



## China 3.0

In transition to become the World's Largest Innovation Nation?

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Claus Lønborg / [claus@innovationcenterdenmark.cn](mailto:claus@innovationcenterdenmark.cn)



## Contents

- Innovation Center Denmark – In Brief...
- China's Transition: China Tomorrow
- Market Drivers & Developments
- "Building China"

# Innovation Center Denmark, Shanghai

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Innovation Center Denmark



## Brief overview of the Innovation Centers

- New type of representation in international "hot spots". Facilitates access to innovation drivers like capital, networks, knowledge, technology, and markets.
- Centers in Silicon Valley (June 2006), Shanghai (September 2007), and Munich (June 2008).





## Areas of Operation



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China's Transition: China Tomorrow



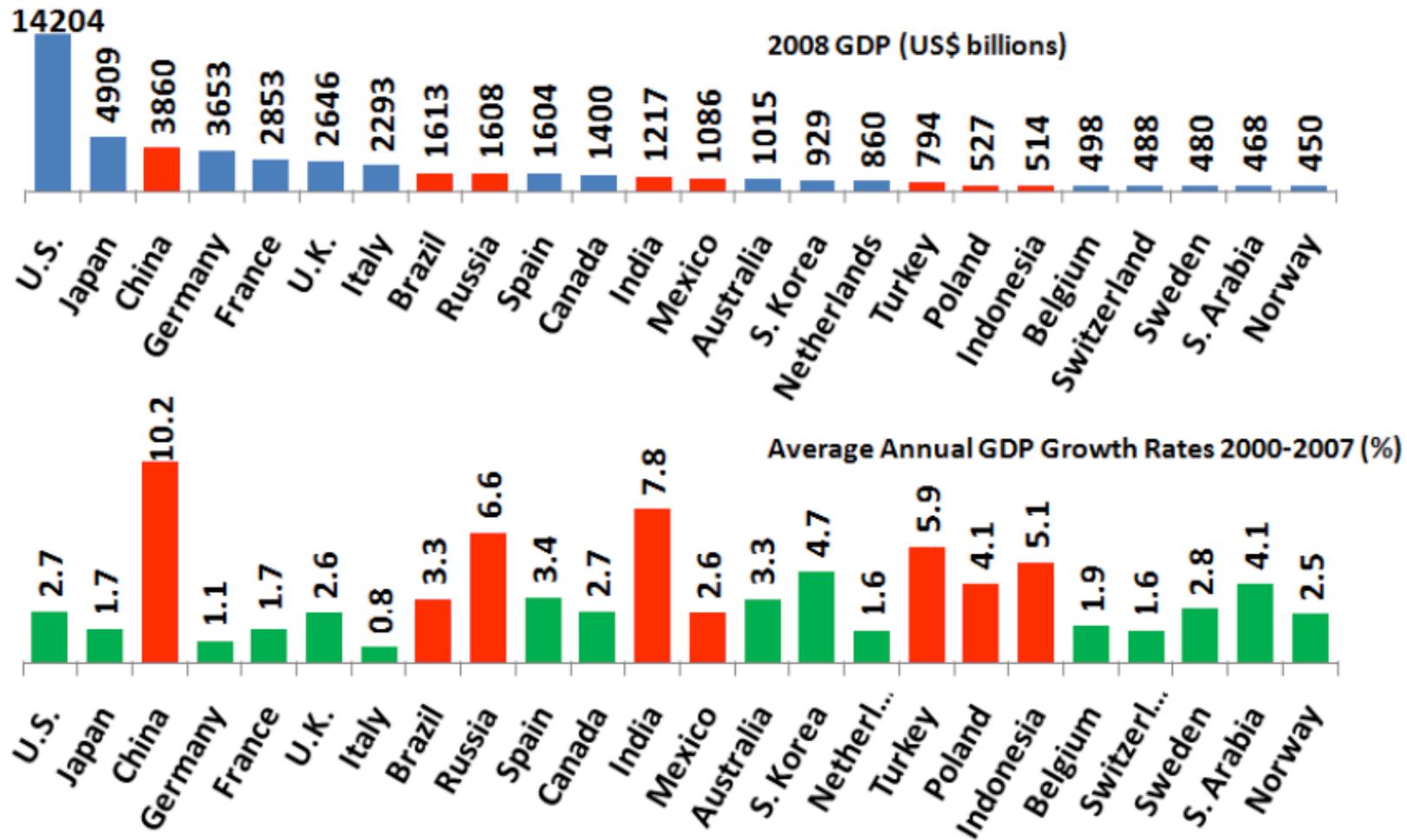
# Understanding "What is China"?

- Size equal to Europe
- Cultural differences
- Rich & Poor
- Brutal competition
- Rapid and significant changes



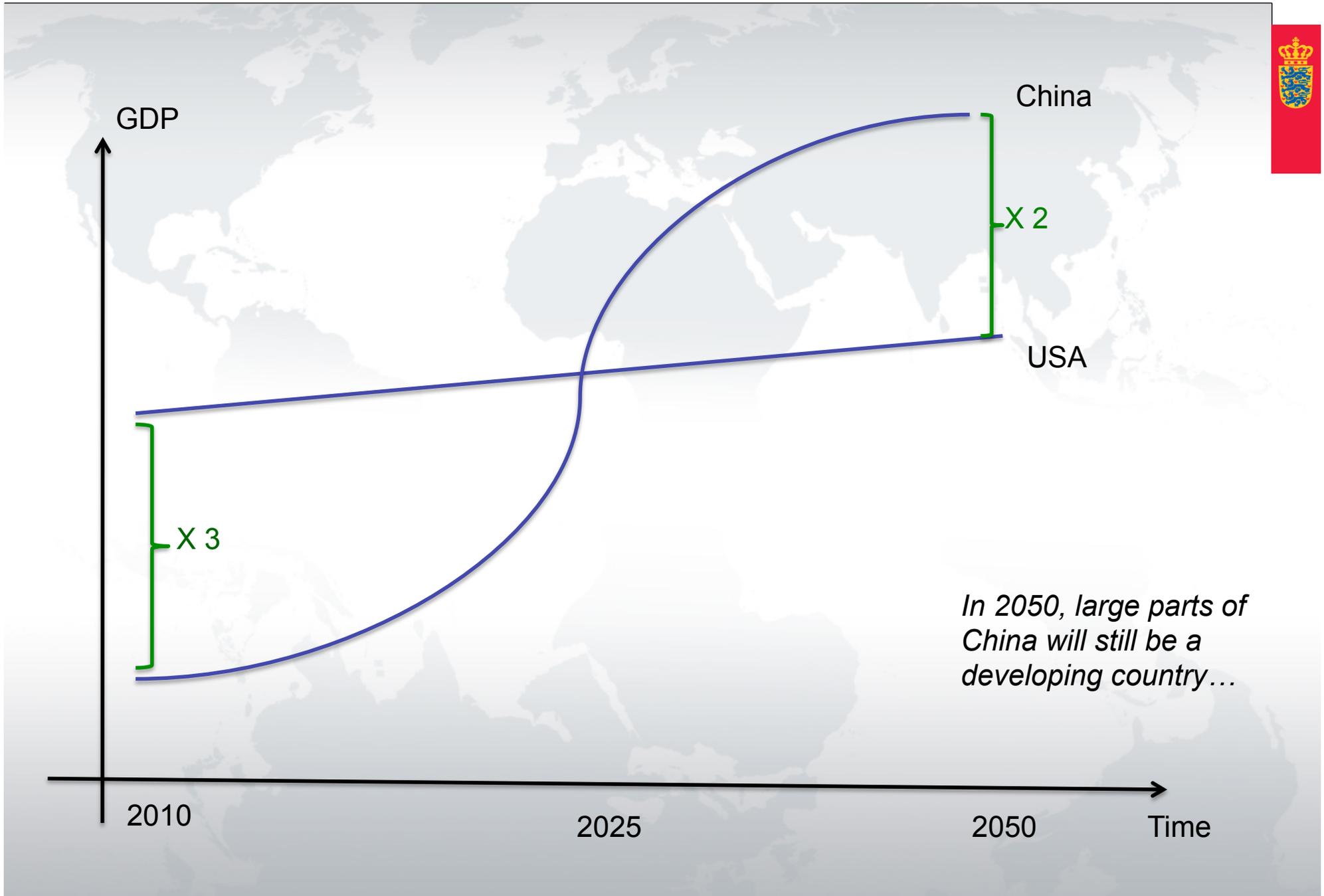


# The Top 24 Economies in the World



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*In 2050, large parts of China will still be a developing country...*



# Where China is Headed

1. World's largest economy by 2025
2. From Exports to Domestic Consumption
3. From Imitation to Innovation
4. More harmonious Society
5. From fragmentation to consolidation
6. From Domestic Players to Global Champions

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## Shanghai, Pudong, 1990



# Innovation Center Denmark, Shanghai

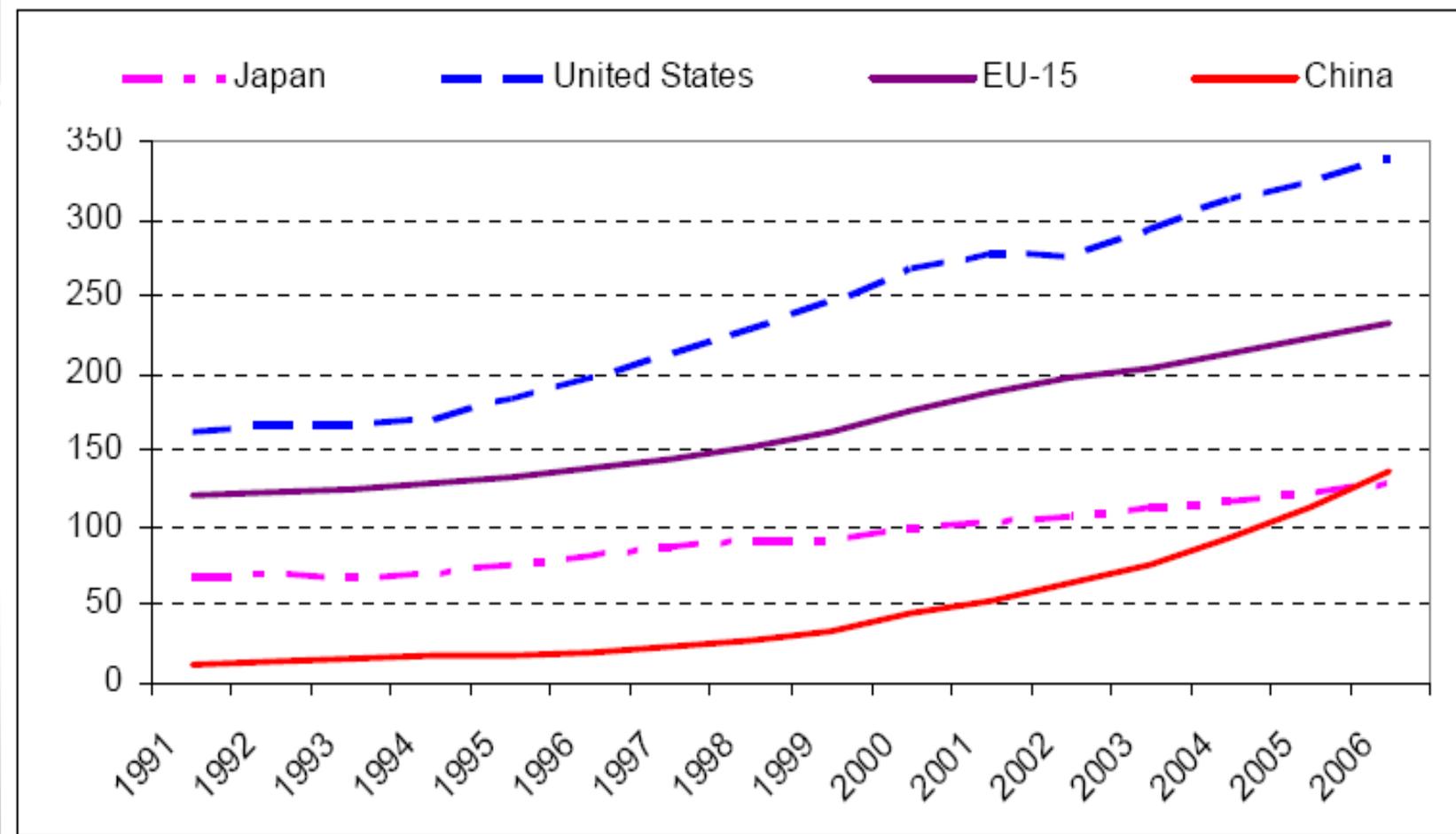
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## Shanghai, Pudong, 2010





# Gross domestic R&D expenditure (bill. US\$)



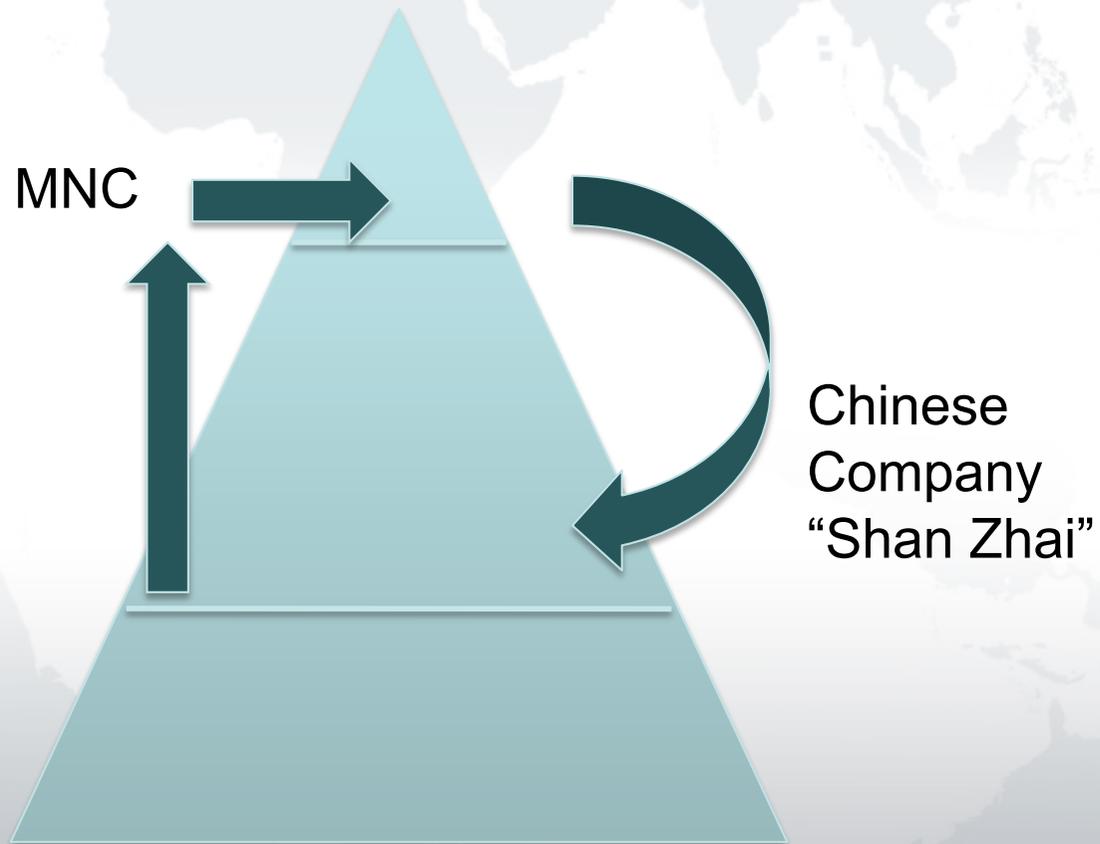


# China's Innovation System

Central indicators for China's innovation system				
	1997	2001	2005	2008
Total R&D investments(billion US\$)	6,1	12,5	30,1	66,5
R&D investments in % of gross domestic product	0,64%	0,95%	1,34%	1,54%
Private share of total R&D investments	55%	56%	66%	72%
Number of students enrolled in Universities (m)	3,2	7,2	15,6	20,2
Researchers (1000 man-years)	559	743	1,119	1,592
Patent Applications in China	114,208	203,573	476.264	828.328
Scientific publications (SCI)	35,311	64,526	153,374	196,629
Export of high technology in % of total export	8,9%	17,5%	28,6%	29,10%
Source: China Statistical Yearbook 2009, OECD 2009				



# Imitation + Innovation = Imivation ??





# Some of the *Shan Zhai* products

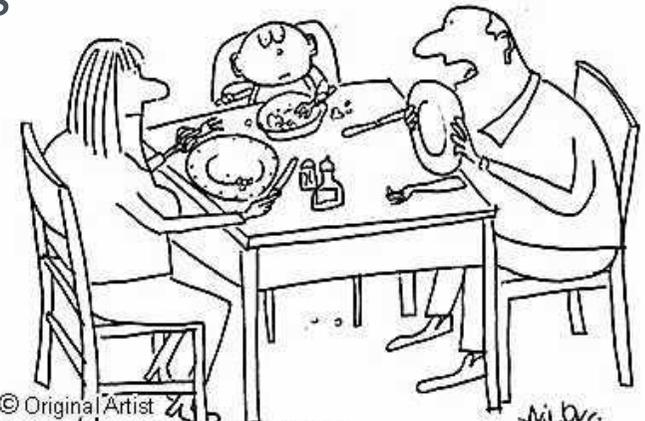




## So the Challenges are Also Present...

- Cultural differences / Language Barriers
- Market- & environment understanding
- Brutal Competition (hyper-growth, price, target marketing and speed to market)
- Intellectual Property Rights – Imitators.
- Technology Transfer / Joint Ventures
- Knowledge about Chinese Innovation Clusters
- Recruiting and Retaining Qualified Staff
- How and where to get Started?

DID YOU KNOW  
IN SOME CULTURES IT'S  
CONSIDERED RUDE TO  
LICK YOUR PLATE



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Market Drivers in China



# Energy, Environment, Clean Tech...

## **Chinas priorities (with direct impact on Energy & Environment)**

1. Continue growth, control inflation, increase welfare and shrink the gap between poor and rich
2. Build up Green Tech business to support growth
3. Self sustainable within energy
  - Increase energy efficiency
  - Increase use of renewables
4. Improve the immediate environment (air and water)
  - Lower Nox, SO<sub>2</sub> and COD
5. CO<sub>2</sub>-abatement



# Building and Construction

## Booming Urbanization

- Intelligent residence community shall grow by 30% in 5 years
- 3-500 million people relocates to the cities in the next 40 years.

## Improved Living Standard

- People is seeking for buildings more comfortable, convenient, intelligent, energy-saving and environmentally friendly

## Energy Strategy

- Government concerns on energy issue is the most robust booster for popularization of intelligent house

## Technology Usage

- More and more extensive application of information technology, control technology and networking

## Huge Investment

- Investment on intelligent building shall accounts for 5% to 8% of the total investment on building, some areas even 10%, with an approx. amount of 81 billion RMB

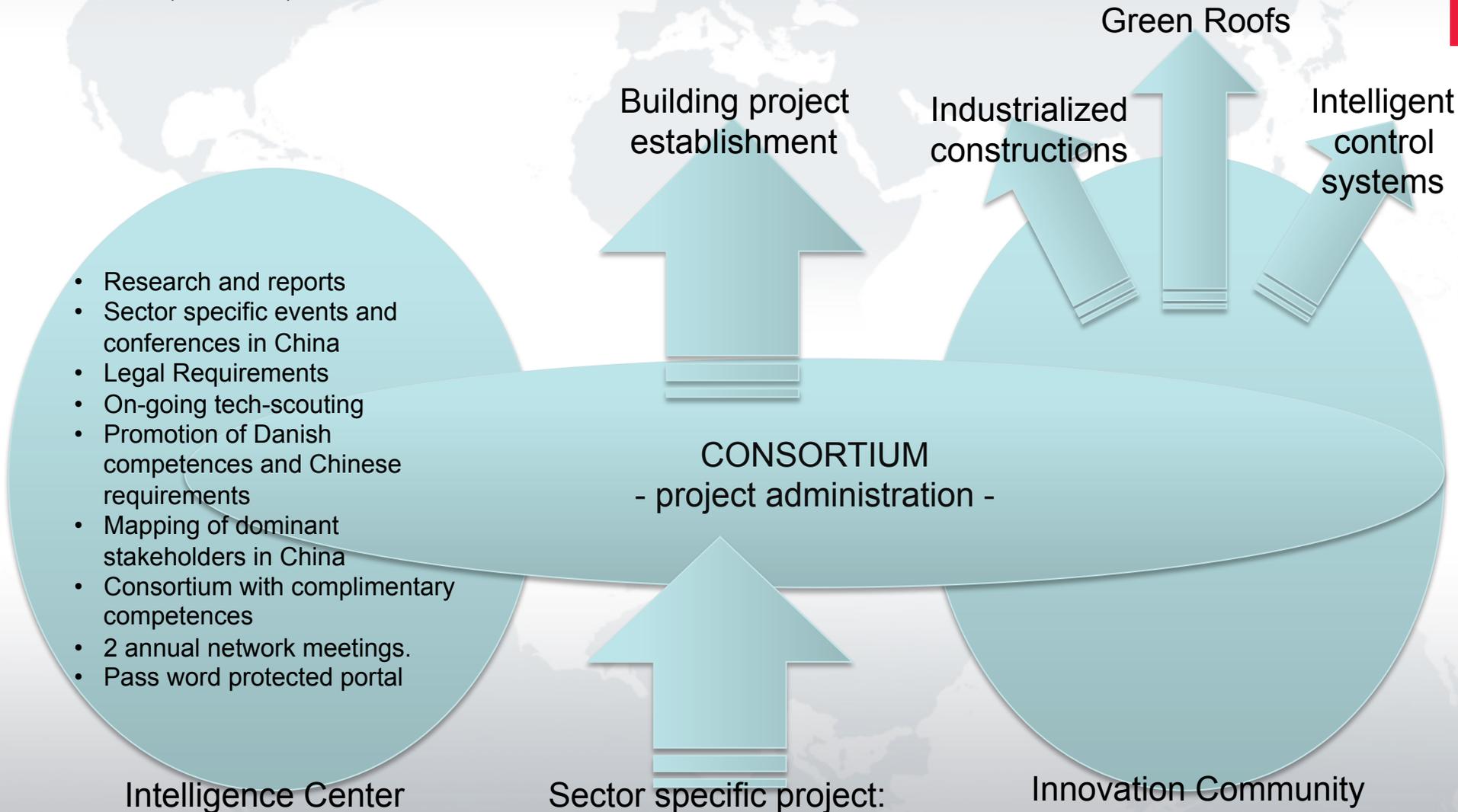
## Quality Control

- A lot of construction projects suffers from poor quality control and insufficient training of construction workers. Leading to poor quality constructions.



## Building China

Aviation, Health, Public



**THANK YOU**

**? / !**

