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# review of operations

TINJAUAN OPERASI

**review of operations**  
tinjauan operasi

The group's major business activities are engineering & construction, operation of infrastructure concessions and township development.

Kegiatan perniagaan utama kumpulan terdiri daripada kejuruteraan & pembinaan, pengendalian konsesi infrastruktur dan pembangunan perbandaran.

Engineering & construction, infrastructure concessions and township development are the cornerstones of our business activities and our focus has been to consistently grow and improve these areas which contributed a total of 94% of the group's operating profits.

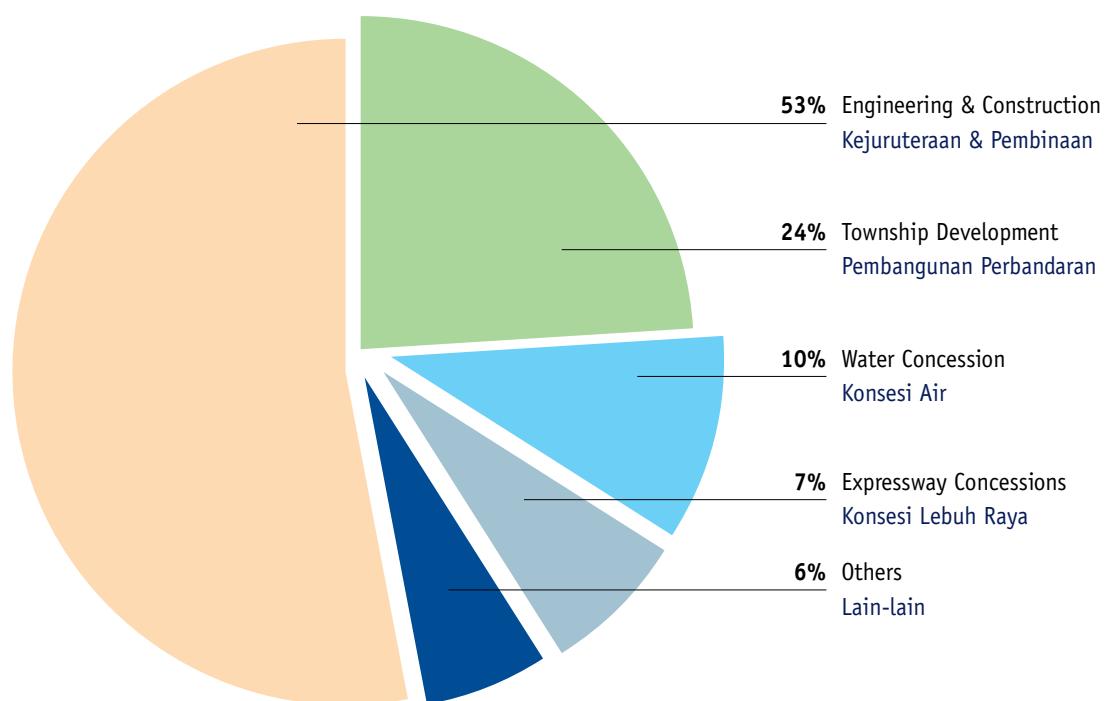
Kejuruteraan & pembinaan, konsesi infrastruktur dan pembangunan perbandaran adalah tunggak kegiatan perniagaan syarikat. Justeru itu, kami sentiasa berusaha untuk memperbaiki dan meningkatkan pertumbuhan bahagian-bahagian perniagaan ini, yang menyumbang 94% daripada keuntungan operasi kumpulan.

# contribution by business segments

Operating profit before taxation

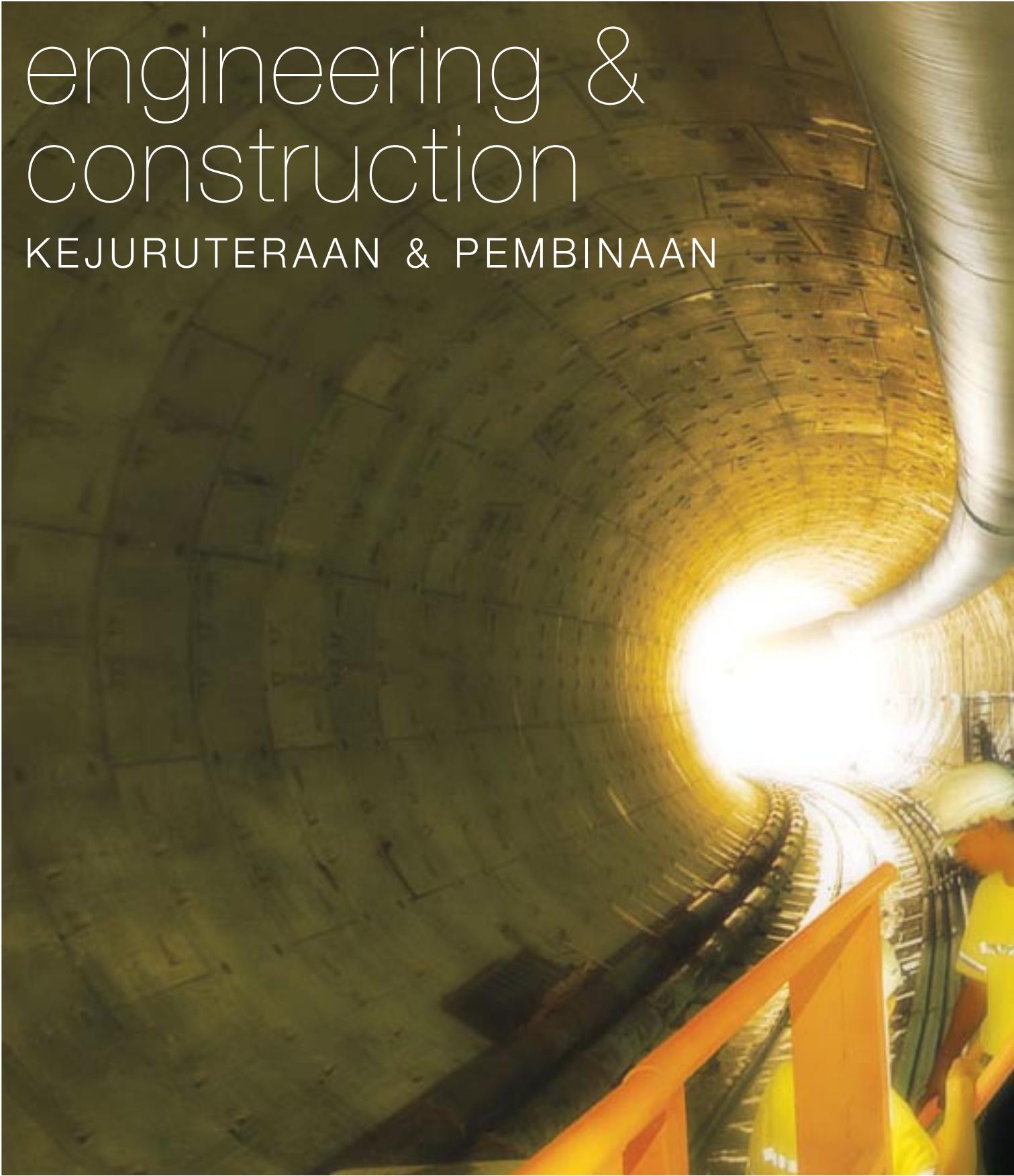
sumbangan mengikut segmen perniagaan

Keuntungan operasi sebelum cukai



# engineering & construction

KEJURUTERAAN & PEMBINAAN



Inside the SMART tunnel, where on-going works will build the world's only dual-purpose stormwater tunnel and motorway.

Di dalam terowong SMART, kerja-kerja sedang dijalankan untuk membina satu-satunya terowong dwifungsi di dunia yang menempatkan sistem saliran air banjir dan jalan raya.



## engineering & construction

kejuruteraan & pembinaan



Admiring a miniature model of the SMART tunnel-boring machine (TBM). Two Slurry Shield TBMs were especially designed for SMART and in actual size, each TBM measures 13.20 metres in diameter, making these the largest TBMs in South East Asia and the second largest in Asia.

Mengamati model kecil mesin penggerudi terowong (TBM) SMART. Dua TBM 'Slurry Shield' telah direka khas untuk SMART. Dalam saiz sebenar, setiap TBM berdiameter 13.20 meter, menjadikannya TBM terbesar di Asia Tenggara and kedua terbesar di Asia.



Engineering and construction continues to be the major driver of the group's business. Pictured here is a section of Penchala Link.

Kejuruteraan dan pembinaan adalah pendorong utama perniagaan kumpulan. Gambar di atas menunjukkan sebahagian daripada Hubungan Penchala.



West Portal of the unique twin-tunnels of Penchala Link.

Gerbang Barat terowong berkembar unik di Hubungan Penchala.



Bukit Badong Water Treatment Plant Phase 1 & 2 have a capacity of 800 mld.

Loji rawatan air Bukit Badong Fasa 1 & 2 berkapasiti sebanyak 800 mld.

This division contributed 53% of the group's operating earnings and the main local projects undertaken during the year were the two final stages of Sungai Selangor Water Supply Scheme Phase 3 (SSP3), Sprint's Penchala Link and the Stormwater Management and Road Tunnel (SMART) Project.

Stage 2 of SSP3's Rasa Water Treatment Plant (WTP) was completed and commissioned, adding another 125 million liters per day (mld) supply to the system. Stage 2 WTP works at Bukit Badong, with an additional capacity of 400 mld has progressed quickly, aiming for completion by mid-2005.

Sprint's Penchala Link, with its unique twin-tunnels, was completed in our customary fashion, 6 months ahead of schedule and was opened to traffic in March 2004.

Bahagian ini menyumbang 53% daripada pendapatan operasi kumpulan. Projek-projek dalam negara utama yang dilaksanakan pada tahun yang dilaporkan ialah dua peringkat terakhir Skim Bekalan Air Sungai Selangor Fasa 3 (SSP3), hubungan Penchala Sprint dan Projek Pengurusan Air Banjir dan Terowong Jalan Raya (SMART).

Peringkat 2 Loji Rawatan Air Rasa (WTP) SSP3 telah selesai dan dilengkapkan, lantas menambah bekalan sebanyak 125 juta liter air sehari (mld) kepada sistem. Kerja-kerja WTP peringkat 2 di Bukit Badong, dengan kapasiti tambahan sebanyak 400 mld berjalan lancar, dan dijangka siap menjelang pertengahan 2005.

Hubungan Penchala Sprint, dengan terowong kembar yang unik, seperti biasa telah disiapkan 6 bulan lebih cepat daripada dijadualkan dan dibuka untuk lalu lintas pada Mac 2004.

## engineering & construction

### kejuruteraan & pembinaan



Tunnel boring works for SMART are in full swing.

Kerja-kerja pembinaan terowong untuk SMART sedang berjalan dengan lancar.



KMRT works involve small diameter tunnelling and deep excavation on soft soil.

Kerja-kerja di KMRT termasuk membina terowong yang berdiameter kecil dan pengorekan dalam di tanah yang lembik.



Highways in India are in the final stages of completion.

Projek-projek lebuh raya di India kini di peringkat akhir penyiapan.

Although work on SMART began in January 2003, the official signing of the construction cum concession agreement for this innovative, first-of-its-kind in the world project in June 2004 has given added impetus to the project. Both tunnel-boring machines (TBMs) were successfully installed and tunnel-boring work is progressing in full swing.

On the overseas front, the two highway projects in Panagarh-Palsit and Durgapur being built for the National Highway Authority of India are in the final stages of completion, expected to be completed by early 2005.

The Mass Rapid Transit Project in Kaohsiung, Taiwan, which involves the construction of an underground railway and 2 underground stations is progressing to schedule and should complete by 2006.

Walaupun kerja-kerja SMART sudah pun bermula pada Januari 2003, majlis tandatangan rasmi perjanjian pembinaan dan konsesi bagi projek yang inovatif dan pertama sepertinya di dunia pada Jun 2004 telah memberi dorongan tambahan kepada projek tersebut. Kedua-dua mesin pengorek terowong (TBM) telah berjaya dipasang dan kerja mengorek terowong sedang berjalan lancar.

Di luar negara, dua projek lebuh raya di Panagarh-Palsit dan Durgapur yang dibina untuk Lembaga Lebuh Raya Negara India kini berada di peringkat akhir penyiapan, dan dijangka siap menjelang awal 2005.

Projek Mass Rapid Transit di Kaohsiung, Taiwan, yang membabitkan pembinaan landasan kereta api bawah tanah dan 2 stesen bawah tanah sedang dijalankan mengikut jadual dan dijangka selesai menjelang 2006.



The launch shaft of SMART, where the two TBMs started boring in opposite directions.

Syaf pelancaran SMART di mana dua mesin penggerudi terowong bergerak ke arah bertentangan.

# infrastructure concessions

KONSESI INFRASTRUKTUR

The Sungai Selangor Dam, part of the Sungai Selangor Water Supply Scheme Phase 3 (SSP3), has storage capacity for 235 million cubic metres of water.

Empangan Sungai Selangor, sebahagian daripada Skim Bekalan Air Sungai Selangor Fasa 3 (SSP3) mempunyai kapasiti simpanan 235 juta meter padu air.



## infrastructure concessions

konsesi infrastruktur



Penchala Tunnel is a vital route for rapid-growth zones in the western part of Kuala Lumpur, providing direct connectivity between Sri Hartamas and Mont Kiara and the LDP at Penchala, Taman Tun Dr. Ismail and Kg. Sungai Penchala.

Terowong Penchala ialah laluan penting bagi zon pertumbuhan pesat di bahagian barat Kuala Lumpur, menyediakan hubungan langsung antara Sri Hartamas dan Mont Kiara, dan LDP di Penchala, Taman Tun Dr. Ismail dan Kg. Sungai Penchala.