, production quantity of new Lorries grew at an average annual rate of 71.4%.
- Between 1998 and 2002, production quantity of new Vans grew at an average annual rate of 34.0%.
- Between 1998 and 2002, production quantity of new Trucks grew at an average annual rate of 62.6%.

(Source: *Department of Statistics*)
- The growth phase of the life-cycle of the Rebuilt Commercial Vehicle Industry will continue to be fuelled by the following trends and factors:
 - The value of Gross Output of Road Haulage Services grew at an average annual rate of 12.1% from 1992 to 2000 (Source: *Yearbook of Statistics Malaysia 2002, Department of Statistics*). The liberalisation of the Road Haulage Industry will encourage further growth and hence create greater demand for Rebuilt Commercial Vehicles;
 - As the supply of the Rebuilt Commercial Vehicle Industry caters to a diversified end-user sector, the growth of these sectors will continue to sustain demand for Rebuilt Commercial Vehicles.

5. Government Legislation, Policies and Incentives

Key Regulatory Framework for Rebuilding of Commercial Vehicles

- There are significant Government laws, regulations and policies that impact on the Rebuilding of Commercial Vehicle Industry.
- The main regulatory framework for the Rebuilding of Commercial Vehicles is the issuance of:
 - Manufacturing licence by the Malaysian Industrial Development Authority and Ministry of International Trade and Industry;
 - Certificate of Recognition for Rebuilding Commercial Vehicles that enables the Rebuilt Commercial Vehicles to be registered under Road Transport Department (Jabatan Pengangkutan Jalan - JPJ) for on-road usage.
- To-date only Boon Koon Group, through its subsidiary Boon Koon Vehicles Industries has been awarded the Certificate of Recognition for Rebuilding Commercial Vehicles.

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- Generally, without a Certificate of Recognition for Rebuilding Commercial Vehicles, the Rebuilt Commercial Vehicles will not be registered by the Road Transport Department and are therefore not allowed to operate on State and Federal Roads.
- However, two other operators have been given Letters of Approval on July and August 2003 for probation periods of six months for the Rebuilding of Commercial Vehicles. These Letters of Approval would enable them to Rebuild Commercial Vehicles for on-road use. After the probation periods, their operations will be assessed and reviewed and Certificates of Recognition for Rebuilding Commercial Vehicles may then be issued subject to JPJ's assessment of the operators' full compliance with JPJ's technical and registration specifications.
- As at 31 January 2004, being the latest practical date prior to the printing of the prospectus, the status of the two operators remain the same.

6. Government Regulations

- According to the Industrial Co-ordination Act 1975, companies that are involved in the following activities are required to apply for a manufacturing licence with the Malaysian Industrial Development Authority:
 - reconditioning of commercial vehicles;
 - commercial vehicle body building;
 - fabrication of commercial vehicles;
 - fabrication of commercial vehicle-related components and parts;
 - activities relating to the conversion of commercial vehicles.
- The Boon Koon Group through Boon Koon Vehicles Industries Sdn Bhd has obtained the following manufacturing licences:
 - Reconditioning and Conversion of Commercial Vehicles and Bodyworks effective from 29 June 1998;
 - Reengineering and Reassembling of Used Commercial Vehicles effective from 6 July 2001.

Licensing and Vehicle Inspection Requirements

- It is mandatory under the Road Transport Act 1987 that all motor vehicles must be registered and licensed with the Road Transport Department.
- On 24 July 2001, Boon Koon Vehicles Industries has been certified by the Road Transport Department or Jabatan Pengangkutan Jalan (JPJ) for the Rebuilding of Commercial Vehicles.
- On 5 April 1997, Boon Koon Vehicles Industries has obtained a Workshop Registration license with the Road Transport Department for the construction and technical modification of motor vehicles (*Source: Road Transport Department*).

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- In addition, any person, being a manufacturer, repairer of, or dealer in motor vehicles is required to apply for a motor vehicle trade licence under the Road Transport Act 1987 (*Source: Road Transport Act 1987, all amendments up to August, 1996*).
- Motor vehicles are required to undergo periodic inspection for determining that the vehicles comply with the requirements as to construction equipment and use and the frequency of such inspection in respect of a particular class or category of vehicles.
- Previously, motor vehicle inspection services were conducted by the Road Transport Department. The Government has privatised the vehicle inspection services and has authorised Pusat Pemeriksaan Kenderaan Berkomputer Sdn Bhd (Puspakom) to undertake vehicle inspection in determining vehicle roadworthiness.
- Some of the vehicle inspection tests conducted by Puspakom include:
 - vehicle identification;
 - smoke emission test;
 - suspension test;
 - headlight test;
 - under carriage check complete with axle-play detector;
 - above carriage inspection;
 - slide slip test;
 - brake test;
 - speedometer test;
 - integrated and computer analysed result.

(Source: Pusat Pemeriksaan Kenderaan Berkomputer Sdn Bhd)

- On 9 September 1999, Boon Koon Vehicles Industries obtained approval from the Road Transport Department allowing inspection of Rebuild Commercial Vehicles to be conducted by Puspakom.

Licensing of Dealers in Second-Hand Goods

- The Second-hand Dealers Act 1946 under Laws of Malaysia Act 189 specifies that any person who deals in second-hand goods must apply for a licence.
- Operators that are involved in the sales and purchases of used or second-hand motor vehicles or vehicle parts and components are required to apply for a Second-hand Vehicles licence (*Source: Department of Crime Investigation*).
- Boon Koon Vehicles Industries Sdn Bhd has obtained a Second-hand Vehicles Licence for activities involving the purchases and sales of used or second-hand motor vehicles. The licence was issued by the Chief Police Officer in Penang on 27 January 2004 (*Source: The Royal Malaysia Police*).

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Government Incentives and Tariffs

- Commercial Vehicle Rebuilding is listed as a promoted activity classified under the Manufacture of Transport Equipment, Components and Accessories which is eligible for consideration of Pioneer Status and Investment Tax Allowance under the Promotion of Investments Act 1986.
- Boon Koon Vehicles Industries has been granted Reinvestment Allowance for investments in plant, machinery and factory building.
- Other incentives to the Rebuilding of Commercial Vehicle Industry, which are tariff related, are as follows:
 - Exemption from Sales Tax on Acquisition of Imported or Local Raw Materials or Components;
 - Drawback on Import Duty and Sales Tax on Machinery and Equipment.
- Boon Koon Group is currently eligible for full exemption from import duty on direct raw materials and components for use in the manufacture of goods for local market.
- Currently, there are tariffs imposed on the import of motor vehicles. With the implementation of the Association of South East Asian Nations (ASEAN) Free Trade Area (AFTA) for the Automotive Industry by 2005, approximately 20% tax will be implemented, as opposed to the previous 40% for imported motor vehicles that comply with the 40% local content (*Source: Automotive Unit of Industries Division, Ministry of International Trade and Industry*).

7. Environmental Regulations

- The disposal of lubricant wastes and sludge resulting from the Commercial Vehicle rebuilding process will fall under the 'Spent Oil or Grease Used for Lubricating Industrial Machines' of Scheduled Wastes from Non Specific Sources in the Environmental Quality Act 1974 and the Environmental Quality (Scheduled Wastes) Regulations 1989 (*Source: Environmental Quality Act and Regulations*).
- The transport and treatment of lubricant wastes and sludge is undertaken by approved contractors of the Department of Environment (DOE).

8. Labour Usage

- As there are no specific data on the labour intensity of the Rebuilt Commercial Vehicle Industry, data on the manufacture and assembly of Motor Vehicles sector, which includes rebuilding and major alteration of complete commercial vehicles, are used instead.
- The usage of labour in the manufacture and assembly of Motor Vehicles sector is less intensive compared to the overall Manufacturing Industry. This is supported by the following:

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	Sales per Employee - 2002
Overall Manufacturing Industry	RM316,892
Manufacture and Assembly of Motor Vehicles Sector	RM733,801

Note: Sales per employee is derived by dividing sales value for the manufacture of the respective products with the total number of employees in the respective industry or sector.

Source: Monthly Manufacturing Statistics, November 2003, Department of Statistics

- The manufacture and assembly of Motor Vehicles utilise less labour for each Ringgit of sales generated compared to the overall Manufacturing Industry. This is reflected by the fact that the sales per employee exceeded the industry average for the overall Manufacturing Industry by 2.3 times in 2002 (*Source: Monthly Manufacturing Statistics, November 2003, Department of Statistics*).
- Largely, the relatively lower use of labour is because of economies of scale, which is achieved through mass and standardised manufacturing and assembly process for new vehicles. This process is highly automated which incurs significant investment in advance technologies.
- However the Rebuilding of Commercial Vehicle Industry is more labour intensive compared to manufacturing or assembly of new vehicles. This is because rebuilding involves a large pool of skilled and semi-skilled labour in carrying out dismantling works on used vehicles, and technical expertise is required in salvaging and welding vehicle parts and components, design work as well as running various vehicle tests on parts and components. In addition, each production line is customised and manned by a number of workers progressing on a specific type of commercial vehicle or project.

9. Supply and Supply Dependencies

- Raw materials required for the Rebuilding of Commercial Vehicles are from imports and local sources. The following are the major raw materials of the Rebuilt Commercial Vehicle Industry:
 - Motor Vehicle Parts and Accessories;
 - Bodies of Motor Vehicles for the transport of goods;
 - Trailer Body Parts;
 - Partition, Parts of Trucks;
 - Body Parts for Lorries;
 - Pneumatic Tyres.
- In February 2003, the Malaysian Industrial Development Authority reported that there were 232 vendors of motor vehicle components supplying to Perusahaan Otomobil Nasional Berhad (Proton) and 126 vendors supplying to Perodua Manufacturing Sdn Bhd (Perodua) (*Source: Malaysian Industrial Development Authority*).

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- In encouraging the use of locally produced automotive components, the Government has implemented the local material content programme on 1 January 1992. Commercial Vehicles with a maximum of 2,500kg of gross vehicle weight are required to achieve local content of 20%, 30%, 35%, 40% and 45% progressively between 1992 and 1996 (*Source: Second Industrial Master Plan 1996 – 2005, Ministry of International Trade and Industry*).
- The programme has resulted in a network of local component suppliers. Locally produced components constituted around 30% to 40% of the total value of components and parts of other passengers and commercial vehicles assembled locally (*Source: Second Industrial Master Plan 1996 – 2005, Ministry of International Trade and Industry*).
- Several Malaysian automotive component and parts manufacturers have established joint ventures in other ASEAN countries to cater for regional requirements. Parts manufacturers from other ASEAN countries have also established joint ventures in Malaysia.
- With the depletion of 11 items under the list of Mandatory Deleted Items by 31 December 2003, manufacturers and assemblers can now source these deleted items from any part of the world (*Source: Malaysia International Trade and Industry Report 2002, Ministry of International Trade and Industry*). Hence, this will have a positive effect on Automotive manufacturers and assemblers as they can source raw materials from the most competitive vendors anywhere in the world.

10. Demand and Demand Dependencies

- The Rebuilt Commercial Vehicle Industry, as with New Commercial Vehicle Industry, supports the development of virtually all Manufacturing and Service Industries in the country.
- The end-user industries of the Rebuilt Commercial Vehicle Industry are diverse including, among others, the following:
 - Manufacturing;
 - Transportation;
 - Wholesale and Retail;
 - Hospitality;
 - Agriculture, Forestry and Fishing;
 - Mining and Quarrying;
 - Construction.

11. Competitive Nature and Intensity

- The Rebuilt Commercial Vehicle Industry operates primarily under **Oligopoly** conditions.
- As at 31 December 2003, there were three operators in Malaysia, including **Boon Koon Vehicles Industries Sdn Bhd**, which are able to Rebuild Commercial Vehicles for on-road use.

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- However, apart from Boon Koon Vehicles Industries Sdn Bhd, the other two companies have been granted Letters of Approval in July and August 2003 for probation periods of six months to undertake Rebuilding of Commercial Vehicles.
- As at 31 January 2004, being the latest practical date prior to the printing of the prospectus, the status of the other two operators remain the same.
- Competition within the Rebuilt Commercial Vehicle Industry in Malaysia is **low to moderate** based on the following observations:

Factors that Increase Competitive Intensity

- Competition arising from new commercial vehicles. As at 1 December 2003, according to the Malaysian Industrial Development Authority, there are four manufacturers and nine assemblers of motor vehicles within the Automotive Industry (*Source: Automotive Unit of Industries Division, Ministry of International Trade and Industry*).
- Some of the assemblers are large operators with established brands such as Nissan, Isuzu and Volvo. These global brand names would exert strong competitive pressure.
- Reconditioned Commercial Vehicles are also imported. However, imported reconditioned Commercial Vehicles have restrictions. Only reconditioned prime movers, tippers and specialised Commercial Vehicles are allowed to be imported into Malaysia through the Approval Permit (AP) system. Imported prime movers are not allowed to be transferred to another owner for a minimum of four years, and imported tippers are not allowed to be modified. Rigid Commercial vehicles are not allowed to be imported.

Factors that Moderate Competitive Intensity

- Rebuilt Commercial Vehicles are priced significantly lower than new Commercial Vehicles. In addition, Rebuilt Commercial Vehicles are treated as equivalent to new Commercial Vehicles as their odometers are reset to zero and their dates of manufacture are set as the dates of completion of rebuilding. As such, Rebuilt Commercial Vehicles have a significant price advantage over new Commercial Vehicles.
- Rebuilt Commercial Vehicles target end-users that are unable to afford the high price of new Commercial Vehicles. As such, this group of end-users have only the Used, Reconditioned and Rebuilt Commercial Vehicles to choose from. With the Boon Koon Group being the most established and the leader in the Rebuilt Commercial Vehicles, most of the competition would come from Used or Reconditioned Commercial Vehicles for on-road usage.

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12. Operators within the Industry

- As at 31 December 2003, there were three operators that were able to Rebuild Commercial Vehicles for on-road use.
- However, apart from Boon Koon Vehicles Industries Sdn Bhd, the other two operators were recent entry and were granted Letters of Approval on July and August 2003 for probation periods of six months.
- As at 31 January 2004, being the latest practical date prior to the printing of the prospectus, the status of the two operators remain the same.

(Source: Road Transport Department)

13. Barriers to Entry

- Barriers to entry into the Rebuilt Commercial Vehicles are **high** mainly because of Government licensing.
- Other barriers to entry include:
 - capital costs;
 - government regulations;
 - skills and experience;
 - track record.

Government Licences

- There are two key licences required to operate effectively within the Rebuilt Commercial Vehicle Industry:
 - Manufacturing licence by the Malaysian Industrial Development Authority and Ministry of International Trade and Industry;
 - Certificate of Recognition for Rebuilding Commercial Vehicles that enables the Rebuilt Commercial vehicle to be registered under Road Transport Department (Jabatan Pengangkutan Jalan - JPJ) for on-road usage.
- To-date only Boon Koon Group through its subsidiary Boon Koon Vehicles Industries has been awarded the Certificate of Recognition for Rebuilding Commercial Vehicles.
- Generally, without a Certificate of Recognition for Rebuilding Commercial Vehicles, the Rebuilt Commercial Vehicles will not be registered by the Road Transport Department and not allowed to operate on State and Federal Roads.

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- However, two other operators have been given Letters of Approval on July and August 2003 for probation periods of six months for the Rebuilding of Commercial Vehicles. These Letters of Approval would enable them to Rebuild Commercial Vehicles for on-road use. After the probation periods, their operations will be assessed and reviewed and Certificates of Recognition for Rebuilding Commercial Vehicles may then be issued subject to JPJ's assessment of the operators' full compliance with JPJ's technical and registration specifications.
- According to the Industrial Co-ordination Act 1975, other licences are also required. Companies that are involved in the following activities are required to apply for a manufacturing licence with the Malaysian Industrial Development Authority:
 - commercial vehicle body building;
 - fabrication of commercial vehicles;
 - fabrication of commercial vehicle-related components and parts;
 - activities relating to the conversion of commercial vehicles.

Capital Costs

- The capital cost requirements for setting-up a viable business of Rebuilding of Commercial Vehicles are **moderate**.
- The capital cost of starting-up a small sized manufacturing plant for the Rebuilt Commercial Vehicle Industry would cost approximately RM10 million (excluding land and building) segmented as follows:
 - RM3 million for machinery and equipment;
 - RM7 million for working capital for raw materials and work-in-progress
(Source: Boon Koon Group)
- Working capital requirements are significant because of the long cycle time from sourcing of raw materials to sales as follows:
 - raw materials holding;
 - work in progress;
 - completed units for testing by Puspakom;
 - completed units for registration with JPJ;
 - completed units for display prior to sales.
- A start-up cost of approximately RM10 million would enable the new entrant to manufacture approximately 15 Commercial Vehicles per month.
- Capital costs start to escalate for larger operations and to enable greater economies of scale. Larger operations are necessary to meet the demands from export countries, as there is a requirement to have a higher volume of production.

Skills and Experience

- Generally, the skill level of labour used in the Rebuilt Commercial Vehicle Industry is high. Some of the key personnel required include the following:
 - Professional engineers and technical personnel with engineering background, experienced in technical plan drawings, mechanical

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engineering, certificate approval, and exposure in vehicle as well as plant refurbishment system and technology;

- Large-pool of semi-skilled and general labour, usually recruited from government-funded vocational schools. At this level of skill, workers would have undergone extensive training and have experience in welding, metalwork, carpentry, painting and sandblasting.
- Skilled labour with extensive experience are essential in various aspect of vehicle rebuilding operations as each production line caters to customised manufacturing and requires significant engineering skills and technical knowledge to rebuild and recondition commercial vehicles.

Track Record

- Full compliance with stringent safety vehicle rules and standards imposed by the Government in ensuring that Rebuilt Commercial Vehicles are road worthy is critical.
- Hence, large customers would prefer to deal with operators that have a proven track record in successively meeting safety requirements and generally have extensive business experience in Rebuilding of Commercial Vehicles.
- As the process of rebuilding involves a great deal of complexity in terms of combining and installing used and new components and parts, companies with track record in providing reliable after-sales services will have greater competitive advantage within the industry.

14. Barriers to Exit

- Barriers to exit for Commercial Vehicle Rebuilding operators are **low to moderate**.
- Machines may be sold to Vehicle manufacturers, assemblers and reconditioners.
- According to the Ministry of International Trade and Industry, there are four manufacturers and nine assemblers of motor vehicles (*Source: Automotive Unit of Industries Division, Ministry of International Trade and Industry*).
- Although the number of related operators is small, many of the machines may be used by vehicle workshops and general manufacturing machine workshops.

15. Industry Outlook and Growth Forecast

- The outlook of the Rebuilt Commercial Vehicle Industry is **favourable**.
- This is mainly substantiated by the following analysis and observations:

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Growth Trend of Commercial Vehicles in General

- Between 1998 and 2002, the production quantity of the manufacture and assembly of Commercial Vehicles grew strongly at an average annual growth rate of 38.4%. Production grew by 3.7 times from 19,693 units in 1998 to 72,327 units in 2002.
- In 2002, the production of the manufacture and assembly of Commercial Vehicles was highest over the past five years reaching 72,327 units with a significant growth of 15.3% over the previous year (Source: *Monthly Manufacturing Statistics, November 2003, Department of Statistics*).
- The strong growth indicates the robustness of the sector and a sustained demand for Commercial Vehicles from local as well as overseas buyers.
- In 2002, the sales quantity of Commercial Vehicles amounted to 75,020 units, representing an increase of 10.0% over the previous year (Note: *Sales of Commercial Vehicles include the manufacture and assembly of Commercial Vehicles*)
- Sales of Commercial Vehicles were predominantly contributed by the assembly of Commercial Vehicles, with a share of 76.4% or 57,313 units in 2002. The remainder of the total sales of Commercial Vehicles was derived from Commercial Vehicles manufacturing
- In 2002, sales quantity of Commercial Vehicles accounted for 17.2% of the Automotive sub-sector. Sales of the Automotive sub-sector totalled 434,954 units, experiencing an increase of 9.7% over the previous year. The increase of sales of this sub-sector was attributed to the following factors:
 - . introduction of new models by manufacturers and assemblers;
 - . aggressive promotions by the industry;
 - . easy accessibility to financing.
 (Note: *Sales of Automotive sub-sector include the manufacture and assembly of Passenger Cars and Commercial Vehicles*)
 (Source: *Malaysian Automotive Association as reported in Malaysia International Trade and Industry Report 1997/98, 1999, 2000, 2001 and 2002, Ministry of International Trade and Industry*).
- Latest statistics indicated that, between January and November 2003, production quantity of Commercial Vehicles increased by 10.8% to 74,619 units compared to the same period in 2002 (Source: *Monthly Manufacturing Statistics, November 2003, Department of Statistics*).

Growth Trends of Specific Commercial Vehicles

- Between 1998 and 2002, production quantity of new Lorries grew at an average annual rate of 71.4%.
- Between 1998 and 2002, production quantity of new Vans grew at an average annual rate of 34%.

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- Between 1998 and 2002, production quantity of new Trucks grew at an average annual rate of 62.6%.
(Source: Department of Statistics)

16. Areas of Growth and Opportunities

Heavy Industrial Machinery

- At present, most local operators within the Automotive Industry are involved in the manufacturing, assembly, rebuilding, reconditioning and bodybuilding of commercial vehicles.
- Opportunities exist for operators within the Rebuilt Commercial Vehicle Industry to rebuild heavy industrial machineries including fabrication of bodyworks.
- By tapping into the niche market of rebuilding and bodybuilding of heavy industrial machinery, operators of Rebuilt Commercial Vehicles including Boon Koon Group will be able to reduce its dependency on one particular segment of market and broaden its customer base to include other user-sectors currently not served by operators within the Rebuilt Commercial Vehicle Industry.

Innovative Technologies

- The use of innovative technologies can provide significant advantages for operators to differentiate themselves as well as address new markets.
- One area of significant competitive differentiation and growth is the utilisation of innovative technologies such as heavy-duty diesel engines in the rebuilt commercial vehicles which comply with standards, namely Euro I, II, III, IV and V. These standards are approved by the European Parliament and the Council Ministers. Vehicles installed with such engines are widely accepted and acknowledged as enhanced environmentally friendly vehicles.
- The use of these innovative technologies can be applied in the Malaysian environment as well as overseas where such use of technologies have not taken place yet and is gaining wider market acceptance.

Overseas Markets

- There are opportunities for Malaysian operators to export Rebuilt Commercial Vehicles in developing countries, particularly with the implementation of AFTA.
- Operators that can serve various markets will have increased areas of opportunities for growth as well as to diversify business risk.

Government Policy Review

- Demand will increase for prime movers and semi-trailers in view of a change of Government policy on multi-purpose semi-trailers and prime movers road tax.
- In encouraging the ownership of multi-purpose semi-trailers and to promote the Transportation Industry as well as to reduce the cost of transport, the following

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regulations of road tax on multi-purpose prime movers and semi-trailers have been implemented on 1 January 2003:

- road tax on multi-purpose semi-trailers is abolished;
- road tax on multi-purpose prime movers is revised from an assessment based on the kerb weight of the prime mover to that which is based on the gross combined weight, namely weight of the prime mover, semi-trailer and vehicle load capacity;
- road tax of RM90 on semi-trailers for containers is abolished;
- road tax on prime movers for containers is assessed based on the kerb weight.

(Source: Budget 2003)

- The abolishment of road taxes on commercial vehicles will impact favourably on encouraging demand and usage of such vehicles.

17. Threats and Risks Analysis

Implementation of Asean Free Trade Area (AFTA)

- With the implementation of AFTA in 2005 for the Automotive Industry, the reduction of import duties to 0% or 5% would make imports competitive against locally manufactured, rebuilt and reconditioned commercial vehicles.

Mitigating Factors

- Local operators within the Rebuilt Commercial Vehicle Industry will still have some advantages, in terms of cost competitiveness, over imported commercial vehicles.
- Under AFTA, several measures such as local content requirement of at least 40% will still be imposed on imported vehicles if lower import tariff is to be obtained.
- Additionally, imported Rebuilt Commercial Vehicles would need to obtain various licences, particularly for certification of roadworthiness from the Road Transport Department. Thus could create a barrier for imported Rebuilt Commercial Vehicles.

Economic Slowdown

- The 11 September 2001 terrorist attacks on the United States, terrorist bombing in Bali, Indonesia, the war in Iraq and the outbreak of Severe Acute Respiratory Syndrome (SARS) have aggravated the situation on the global economic slowdown.

12. INDEPENDENT MARKET RESEARCH REPORT (Cont'd)**VITAL FACTOR CONSULTING**

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- All these have the impact of reducing movement of goods, which would have a negative impact on the Rebuilt Commercial Vehicle Industry.

Mitigating Factors

- In times of an economy slowdown, many may opt for lower cost Rebuilt Commercial Vehicles. As such, impact on the Rebuilt Commercial Vehicles would be less when compared to the impact on new Commercial Vehicles.
- In addition, the Government's continued prompt policy in implementing pro-growth measures to sustain the country's growth momentum, by raising domestic demand to compensate for slower external growth, will help Malaysian manufacturers and service operators including operators in the Rebuilt Commercial Vehicle Industry to be in a stronger position to counter the effects of the slowdown in the global and local economies.

Over-dependency on Imported Automated Parts and Components

- Although Malaysia has its own supply of automotive components and parts, a sizeable portion of intermediate inputs and automotive parts are still imported by components and parts manufacturers for local production and value-added activities. This is due to the limited range of components and parts produced locally.
- As such, the over-dependency of imports could impact negatively on operators, for example, interruption in supply, foreign exchange fluctuations, longer lead time and higher stock holdings.

Mitigation Factors

- As the Automotive Industry is a global industry, there are ample sources of supply in the world market. From that perspective, any shortages in supply are minimised.
- In addition, with the depletion of 11 items under the list of Mandatory Deleted Items by 31 December 2003, manufacturers and assemblers can now source these deleted items from any part of the world (*Source: Malaysia International Trade and Industry Report 2002, Ministry of International Trade and Industry*).
- Under the existing local content requirement policy, the Automotive Components and Parts Industry has been established and has resulted in an extensive range of parts and components produced locally, thus replacing many of the imported items.
- Automotive component and part manufacturers are now increasingly exporting to regional markets. Some of the Malaysian automotive component and part manufacturers have joint ventures in other Asean countries and China to cater for regional requirements. Automotive component parts manufacturers from other ASEAN countries have also established joint ventures in Malaysia (*Source: Malaysia International Trade and Industry Report 2002, Ministry of International Trade and Industry*). All these points to an increasing range of parts and components from local manufactures.

12. INDEPENDENT MARKET RESEARCH REPORT (Cont'd)



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Increase in Competition from New Entrants

- Recently the Department of Transport has issued Letters of Approval for Rebuilding Commercial Vehicles to two other operators. However, they are on six months probation till the early part of 2004. Once these operators satisfy the technical compliance of the Department of Transport, a Certification of Recognition for Rebuilding Commercial Vehicles may be issued at a later stage subject to compliance to JPJ's requirements.
- New entrants will increase the competition for the existing operator in the industry.

Mitigating Factors

- As at 31 January 2004, being the latest practical date prior to the printing of the prospectus, the status of the two operators, which have been issued with Letters of Approval for Rebuilding Commercial Vehicles, remain the same.
- New entrants into the industry will take time and investment to build a reputable brand name of Rebuilt Commercial Vehicles.
- In addition, track record and market reputation is critical particularly in Commercial Vehicles whereby compliance to safety standards and roadworthiness are important buying factors.
- New entrants will also require time to fully comply with the various technical specifications of the Department of Transport before the issuance of Certification of Recognition for Rebuilding Commercial Vehicles. This requires significant skilled resources and capital, and a period of testing by the Department of Transport to ensure the capabilities of any new entrant.
- This is where established operators such as Boon Koon Group, with its track record and a highly recognised brand name will have a significant advantage over new entrants.

Government Policy on Commercial Vehicles

- In November 2003, the Commercial Vehicles Licensing Board lifted the ban on Commercial Vehicles that are more than 15 years old for on-road usage for the transportation of goods and passengers.
- This may have a negative impact on the demand for Rebuilt Commercial Vehicles sector whereby users can extend the use of their Commercial Vehicles beyond 15 years.

Mitigating Factors

- This is not likely to have a major impact on the demand for Rebuilt Commercial Vehicles as running a Commercial Vehicle that is more than 15 years old is not likely to be efficient and will result in costly repairs and maintenance. It is more than likely that many users would consider either buying a new or Rebuilt Commercial Vehicle after 15 years regardless of any Government regulations.

12. INDEPENDENT MARKET RESEARCH REPORT (Cont'd)



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18. Market Ranking

- For 2003 Boon Koon Group was the market leader within the Rebuilt Commercial Vehicle Industry.
- The two other operators within the industry had only obtained their Letters of Approval for the Rebuilding of Commercial Vehicles in July and August 2003 and have yet to make any major impact on the market.
- As at 31 January 2004, being the latest practical date prior to the printing of the prospectus, the status of the two operators remain the same.

19. Market Size

- For 2003, the market size for the Rebuilt Commercial Vehicle Industry was estimated at **RM50 million**.

Vital Factor Consulting Sdn Bhd has prepared this report in an independent and objective manner and has taken all reasonable consideration and care to ensure the accuracy and completeness of the report. It is our opinion that the report represents a true and fair assessment of the industry within the limitations of, among others, secondary statistics and information, and primary market research. Our assessment is for the overall industry and may not necessarily reflect the individual performance of any company. We do not take any responsibilities for the decisions or actions of the readers of this document. This report should not be taken as a recommendation to buy or not to buy the shares of any company.

Yours sincerely

Wong Wai Ling
Director
Vital Factor Consulting Sdn Bhd

13. DIRECTORS' REPORT

(Prepared for inclusion in the Prospectus)

BOONKOON[®]

BOON KOON GROUP BERHAD (553434-U)

Registered Office:

51-8-B Menara BHL Bank
Jalan Sultan Ahmad Shah
10050 Penang
Tel : 04-2287828 Fax : 04-2279828

Date: 12 March 2004

The Shareholders of
Boon Koon Group Berhad
51-8-B, Menara BHL Bank
Jalan Sultan Ahmad Shah
10050 Penang

Dear Sir/Madam,

On behalf of the Board of Directors, I wish to report after due enquiry that between the period from 31 October 2003 (being the date to which the last audited financial statements of the Company and its subsidiaries ("Group") has been made up) to 12 March 2004 (being a date not earlier than 14 days before the issuance of this Prospectus), that:-

- (a) the business of the Group has, in the opinion of the Directors, been satisfactorily maintained;
- (b) in the opinion of the Directors, no circumstances have arisen since the last audited financial statements of the Group which have adversely affected the trading or the value of the assets of the Group;
- (c) the current assets of the Group appear in the books at values which are believed to be realisable in the ordinary course of business;
- (d) no contingent liabilities have arisen by reason of any guarantees or indemnities given by the Company or any of its subsidiaries or associated companies;
- (e) in the opinion of the Directors, since the last audited financial statements of the Group, they are not aware of any default or any known event that could give rise to a default situation, in respect of payments of either interest and/or principal sums in relation to any borrowings; and
- (f) save as disclosed in the "Proforma Consolidated Balance Sheets" and the "Accountants' Report" of this Prospectus, there have been no change in the published reserves or any unusual factors affecting the profits of the Group since the last audited financial statements of the Group.

Yours faithfully,
For and on behalf of the Board of Directors
Boon Koon Group Berhad


GOH BOON KOON
Managing Director