

Malaysia's Science City of the Future

Among the proliferation of science or technology parks in the region, one high-tech park situated in the north of Peninsular Malaysia has quietly been building itself up to become a major catalyst in launching the country into the technological age - Kulim High Tech Park.



The government's push for the spawning and nurturing of entrepreneurs resulted in the launching of the Multimedia Super Corridor (MSC) Technopreneur Development Flagship, which holds the responsibility of facilitating the growth of ICT small and medium sized enterprises (SMEs) in Malaysia. So, it was only fitting that the Flagship was launched in November 2001 at the Kulim High Tech Park (KHTP).

Located in the northern region of Peninsular Malaysia near the Bayan Lepas Free Trade Zone in Penang and just 20km from the Penang Bridge, KHTP plays a complementary role to the Multimedia Super Corridor (MSC), which is concentrated in the 15x50km corridor stretching from the Kuala Lumpur City Centre (KLCC) to the Kuala Lumpur International Airport (KLIA).

When first conceived in 1990 with the coining of the phrase 'Science City of the Future', KHTP was a dream that the planners knew would require a lot of effort and hard work to overcome the anticipated hurdles and challenges. But that did not deter them. They believed that the shift that was already happening in the country from a labour intensive to a value added knowledge based economy.

The planners recognised that Malaysian workers were fast becoming highly skilled and that the establishment of a science or high technology park in the north of the peninsular would be just right.

It took the planners four years to get the park ready. In those four years, site studies and concept reviews were conducted. Consultation with international experts and planning resulted in a park that comprises manufacturing plants, research and development centres, residential areas, education facilities, natural forests and landscapes, and various types of recreation facilities.

When it opened for business in 1993, KHTP was all set to strive towards the fulfilment of its three main objectives:

first, to attract as many high tech operations as possible; second, to promote R&D in Malaysia; and third, to produce and train skilled and dedicated employees. But it wasn't just going to be a science or high tech park catering to business needs.

"We are developing a town - a truly comprehensive development," said Ahmad Shukri Tajuddin, managing director, Kulim Technology Park

Corporation Sdn Bhd. "It will have both residential and educational components, the very best amenities and a state-of-the-art system of electronically linking park residents to anywhere else in the world."

Strategically located at the centre of the state of Kedah Darul Aman, KHTP is directly linked to the East-West Highway via a four-lane primary access road. It's a mere 26km from the North Butterworth Container Terminal of the Penang Port and 36km from Penang's Bayan Lepas International Airport. KHTP's closeness to Penang, already renown for its electronics manufacturing, is a welcomed advantage. Shukri explained that many electronics companies are based in or near Penang and, as their needs expand and become more high tech in nature, KHTP will be the natural setting for companies to serve their needs. This so-called 'clustering-complementing' link could lead to a new wave of development for the park in the very near future.

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KHTP comprises 6 major zones - Industrial Zone, which features research & development (R&D), administrative and other supporting facilities; Amenity / Recreational Zone, which include a Nature Park, 27-hole golf course, Club House, apartment blocks and bungalow lots; Residential / Commercial Zone, which is the development of a RM600 million satellite township consisting of different categories of houses, shop houses, office lots, commercial buildings and a shopping centre; R&D and Training Zone, where the R&D block occupies 8.7 hectares of land with MIMOS Berhad and SIRIM Berhad serving as catalysts for technological developments in KHTP; Urban Zone, which comprises the town

centre, the sub-centre and the neighbourhood centre; and Institutional Zone, which comprises public facilities and institutional reserves.

"KHTP is expected to be operating under the concept of intelligent township - the 'Science City' - it will offer its residents all kinds of special electronic services - smart schools, smart offices, smart homes, e-commerce and Internet connectivity. The Science City oversees hi-tech manufacturing plants, research and development centres, residential areas, education facilities, natural forest and landscapes, and various types of recreation facilities," elaborated Shukri.

Setting sights high

"In our early planning, we set our sights high. We visited many science and R&D parks all over the world and used some of them as models. I remember how impressed we were with Tsukuba Science City in Japan and Hsinchu Science Based Industrial Park in Taiwan. We then implemented a plan to make certain that KHTP would meet the needs of even the most demanding clients. To attract these so-called 'super clients' meant developing a world-class infrastructure with more than adequate power and water supply. We are, in fact, the only park in Malaysia to provide industrial waste management, which is crucial for the wafer industries. We also have an excellent telecommunication system, a ready supply of industrial gases and chilled water distribution facilities," claimed Shukri.

And it's not an empty claim as according to Strategic Information Services, a US-based consulting firm, KHTP is rated second in the list of best high tech parks in Asia



Feature



in terms of infrastructure, after China's Wuxi-Singapore Science Park.

KHTP obtains its stable power supply from an independent power provider, Northern Utilities Resources (NUR) and utilises the most sophisticated hierarchical underground ring system to ensure uninterrupted power supply to tenants of KHTP. Quality and reliable power supply is achieved by a protection scheme designed for the high-speed clearance of electrical faults within the system. The system is further enhanced by a full Supervisory, Control and Data Acquisition (SCADA) system using fibre optic links.

In terms of telecommunications, KHTP tenants are served with a dedicated telecommunications switching station, operating on a two-core fibre optic cable. It has an initial capacity of 60,000 lines, which guarantees a

priority connection at all times. KHTP is using the services of 3Com(r), a global leader in networking products and solutions, to improve its bandwidth infrastructure.

For tenants engaged in high-tech manufacturing, three specifically designed concrete reservoirs provide ample water supply, up to a maximum capacity of 85,000 cubic metres a day. A joint venture company involving Sitt Tatt Industrial Gases Sdn Bhd and Air Products Inc. and Malaysian Oxygen Berhad (MOX), is providing industrial gases to tenants of KHTP using an underground gas pipeline system.

KHTP is also concerned with protecting the environment and has made available facilities for the storage of scheduled industrial wastes. These specially constructed storage and holding areas will alleviate the need for individual companies to construct their own waste storage facilities.

Venue for future successes

As the saying goes, proof of the pudding is in the eating, proof of KHTP is in its established and satisfied tenants. Although fairly new, KHTP boasts more than two dozen tenants, with 70 percent of them being multinational corporations. Among the tenants are Intel Products (M) Sdn Bhd, Silterra (M) Sdn Bhd, Celestica (M) Sdn Bhd, AIC Semiconductors Sdn Bhd, and Fuji Electric (M) Sdn Bhd.

"KHTP is a well-planned and integrated Park. With the excellent built-in infrastructure, proximity to major highways and ports, availability of land for future growth and a committed and professional management team, KHTP has all the key ingredients required for an industrial park's success," remarked Dr EK Chong, managing director, Intel Products (M) Sdn Bhd.

Equally satisfied tenant, Yoshiko Nakazato, president, Fuji Electric said, "We spent years searching to ensure that we would be in the right place at the right time and after much consideration, we finally decided to establish a new factory in Kulim. The KHTP includes high-tech companies, a university and technical and training centres with excellent business conditions.

"We understand that this area will contain Malaysia's greatest concentration of high-tech industry. We are very confident that the Kulim site is the most suitable place for our plant."

Undoubtedly, KHTP, Science City of the Future, is fast becoming the location of choice for the specific high-tech companies that it takes in, for both local and foreign companies. We have much to expect from KHTP in the future. ●