Understanding the PRD

Looking at the sector tendencies behind the economic power house of the Pearl River Delta in China
Preface

The white paper “Understanding the PRD” represents the views of the Netherlands consulate in China. This paper can serve as a first steppingstone in trying to understand the business environment on a sector basis. Our team of sector specialists have compiled the latest information within their respective sectors. The horticulture- and agriculture sector is not included as we believe these sectors have tremendous potential worth having a separate report. The main goal of this paper is to give a general bird’s eye view of the current sector developments in the Pearl River Delta.

For more specific information regarding the services of our China Economic Network please be referred to the following websites:

www.guangzhou.nlconsulaat.org

www.agentschapnl.nl/onderwerpen/internationaal-ondernemen/landenoverzicht/china
The Pearl River Delta is and will remain for the coming years the main production- and trade engine of China. The transformation- and maturing of this dynamic economy creates many opportunities and challenges for Dutch (and Chinese) businesses.

The Chinese government has created three new special economic zones (SEZs) in the PRD that will function as the regions’ new pearls of state-capitalism; clustering the entire region into a ‘California style’ modern economy. The three SEZ’s are Qianhai, Hengqin and Nansha.

When looking at current economic trends in the region the following top-sectors deserve extra attention in terms of opportunities for Dutch businesses trying to enter the South China market: creative, water, logistics, energy, High-tech Systems & Materials and Life Science & Health.

Creative industries: Throughout the PRD region, Guangzhou and Shenzhen are taking the lead in developing creative industries. In the first half of 2013, the added value of creative industry in Shenzhen was 64.7 billion RMB, up by 18.5% annually since 2010. Cities surrounding Guangzhou and Shenzhen are propelled into being more innovation oriented compared to other 2nd- and 3rd-tier cities in the region. Opportunities are in industrial design, branding, architecture and fashion.

Water-sector: Conditions in the Netherlands are comparable to those in the Pearl River Delta. The Pearl River Delta is facing tremendous water-related problems such as saltwater intrusion and algae infestation due to over-use of fertilizers. In order to explore the water challenges facing coastal cities in the Pearl River Delta, the Dutch consulate in Guangzhou (CG) co-hosted a water conference with Sun Yat-sen University (SYSU) on 28 November 2012 with experts from around the world. As a follow up to H2o12, CG Guangzhou is planning to host a H2o13 workshop at the end of 2013 (www.h2o13.net). Focusing on ground water pollution and soil remediation problems the H2o13 will showcase Dutch solutions to PRD water challenges. The main opportunities are in water-safety technology, salt-intrusion management, water monitoring equipment, soil remediation, Yacht industry and specialized shipbuilding.

Logistics: The logistics sector in the PRD is one of the most advanced sectors of China. Around one third of total exports from China will ship through ports from the GPRD (Greater Pearl River Delta = PRD + Hong Kong & Macau). The main opportunities are in transportation infrastructure, port management, aviation industry and smart transportation systems.

Energy: The various local governments in the PRD are facing many challenges governing the factory landscape. Simply relying on energy saving and emission control cannot comprehensively solve the problem of energy shortage. Energy overspending will continue to cause environmental pollution. Faced with this situation the government is trying to maximize the use of sustainable energy and clean technology. This shift in government focus has opened many opportunities for foreign businesses in waste-to-energy, offshore wind energy, smart-grid, sustainable building and conventional energy.

High-Tech Systems & Materials: The HTSM sector in the PRD region is in many areas more developed than other parts of China. The main opportunities for Dutch companies are in the ICT service industry and automotive industries. The ICT industry in the PRD region is a dynamic and complex industry covering a broad range of products and services including telecommunications, hardware (consumer electronics), software and IT services. The electronics and information sector, the equipment & machinery manufacturing, automobile manufacturing, and oil & chemistry are
targeted by the province’s five-year plan. Despite the fact that PRD’s hi-tech industry is leading the country, its development is still far from other leading high-tech countries and regions.

Life Science & Health: The PRD’s concentrated wealth and its large population create an ever growing market for healthcare products and services. The PRD medical device industry is mostly concentrated in Shenzhen. IPR problems are more often successfully addressed with help from the Chinese government. Main opportunities are in e-health service industries, hospital management, aging related industries, elderly care and high-tech medical devices.

The developments in the various aforementioned sectors create a lot of opportunities for Dutch enterprises if approached in a proper and conscious way. SMEs need to be financially prepared, need to understand the region, its customs and culture. In recent years it shows that a company starting with a good legal basis has much more opportunity to grow.

The PRD is home to a growing middle class with a growing appetite for foreign products. Foreign products have more prestige and are (still) viewed as reliable and of higher quality than domestic products. The purchasing power of the people of the PRD creates many opportunities for Dutch businesses trying to enter the Chinese market, especially in the aforementioned sectors.
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The Pearl River Delta in a bird’s-eye view

China’s 3rd longest river (after the Yangtze and the Yellow river) gives the Pearl River Delta (PRD) its name. The Pearl River flows through Guangzhou, the provincial’s capital, known historically as Canton. With a population of almost 13 million, Guangzhou is the 3rd largest city in China and has the highest average annual salary (€10.000) per capita.

The PRD has a long history of trade; reflected in the Cantonese people´s adaptability to the world’s trends in globalization. Traders from the Middle East were doing business through this port as early as the eighth century; making the city a trade port for Christians, Arab Muslims and Jews. The Portuguese were the first Europeans to start trading by sea in the PRD in the early 16th century. They kept a monopoly on the trade until the Dutch took over in the early 17th century operating from Dutch Formosa (current Taiwan) until the invasion of Zheng Chenggong (Koxinga) in 1662. The 18th and 19th century were marked by many European trading companies setting foot in the PRD, resulting in the Opium Wars of 1839 and 1842, forcing the Chinese emperor to further open up the trade lines with Europe’s empires.

During the Opium Wars era the British occupied parts of Guangzhou, setting up Shamian Island (currently Guangzhou’s main tourist spot). After WO II foreign business activity in South China was limited to Hong Kong and Macau and was close to zero until President Nixon visited Chairman Mao in 1972. China’s economic policy from then on slowly shifted to experimenting with capitalist open market systems starting with Deng Xiaoping’s pilot project, the first Special Economic Zone in Shenzhen in 1982.

After this the delta developed into one of the world’s most densely populated areas including nine cities in southeast Guangdong province: Guangzhou, Shenzhen, Dongguan, Foshan,
Huizhou, Jiangmen, Zhaoqing, Zhongshan and Zhuhai. The main economic centers of the PRD are Guangzhou and Shenzhen.

When trying to understand the economic drive of the PRD one needs to understand the role of the special administrative region of Hong Kong (and Macau) as the region’s main investor. Since 2003 Hong Kong and Macau have substantially liberalized trade with the mainland by phasing out trade barriers and boosting investment in Guangdong. The term Greater Pearl River Delta (GPRD) includes Hong Kong and Macau to underline their economic role in the region. Since the opening up of China in the late seventies the PRD has enjoyed two digit growth for over 3 decades enclosing about one third of all China’s foreign investment.

The PRD is also home to some of China’s biggest corporate giants like Tencent, BYD, Huawei and ZTE which are all based in Shenzhen. The PRD accommodates about a 100,000 foreign enterprises, nearly a quarter of all foreign enterprises, accounting for over half of the region’s export and total industrial input. FDI is mainly concentrated in the manufacturing industries of hard-ware, computers, computer accessories, mechanical and electrical products, but also biological products and refined chemicals.

When targeting opportunities for foreign and Dutch enterprises it is advisable to take a sector approach to the region and see what developments the main sectors are undergoing, and how these economic changes and trends create business opportunities for Dutch enterprises. Before looking at the sectors separately, it is important to look at some major new government projects, the so called special economic zones.

“Many Dutch entrepreneurs who go to China focus on first tier-cities such as Beijing and Shanghai. However, according to me the PRD is the area with the best business opportunities, marked by the highest export rates and foreign investment numbers in whole China”

- Remco Böhre Chairman Benelux Chamber of Commerce PRD
1.1 Chinese government investment and development plans, the new special economic zones of the PRD: Qianhai, Hengqin, Nansha

There are many economic zones in the PRD which all have their own characteristics. In this paper the focus will be on (i) Qianhai (marked ‘green’ on the map below), (ii) Hengqin (‘red’) and (ii) Nansha (‘blue’), as these surpass all the others in terms of government funding and special business-supporting regulations. These respective zones lay at the heart of an interconnected infrastructure (bullet-trains, expressways, mega-bridges) clustering the area into one major (sea-oriented) economy.
Qianhai

Situated at the shore of Nanhai and neighboring to Hong Kong and Macau, the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone (hereinafter referred to as Qianhai Zone) is located at the west of Shekou Peninsula in Shenzhen and the east estuary of the Pearl River, which covers an area of 15 km².

As an important step to facilitate the cooperation and economic development between mainland China and HK/Macau, Qianhai Zone has been identified as one of the key strategic development zones in the PRD. It is to be developed into a national modern service industry base. The blueprint of the future Qianhai Zone consists of “three areas and two belts”. Two belts, (i) an integrated service industry belt and (ii) a coastal recreational and culture belt will connect the three areas, (a) a bonded port area, (b) a comprehensive development area and (c) a central business area. The sector focus of Qianhai Zone will be: finance, modern logistics, information services and technology services. GDP of Qianhai Zone is expected to reach 150 billion in 2020. To mark the importance of this ‘Chinese Manhattan project’, chairman Xi Jin Pin visited the site as his first official visit outside of Beijing.

Policy incentives
June 27, 2012, the State Council approved the relevant policies in the development and opening up of Qianhai Zone. Pilot policies, covering finance, tax, legal affairs, human resources, education, medical care and telecommunications, will be adopted, so as to attract domestic and foreign investment in Qianhai.

Finance
The most important policy incentive is financial reform on cross-border RMB business, which actually activates RMB currency circulation in the international market and enables the development of Hong Kong as an offshore RMB settlement center. For the RMB inflow into China, companies in Qianhai can take advantage of the large RMB deposit at lower loan interest in Hong Kong compared to mainland China. For the outflow, large amounts of the domestic capital accumulated by the financial service industry in Qianhai Zone, will be invested in overseas financial products based on the loose policy on foreign investment regarding the special zone. By May 2013, around 610 entities registered in Qianhai, 80% of which are from the financial service sector. The registered capital reached over RMB 80 billion. The total investment so far has been over RMB 130 billion.

Preferential Tax system
In view of corporate tax incentives and treasury support, qualified enterprises that set up in Qianhai can enjoy a reduced Corporate Income Tax (CIT) rate at 15% and subsidy by the way of tax rebates. Exempted from Individual Income Tax (IIT) are: (i) overseas experts and professionals; (ii) staff working in enterprises for over a year (enterprises belonging to so called encouraged industries). The modern logistics enterprises registered in Qianhai that meet specific conditions enjoy favorably business tax policy specifically set-up for enterprises in the logistics sector.

Legal system
A Hong Kong arbitration office will be set up to deal with commercial disputes in Qianhai. Therefore, an alternative option will be available for companies, especially foreign...
companies, to better protect their rights and interests. Joint operation of law firms between China mainland and Hong Kong will be further improved in this zone. In case of commercial disputes it eventually enables foreign companies in Qianhai to have their case handled in English by a Hongkong (international) lawyer. This is a historical shift in mainland legal systems recognizing the importance of HK legal systems as a tool to upgrade the FDI climate in mainland China.

Nansha Island

**Location**
In September 2012, the State Council officially approved the Plan for the Development of Nansha New Zone. With the proximity of Hong Kong and Macau, Nansha occupies the center of an “A”-shaped spatial structure formed by Guangzhou, Hong Kong and Macao. Within a 75-kilometer radius of Nansha New Zone, there are five international airports: Guangzhou, Shenzhen, Zhuhai, Hong Kong and Macau. By the year 2015, railway-travel time between the center of Nansha and downtown Hong Kong and Macao will be cut to less than 40 minutes (!).

Nansha is positioned by the Chinese government as the "No 1" project in Guangzhou’s urban development. It is to be built into a high-quality residential district for Guangdong, Hong Kong and Macao residents.

Nansha has built a cluster of industries including automobiles, shipbuilding and ocean engineering machinery, port logistics and chemicals. As the country’s number 6 State-level New Area, the Nansha New Area will get central government support through a series of preferential policies and reforms on tax policy, land management and industrial development.
Hengqin Island

Location
Hengqin island is located in the South of Zhuhai, covering 106 km², connected to Macao by bridge and therefore centrally located at the mouth of the PRD close to Hong Kong and Guangzhou. In 2011 Hengqin was upgraded from Special Economic Zone (SEZ) to a Free Trade Zone. The island will basically triple Macau in size, providing it with the necessary space to expand the facilities that are essential for leisure tourism, such as resorts, hotels and theme parks.

‘The Pudong of the South’
The Hengqin Overall Development Plan, approved by the Central Government in Aug. 2009, positions Hengqin Island as “the third strategic new area”—after Pudong in Shanghai and Binhai in Tianjin—, getting government financial injections running into billions. Hengqin will focus on: commercial services, leisure tourism, financial services, science education R&D and creativity. Due to a limitation of land resources and increased human resource costs, tertiary industry, especially modern service industry, will be the top priority on the island. Sectors like industrial design, industrial research and development, and other low-carbon emerging industries, are welcome to set-up shop in Hengqin, encouraged with various incentives.

Special government incentives
Preferential policies on taxes and treasury support will be implemented in several sectors such as commercial services, science education and R&D, creativity and highly specialized & new technologies. Qualified enterprises that establish their business in Hengqin can enjoy a reduced Corporate Income Tax (CIT) rate of 15% and get subsidized via tax rebates. The special zone also has some preferential policies in customs & import VAT incentives; the imports of production-related goods into Hengqin are eligible for tax exemption. For the VAT and Consumption Tax (CT), trading of goods among enterprises in Hengqin is exempt from VAT and CT and production-related goods, sold from other mainland areas to Hengqin, are viewed as exports and eligible for VAT refund.

Currently there are over 1700 enterprises registered in Hengqin. So far there are 41 key projects with a total investment of around RMB 175 billion in the zone. Hengqin zone is expected to reach a GDP of RMB 40 billion by 2017. During a meeting between the Dutch consulate and the Hengqin authorities in 2012, the authorities indicated that they would welcome a range of Dutch companies and experts in the following sectors: water-management, soil treatment, landscaping, designing waterfronts, marine companies, urban planning, land reclamation, and high tech companies. Dutch companies are more than welcome to set up either R&D centers or incubators in Hengqin, to turn scientific achievements into real production by effectively by collaborating with local enterprises.
2 PRD Sector Focus

2.1 Creative Industry

Overview
Following the directives of the 12th Five Year Plan (2011-2015) and the Cultural Development Plan (2012) released by China’s central government, local governments have further specified development strategies that are tailored to stimulate the creative sector in China. The Guangdong government has stated in the provincial Cultural Development Plan (2012) to prioritize from 2011 onwards, the development of the creative design sector, including industrial design, arts and craft design, fashion, architecture, animation, music production and advertisement. Throughout the PRD region, Guangzhou and Shenzhen are taking the lead in developing creative industries. In the first half of 2013, the added value of creative industry in Shenzhen was 64.7 billion RMB, up by 18.5% year on year.

Market trends and development
The Dutch creative industry promotes design, architecture and fashion as the three main subsectors. The PRD as a whole is a promising market, open to foreign players and could constitute opportunities for Dutch companies to play a role in this economic transformation. Chinese are increasingly seeing the added value of creativity. Conservative thinking, that mass production will sell itself, is making way for innovative enterprises investing in design and branding strategies, opening new markets for Dutch creative enterprises, plus possibilities to sell branding strategies.

Branding
The awareness by local Chinese companies of the importance of branding has greatly increased as a key to long-term market competitiveness. There is a growing demand for graphic design, branding, visual identity, packaging, promotional materials and website development. Shenzhen is one of the pioneering cities in the graphic design sector. Over 20,000 graphic designers are working in more than a 1000 design studios located in Shenzhen. According to government data the annual output reaches 600 million RMB.

Industrial design
Given the fact that the PRD is China’s biggest production house, the market for industrial design is enormous. The growing middle-class demand for high quality consumer electronics, wireless communication, automobile electronics, furniture and home decoration, puts Shenzhen and Guangzhou on center stage for design companies. Other cities are also trying to attract foreign design. For example, Shunde district in Foshan city is a national furniture manufacturing base. Jiangmen city is famous for sanitary-ware production. Local governments have been showing a willingness to introduce foreign design firms to provide services to these local factories. Interactive design is especially in need of website development, computer-generated special effects, computer-generated animation and electronic games. In fact, Guangdong has a strong sector focus on...
animation. It is reported in the Guangdong Cultural Development Plan (2012) that the annual output value of animation of Guangdong accounts for 1/3 of the national total, while the output of gaming products accounts for 2/3.

Dutch interior design is highly valued by local Chinese. Looking into the local market, Shenzhen positions itself as leader in this field. Shenzhen interior designers have won the most international awards compared to other cities in China. According to recent government data nearly half of the landmark decoration projects in China are designed and implemented by Shenzhen companies.

Architecture
China is still the world’s biggest construction site and the demand for architectural design is steadily increasing. The governments of the PRD are faced with high population ratios per km2, making the need for smart urban development a top priority. Statistics from the China Architecture Association show that the output value of China construction industry increased 140 times within 25 years (between 1985 to 2010), while the added-value was up 60 times. In 2011, the output of the construction industry in Guangdong was 585.91 billion RMB and increased by 24.3% annually.

Greater demand for landmark architecture and city branding tools are now also increasing in 2nd- and 3rd-tier cities and suburbs. For 1st-tier cities, taking Guangzhou and Shenzhen as example, opportunities lie in the government steered public construction projects, such as cultural- and gym facilities and public building projects (See chapter on energy for eco-city planning page 18).

Fashion
Growing private consumption is the primary factor that boosts fashion industry in China, and the online shopping has further fueled this consumption. For fashion and garment companies, online shopping has been an important retail and marketing channel that not only lowers marketing cost, but also helps fashion designers to reach more potential customers. In 2011 the online fashion sales reached a total amount of 809 billion RMB of which 83.9% is attributed to clothing. Guangzhou and Shenzhen are the center of fashion and garment industry in South China. Shenzhen garment industry takes more than 50% of the market share in 1st-tier cities while garment factories in Guangzhou account for 1/4 of the clothing production in China. Local companies have the willingness to cooperate with foreign designers, especially design companies that sell tailor-made training courses and trend forecasts. There is still much room to further promote the awareness of Dutch fashion brands. Italy, UK and France are taking the mainstream position. Fashion fairs and lectures are considered as efficient promotion channels for Dutch fashion designers (for possible channels please be referred to Annex).
2.2 Water sector

General overview
Located in a subtropical zone, with abundant rainfall and advanced water systems, the PRD is one of the areas in China with rich water resources. The Pearl River water system consists of the Xijiang, the Dongjiang, the Beijiang and the Delta water system, the Hanjiang River water system and rivers that directly flow to the sea. This delta area of 440,000 km² makes the region very unique; relying on surface water instead of underground water like the rest of China (which is basically very dry and facing tremendous water shortages).

Government Policy
In its 12th Five-Year Plan (2011-2015), Guangdong stated that sustainable growth will be a major theme. To meet the rapid economic development challenges in the PRD, investment in clean technologies will continue to increase in the areas of water purification, flood control, coastal protection, foundation technology and water management in urban as well as rural areas.

The Pearl River Delta is facing tremendous water-related problems such as saltwater intrusion and algae infestation due to over-use of fertilizers. In this field, certain opportunities have been brought up under the government-to-government cooperation framework. As of June 2010, a Sino-Dutch cooperation program on salt-water intrusion has been jointly carried out by Rijkswaterstaat its local Chinese counterpart – the Pearl River Water Resources Commission.

Shipbuilding/Yachting
The Pearl River estuary in Guangzhou is one of the three key shipbuilding bases that are prioritized by the China government. Guangzhou municipal government has highlighted the importance of developing shipbuilding and ocean engineering in the region. In 2010, China has become the world’s largest shipbuilder with coverage of 43% of the total world’s market. An interesting new development in shipbuilding is the Yacht industry. China’s Yacht industry started booming in recent years. Although its yacht manufacturing industry is still in the initial stage of development, the growing amount of millionaires has an ever increasing appetite for yachting.

Dutch activity in the PRD
In order to explore the water challenges facing coastal cities in the Pearl River Delta, the Dutch consulate in Guangzhou (CG) co-hosted a water conference with Sun Yat-sen University (SYSU) on 28 November 2012 with experts from around the world. As a follow up to H2o12, CG Guangzhou is planning to host a H2o13 workshop at the end of 2013 (www.h2o13.net). Focusing on ground water pollution and soil remediation problems the H2o13 will showcase Dutch solutions to PRD water challenges. Conditions in the Netherlands are comparable to those in the Pearl River Delta. Hence, the Netherlands is a natural partner for the South of China to exchange knowledge and experience on soil and groundwater remediation (for more information on main events and players in the water sector please be referred to Annex).

“You definitely need to partner up with the Chinese if you want to be successful in your business here”
- Bert Meijwaard, Managing Director Damen Shipyards in Guangzhou
2.3 Logistics

The logistics sector in the PRD got an immense boost by the open door policy in 1979. Around one third of total exports from China will ship through ports from the GPRD. With a capacity of 14.52 Mill TEU and 22.16 Mill TEU, the Ports of Guangzhou and Shenzhen both ranked in the global top 10 ports in 2012.

Ports
The PRD economy has been focused on its manufacturing industry. To bind this region into the global economy, it has built up high quality world class ports facilities to ship out the production, to meet not only the world’s manufacturing demands, but, recently, also domestic market demands. Nansha port, part of the Port of Guangzhou, is an excellent example of the growing inland shipping and logistics development serving local demand.

Since the inner ports in Guangzhou were not able to handle heavy ships, a deep water port in Nansha came into operation in 2004. Within a few years, Nansha port has developed 20 world class deep-water berths for ships with gross deadweight tonnage of 50,000 to 100,000 tons; it also operates China’s largest roll-on/roll-off pier for the shipping of motor vehicles.

Market trends and developments
Due to the global economic recession, Shenzhen Port, together with Hong Kong, suffered a TEU decline in 2012, while Guangzhou Port increased by 2.8%; a clear indicator of growth of the domestic market.

“...it also dropped like other ports in PRD. However, the domestic market has been growing fast and I expect to see this trend to continue steadily”

–Mr. Ma, Chairman of a Guangdong Logistics Association

Transportation infrastructure
With rapid urban development and rising environmental concerns, developing sustainable transportation systems in terms of traffic and emission control becomes a top priority in China’s government policy making. Watching the development trends in the PRD region, infrastructure investment is still regarded as the main drive of economic growth, especially since the exports to the United States, Japan and Europe, the lifeblood of the region’s economy, have been weakened and domestic consumption is not growing fast enough. Guangzhou city, for example, plans to spend 63 billion RMB to expand its railway system during the 12th Five-year plan.

Aviation industry
When looking at infrastructure construction projects, the ongoing expansion project of Guangzhou Baiyun International Airport is definitely a key project. Last year, according to China’s Civil Aviation Industry Promotional Development Opinion issued by the State Council, Guangzhou has been positioned as one of three national hub airports; through China Southern Airlines and its Sky Team members’ Baiyun airport is connected to the world’s major airports. The airport has budgeted 22 billion RMB to conduct the expansion project.

When looking at the expansion project in detail, the main opportunities for Dutch companies lay in the following aspects: (i) the construction of the third runway; (ii) the preliminary research phase for the fourth...
runway; (iii) the new terminal building covering a total of 800,000 sqm, including an integral transport center; (iv) the Baiyun airport authority also realizes that a world-class airport requires not only heavy passenger throughput but also an optimized processing of passengers. In addition, collaboration is needed with regard to commercial development of terminal areas and staff training.

Past cooperative experiences between Guangzhou aviation industry and the Dutch sector, both Schiphol and KLM, have been very fruitful for Baiyun airport and China Southern Airlines. There is a strong demand from the Chinese side to further deepen and broaden the cooperation. In addition we have identified potential niche markets in pilot training, captain recruitment, aircraft maintenance, aviation materials, and operating low-altitude flying clubs. Active market players also include Shenzhen Airlines, Shenzhen Aviation Transportation Association, Zhuhai Aviation Industrial Park.

Sustainable transport/Roads
Increasing infrastructure construction will speed up the development of different areas in order to restore the regional imbalance in Guangdong’s economy. This form of economic growth is however very dangerous, possibly caused by the government’s debt problem and its corruption issues. In China, every 10% increase in road capacity will be fully filled up within one year. Therefore, simply building roads is not the best solution to overcome this serious challenge. Sustainable solutions for the ever rising congestion levels throughout Guangdong should be considered.

Dutch Intellectual Transportation System (ITS) solutions have been also introduced to Guangdong by the consortium of ITS experts. The integrated ITS solutions varying from database foundation, data collection, real-time traffic modeling, scenario evaluation and traffic management are demanded by the market in Guangdong. By applying ITS solutions, the city’s transportation system can be further optimized and more effectively integrated. TNO has signed a MoU with the Shenzhen government aiming at transforming Dutch technical solutions into Chinese practice. Sustainable transport solutions have another advantage in terms of their contribution to emission control. The Guangdong transport sector is also strained by diesel shortage. The energy shortage and heavy pollution has triggered emerging subsectors, such as electric vehicles, the transition of people’s travel model from driving private cars to using public transport, which increases the demand for EV busses, high-end bicycles and parts, and upgrading of current greenways.

Last but not least, a number of Dutch companies active in sustainable-water-transport are also successfully tapping into integrated transportation projects from the Guangdong government.
2.4 Energy

Guangdong is heavily investing in energy efficiency. The provincial government has carried out relevant feasibility studies and pilot projects on offshore wind power and solar energy. Biomass energy has been also prioritized to an unprecedented position, in relation to all kinds of waste-to-energy regeneration and management.

Energy-saving technologies (applied in existing buildings) and new green buildings are generally required in the PRD cities. Eco-city or smart city concepts are becoming quite popular. To fit Dutch strong expertise in these market trends, the following five areas would be the threshold to start with:

a) Waste-to-energy

The Netherlands has an impressive track record of almost 85% of its waste being recycled. Only a small portion would be either landfilled or incinerated. Guangdong’s situation, however, lags far behind (!).

According to the Provincial 12th Five-year Plan, there is need to come to a more reasonable and pragmatic layout of biomass power generation projects. Active market players, such as Shenzhen Energy Company and Guangdong Zhongke Tianyuan New Energy Science and Technology Co., Ltd., are investigating investment possibilities in these respective sectors.

“In China relationships are more important than regulations”

– Fulco van Lede, CEO SHV Energy China

b) Offshore wind energy

For China, offshore wind energy is indeed an emerging sector. To tackle huge challenges, Guangdong Province, after carefully inspecting 26 potential sites, has taken two years to finalize its comprehensive offshore wind power development plan. The first project is located in Guishan, Zhuhai city and is a result of the joint efforts of a consortium of eight wind energy companies, including the most important market players, Mingyang Wind Power Group, Yuedian Group and China Southern Power Grid. Another two projects are still in the preliminary research phase. Additionally, more and more Chinese companies show interest in expanding the current business scope to offshore engineering, in which partnering foreign companies would be a shortcut to good results. A good example of this business structure is the Guangzhou New Energy Development Co., Ltd and Guangzhou Steel and Iron Group.

The identified areas for potential cooperation are: deep-water engineering, wind farm operation and management, reliability and connectivity between remote wind farms and the power grid, and technical consultancies.
Especially deep-water engineering, such as installation of wind turbine foundation, ocean environmental protection and pollution prevention, could be a very interesting area for collaboration.

c) Smart grid
Like the rest of China, Guangdong has a centralized power management structure with an integrated implementation of smart grid. The entire network is state owned and operated by the China Southern Power Grid and its branches, under the supervision of the Economic and Information Commission of Guangdong Province.
Grid operators face an increasing demand for a reliable distribution network, the need to decrease planned or unplanned power cuts, meeting the ever increasing customer needs. The Netherlands has know-how and practical experience in this field. Their research capacity and experience in standardization of smart grid could be very valuable to their Chinese counterparts. There is also room for exploring the business potential for Dutch companies in the field of superconducting materials, sensors and monitoring technology.

d) Sustainable Building
PriceWaterhouseCoopers China published the China Green-tech Report 2011, providing an analysis of emerging opportunities in six key sectors: cleaner conventional energy, renewable energy, electric power infrastructure, green building, cleaner transportation and clean water. The report marked that the largest business opportunity in the green-tech sector lays in the green building industry. To address this opportunity the Dutch government supported the launch of the Dutch Sustainable Building Platform (a cluster of 22 Dutch companies). They constitute a platform that has become a dynamic first-stop foundation for entering this emerging sector in China.
Another trend which is becoming more popular among local-government urban policy is the shift in focus from individual-based green building to smart city concepts. Shenzhen city is definitely a frontrunner in this field. Smart City development is a working area where Dutch expertise prevails over most of its other foreign competitors.

e) Conventional energy
The energy sector contributes substantially to the Dutch national income. Exports, employment, conventional energy (oil and gas), form a crucial part of this income. As the PRD is a major user of conventional energy this market has much potential for Dutch companies operating in this niche market.
Overview of the PRD’s HTSM Industry
The HTSM sector in the PRD region is in many areas more developed than other parts of China. This chapter will focus on two subsectors, ICT and the automotive Industry that have the most potential for foreign businesses.

ICT
The ICT industry in the PRD region is a dynamic and complex industry covering a broad range of products and services including telecommunications, hardware (consumer electronics), software and IT services. The PRD industries form one of the most clustered economies in China. In 2012, the revenue of telecommunication-operation-carriers in Guangdong province was 178 billion RMB, up by 9.8% year on year, taking up 13.7% of the whole country’s sector revenues. The information industry in the Guangdong is concentrated in 3 cities in the PRD region: Shenzhen, Dongguan and Huizhou. Now the added value of the electronics and information industry of the three cities accounts for 78.2% of the province’s total. This trend creates many opportunities for small startups in IT service industries, especially in the field of web-design, e-commerce and IT-security.

Automotive
Guangdong accounts for 1/4 of the country’s total sales of automotive industries. Its capacity of production ranks no. 2 in the nation. Guangdong’s automotive industry is concentrated around Guangzhou. The added value of the automobile manufacturing industry in Guangzhou, Foshan, and Zhaoqing amounts to 85.2% of the province’s total. In recent years there’s growing attention on the new energy automobiles and the automobile aftermarket, especially in Shenzhen where there is growing focus on Smart Mobility (translation of traffic information into smart actions in or vehicles, to reduce energy use and congestion).

“Try to consult others conducting business in China as much as possible”
– Martijn van der Woude, Founder & CEO the LED company Artixium

Market trends and developments
The high-tech industry is one of the main development priorities of the Guangdong government. Guangdong’s twelfth five-year plan (2011-2015) is determined to upgrade its traditional industries and nurture its new industries. The electronics and information sector, the equipment & machinery manufacturing, automobile manufacturing, and oil & chemistry are targeted by the province’s five-year plan. Despite the fact that PRD’s hi-tech industry is leading the country, its development is still far from other leading high-tech countries and regions. Therefore the players in this sector are very keen on importing hi-tech products from more developed countries to learn from their best practices in order to eventually produce them themselves (for major sector players please be referred to Annex). According to the Department of Foreign Trade and Economic Cooperation of Guangdong Province, Guangdong now encourages imports
of 1006 categories of well-defined products and technologies. The Guangdong government is using incentives to encourage such imports. For instance, Guangdong provincial government is spending 250 million RMB annually to subsidize the imports of special technologies and equipment needed for the upgrading of the regions HTSM industry. In the first half of 2013, Guangdong imported 129 billion USD of electronics and IT products, up by 49.2% year on year; this figure is much higher than Jiangsu’s 42 billion US dollars and Shanghai’s 34.7 billion US dollars (!).

Dutch opportunities
Quite some Dutch high-tech companies have operations in the PRD region. Most of the Dutch players in this sector established a sales office and/or an assembly factory. At the moment, the image of the Netherlands is not (yet) linked to high-tech, especially compared to some countries like Germany, France, USA, Japan or Korea. However, the Dutch unique edge in many areas such as: embedded systems, nano-electronics, navigation systems and mechanics gives Dutch players in these fields a competitive advantage compared to many other foreign competitors competing in the PRD.

Showcasing Dutch innovation at fairs like the China Hi-tech Fair (currently the largest and most influential scientific and technological fair in China and renowned as “the No.1 Technology Show in China”, is held in Shenzhen each year) forms an important strategy in entering the HTSM markets of the PRD.
2.6 Life Science and Health

The PRD’s concentrated wealth and its large population create an ever growing market for healthcare products and services. For instance, only in the year 2012, in Guangzhou, Guangdong’s capital city, 123 million people went to see a doctor in the hospitals/clinics and 2.2 million people were hospitalized. Guangdong province invests large amounts of resources to develop its healthcare industry. According to the Guangdong Health Department, Guangdong spent 185.18 billion RMB on healthcare for its citizens in 2011, up by 22.7% compared to 2010, with 50.17 billion RMB from the government. Per capita health expense also increased from 1445.9 RMB in 2010 to 1762.7 RMB in 2011, up by 21.9%.

China’s main medical device manufacturing centers are located in the PRD, the YANGTZE River Delta (YRD) and the Bohai rim area. Major life science clusters in the PRD region are: Guangzhou Science City, Guangzhou International Biotechnology Island, Baiyun District Biomedical Health Industry, Panyu Biological Industry Base, Conghua Biological Medicine Base, Shenzhen Hi-tech Industrial Park and National Health Technology Park in Zhongshan.

“When doing business with local Chinese counterparts it is important to put oneself in someone else’s shoes”
– Tim Steltenpool, Operations Manager
AMS Group

The PRD medical device industry is mostly concentrated in Shenzhen. In 2010, the output of Shenzhen’s medical device industry took up 42.36% of Guangdong’s total and 14.27% of the country’s total, and the Shenzhen growth rate is also 10% higher than Guangdong’s average. Shenzhen is also home to the China International Medical Equipment Fair (CMEF), the largest medical equipment trade fair in Asia.

Output of Shenzhen’s Medical Device Industry

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (million RMB)</td>
<td>19.6</td>
<td>27</td>
<td>41</td>
<td>53.38</td>
<td>68.39</td>
<td>93.29</td>
<td>107.15</td>
<td>121.3</td>
<td>163.03</td>
</tr>
<tr>
<td>YOY Growth(%)</td>
<td>51.94</td>
<td>37.76</td>
<td>51.8</td>
<td>29.95</td>
<td>28.13</td>
<td>36.41</td>
<td>14.86</td>
<td>13.21</td>
<td>34.4</td>
</tr>
</tbody>
</table>

* Source: Shenzhen Drug Administration
Market trends and developments

The healthcare industry in the PRD region has been growing at a growth rate of over 20% annually since 2005. The healthcare industry is completely re-organizing itself to deal with the following factors:

- **Aging:** It’s predicted that until 2020, Guangdong’s population of over 60 years old will account for 16% of the province’s total. Also as a result of China’s one-child policy, the 4-2-1 family model (a couple takes care of 4 parents and one child) means innovative solutions are being sought to resolve the problem.

- **Noncommunicable diseases (NCDs):** According to the World Health Organization, main factors contributing to NCDs are alcohol consumption, tobacco use, unhealthy diet, and physical inactivity. According to the 2010 statistics of the Guangdong Health department, over 750,000 people drink excessive alcohol, 4.6 million adults smoke, 70% of the families take in too much salt, and only 20% of the population exercises regularly. Common NCDs in Guangdong are cardiovascular diseases, diabetes, cancer and respiratory diseases, and chronic diseases contribute to 85% of Guangdong’s deaths. The heavy pollution in this region due to its rapid industrialization also contributes substantially to the prevalence of NCDs.

- **Middle-class higher demand for better life quality as a result of economic development:** With the per capita GDP of 13,454 US dollars in 2012, the PRD region is one of the wealthiest areas in China. The rising middle class in the PRD region demands better medical care, which again turns into market potential for medical companies.

The PRD region is making a great effort to meet such challenges, strengthening the primary medical care, and looking for innovative medical solutions such as e-health. Guangdong is playing a leading role in the IT part of health care. However, the PRD’s e-health services are still relatively underdeveloped and the local governments are allocating resources to further develop this field. In this regard, the PRD has been seeking cooperation with western countries to learn from their expertise and best practices and also incorporate western healthcare systems and products (for major sector players please see Annex).

Dutch Opportunities

To strengthen the competitiveness of Chinese companies in the high-end market, the Guangdong government aims to stimulate the domestic innovation capacity. Chinese companies are therefore keen on investing in promising projects of western partners, R&D collaboration, or technology transfer (note that IPR violation is a recurring issue in this sector). Due to the fact that China’s healthcare service is dominated by public hospitals, public procurement is the primary method for the purchase of medical equipment and pharmaceuticals. However, the procurement process remains complicated and diffuse, particularly for Dutch companies which are not familiar with the Chinese culture. Support from a local agent or company therefore is an effective tool, as they are familiar with the written- and non-written rules and know how to capitalize on their network.
3 PRD SWOT - Analysis
Strengths, Weaknesses, Opportunities and Threats

Strengths

- The PRD will remain a powerhouse for the coming decade. Its export oriented infrastructure is being transformed to serve two markets; domestic and foreign. The region has an outstanding road and railway system.
- A number of major ongoing infrastructure projects will further elevate the GPRD as one of the most competitive world regions of the 21st century. The main projects are: (i) the Zhongshan-Shenzhen passage across the river mouth of the Pearl River, (ii) the world’s longest bridge; Hong Kong – Zhuhai – Macau Bridge to be completed by 2016, (iii) eastern passageway between Hong Kong and Shenzhen, (iv) Express railway from Guangzhou to Hongkong, via Shenzhen, (v) expansion of Baiyun Airport in Guangzhou. This will maximize global linkage to any business located in the PRD.
- Home to China’s newest Special Zone projects that are directly coordinated by the central government in Beijing; Nansha, Hengqin, Qianhai; three projects that will further cluster the region into a conglomerate economic powerhouse.
- Home to one of the world’s largest and modern ports; guaranteeing low global transportation costs for the coming decade.

Weaknesses

- Red tape is still a common problem for foreigners doing business in the PRD. There is much room for improvement from the side of the local government in being transparent about current and changing rules and regulations that directly impact a foreign enterprises performance.
- Corruption is still common practice and many companies experience the culture of bribes and “red envelopes” as a normal way of doing business.
- No level playing field for most foreign companies. Local enterprises find their way around fines and regulations through a culture of bribing and this makes it harder for foreign enterprises to compete on domestic markets.
- Despite the fact that the government portrays itself administrating an area were English is the second language, in reality when doing business in the PRD one will depend a lot on local staff or local business partners.
- The local education system is still censored and very backward compared to the EU; creative thinking is not stimulated and this will pose a serious threat to the development of service industries. Chinese who have studied abroad are in many ways an excellent option for foreign enterprises in the service sector, but one needs to be willing to pay the extra price.
Opportunities

- The main opportunities for Dutch companies lie in the following sectors:
  1. Creative industries: branding, architecture, fashion and design;
  3. Logistics: transportation infrastructure, port managements, aviation industry, sustainable smart transport systems.
  There are also opportunities in other sectors:
  4. Energy: waste-to-energy, offshore wind energy, smart-grid, sustainable building and conventional energy;
  5. High-Tech Systems & Materials: ICT service industry, automotive industries;
- The developments in the various aforementioned sectors, create much opportunity for Dutch enterprises if approached in a proper and conscious way. SMEs need to be prepared, need to understand the region, its customs and culture. In recent years it shows that a company starting with a good legal basis has much more opportunity to grow.
- The PRD is home to a growing middle class with a growing appetite for foreign products. Foreign products have more prestige and are (still) viewed as reliable and of higher quality than domestic products.

Threats

- Rising labour costs form a threat for foreign enterprises that are not ready to invest in capital intensive manufacturing. Therefore traditional labour intensive industries like the textile industry have been moving out to neighboring countries or more inland to provinces with low labour costs.
- Pollution is a growing problem; many foreigners see the pollution as a big threat to their families and hesitate to stay for longer periods of time. The pollution is very severe when compared to the Netherlands, not only air and water pollution, but also food safety seems to be a never ending problem. When investing in the PRD one needs to take this into account; especially when moving your family here.
- Decreasing industrial land availability is causing relatively high inflation in food prices, real-estate and rent prices.
- IPR violation is still a common problem for foreign enterprises, but it must be said that the government is attacking this problem effectively and the situation has improved much when comparing to previous years.
- The business environment has become more foreign friendly over the years, but there is still much room for improvement. Visa regulations, hiring and firing staff, even simple things like acquiring a car and driver’s license are increasingly made difficult, which is remarkable given the fact that the PRD has one of the smallest foreign populations in the world. The American Chamber of Commerce has marked RED-tape as one of the main threats for future foreign investors.
Major Sector Players and events Creative Industry PRD

Guangzhou Design Week
In 2012, Dutch Design was presented in Guangzhou Design Week (GZDW) especially as 'Dutch Design Day', a whole day program, by the former Dutch Design Desk South China (DDDSC) in collaboration with the Consulate General of the Kingdom of the Netherlands in Guangzhou (CG GZ). Special exhibition of Graphic Happiness and Pixel Arts received Dutch government support. For the coming 2013 session, a Dutch bike exhibition curated by YKSI will be presenting Dutch design in GZDW.

Urbanism/Architecture Bi-city Biennale, UABB, Shenzhen
In 2013 UABB, Ole Bouman, the former Director of The Netherlands Architecture Institute, will act as Creative Director. He will collaborate with Stylepark on Urban Labs project. The fact that this year the Biennale will have a Dutch curator will further boost the exposure of Dutch design in the region.

University and Design College
Guangzhou Academy of Fine Art (GAFA)
The academic exchange and collaboration is very active between GAFA and Dutch counterparts. Prof. Tong Huiming, Dean/Professor of GAFA School of Industrial Design is one of the key contact points within CG’s network.
http://www.gzarts.edu.cn/2013/
Shenzhen Polytechnic (SZPT)
School of Art and Design (SAD)
http://english.szpt.edu.cn/
Guangdong University of Technology (GDUT)
School of Design
http://wsc.gdut.edu.cn/channels/47.html

Associations
Shenzhen Association of Interior Designers (SZAID)
http://www.szaid.com/
Shenzhen Graphic Designer Association
http://www.sgda.cc/
Shenzhen Industrial Design Profession Association
http://www.szida.org/

Design Companies
ARTOP Industrial Design, Shenzhen
Rito Communication Group, Shenzhen
Shenzhen DEVE BUILD Design Agency, Shenzhen
http://www.devebuild.com/index.html
Tom Shi Design and Research Studio, Guangzhou
http://www.tomshi.com/
Architecture
URBANUS Architecture & Design, Shenzhen
NODE (Nansha Original DEsign), Guangzhou
www.nodeoffice.com
O-Office Architects, Guangzhou
http://www.o-officearch.com/main.htm

Fashion
TANGY Collection, Shenzhen
http://www.tangysilk.com/
EXCEPTION de MIXMIND, Guangzhou
http://www.mixmind.com.cn/

Major players and activities in Water Sector

Zhuhai PINGSHA Yacht Industrial Park
PINGSHA Town of Zhuhai has just been designated by the 1st Investment & Cooperation Summit of Chinese Chambers of Commerce in Guangzhou, sponsored by the Guangdong Provincial Enterprises Confederation and Guangdong Provincial Association of Entrepreneurs, as one of Guangdong's Most Competitive Specialized Towns, ranking third after Guangzhou's Shiling Town focusing on leather industry and Dongguan's Humen Town highlighting garments. Also on the list are Zhuhai, ranking third of the Guangdong Best Business Climate Cities, and Hengqin New Area, ranking fourth of the Guangdong Economic Parks with the Most Investment Potential
http://www.pingsha.gov.cn/
http://www.investzhuhai.gov.cn/

Damen Ship Building Guangzhou Office
As a business model in ship building, Damen has 35 renowned shipyards or partner yards globally, which enables it to build vessels for customers in nearly every country of the world and maintain high quality and reputation globally. Damen Guangzhou has been operating the market for six years as a joint venture with Afai Southern Shipyard Ltd.
www.damen.nl

IHC China Support Co., Ltd
IHC China Support is 100% owned by IHC Holland, acting as an extension of the IHC Parts and Services B.V. in China. The company was established in Guangzhou in March 2005, and the components constructed in this facility vary from drag head to spud carriage
www.ihcfabrication.com
www.ihcmerwede.com

International Maritime Expo (INMEX China)
In 2012, INMEX was hosted in Guangzhou. The official statistics of INMEX show that the fair attracted over 800 exhibitors and 15,000 buyers from 20 different countries and regions. Initiated by Holland Marine Equipment (HME); a delegation of 10 Dutch maritime companies were showcasing their products and services at INMEX China. They were Bakker Sliedrecht, Electro Industrie BV, Elma BV, Heatmaster BV, HMHC, HMSA, IHC Hyto, MARIN, Rubber Design BV, VAF, Winteb VOF.
It also showed a trend that more Dutch companies are coming to PRD to set up their production facilities; a good example is IHC, and also Bakker, Rubber Design, etc. Some of the Dutch companies are seeking for or already cooperating with reliable agents starting up their business in the Chinese maritime market.
[www.inmexchina.cn](http://www.inmexchina.cn)

**Nansha Marina**
Under the nation’s 12th Five Year Plan, China’s central government has pledged its effort in making Nansha the center of a service hub linking the mainland with Hong Kong and Macau. Being the center of the Opium Wars, surrounded by old fortresses, Nansha is centrally located within the PRD region; an integrated coastal city in the making, and an ideal location for the development of a marina leisure hub for Southern China.
The Western management of Nansha Marina claims to become the main “marine leisure destination and regional boating hub” of Southern China by 2015. Belonging to Nansha Bay, it requires and enables Nansha Marina to be well connected to the Yacht building industry in south China, as well as in Hong Kong and Macau. The emerging development will be an opportunity for Dutch marine equipment companies to showcase Dutch water knowledge and equipment in this ever expanding leisure industry.
[www.nanshamarina.com](http://www.nanshamarina.com)

**Zhongshan Dafeiyang Shipbuilding Co., Ltd**
Established two years ago, Dafeiyang has an impressive trackrecord. Dafeiyang has got the full financial support from this real-estate headquarter in expending its business into different areas. Not only focusing on yacht building, Dafeiyang is planning to build a “one stop service” center in two years, which includes yacht purchasing, service, maintenance, yachting leisure etc. As Mr SUN, GM of Dafeiyang said, ‘‘because of a lack in design, the factory is still building its yachts in a conservative way; building its interior structure from prototyping, instead of following a 3D design blueprint’’ (like Dutch Yachtbuilders). Besides this, it is important to note that Dafeiyang is a big consumer of imported components.
[www.dafeiyangyacht.com](http://www.dafeiyangyacht.com)

**Major sector players HTSM (companies, organizations and associations)**

**China Mobile, China Telecom, China Unicom**
The 3 state-run telecom carriers occupy almost the whole PRD telecommunication market - China Mobile (53.5%), China Telecom (16.2%), and China Unicom (29.4%).
[http://eng.chinaunicom.com/](http://eng.chinaunicom.com/)

**Huawei, ZTE**
As for the ICT market, many MNCs have been active in the PRD region for many years. Huawei and ZTE are two examples of local brands with great success in the ICT industry. Huawei, with its headquarter in Shenzhen, is a leading global information and communications technology solutions provider. Its product scope ranges from networking & security, UC & C, cloud computing & data centers, to management & tools. In the first half of 2013, Huawei’s sales revenue reached 113.8 billion RMB, an increase of 10.8% year on year.
Founded in 1985, and listed in both the Hong Kong and Shenzhen Stock Exchanges, ZTE is one of China’s largest telecoms equipment companies with operations in 160 countries. ZTE is the world’s fourth-largest handset maker, and thanks to its 18 R&D centers, the biggest
originator of technology patents in the past two years according to the World Intellectual
Property Organization.
http://www.huawei.com/en/

Tencent
Founded in 1998 and listed in the Hong Kong Stock Exchange, Tencent is running a few of
China’s leading internet platforms in China – QQ, WeChat, Paipai and Tenpay. Until the end
of 2012, the number of QQ users has reached 798.2 million.

Philips
Royal Philips is a diversified health and well-being company, focused on the areas of
Healthcare, Consumer Lifestyle and Lighting. Philips posted 2012 sales of EUR 24.8 billion
and employs approximately 118,000 employees with sales and services in more than 100
countries. The company is a leader in cardiac care, acute care and home healthcare, energy
efficient lighting solutions and new lighting applications, as well as male shaving and
grooming, home and portable entertainment and oral healthcare. Philips has been active in
the PRD region for many years and its products are deemed by ordinary Chinese as high-
quality products from the western world.
http://www.philips.com/global/country_selector.page?locale_org=global

Guangdong Hi-tech Industry Association
Founded in 1999, Guangdong Hi-tech Industry Association now has over 6000 hi-tech
companies as its members, including over 100 listed companies. The annual output of its
members exceeds 800 billion RMB. Its members are mainly in the sectors of electronics,
telecommunication, BIPV, mechatronics, new energy, new materials, fine chemistry
engineering, biology & pharmaceuticals, and machineries. This association also has offices in
Vietnam, Dubai, and Germany.
http://www.gowin.org.cn/ (Chinese only)

Shenzhen Hi-tech Industry Association
Shenzhen Hi-tech Industry Association, as a representative of the high technology industry
in Shenzhen, is one of Shenzhen’s biggest industry associations. Now it has over 1500
members, which are mainly local hi-tech companies covering different hi-tech sub-sectors in
Shenzhen.

Shenzhen Information Industry Association
Founded in 1989, Shenzhen Information Industry Association has over 400 members, which
range from influential players in the electronics and information industry like Huawei, ZTE,
China Telecom, China Mobile, Tencent, and Kona, to small information companies in
Shenzhen.
http://www.sziia.org/index_en.asp
Major sector players LSH Sector (companies, organizations and associations)

3-level Hospitals
In China, 3-level Hospitals mean the best hospitals, which gained the ranking after the assessment by the Chinese authorities. Now Guangdong has 25 3-level hospitals, which are located mainly the PRD region. Important 3-level hospitals in this region include Nanfang Hospital, the First Affiliated Hospital of Sun Yat-sen University, Sun Yat-sen University Memorial Hospital, Guangdong People’s Hospital, Shenzhen People’s Hospital, Nanshan hospital, and Peking University Shenzhen Hospital.

Mindray
Founded in 1991, Mindray is one of the leading global providers of medical devices and solutions, with its focus on patient monitoring & life support, in-vitro diagnostics, and medical imaging. Headquartered in Shenzhen, and listed in the New York Stock Exchange, Mindray has subsidiaries in 18 countries in North and Latin America, Europe, Africa and Asia-Pacific, and has a global R&D network of research centers in Seattle, New Jersey, Miami, Stockholm, Shenzhen, Beijing, Nanjing, Chengdu, Xi’an and Shanghai. Today, Mindray's products and services can be found in healthcare facilities in over 190 countries and regions.

Edan
Based in Shenzhen, and listed in the Shenzhen Stock Exchange, EDAN Instruments, INC. focuses on R&D, production, and distribution of advanced electronic medical equipment: Obstetric & Gynecology Products, Patient Monitoring Products, Diagnostic Electrocardiographs, Ultrasonic Imaging Systems and In-vitro Diagnostic Products. The company owns core technologies in various domains such as Physiological signal detection, medical transducer, main-control platform. Its products are being sold to 480 3-level general hospitals in over 2000 cities and towns. Meanwhile, the company has set up marketing channels in over 120 countries and regions.

Applikon Biotechnology China
In view of the growing market in China, Applikon Biotechnology B.V., a Dutch leader in customized bioreactor systems, set up this company in Guangzhou to serve the Chinese market.
http://www.applikon-biotechnology

DSM
DSM is a life sciences and materials sciences company which produces sustainable products in nutrition, pharmaceutics, performance materials and polymer intermediates.
http://www.dsm.com/corporate/home.html

Arnold Suhr China
Arnold Suhr B.V., founded in 1947 and with its HQ in Utrecht, supplies ingredients for pharma & health, food & beverages, sports nutrition and chemical products. Arnold Suhr China, located in Guangzhou, is active in the sales of different products for the Chinese market.
http://www.arnoldsuhr.com/

Shenzhen Association for Medical Devices
Led by Mr. Li Xiting, the president of Mindray, Shenzhen Association for Medical Devices now has around 100 medical device companies as its members. Given the important role Shenzhen is playing in China’s medical device industry, this association exerts substantial influence in the industry.
http://www.samd.org.cn/ (Chinese only)

Guangdong Province Hospital Association
This association, with 26 branches focusing on different medical fields, has close relations with the most important hospitals in the PRD region.
http://gdsyy.org/
Creative Industry

GUANGZHOU

**Redtory**
Redtory uses the style of the Guangdong Canning Factory, which was the biggest canning factory in China, built in 1956. The waste production plant of the factory now has been transformed into a stylish LOFT, which gives unlimited inspiration of creativity and all together exudes a brilliant cultural history of the city which is the brand of urban development.
*Address: No128, Yuancun Si Heng Lu, Tianhe District*

**T.I.T Creative Park**
The T.I.T. Creative Park has garment, fashion, creative, culture and art as its themes. Famous designers, model companies and fashion brands from home and abroad have established their business in the park.
*Address: No 397, Middle Xingang Road, Haizhu District*

SHENZHEN

**OCT LOFT**
OCT Contemporary Art Terminal (OCAT) is a brand new contemporary art organization under the umbrella of Shenzhen’s He Xiangning Art Museum, and is significant in being the first such professional institution to be established in association with, and administrated by, a state-owned art museum anywhere in China.
*Address: Behind Konka, Nanshan District*

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