Sino-Singapore Guangzhou Knowledge City

Dec 2011

Sino-Singapore Guangzhou Knowledge City
Investment and Development Co., Ltd

A unique place integrating leading technologies, talents and ecology
Presentation Outline

- Knowledge City Concept
- The Key Partners
- Knowledge City Site
- Knowledge City Development Status
- Presenting Unique Opportunities
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How Knowledge City started...

Guangdong Party Secretary Wang Yang led a 400 member delegation to Singapore in Sep’08

“…Guangdong now would like to leverage on the successful experience of Singapore, and integrate it with the actual conditions in Guangdong, thereby forging a way that is suitable for Guangdong, so that it can become a modern city like Singapore”

PS Wang Yang LHZB 联合早报 1 Sep’08

Guangdong studies Singapore's economy

‘…So if you don't know how to restructure the economy, go and learn from Singapore.’

PS Wang Yang Straits Times 10 Oct’08
Guangdong’s 2\textsuperscript{nd} Economic Miracle – Creating the next S Curve

\textbf{GDP/capita} \hspace{1cm} \textbf{Time}

- Labour intensive industries
- Knowledge intensive industries
What is the Knowledge City

Positioning

China’s economic transformation and regional development

- Total area: 123 sqkm
  Knowledge-based economy oriented

- Total area: 31.23 sqkm
  Eco urban development

- Total area: 80 sqkm
  Manufacturing oriented

Guangzhou Knowledge City 2010

Tianjin Eco City 2008

Suzhou Industrial Park 1994
Vision and Concept of Knowledge City

- A unique and distinctive city well-known in China and globally for its dynamic economy and environmentally-friendly living
- Housing a vibrant community where people ‘live, work, learn and play’ in harmony
- Talents and enterprises converge to create new innovations, ventures, high-value products and services for the world

Magnet for talents, enterprises and industries
Integrated Development of Knowledge City

**Environmental**

**Social**
- Public housing
- Healthcare
- Education
- Social Harmony

**Economic**
- Industry development
- Investment promotion
- Manpower training
- R&D

**Governance**
- Regulations
- Policies
- E-Government
- Incentives

**Physical**
- Urban planning
- Infrastructure
- Transportation
Strategic Initiatives

Strategic Overlay

GKC Devt Plan
1. Smart City

1. Smart City

- Smart City Master Plan
  - eGovt
  - Smart Business
  - Smart Lifestyle

- FTTB / FTTH
- Fusion of Networks
- 21 companies submitted 123 ideas.
Strategic Initiatives 2: Eco City

- Green Buildings
- District Design Guidelines
- >20 Eco City KPIs
- Potable Water
Strategic Initiatives 3: Learning City

- NTU-Kauffman Innovation Base
- International academic exchanges
- Smart Library
- International School

1. Smart City 智慧城
2. Eco City
3. Learning City

GKC Devt Plan
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Key Partners

Guangzhou Development District (GDD)

One of the best development zones in China. It ranks first in major indicators among all state-level development zones in China.

Singbridge International Singapore Pte Ltd

Singbridge
TEMPASEK’s wholly-owned subsidiary, having rich experience in developing and managing world-class business parks around the world.
GDD – ranked top among China’s 54 state-level development zones for last 5 years on major indicators

<table>
<thead>
<tr>
<th>Indicators – 2010</th>
<th>No.</th>
<th>GDD</th>
<th>TEDA (Tianjin)</th>
<th>SIP (Suzhou)</th>
<th>Kunshan</th>
<th>Billion USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1</td>
<td>25</td>
<td>24</td>
<td>22</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Industrial Value-added</td>
<td>1</td>
<td>48</td>
<td>48</td>
<td>14</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Gross Industrial Output (increase)</td>
<td>1</td>
<td>4.2</td>
<td>3.6</td>
<td>3.9</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Fiscal revenue</td>
<td>1</td>
<td>6</td>
<td>5.7</td>
<td>5.7</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Tax revenue</td>
<td>1</td>
<td>4.8</td>
<td>4.2</td>
<td>4</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Tax revenue - Foreign-invested enterprise</td>
<td>1</td>
<td>4</td>
<td>3.5</td>
<td>3.7</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>

Source: GDD, 2010 statistics
GDD – excellent investment promotion and implementation capabilities

- Attracted >2,800 foreign-invested companies; investors including 109 *Fortune 500* companies

  - Key industries in GDD:
    - ICT and software;
    - F&B; electronics;
    - Materials;
    - Chemicals;
    - Automotives;
    - Pharmaceuticals;
    - Iron and steel.
Singbridge International - Mission

Invest in, develop and manage integrated cities & sustainable urban solutions which embed the unique Singapore’s Development Experience

(Singbridge is wholly-owned by Temasek Holdings)
Singbridge’s Capability

Singbridge staff have played key roles in:
- various aspects of Singapore’s development
- large scale integrated projects
  - Suzhou Industrial Park
  - Tianjin Eco-City
  - IT Park Bangalore
Cooperation Framework

Temasek Holdings

Singbridge

SPV

Reg Capital: RMB 4bn (US$635m)

SPV

Knowledge City Administrative Committee (KCAC)

Guangzhou Knowledge City Pte Ltd

Project Management Office

Construction Management Office

Social Affairs Office

Sino-Singapore Guangzhou Knowledge City Investment & Development Co, Ltd (SGKC)

Master Developer

Received Business License on 13th Sept, 2011
Key Partners – Respective Roles

**KCAC**
- Delegated authority up to Provincial level for 20 criteria;
- Major infrastructure construction including expressways, subways, utilities etc;
- Management of investment preferential policies and incentives;
- Management of Social affairs.

**JVCo**
- Master Planning & Development;
- Industry Development & Investment Promotion;
- Infrastructure construction of ‘One-road & 3 Waters’;
- Development of residential and commercial facilities;
- Development of Business Parks;
- Facilitate software transfer.
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Pearl River Delta Region

80% of GD GDP
48 m pop; 55k sq km
Knowledge City Location

Pearl River Delta (PRD)
(9 cities and 2 SARs)
Area: 55,000 sq km

Guangzhou
Area: 7,400 sq km
Centre of PRD

Knowledge City
Area: 123 sq km
Centre of PRD
Regional Transportation Network

- **Airport**
- **GZ Downtown**
- **Beijing-Zhuhai Highway (completed)**
- **Guangcong Expressway (end 2013)**
- **Guanghe Highway (end 2011)**
Regional Transportation Network

Mass Rapid Transit System
- Extension of Line 14 from the city centre (end 2014)
- Extension of Lines 6 and 21 (under planning consideration)

High Speed Intercity Rail
- 180km/h
- 15 min to Baiyun International Airport
- 45 min to Shenzhen
- 1 hr to Hong Kong (when completed)
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Key Milestones

- **2010.6.30**: Ground Breaking
- **2010.11.12**: JVA Agreement
- **2011.1.21**: Prep Team
- **2011.6.30**: First Anniversary
- **2011.9.13**: JVCo Incorporation
- **2015**: Startup Area Completed
- **2030**: Overall completion
Key Milestones

MOU Signing – 24 Mar 09

JVA Signing – 12 Nov 10

KC Agreements Signing – 30 Jun’10

JVCo Incorporation – 13 Sept 2011

1st Anniversary – 30 Jun 11
Knowledge City Masterplan by Mr Liu Thai Ker* of RSP

- Residential (Hi Density)
- Residential (Lo-Med)
- Residential (Low)
- Commercial
- Business Park
- Type 1 Manufacturing
- University
- Convention Centre

*Mr Liu was formerly the Chief Planner of Singapore
### Start-up Area Development Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Area</td>
<td>6.12 sq km</td>
</tr>
<tr>
<td>Land Use (Approx)</td>
<td>1/3: Residential</td>
</tr>
<tr>
<td></td>
<td>1/3: Industry</td>
</tr>
<tr>
<td></td>
<td>1/3: Govt, Amenities, Green</td>
</tr>
<tr>
<td>Development Timeframe</td>
<td>5-8 years</td>
</tr>
<tr>
<td>Total Population</td>
<td>77,000</td>
</tr>
<tr>
<td>Total Industry Employment</td>
<td>35,000</td>
</tr>
</tbody>
</table>
Start-up Area
Projects
Projects

South Aerial View

Hi-Tech Park

Commercial Centre
Projects

South Aerial View

Hitech Park

Commercial Centre

Neighbourhood Centres

Residential
Projects

South Aerial View

Hitech Park

Commercial Centre

Neighbourhood Centres

Residential

International School
Projects

Medical Research & Services Centres

Hitech Park

Commercial Centre

Neighbourhood Centres

Residential

International School
Projects

- 2 Medical Research & Services Centres
- 2 所医疗研究与服务中心
- Neighbourhood Centres
- Residential
- International School
- Commercial Centre
- Hitech Park
Industry Development Strategy

Targeted Industries
- Biomedical
- Clean Tech
- Electronics & IT
- Green Transport
- New materials
- Automotive components & systems
- Software
- Digital Society
- Content
- Creative Services

Targeted High value-added activities
- Research
- Design
- Production (key components, modules, system assembly)
- Supply Chain Mgt
- Branding

HQ (manufacturing control, data centre etc)
- Entrepreneurship and Innovation
- Training & Education
- Business Process Outsourcing

Existing Pillar Industries
- Adjacent Industries
## 8 Pillar Industry Clusters - Targeting Knowledge-based Manufacturing and Services

<table>
<thead>
<tr>
<th>IT Convergence</th>
<th>Biotech &amp; Pharma</th>
<th>Energy &amp; Clean-tech</th>
<th>Advanced Mfg</th>
</tr>
</thead>
</table>
| - Digital city/society  
- Automotive applications  
- Medical applications  
- Security applications  
- IC design  
- Software services  
- E-commerce  
- Embedded software | - Pharmaceuticals  
- Biotechnology (medical & non-medical)  
- Clinical testing  
- Bioinformatics  
- Biochips  
- Medical devices  
- Biomaterials | - Energy efficiency, storage & distribution  
- New materials  
- Equipment  
- Green building  
- Other environmental technology | - Subsystems/key modules for hybrid & alternative energy vehicles  
- Robotics  
- Industrial equipment  
- Nanotech  
- Process intensive manufacturing (semi-con, displays, PV) |

<table>
<thead>
<tr>
<th>R&amp;D Services</th>
<th>Creative Industries</th>
<th>Education &amp; Training</th>
<th>Health &amp; Wellness</th>
</tr>
</thead>
</table>
| - R&D centers  
- Industrial design  
- Intellectual property exchange  
- Commercialization platforms | - Digital media  
- Digital animation  
- Games development  
- Software development | - Industry skills training  
- Skills upgrading  
- World-renowned teaching & research university branches | - Health & wellness resorts  
- Health therapy services  
- Health supplements & nutraceuticals |
Projects – Foreign Companies

- (Hi-tech Business Park)
- (Green Building)
- (Commercial Center)
- (International School)
- (Smart City R&D Center)
- (Design Project)
- (Smart City Energy Solution)
- (LED Lighting Solution)
- (Solar Energy R&D and HQ)
- (Smart City Energy Management)
- (EV Operation)
- (Sales HQ & English-training center)
Projects – Chinese Companies

(Communications R&D)

(TCM R&D)

(Cloud Computing)

(Cancer Research)

(Digital Animation)

(EV Operation)

(LED R&D)

(Biotech Incubation)

(Medical Diagnostics)
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## Investment Opportunities

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>(1) R&amp;D Center (GKC leases facilities and Government supports with incentives);</td>
</tr>
<tr>
<td></td>
<td>(2) Incubation facilities;</td>
</tr>
<tr>
<td></td>
<td>(3) Operating HQs;</td>
</tr>
<tr>
<td></td>
<td>(4) Manufacturing facilities.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>(1) Energy management;</td>
</tr>
<tr>
<td></td>
<td>(2) Waste management;</td>
</tr>
<tr>
<td></td>
<td>(3) Water management;</td>
</tr>
<tr>
<td></td>
<td>(4) Smart transportation;</td>
</tr>
<tr>
<td></td>
<td>(5) Healthcare facilities.</td>
</tr>
</tbody>
</table>
# 3-in-1 City – Strategic Overlays

<table>
<thead>
<tr>
<th>Smart City</th>
<th>Eco City</th>
<th>Learning City</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Common IT Platform</td>
<td>• District cooling/heating</td>
<td>• Innovation/R&amp;D cluster</td>
</tr>
<tr>
<td>• Cloud Strategy</td>
<td>• Water management</td>
<td>• Eco technologies R&amp;D</td>
</tr>
<tr>
<td>• IC Card</td>
<td>• Waste management</td>
<td>• Smart city, Eco-city, Learning city related</td>
</tr>
<tr>
<td>• Security</td>
<td>• Electric Vehicle (EV)</td>
<td>R&amp;D</td>
</tr>
<tr>
<td>• E-government</td>
<td>• Renewable energy</td>
<td>• Virtual learning / classrooms</td>
</tr>
</tbody>
</table>

- **Smart Grid / Micro Grid**
- **Intelligent Transport**
- **Common IT Platform**
Participating in the growth of Knowledge City

- Business Opportunities in Guangdong region;
- **Cost** competitiveness;
- Strong **talent** base;
- GDD’s readiness to support with attractive incentives;
- Ability to develop & test systems in GKC;
- Strong visibility in GKC leading to future business opportunities across China.
Summary - Uniqueness of Knowledge City

Industry Development Experience
- 1st world development
- Pro-business

105 Fortune 500 Coys
One-stop Service
Supporting Policies

60 sqkm developable land
Geographical Advantage (PRD)

Singapore & China
Governments (Municipal, Provincial, Central)

GDD’s customer-centric service

Singapore’s Software Expertise

Strong support from both Singapore & China Governments

Powerful combination ensuring success

Greenfield test bedding
A unique place integrating leading technologies, talents and ecology

Thank You!

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