

Infrastructure Materials and Infrastructure-related Businesses



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Award for Industry: Environmental Performance,
which is the top honour for this category.**



Infrastructure Materials and Infrastructure-related Businesses

Consolidation and Diversification

2000 was a challenging year for the infrastructure materials business. Following a cyclical business downturn, aggravated by the reduction in government housing and slow down in infrastructure activities, the demand for infrastructure materials in the year was generally on the decline and prices were further eroded. As leading players in the industry, Green Island Cement (Holdings) Limited (GIC) and Anderson Asia (Holdings) Limited (AAH) were strongly affected. To mitigate the impact brought about by the infrastructure materials

business, the Group has adopted a strategy of consolidation and diversification. On one hand, the Group has consolidated the infrastructure materials business, streamlining operations and implementing cost control measures to further improve cost efficiency and productivity; on the other hand, it diversified into other infrastructure-related businesses such as those in the areas of environmental business, and electronic infrastructure. A new business division under "Infrastructure Materials and Infrastructure-related Businesses" has been formed to include the

America by acquiring a 63.7 per cent. stake in the Canadian-listed asphalt technology company Polyphalt Inc. The company is engaged in the development and commercialisation of polymer modified asphalt (PMA) and other raw materials made from recycled substances. Another special feature of PMA is that it can prolong the usage of road surfaces and reduce maintenance cost.

The acquisition helped GIC complete its existing asphalt product range and created good synergy with CKI's



Green Island Cement won the 2000 Hong Kong Award for Industry: Environmental Performance; Anderson Asphalt won the 2000 Hong Kong Awards for Industry Private Sector Committee on the Environment (PSCE) Certificate of Merit in Environmental Performance.

The Group's joint venture water treatment operation in Yueyang in Hunan, China, reported good performance last year.



INFRASTRUCTURE MATERIALS AND INFRASTRUCTURE-RELATED BUSINESSES

- Anderson Asphalt, Anderson Asia, Hong Kong
- Asia Stone, Anderson Asia, Hong Kong
- Bonntile, Anderson Asia, Hong Kong
- Ready Mixed Concrete, Anderson Asia, Hong Kong
- Green Island Cement, Hong Kong
- Shantou Cement Grinding Plant, Guangdong
- Yunfu Cement Plant, Guangdong
- Siquijor Limestone Quarry, Philippines
- Polyphalt Inc., Canada
- Stuart Energy Systems Corp., Canada
- Shenyang LPG Business, Liaoning
- Yueyang Water Plants, Hunan
- e-Smart System Inc., Hong Kong

materials business and the new infrastructure-related initiatives.

INFRASTRUCTURE MATERIALS

Cement and Asphalt Market

Overall the price and volume of cement decreased due to a sluggish market. GIC recorded a decline in sales volume last year. Strong competition from lowered rates and surplus supply in the region also contributed to a drop in profit margin, which is forecast to decline further in 2001.

In the Philippines, the Group's limestone quarry continues to supply part of the Group's own requirement for the production of clinker.

While the Group streamlined domestic operations and implemented cost control measures, it broadened its infrastructure materials business footprint to North

transportation businesses. By combining the Group's extensive financial resources with Polyphalt's advanced technology, the Group looks forward to good contributions from Polyphalt.

Concrete, Aggregates and Spray Coating Market

Facing strong competition, a shrinking construction market and lower government contracting rates in Hong Kong, the Group's subsidiary recorded a decline in profit contribution in its concrete, aggregates and spray coating businesses.

AAH continues to enhance competitiveness by raising cost efficiency and productivity. The construction of several large infrastructure projects which are coming up in the next few years in Hong Kong are expected to contribute revenues in this sector in the near future.

The declining public housing market also affected the spray coating business under Bonntile Industries (HK) Ltd. While the company downsized its operations in Hong Kong and switched its marketing focus to the development of private properties last year, it plans to expand into the Mainland. The business environment is expected to improve in 2001.

Merit in Environmental Performance. These accolades are a clear recognition of the Group's contribution to the environment while creating shareholder value in a win-win formula.

Liquefied Petroleum Gas

In early 2000, CKI concluded an agreement to hold a 51 per cent. stake in a joint venture with Petro China's subsidiary Liaoning Petroleum Industrial Company and Shenyang Transport Bureau's Shenyang Road Main Hub Group Company Limited, to operate liquefied petroleum gas (LPG) business and vehicle conversion facilities in Shenyang.

and purity needed for clean energy applications such as transportation and regenerative power.

As an environmentally friendly alternative to fossil fuel, hydrogen is a cost-effective, zero-emission energy solution for the 21st century.

Water Business

The Group's joint venture water treatment operation in Yueyang in Hunan, China, reported good performance last year, contributing a steady profit. Other water treatment projects in the Mainland and other markets are being studied.



Smart cards can be used on multiple applications such as stored value, fare collection, access control, time and attendance record, loyalty programmes, web transactions, and national identification.

Stuart Energy, through its proprietary water electrolysis technology, is a world leader in the development and production of hydrogen fuel appliances which supply hydrogen at the pressure and purity needed for clean energy applications.



INFRASTRUCTURE-RELATED BUSINESSES

Commitment to the Environment

During the past few years, the Group's environmental initiatives have revolved in the areas of waste material recycling, reduction of natural resources usage, and reduction of emissions to the environment. New environmental projects concluded and under development are the results of the Group's long-term strategy.

In 2000, GIC won the 2000 Hong Kong Award for Industry: Environmental Performance, which is the top honour for this category. This is an additional accolade to the Asia Pacific Economic Council (APEC) Environmental Award obtained by the company in 1999. Furthermore, another company within the Group, Anderson Asphalt Limited, won the 2000 Hong Kong Awards for Industry Private Sector Committee on the Environment (PSCE) Certificate of

This investment enables the development of the potentially lucrative LPG market in the Mainland and creates synergies with the Group's transportation and energy businesses.

Hydrogen Fuel

CKI's investments in environmental energy expanded beyond Asia last year with the Group's acquisition of a 12.9 per cent. stake in the Canadian-listed hydrogen fuelling technology company, Stuart Energy Systems Corporation (Stuart Energy). To introduce and develop the application of the technology into this part of the world, an exclusive distribution right of Stuart Energy's hydrogen fuelling technology was extended to a joint venture of Stuart Energy and CKI for the Asia Pacific Region for a period of 12 years.

Stuart Energy, through its proprietary water electrolysis technology, is a world leader in the development and production of hydrogen fuel appliances which supply hydrogen at the pressure

Smart Card

Technology is an integral part of the Group's diversification initiatives. Last year, CKI established a 50:50 joint venture, e-Smart System, Inc., with German-listed, Israeli-based On Track Innovations (OTI) to deliver the patented "EYECON" microprocessor-based contactless smart card technology to Asia Pacific.

Smart cards can be used on multiple applications such as stored value, fare collection, access control, time and attendance record, loyalty, web transactions, and national identification.

Riding along CKI's participation in smart card technology, further efforts on integrating smart card applications into biometrics and other electronic infrastructure initiatives are under development.