



A Visit to the Silicon Valley for Surveying Innovative Venturing Mechanisms

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Mission of the Delegation

- 1. To visit new startup companies or institutes involved in technology innovation, venturing entrepreneurship, and R&D in Silicon Valley.**
- 2. To learn the way of business venturing in Silicon Valley to help domestic startups follow brand-new business models in technology innovation and value creation.**
- 3. To help domestic startups expand their markets with globalized vision.**



Mission of the Delegation

- 4. To help domestic startups build up links with the US counterparts and form up supply chain with global flagship enterprises.**
- 5. To help identify key factors for success of domestic startups in gaining global niches and competitiveness in high-tech industry sectors.**
- 6. To promote possible cooperation between Silicon Valley and science parks in Taiwan to benefit startups in both parties.**



Members of the Delegation

1. Leader of the delegation

Dr. Hong HoCheng

Deputy Minister, National Science Council,

*Newly elected President of National Tsing-Hua
University, Taiwan, is assuming the President on
February 1, 2014.*

*Dean of the Department of Power Mechanical
Engineering, National Tsing-Hua University, Taiwan*



Members of the Delegation

2. Members of the delegation

1) Dr. Yung-Chuang Wang, Director General, Central Taiwan Science Park Administration

2) Dr. Kuan-Hsiu Hsiao, Deputy Director General, Hsinchu Science Park Administration

3) Mr. Ging-Yu Chen, Section Chief, Southern Taiwan Science Park Administration

4) Mr. Yong-Fu Su, Senior Technical Specialist, Southern Taiwan Science Park Administration



Members of the Delegation

2. Members of the delegation

5) *Mr. Sheng-Long Shieh, Section Chief, National Science Council*

6) *Ms. Sing-Rong Ho, Assistant Researcher, National Science Council*

7) *Dr. Robert Lo, Director & Principal Researcher, Industrial Economics and Knowledge Center (IEK), Cross Discipline Research Group, Industrial Technology Research Institute (ITRI)*

8) *Mr. Ging-Siang Tsao, Researcher, IEK, ITRI*



Introduction to the National Science Council, Taiwan

1. Promotion of Science & Technology

Development in Taiwan

2. Support for Academic Research

3. Development of Science Parks



Introduction to the Industrial Technology Research Institute, Taiwan

1. Advanced Technology Research

2. Industrial Services

3. IP Business and New Venture



Introduction to Science Parks in Taiwan

- 1. General information*
- 2. Industries*
- 3. Business model/infrastructure/services*
- 4. International reputation*



Why Science Parks

**High-tech
Talent**

**High-tech
Investment**

**Rooting
High-tech
Industries**

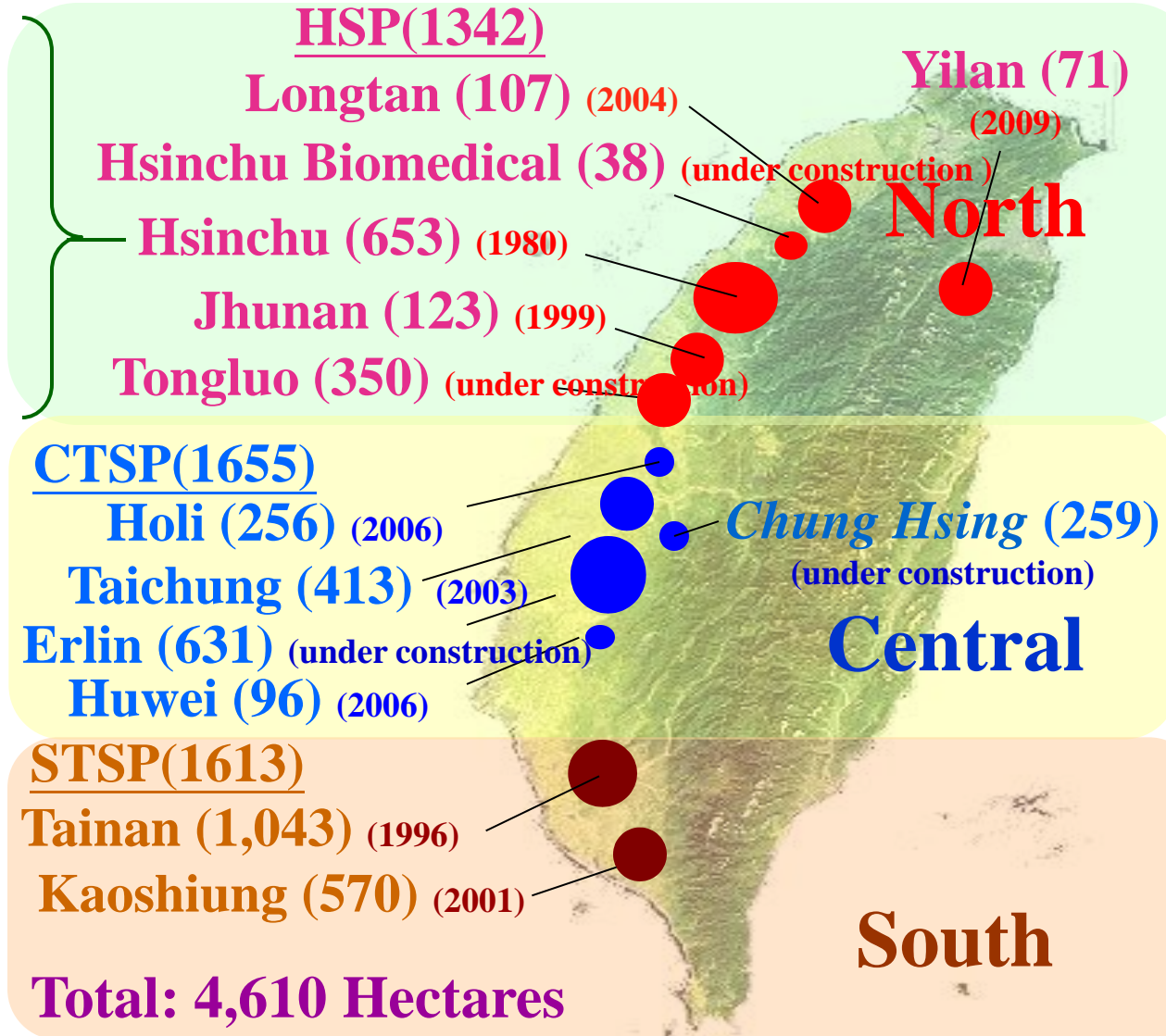




Science Parks in Taiwan

(Hectares)

- ◆ Startup of HSP:
Dec. 15, 1980
- ◆ Managed by:
Science Park
Administration,
National Science
Council





Statistics of the Three Science Parks

	2013.01-08 Sales Revenue	2013.01-10 Tenant Companies	2013.01-10 Employment Population	Fund Invested in Development
HSP	25 billion USD	505	150,474	3 billion USD
CTSP	9.96 billion USD	159	30,879	2.6 billion USD
STSP	13.5 billion USD	188	68,983	2.4 billion USD
Total	48.46 billion USD	852	250,336	8 billion USD



Business Model

- a. Land owned by State**
- b. Land or standard fabs are available for rent**
- c. Government does not interfere in the operation of companies**
- d. One-stop services from government**



Infrastructure

- a. Water, power, telecom, road, etc.
- b. Standard fabs and housing units
- c. Wastewater treatment plant
- d. Banks, clinics, gas stations
- e. Bilingual school, recreation facilities





Incentives

- a. Corporate income tax: maximum 17%**
- b. R&D expenditure tax deduction up to 15% without exceeding 30% of corporate tax to be paid**
- c. Bonded area: no import duty for equipment and materials**
- d. R&D grants and on-job training subsidies**



R&D Grants

Year	R&D Grants	Instruction
1986~2006	R&D Project	Only for park tenants
2007~2009	R&D grant project for collaboration between industry and academia	Adding grants to universities to encourage the collaboration between industry and academia
2009	Sustainable development project	Set up in accordance with the economic tsunami happened in the end of 2008
2010~now	Sustainable development project between industry and academia	<ul style="list-style-type: none">•Combine all the subsidiary grants•For individual case, the total grant should be within 10 million NT dollars without exceeding 50% of the total grant. Subsidiary grants for academic research institution should not be lower than 30% of the total grant

One-Stop Services

The Administration is authorized to offer all necessary services for Park tenants:

MOEA, MOF, CLA, MOI, MOE, EPA, Local Government

Entrust **SPA** Authorization

Investment	R&D grant	Construction	Foreign labor
Business reg.	Labor safety	Security	Bilingual school
Fire-fighting	Trade license	Tax break	Environmental protection

Support

**Custom, banks,
post office, clinics,
shipping, etc.**

**Water, power, safety,
environmental protection,
transportation commissions
of Park Association**

Taiwan's Leading Products & Industry Capacities

Industries	2011 Global Market Share (%)	Rankings
Mask ROM	100	1
IC Foundry	67	1
TFT LCD(>10")	24.9	2
TFT LCD(<10")	21.5	2
IC Design	18.1	2
Solar Cell	12.7	2
OLED	8.9	2
WLAN	2.3	3

Data source : ITIS (2012/05)



Global Competitiveness - No.4 In Asia

2013-2009 Ranking					
Nations	2013	2012	2011	2010	2009
Switzerland	1	1	1	1	1
Singapore	2	2	2	3	3
Finland	3	3	4	7	6
Germany	4	6	6	5	7
U.S.A	5	7	5	4	2
Hong Kong	7	9	11	11	11
Japan	9	10	9	6	8
Taiwan	12	13	13	13	12

Data from: WEF (World Economic Forum Annual Report)



No. 1 in Global Industry Cluster

WEF's first 6 rankings of industry cluster competitiveness					
Nations	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
Taiwan	1	1	3	6	1
Italy	2	2	1	3	4
Singapore	3	5	5	5	3
United Arab Emirates	4	28			
Japan	5	3	2	1	5
Finland	6	4	9	7	6
Data from: WEF (World Economic Forum Annual Report)					

Hsinchu Science Park is the powerhouse of Taiwan's high-tech industry and one of the best innovation industry clusters in the world. It also ranked No. 1 in the world from 2007-2008.



Knowledge Economy Index - No.1 In Asia

2012 Knowledge Economy Index (KEI)					
Nations	KEI	Pillars			
		Economic Incentive Regime	Innovation	Education	ICT
	Rank				
Sweden	1	4	2	6	2
Finland	2	2	3	11	6
Denmark	3	3	5	15	13
Netherlands	4	19	7	12	5
Norway	5	8	17	3	17
Taiwan	13	35	9	8	9
Hong Kong	18	5	14	46	10
Japan	22	39	15	19	28
Singapore	23	1	4	79	15

Date source : World Bank , CEPD

Note: World Bank releases KEI annually based on 12 indexes sorted from four pillars including Economic Incentive Regime, Innovation, Education and ICT.

Profit Opportunity Recommendation - No.2 in Asia

2012.08 BERI Profit Opportunity Recommendation ; POR

Nations	POR	Pillars		
		Business Risk	Political Risk	Currency Exchange Risk
	Rank			
Singapore	1	1	1	3
Switzerland	2	3	2	1
Norway	3	3	4	5
Taiwan	4	2	7	4
Germany	5	6	7	6
Austria	6	8	3	18
Netherlands	6	15	14	1

Data source : (Business Environment Risk Intelligence ; BERI)



Superior Operation Model



Infrastructure & one-stop services



R&D and business model



Complete capital market
◆ Venture capital (VC)
◆ Stock market

**Cluster effect
Industry and academia
collaboration**

**High-quality of
human resource**





Perspective & Strategic Goals

- 1. Further improve the park as a sound investment environment by rendering readily accessible services efficiently and effectively.*
- 2. Promote across-the-board technology upgrade and innovation to enhance the competitiveness of park tenants.*
- 3. Build a low-carbon park running on energy saving, water saving, land saving, green building, etc., and create an environment conducive to sustainable development.*
- 4. Strengthen cooperation across industry, government, academia, and research institutions to boost the park's R&D capacity, innovative capability, and output.*



Thanks for Your Attention!