

Report on International Competitiveness of Qingdao City

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Qingdao should promote its international competitiveness in fierce competition among international and domestic cities. Since 1990s, science and technology has been changing quickly and economic integration has grown by leaps and bounds. With the establishment, expansion and adjustment of a global city system, the position of cities has been playing a more important role in global economy. The trend of city international competition has been prompted with more severe fierce competition amongst cities of different levels. The promotion of competitiveness has been given great attention by the ministers, mayors, entrepreneurs from home and abroad, and public in all countries.

As one of the important cities in China, Qingdao has been in rapid development since the reform and opening-up, with a great promotion of competitiveness as a city. It has become a famous tourist attraction as well as an important international trading port and transportation junction along the Yellow River basin and the west coast of Pacific Rim. Qingdao has obtained a large amount of awards in the past, such as the Award for Work Contribution from China International Friendship Cities Association, the First Prize of the Performance of Prefecture-level Official Website for Qingdao Government Affairs Online, the First Prize of the First Inland City Investment Environment Rankings (2005), the Most Economic Vitality City of China (November 2004), the Best Commercial City of China (August 2005), the Capital of Brands of China (November 2005), the Transnational Corporations' Choice of the Most Investment Valuable Chinese City (August 2006), the Best Commercial City in Mainland China by Forbes (September 2006), the Top Ten Competitive Cities of China's Manufacturing Industry (December 2006), the Migrant Workers' Most Favorite City of China (February 2007), the Safest City Award of China (September 2007), the World's Most Beautiful Bay (October 2007), the Top Ten Most Enjoyable Cities of China and the Top Ten Most Happiness Cities of China (November 2007).

As a Partner City of 2008 Beijing Olympics, Qingdao has been developed into China's "Capital of Sailing" according to the concepts of "environment-friendly Olympics, technology-empowered Olympics and culture-enriched Olympics". In 2006 and 2007, Qingdao hosted two International Sailing Competitions, gaining a series of good results in the field of city development.

However, Qingdao also faces with some new challenges. Globalization and the opening-up of China have provided great opportunities for other burgeoning cities. Their rapid development puts many external pressures on Qingdao. At the same time, it should be clear that Qingdao is still a developing city with lots of issues, for example, its development target and city status are incompatible, as well as its development needs, resources and environment. The economic growth mode is still under transformation and economic structure needs to be optimized. Its ability to innovate is weak, and the development of urban and rural areas is imbalanced. The task of city construction and management is still very difficult; institutional and mechanical issues affecting development need to be solved immediately.

The *Report on the Competitiveness of Qingdao International City* is to put Qingdao into global coordinates, creating a framework of international competitiveness comparison from the dimension of city competitiveness and by using city competitiveness theory. With the guidance of this analytical framework and the method of data comparison, it provides the time-space analysis and benchmark comparison for the economic and societal development of Qingdao, putting forward the strategy of promoting Qingdao's comprehensive international competitiveness and helping Qingdao consolidate and increase its advantages under severe competition amongst cities.

Part I Analytical Framework, Research Methodology and Approach, and the Choice of Benchmark Sample

I. Urban Competitiveness: An Analytical Framework

Urban Competitiveness is the ability of an urban region to improve the welfare of its citizens when compared with other urban regions in the world. Urban competitiveness derives from the combination of enterprise operational factors and

industrial systems, which attract and transform resources, controls and dominates markets, creating wealth fast, cost-effectively and sustainably. Then, how does urban competitiveness develop? With the background of globalization, there is unceasing competition among cities. This is due to the fact that the operational factors among urban regions distinguish themselves from each other, flowing and changing consistently. What's more, cities of different levels have different functions. Therefore, cities need to cooperate, transfer, upgrade, and change. With this background, cities attract nonlocal factors, while maintaining the local ones, and thus to nurture the urban functional structural system, and the urban functional system derives from the former one. Together with these systems, cities form their urban value system.

In fact, with the background of globalization, every city is competing and cooperating with other cities in the world in regard to elemental environment, industry and urban function. The elemental environment, industrial system, value system interact with one another, and form a city's comparative urban competitiveness to other global cities.

The determining mechanism of Urban Competitiveness: After investigating the spatial arrangement of global economic and social development, it is found that cities are different in development level (i.e. level of value creation); different in functions; different in industrial systems; meanwhile, huge differences lie in industrial factors and environment among cities. In this, the higher a city's development level, the higher its functional and industrial level is. The higher a city's industrial level, the higher the industrial factor quality is. By comparing and linking these factors, we could find the determining mechanism of urban competitiveness, that is, with the background of globalization, distinguishing the system of operational factors from each other, as they flow and change. Cities of different levels function differently. They constantly cooperate, transfer, upgrade and change. Cities exist against a background of competition.

1. Environment decides industries

Urban enterprise cluster's (UEC) operational factor is the foundation of urban competitiveness. Cities nurture UEC's urban functional structural system and the urban

functional system derives from the former one through attracting nonlocal factors and maintaining local ones. Together with these systems, cities form their urban value system. Urban operational factors and conditions include multiple factors such as human resources situation, technological innovation, infrastructural and systematic cultural environment, etc.

2. Industries decide functions

Urban industrial system or enterprise cluster is the principle part of urban competitiveness. It is affected by operational factors, as well as a part of it. A city's industrial system decides its urban function. Vice versa, it affects the operational factors since it decide the urban value through either strengthening or weakening local industries, attracting or excluding nonlocal industrial creation.

3. Functions decide value

Urban function is the role an urban area plays in global, national or regional development. The level of urban industrial system, the importance of urban function and its scope decide the system and level of a city's value creation.

4. Value affect environment

Urban value system manifests the URBAN COMPETITIVENESS. It is determined by the urban operational and functional system. And in turn it affects operational conditions and functional system by strengthening or weakening, attracting or excluding nonlocal factors.

Framework and indication system of urban competitiveness. This report proposes the framework of URBAN COMPETITIVENESS based on the assumption that urban value profit is the outcome of urban competitiveness: urban comprehensive competitiveness = F (growth, scope, efficiency, profit, structure and quality). The main indications include: gross GDP growth, growth rate, GDP per capita, GDP per unit area, electricity consumption per unit GDP, water consumption per unit GDP, pollution severity of "three wastes"(waste water, gas and residues), R&D investment and its proportion in income, per capita value added in the tertiary, per capital disposal income and fiscal income.

Interpretation framework and indication system Of Urban Competitiveness. According to the above mentioned mechanism analysis of urban competitiveness and urban competitiveness interpretation framework: urban competitiveness (UC) =F

(environmental competitiveness and noumenon entity competitiveness) =F (Human capital competitiveness, enterprise management competitiveness, business environment competitiveness, creation environment competitiveness, and social environment competitiveness).

In order to research and compare Qingdao's international competitiveness, this research group adopts the benchmarking method. Its basic idea is to help the research subject find, recognize, follow, emulate and surpass its competitive target on the basis of standard and consecutive comparative analysis. According to relevant principles, this research group identifies three target cities from three levels in line with qualitative analysis and preliminary quantitative comparison in order to prepare for the further study in future. This report classified the benchmark cities into three types, they are: (1) Rival cities, such as Dalian, Chengdu, Dongguan, Shenyang, Ningbo, Wuhan, and Xi'an. (2) Model cities, including San Francisco, Tokyo, Seattle, Vancouver and Geneva. (3) Partner cities consist of Beijing, Shanghai and Seoul. The data sources of this report are *Annual Report on China's Urban Competitiveness No.5*, *Annual Report on China's Urban Competitiveness No.6*, *Global Urban Competitiveness Report 2005/2006* and *Global Urban Competitiveness Report 2007/2008*. Measurement model and research method in this report are in line with the *Global Urban Competitiveness Report*.

II. Methodology

The Qingdao international urban competitiveness report makes full use of multidisciplinary advantages and adopts four major research methods: (1) The mix method of qualitative and quantitative research method. (2) The combination of comparative method and case study method. (3) The method combines literature review, data collection, field research and interview. (4) The mix method of theoretical and question analysis. Four major research questions concerning enhancing Qingdao's international competitiveness are: (1) the international competitiveness of Qingdao; (2) the internationalization level of Qingdao; (3) the impact of the Olympic sailing race on Qingdao's international urban competitiveness and internationalization; (4) and in-depth and thorough analysis for Qingdao's future competition strategy.

The table below illustrates the specific research frameworks, methods and steps:

Table 1 Research Frameworks, methods and strategies.

Basic Strategy	Major Object	Analysis Framework	Method Standard	Data Source
Step 1	Establish UC theoretical framework	Developing framework model	Abstract theoretical Framework Induction	Urban economics, space economics literature (searching)
Step 2	Analyzing Qingdao's UC from space perspective	Adopting analysis model	Theoretical framework Deduction	Qingdao and relevant cities' resource and policy literature
Step 3	Focusing on a single UC issue: establish framework of internationalization	Developing framework model	Abstract theoretical Framework Induction	International economics (searching)
Step 4	Analyzing Qingdao's internationalization from space perspective	Adopting analysis model	Theoretical framework Deduction	Qingdao and relevant cities' resource and policy documents
Step 5	Analyzing Qingdao's UC from time perspective	Adopting analysis model	Theoretical framework Deduction	Qingdao and relevant cities' resource and policy literature
Step 6	Analyzing Qingdao's internationalization from time perspective	Adopting analysis model	Theoretical framework Deduction	Qingdao and relevant cities' resource and policy literature
Step 7	Identifying competitiveness: advantages and experiences	Adopting analysis model	Induction	Qingdao and relevant cities' resource and policy literature
Step 8	Suggestions for competitiveness enhancement policy	Strategic designing framework	Governmental intervention standard Assumption for ineffective market	Qingdao and relevant cities' resource and policy literature

III. Report Structure

Though the report covers a wide range of contents, the research group manages to establish a unified framework to set these research questions in order, which has formed a strict and logical structure. This report starts with introducing urban competitiveness' analysis framework. On its basis, from the space perspective, this report comparatively analyzes Qingdao's urban competitiveness. The specific issue of Qingdao's internationalization is separated from the urban competitiveness of Qingdao, and it has been an independent issue to be mainly analyzed. Then, from the chronological perspective, this report analyzes the influence of Olympic Sailing Game on urban competitiveness and internationalization of the time period from bidding for to hosting the Game, or even a longer term. Based on the analysis, the international strategy of improving Qingdao's urban competitiveness has been proposed.

Part II Analysis of Qingdao's International Urban Competitiveness

In this part, this report deals with two aspects, that is, manifest and interpret competitiveness. This report locates Qingdao in global city system, and compares it to the standard cities, i.e. model cities, rival cities and partner cities, and thus to locate Qingdao in the right position among global city systems, as well as to make comparison between Qingdao and the standard cities from all aspects.

I. Analysis of Qingdao's international comprehensive competitiveness (Global 500)

Qingdao's international comprehensive competitiveness: it ranks the 252 among Global 500, stepping into the middle level. When comparing the original numbers and the ranks of the chosen cities' nine indicators, and the comprehensive competitiveness index and ranks, we have a positive finding: Qingdao is among the top global cities in regard to indications such as growth rate, price advantage, and economic scale. Qingdao is in the medium level among global cities in terms of multinational companies, amount of patent application, and employment rate (It ranks among the top in Chinese cities). Though it ranks close to the middle level concerning per capita income, GDP per unit area, and productivity in the world, it ranks top among Chinese cities. Among the 10 indicators, the highest one ranks 59, and even the lowest ranks 298 which is a middle level. This indicates that Qingdao performed coordinately in every indication. If Qingdao continues to develop its advantages on cost and growth, and at the same time, maintains its leading role in China in terms of overall development, Qingdao will have a strong potential competitiveness in the future.

To be specific, the comprehensive competitiveness of Qingdao manifests itself in the following nine aspects: (1) Qingdao's economic scale ranks 168 among Global 500. (2) Qingdao's growth rate ranks among the top in the world as it is the 70 among the Global 500. (3) Qingdao ranks 288 among Global 500 with its GDP per capita, and it is top among Chinese cities. (4) Qingdao ranks 298 among Global 500, it is top among Chinese cities. (5) Since it ranks 59 among Global 500, Qingdao has price advantages, which represents an obvious advantage. (6) Qingdao's employment rate ranks 226 among Global 500, which indicates a promising development. (7) Qingdao's productivity ranks 278 in the Global 500, playing a leading role in China. (8) Qingdao is in the middle level of Global 500 in terms of technological innovative ability, as it ranks 247. (9) Qingdao is in the middle level of Global 500 in terms of multinational companies' distribution, as it ranks 268.

In order to analyze Qingdao's international comprehensive competitiveness, we have compared Qingdao to standard cities thoroughly, and we have achieved the following major findings:

(1) Comparing Qingdao to rival cities: Qingdao's development level is higher, yet the development potential needs to be nurtured.

(2) Comparing Qingdao to model cities: though model cities are far ahead, Qingdao has obvious price advantages and great potentials.

(3) Comparing Qingdao to partner cities: they are different in levels, however, their competitiveness complements each other.

II. Analysis of International interpretation competitiveness (Global 150)

The Qingdao's interpretation competitiveness is both strong and weak. Software, living environment, and global connections are highlighted. In order to find way to move forward, we further analyze Qingdao's conditions and identify the real situations of Qingdao. We conduct benchmarking analysis on Qingdao's interpretation sub-item competitiveness in comparison to 150 typical cities and its combination to the standard cities. That is, we thoroughly compare Qingdao with standard cities in regard to seven aspects, including: enterprise entity competitiveness, industrial structural competitiveness, human capital competitiveness, hardware environment competitiveness, software environment competitiveness, living environment competitiveness and global connection competitiveness, and draw the following major findings:

◆ Enterprise entity competitiveness: Qingdao's enterprises have significant brand economy effect, but to become large companies, they still have a long way to go.

◆ Industrial structural competitiveness: Qingdao has a powerful economy, but the industrial structure needs to be upgraded.

◆ Human capital competitiveness: Qingdao is short of high-end brains, though the human capital index remains relatively superior.

◆ Hardware environment competitiveness: Qingdao has a relatively good infrastructure, but lacks technological innovation abilities.

◆ Software environment competitiveness: Qingdao has great achievement on strategies, but public service needs to be improved.

◆ Living environment competitiveness: Qingdao possesses a great environment for living, and it aims to build an international cultural and leisure resort.

◆ Global connection competitiveness: Qingdao performs outstanding in sea transportation, though its aviation needs to be further constructed.

Conclusions can be drawn with the above analysis to Qingdao's real competitiveness and its interpretative competitiveness. The conclusions are as follows: Qingdao's urban framework, urban comprehensive function, infrastructure level and even the entire urban landscape have changed unprecedentedly. Qingdao's software environment, living environment and global connections have a fairly strong competitive edge among global cities. A modern international city has gradually taken shape; an "economically prosperous, distinctively featured, functionally matured, energy-loaded", costal, developed city rises up at the end of the Shandong Peninsular with its flourishing scenery.

Part 3 the Analysis of Qingdao International Competitiveness: the Stage of Preliminary Internationalization

In order to analyze the internationalization level of Qingdao in a deeper way, the research group developed a city international competitiveness index system and internationalization evaluation standard. Based on these methods and the selection of benchmark cities and collection of data, the group used relevant measurements to evaluate and analyze the internationalization level and international competitiveness of Qingdao of the year 2007 from the perspective of space, providing their

suggestions for the development and implementation of the next internationalization strategy for Qingdao.

I. Choice of Benchmark Cities

According to the comprehensive analysis of global city internationalization levels and their development route and trend of internationalization, as well as the internationalization features of Qingdao, the research group chose 16 domestic and foreign cities as benchmark cities: New York, London, Hong Kong, Geneva, Toronto, Vienna, Seoul, Shanghai, Beijing, Dalian, Ningbo, Chengdu, Dongguan, Wuhan, Shenyang, and Xi'an. New York and London are acknowledged as the two most internationalized cities in the world. Hong Kong, Geneva, Vienna, and Toronto have their own characteristics of their internationalization route, for example, Hong Kong has been successful on institutional internationalization, while Geneva and Vienna have achieved internationalization through holding international exhibitions and spreading music and art. The reason of choosing Beijing, Shanghai and Seoul as benchmark cities is that they can be helpful for Qingdao's development according to their geographical location and economic activities. On the other side, Dalian, Ningbo and other domestic cities are the competitors of Qingdao.

II. Comparative analysis: Qingdao has been into the first stage of internationalization

Table 2 is the international competitiveness index of each city, according to the measurements mentioned above. It is shown that these cities are categorized by the international competitiveness index into three levels – comprehensive internationalized city, basic internationalized city and preliminary internationalized city. Here are some important conclusions after deeply analysis:

London, New York, Hong Kong, Toronto, Geneva and Vienna rank top six according to international competitiveness index, therefore, they belong to comprehensive internationalized cities. New York and London are known as the most internationalized metropolises in the world, having balanced competitiveness index in the aspects such as market, entity and environment. Compared with New York, Hong Kong has a weaker international competitiveness and ranks the third. It shows that Hong Kong has huge advantages on the internationalization of capital, technology and environment as a free port. Toronto, Geneva and Vienna make comprehensive promotion of their internationalization, but also have their own features. Toronto is multicultural society, which is admirable;

Geneva makes its famous in the world by its international conventions; Vienna uses its music to make its internationalization very successfully. Qingdao should learn from these experiences of the internationalization of these cities.

From the perspective of geographic location, there are three basic internationalized cities: Seoul, Shanghai and Beijing. These cities are within a 1 hour economic radius of Qingdao. Communications with them regarding society, economy and culture is the key to promoting the internationalization of Qingdao.

Together with Ningbo and Dalian, Qingdao is also one of the preliminary internationalized cities, while Chengdu, Wuhan, Dongguan and some other domestic cities are still at the edge of internationalization. To better direct Qingdao to implement internationalization, the research group compared Qingdao with comprehensively internationalized cities so as to help Qingdao focus on the right direction and accelerate its development.

Table 2 The International competitiveness index and ranking

City	Internationalization index	Ranking	City	Internationalization index	Ranking
London	1.482	1	Basic internationalized city	0.636	
New York	1.427	2	Ningbo	0.469	10
Hong Kong	1.238	3	Qingdao	0.451	11
Toronto	1.212	4	Dalian	0.438	12
Geneva	1.173	5	Preliminary internationalized city	0.309	
Vienna	1.125	6	Chengdu	0.301	13
Comprehensive internationalized city	1		Wuhan	0.298	14
Seoul	0.817	7	Dongguan	0.283	15
Shanghai	0.753	8	Shenyang	0.272	16
Beijing	0.728	9	Xi'an	0.267	17

Conclusions from detailed analysis of the internationalization level of Qingdao are as follows:

(1) **Market Internationalization:** the internationalization index of Qingdao's market is 0.566, which ranks 10 in all compared cities, only lower than Beijing but higher than Ningbo, Dalian and Chengdu. The number is close to the standard of basic internationalization.

(2) **Entity internationalization:** Compared with comprehensively internationalized cities, Qingdao has made great improvements. The internationalization index of the Qingdao Government is 0.521, which has exceeded the standard of basic internationalization, only lower than Shanghai in all Chinese cities. In general, Qingdao has been very successful on promoting entity internationalization, especially government internationalization with the implement of its internationalization strategy and the holding of Olympic sailing competition in recent years. In the future, Qingdao should develop its high-end tourism industry and promote the internationalization of enterprises.

(3) **Benchmark of environment internationalization:** the environment internationalization index of Qingdao is 0.588, ranking 11. The number is same to Ningbo and much higher than other domestic cities except Beijing and Shanghai. However, there is still an obvious gap between comprehensive cities. Qingdao should pay more attention to the way it implements informationization.

Part Four the influence of Olympic sailing competition on the city international competitiveness of Qingdao

The holding of Olympic Sailing Competition has promoted the international competitiveness of Qingdao to a new stage and had some positive effects on promotion of social values, optimization of the city's industrial system and improvement of elementary system. A detailed discussion on the influence of the Olympic Sailing Competition in promoting Qingdao's international competitiveness will be elaborated in this part.

I. **Olympic Sailing Competition boosted Qingdao's international competitiveness:** Qingdao has been ranked top 10 in China and middle class in the world

The international competitiveness ranks of Qingdao from 2002 to 2007 shown in Table 3 are 12, 12, 12, 13, 8, and 8. Although affected by other cities Qingdao's rank in 2005 dropped slightly, in general, its position went up by 4 within 6 years through a leap-forward in development. It ranked 12th from 2002-2004, went down slightly in

2005, bounced back in 2006 and kept stable in 2007. It would have a better performance in 2008.

II. Compared the competitiveness in 6 years with other domestic benchmark cities, Qingdao has the best dynamic performance

The competitiveness of all cities is increasing rapidly. While Shanghai and Beijing are still within top three in all Chinese cities, their ranks dropped down comparing with where they used to be. Both Ningbo and Dalian ranked higher than Qingdao before 2006, however, Qingdao surpassed after then. Chengdu, Wuhan and Xi'an have weaker competitiveness as well as slower developing speed than Qingdao. Shenyang has come up in recent years but is still far behind Qingdao. Dongguan was in a higher position but then went down. Now it rebounded but still ranks lower than Qingdao. Qingdao's great performance is due to the hosting of Olympic Sailing Competition. The competition has to a large extent promoted Qingdao's competitiveness.

Table 3 the Change of City Comprehensive Competitiveness of Qingdao and Other Competing Cities (2003-2007)

City	Shanghai	Beijing	Qingdao	Ningbo	Dalian	Dongguan	Shenyang	Chengdu	Wuhan	Xi'an
2002	1	3	12	8	19	5	25	20	14	35
2003	1	2	12	8	11	16	29	23	26	24
2004	1	4	12	6	14	21	23	28	24	35
2005	1	2	13	5	10	14	12	20	15	26
2006	2	3	8	12	13	11	19	26	11	38
2007	2	3	8	14	17	11	14	18	22	37

III. The Olympic Sailing Competition has helped the development of Qingdao (city value system) step on a new stage

The Olympic Sailing Competition has increased the city value of Qingdao. During 2001-2007, the average economic growth rate of Qingdao was 15.7%. According to statistics, the holding of Olympic Sailing Competition pulled up the economic growth rate by 2.48% in average in 5 years. The investments made for the Olympic Sailing Competition contributed to the economic growth by 3.53%, 1.32%, 2.49%, 2.81% and 2.25% respectively from the year 2003 to 2007. On average, the economic growth rate increased by 2.48%.

The Olympic Sailing Competition improved the living quality of the citizens in Qingdao and provided 180,000 working positions in 3 years. During 2004 to 2007, the direct investment and government investment created about 14,100 and 167,400 positions respectively, in total 181,500 positions. The Olympic Sailing Competition has an impressive contribution to GDP per capita, making the number increase to

882.69 per year in average from 2004 to 2007. The contribution rate was in average 2.3% per year. The investment to Olympic Sailing Competition not only boosted the economic development of Qingdao and improved social environment, but also increased people's productivity. Obviously, the Olympic Sailing Competition also had positive effects on per capita nonproductive expenditure. The competition increased the yearly consumption per capita by 273.62 and had a contribution rate of 2.4%. In general, the holding of Olympic Sailing Competition motivated the economy of Qingdao as well as bringing direct benefits to the daily life of its citizens.

IV. The Olympic Sailing Competition helped the city function system enter into a new level

The Olympic Sailing Competition improved the city function system significantly and established its role of the "city of exhibition, music and film and television". The holding of the competition improved the reputation of Qingdao and its natural environment quality, as well as accelerated road construction in Qingdao. During the competition period, Qingdao cultivated some well-known brands in the exhibitions and held three APEC SME technical exchange and exhibition fairs. The culture media grew healthily and the role of "city of music, film and television" was established.

V. The Olympic Sailing Competition made new progress in the adjustment of city industrial system of Qingdao

According to the statistics, the holding of Olympic Sailing Competition was favorable to the industrial structure optimization of Qingdao. During the competition period from 2003 to 2007, the service industry in general kept a relatively faster growth rate and the average nominal growth rate reached up to 23.7%, which was nearly 3% higher than the average nominal growth rate of the city's GDP.

VI. The Olympic Sailing Competition made the environment of Qingdao leap forward

The holding of Olympic Sailing Competition improved the quality of human resources in Qingdao. For example: 1. The competition would change people's mind significantly; 2. The competition would improve the cohesion of the city; 3. The competition urged the government to propose introduction policies for talents; 4. The competition pressed the government to improve the policies of cultivating and stimulating talents; 5. Education developed fast.

The holding of the competition created a soft environment for Qingdao to meet the international standard: 1. The government found a way to develop e-government with low cost and intensification, which was called "Qingdao Mode". Qingdao has so far finished the construction of the "451" fundamental e-government system and its

e-government trial project has passed the site acceptance test by General Office of the State Council and joint panel from Ministry of Technology. 2. In the first half of the year 2007, Qingdao organized a committee of municipal design to discuss the general municipal design, regulatory adjustment, conceptual plan of the east coast, space layout of high-rise building and reconstruction plan of old towns and villages. 3. In the aspect of safety management and emergency management, the government of Qingdao established a coordinate group for security and an emergency command center, spending 260 million to create a security network which integrate fighting, preventing and controlling.

The holding of the competition also improved a hard environment for Qingdao to meet the international standard: 1. The standard of airport was improved and the passenger capacity was doubled. 2. According to the requirement of the competition, Qingdao invented a wireless fax technology, which solved the problem that information cannot be transferred in real time through wire transmission. The officer from International Sailing Committee called it “an innovation in the development history of sailing”. 3. The technological developments at Qingdao were motivated by the concept of “Hi-tech Olympics. During the Olympic Games, a large amount of outstanding research goals were achieved in Qingdao and its ability to make technical innovations was improved. In 2007, 506 important scientific and technological achievements were acquired and 8 national science and technology awards was obtained. Two worldwide breakthroughs were achieved in the fields of Olympic scientific and technological innovation.

The holding of the competition consolidated Qingdao’s reputation as a livable city and promoted the citizens’ sense of security to 96%. For example: 1. Qingdao created and improved a series of new safety policies for security at the Olympic Sailing Competition. The detection rate of traffic accidents reached up to 98%, giving Qingdao the number 1 ranking in China. The detection rate of homicide cases was near 90%, which was the highest in Shandong Province. 2. The air quality of Qingdao was increased from 88% to 91.2%, including more than 330 blue skies in a year. 3. The development and utilization of clean energy was a remarkable achievement. Compared with ordinary air conditioner, the “seawater air conditioners” which were used in media center of Olympic Sailing Competition base and Huadian Qingdao Generating Company could save more than 22 RMB yuan per square meter on heating cost. Additionally, 168 solar landscape lights and 41 wind energy street lights were installed in Qingdao, which could save more than 17,000 KWh in energy-savings and help protect the environment.

Part five The Effect of Hosting the Olympic Sailing Competition on Qingdao's Internationalization

I. The hosting of the Olympic sailing competition advanced the internationalization of Qingdao.

(1)The successful hosting of the Olympic sailing competition accelerated the progress of Qingdao's internationalization, promoting its internationalization and global influence.

The hosting of the Olympic sailing competition in Qingdao provided a golden opportunity for its internationalization process. During the preparation and the event period, Qingdao government adopted international standards on various perspectives such as infrastructure, cultural institutions, perceptions, and government ideologies. Qingdao was more attractive to the outside and has been more connected to the global society since then.

(2)The hosting of the Olympic sailing competition raised its internationalization index from 0.25 in 2003 to 0.45 in 2007.

The internationalization index of major years in Qingdao was calculated according to the model developed by the research group. From the time dimension, Qingdao's internationalization was continuously improved for the last 15 years from 1994 to 2007, which had an obvious chronic feature with the change of external environment and internal development.

To make a quantitative analysis on the influence of hosting the Olympic sailing competition in Qingdao, we followed the analytical framework and index system which we established in part two of this report on the spatial analysis of Qingdao's internationalization. We chose four typical samples from the 14 years, ranging from 1994 to 2008. Those are 1994, 1999, 2003, and 2007. We collected relevant data to compare and contrast, using the same method used in chapter five, part two of this report to sum up the index. The four different years of Qingdao could be regarded as four different cities. We analyzed these four "cities" together with the sample cities we chose to calculate Qingdao's international competitiveness index of each year. Through this, we could on one hand describe the dynamic change of Qingdao's internationalization, and on the other hand we could clearly see the influence of hosting the Olympic sailing competition on Qingdao's internationalization.

By quantitative analysis, the research group concluded as follows:

Qingdao's internationalization advanced strongly in the period from 2003 to 2007. Figure 2 showed that the international index rose from 0.25 in 2003 to 0.45 in

2007. The hosting of the Olympic sailing competition played a significant role in the preliminary phase of internationalization, and exceeded Dalian on an international level.

During the five years, Qingdao's internationalization has reached a new level with the further expansion of the opening-up. It has set its first step on internationalization and is now moving to be more international. It could be concluded from various indexes before and after, that the Olympic sailing competition had a remarkable effect on the promotion of Qingdao's internationalization.

Qingdao's internationalization moved forward rapidly in the period from 1999 to 2003. Against the background of increasing globalization, a few of Qingdao's internationalization indices increased substantially. Qingdao's internationalization reached a breakthrough, with enthusiastic investments from foreign tradesmen, investments abroad by local enterprises, and a further expansion of global market. With the rapid economic growth, the construction of general infrastructure and information infrastructure improved greatly. The internationalization index has approached the primary stage of the development of an international city. The improvement in city modernization level laid a solid foundation for the construction of an international city and the promotion of the city's international competitiveness.

The years from 1994 to 1999 are the first five years after Qingdao brought up its target of constructing an international city. Qingdao's internationalization was still at its starting stage during that period. The outward and inward internationalization of the market was launching, and the functions of the city mainly focused on domestic service since the international awareness of government, enterprise, and citizens was still developing.

II. The hosting of the Olympic sailing competition promoted Qingdao's internationalization level to a general international standard.

Figure 3 showed the dynamic change of the internationalization index of Qingdao's market from 1994 to 2007. We could conclude from the graph that the internationalization of Qingdao's market reached a breakthrough in the past ten more years. The internationalization index rose from 0.2 in 1994 to 0.58 in 2007. In 2003, the market internationalization has reached the standard of a preliminary international city. In 2007, the year of the Olympic sailing competition, due to the strong driving force of market demand and investment, the market internationalization index increased substantially, which approached the general internationalization level of the global cities.

III. The hosting of the Olympic sailing competition made a breakthrough in Qingdao's main body internationalization, and helped it achieve to a preliminary internationalization.

Figure 4 showed the dynamic change of the internationalization index of Qingdao's entity from 1994 to 2007. Since 1994, some international brands such as Haier and Hisense emerged in Qingdao with the growing of city's comprehensive strength. Although the city was better known than before, the main body internationalization was still at a comparatively low level. Even in 2003, there was still a big gap between the main body internationalization of Qingdao and the international standard. The main body internationalization, especially the internationalization of government and enterprises, has become a bottle neck which limited the further development of Qingdao. The successful hosting of the Olympic sailing competition provided a golden show time for Qingdao to make a great presentation to the world. It increased Qingdao's attractions and global influence to the outside.

According to the statistics, more multinational corporations settled in Qingdao. The numbers of the corporations in 2007 was 4.97 times higher than the numbers in 2000. From 2001 to 2008, Qingdao has built friendships with 9 international cities. The hosting of the Olympic sailing competition helped to increase the virtual connections between the government and citizens. We could conclude from Alexa that the percentage of global internet users of Qingdao government affairs network is 0.00083% while that of the official cite of the Olympic sailing committee is 0.000132%. The hosting of the Olympic sailing competition contributed 15.9% to the virtual connections of the government.

IV. The hosting of the Olympic sailing competition played most significantly on the improvement of Qingdao's environment internationalization. The environment internationalization index increased from 0.4 to 0.588, entering a basic internationalization stage.

Figure 5 showed the dynamic change of internationalization index of Qingdao's environment from 1994 to 2007. It is not difficult to conclude from the graph that before 2003, Qingdao's environment internationalization was in a steady growing period, while from 2003 to 2007, it increased suddenly from 0.4 to 0.6. This change could not be separated from the hosting of the Olympic sailing competition, which modified the transportation and information infrastructure construction, expanded the opening-up, improved the residents' quality and promoted the city's images and

the urban civilization. All changes make Qingdao environment reach the preliminary internationalization level, and start to move into basic internationalization level; all changes lay solid foundation for further improvement of urban internationalization level. According to statistics, during the event period, the number of air routes increased by 1.8 times, flight number increased by 2.52 times, the number of port routes increased by 2 times, the number of internet users increased by 2.72 times, and the number of mobile phone users increased by 4.14 times.

Part Six The strategic conception of promoting the international competitiveness of Qingdao: embracing Jiaozhou Bay from inside and being surrounded by the Yellow Sea from outside.

This strategic conception is developed on the basis of comprehensive analysis of Qingdao's international competitiveness, internationalization degree, and the influence of the hosting of the Olympic sailing competition. It also absorbs the experience and rules of development of the [delete the] advanced cities, and considers the overall developing strategy and the practical situation of Qingdao. This strategic conception is a great idea, a comprehensive developing strategy with multiple meanings, and also the key and guiding strategy of the future development of Qingdao. It is not only a conception of spatial pattern on future development of Qingdao's international competitiveness, but also is a highly summarized developing goal and method. This strategic conception is an important thought and guideline on enhancing international competitiveness of Qingdao.

I. The basic meaning of the strategy of embracing Jiaozhou Bay from inside and being surrounded by the Yellow Sea from outside.

The meaning of the strategy is to use the geographical advantages to develop, competition and cooperation with the nearby cities, protecting the environment of the bay, and relying on the sea to rise. It also refers to improving the internal environment and facilitating international communications, using the resources inside and outside to provide services for the internal and external market. Its target is to make Qingdao as the leader of the Yellow Sea area (including Shandong peninsula, backland, and the west coast of Korea) and a world-leading city on manufacture, exhibition, and recreation.

The geographical scope of the strategy refers to the area of Jiaozhou bay and the Yellow sea. It is established on the economic and social factors of natural and eco conditions, resources and energy supply, environmental capacity, the existing developing efforts, economic structures, population aggregation, geographical characteristics, and internationalization degrees. This strategy could be divided into two parts: the bay strategy and the sea strategy.

----The bay strategy is to conform to the principles of protecting and developing the bay, regarding Jiaozhou bay as the internal lake of Qingdao, relying on the central downtown to develop the bay areas and the outer cities together, establishing a strategic city framework to achieve a scientific, intensive, and compact development of Qingdao.

----The sea strategy is to focus on the Yellow sea area, insisting on the guidelines of competition and cooperation of this area to rise. Its strategic thought is to communicate with the distant and large cities and medium-sized cities nearby, drive the less-developed cities around and influence the distant cities which are also less developed to a better development. It sets Vancouver, Geneva, and Seattle as the benchmark, Beijing, Shanghai, and Seoul as the supporting point, and promotes the development of Shandong peninsula, backland, and the west coast of Korean peninsula, covering the global middle and low-end market. Relying on the Yellow sea, it cooperates with other cities and regions on multi-levels, constructing Qingdao as the leader of the Yellow Sea area (including Shandong peninsula, backland, and the west coast of Korea, Shanghai is not included) and a world-leading city on manufacture, exhibition, and recreation.

II. The basic content of the sea strategy

(1) **The basic statement of the sea strategy**

The sea strategy means to develop in accordance with the thought of communicating with the distant and large cities and medium-sized cities nearby, driving the less-developed cities around and influence the distant cities which are also less developed to a better development. It insists on the guidelines of competition and cooperation of this area to rise, regarding Qingdao as the center of the circle, Vancouver, Geneva, and Seattle as the benchmark, Beijing, Shanghai, and Seoul as the supporting point. It promotes the development of Shandong peninsula, backland, and the west coast of Korean peninsula, covering the global middle and low-end market. Relying on the Yellow sea, it cooperates with other cities and regions on multi-levels, constructing Qingdao as the leader of the Yellow Sea area

(including Shandong peninsula, backland, and the west coast of Korea, Shanghai is not included) and a world-leading city on manufacture, exhibition, and recreation.

(2) The geographical scope of the sea strategy

The sea strategy is outward-oriented, which focuses on the cooperation between Qingdao and outside cities and areas. The sea here refers to the Yellow sea. The Yellow sea areas refers to the marginal sea of the west pacific ocean, surrounded by the main land China in the north and west, and Korean peninsula in the east, including Shandong peninsula, backland, and the west coast of Korea. Shanghai is not included. The great Yellow sea area refers to the whole area of the Yellow sea and the Bohai Sea, a part of the East China Sea (mainly including Shanghai). To be specific, the great Yellow sea area is also called one-hour flying range, with Qingdao as the center, one-hour flying distance as the radiance. It mainly includes the north of Shanghai, the whole area of Beijing-Tianjin-Tangshan, the west coast of Korean peninsula, covering a total area of 950,000 square kilometers. The three supporting points of the sea strategy, which are Shanghai, Beijing, and Seoul, are also in this area.

In the sea strategy, the spatial distance and functions of cities and areas are mentioned. We built a two-dimension analysis framework on the basis of the function orientation, the location and transaction cost of the city in the global value chain and the practical situation of Qingdao. According to the differences of functions and distances, Qingdao's international spatial structure is divided into five sections and two dimensions, as it shows in Figure 6.

Less-developed and nearby area refers to the Yellow sea region, including Shandong peninsula, backland, South Korea, and the west coast of North Korea. This area is closed to Qingdao in distance. Comparing to Qingdao, the power of wealth creation of cities in this area is much lower.

Less-developed and distant area refers to the medium and low-end market or areas such as Africa and some developing countries, which are also far away.

The mid-developed and nearby area refers to the cities in the Yellow Sea region which are at a higher level in the global value chain than Qingdao. These cities are Shanghai, Beijing, and Seoul, which are also three supporting points of the sea strategy.

The high-developed and nearby area refers to the world-class metropolis in the north-east Asia, which is Tokyo.

The high-developed and distant area refers to the world-famous international cities and areas which are far away in the distance to Qingdao, including the

benchmark cities of Vancouver, Geneva, and Seattle, and also New York, San Francisco, London, and also some areas such as German developed cities, which are historically-connected to Qingdao.

III. The Six Core Meanings of the Sea Strategy

The implementation of the sea strategy has a profound meaning. It clearly proposes Qingdao's own international strategy, which profoundly influences the promotion of Qingdao's future comprehensive competitiveness and international status.

(1) The sea strategy is a unique international development strategy designed for Qingdao.

The sea strategy is an international strategy with which suits Qingdao's characteristics. It is a distinct tactic for international competition and cooperation. The proposal of the sea strategy helps to improve Qingdao's international reputation and its significance in the country's overall opening-up strategy. The proposal of the sea strategy conforms to Qingdao's urgent demand to achieve a leap-forward in internationalization, which will greatly lift its internationalization level, pushing it forward to a basic and comprehensive internationalization development stage.

(2) The sea strategy helps to build Qingdao's international structure.

The sea strategy means to use the geographical advantages of Qingdao, which includes the resources of the Yellow sea and the Pacific Ocean, and even extending to the whole range of the world, to open up the international developing views and build its international structure at multi-levels.

Qingdao has to become the leading city in the Yellow sea area. The Yellow sea area not only includes Shandong peninsula, but also includes the west coast of Korean peninsula. The strategy brought up of building Qingdao as the core of the Yellow sea area makes Qingdao not only a leading city in Shandong peninsula, but also exceed the cities in the west coast of Korean peninsula in its competitiveness. Its final target is to lead both sides of the Yellow sea to a better economic development.

Qingdao has to become the central city of the great Yellow sea area. The great Yellow sea area includes the Yellow sea, the Bohai Sea, and a part of the East China Sea, which is one-hour flying range with Qingdao as the center of the circle. A part of North Korea and South Korea is also involved in this circle. The sea strategy indicates that Qingdao needs to cooperate with Beijing, Shanghai, and Seoul by relying on the development of the Yellow sea to become a real central city in the great Yellow sea area rather than just the center from the geographical position.

Qingdao has to become a leading international city. From the global perspective, the sea strategy suggests that Qingdao has to develop on the basis of understanding its own comparative advantages and the development rules of the world industry. In the key professional field, it needs to learn the advanced experiences from the large international cities and cooperate. In the comparative advantage field, it has to capture the global market, with a few high-end products entering the European and American market and most of the middle-high-end products entering the market of developing countries, to build Qingdao as a world famous city.

(3) The sea strategy reflects Qingdao's strategic thinking on internationalization.

The sea strategy clarifies the methods to achieve the internationalization of Qingdao. Based on the transaction cost and city function levels principles, different international sections are divided. The thought of communicating with the distant and large cities and medium-sized cities nearby, driving the less-developed cities around and influence the distant cities which are also less developed to a better development is an effective way to enhance Qingdao's international competitiveness.

The sea strategy could expand the overseas market for the implementation of the bay strategy. The implementation of the sea strategy is beneficial in various aspects, no matter in the development of the Yellow sea area, driving the low-end market, or even the entrance of some advantage industries in the European and American market. The implementation of the sea strategy provides an expanding market for the development of the leading industries and enterprises in the bay strategy.

The Sea strategy helps Qingdao import external resources for its own use. The essence of the sea strategy is to discover available resources around the world. The cooperation between Qingdao and the three supporting-point cities aims to absorb human resources, technology resources and material resources and abide by the principle of "staying close to the richer relatives" and "staying close to those who are easily accessible". By focusing on and importing the excellent resources of world's metropolitan cities, Qingdao is more facilitating to find the most useful and suitable resources to achieve its own leap-forward development.

The sea strategy could undertake the high-end industry transformations for the bay strategy. The implementation of the sea strategy is to seek a developing opportunity around the world, providing policy support for Qingdao's undertaking of

the industry transformation from the developed countries, developing the modern service industry and high technology manufacture industry.

The sea strategy helps the bay strategy transfer its low-end industries. The implementation of the sea strategy provides a new way of thinking for the enterprises and industries that have the plan to transfer. Qingdao has to close the enterprises which nearly go out of business and spare the place and resources for the promising enterprises. This strategy helps to spread the low-end industries in the Yellow sea area.

(5) The sea strategy points out that Qingdao has to become the leading city of the yellow area, not only in the Shandong peninsula.

The sea strategy conforms to the demand of Qingdao's leading role among the cities in the Shandong Peninsula, and the demand to get advantages in the competition with the west coast of South Korea. The sea strategy helps to establish Qingdao's leading role among the cities on the Shandong Peninsula. It requires more views and more advantages in the competition with the west coast of South Korea.

(6) The sea strategy is a significant part in the internationalization strategy of China.

China has become a world-leading country. The development of China's coastal cities severely influences the international position and influential force of China in the pacific region. In the north-east Asia, China also competes with Japan, South Korea, and Russia. The coastal cities of Japan developed rapidly, and South Korea also strives to occupy a more influential position in the north-east Asia. The rise of Qingdao helps Tianjin and Dalian together compete with South Korea in the great Yellow sea area, and compete with Japan and Russia in the west Pacific area. Therefore, Qingdao's sea strategy is an important link in the whole internationalization strategy of China. Qingdao has to learn to cooperate focused and play its own importance in China's internationalization.

IV. The explanation of the strategy of embracing Jiaozhou Bay from inside and being surrounded by the Yellow Sea from outside: the bay strategy is the internal cause for Qingdao's development while the sea strategy is the external cause.

The bay strategy is a result of Qingdao's opening-up. The bay strategy is a result of Qingdao's deepened opening-up while the sea strategy is the strategy and the guideline for its deepened development. Qingdao's spatial structure, function areas segmentation, capacity and sustainable development should be considered on its

further opening-up and development, which asks for learning experiences from advanced cities, cooperating with nearby cities, and driving the less developed cities far around. To better promote Qingdao's international competitiveness, the bay strategy is the foundation. A better implementation of the sea strategy could not be separated from the bay strategy.

The bay strategy also cannot be separated from the implementation of the sea strategy. The implementation of the bay strategy asks for high requirements, large amount of investments, and a long period. It has to expand opening-up on planning, investing, and developing to cooperate with agencies and businessmen. In the future developing process of Qingdao, the industry update, infrastructure construction, eco-tourism construction and transportation development could not be separated from the implementation of the sea strategy. A better bay development of Qingdao should insist on implementing the sea strategy.

The relations of the above two are described from the following three aspects.

1. From the perspective of the developing structure of Qingdao in the new period, the bay strategy is the internal cause for Qingdao's development while the sea strategy is the external cause. The bay strategy is a comprehensive, harmonious and sustainable developing project, planning the future developing mode of Qingdao. It determines Qingdao's future development direction, and is concluded on the basis of critically understanding the internal cause of its development. The sea strategy fully considers Qingdao's outward development and the cooperation space, relying on the major and advanced cities in the Yellow sea area. It is an inevitable choice after the full utilization of the external cause, and also a promotion of Qingdao's developing and opening-up policy.

2. The focus of the bay strategy is to consolidate Qingdao's leading functions in Shandong province while the focus of the sea strategy is internationalization, relying on advanced cities to gain a mutual complements in economy and leap-forward development.

3. The bay strategy is the foundation, and the sea strategy goes far beyond. These two strategies mutually promote and work as each other's motive force. The bay strategy is the foundation and the foothold of Qingdao's economic development. The sea strategy is based on the bay strategy and the sea strategy brings strength to the bay strategy.

V. The Vision of Qingdao's Developing Strategy

The city plans to become the leading city in the Yellow Sea Region and an economic center of the Pan-Yellow Sea Rim through the strategy of embracing Jiaozhou Bay from inside and being surrounded by the Yellow Sea from outside. The

people of Qingdao will turn the city into an internationalized one with strengthened competence on manufacturing, exhibition, and leisure life.

VI. Qingdao's Developing Strategic Goal and Time Plan: A Strategic Trilogy

A strategic trilogy has been developed to realize the vision and the goal above. Qingdao will take three steps, with each entering a new phase, to enhance its competence as a more internationalized city, reach the same or a higher level of the benchmark cities, and finally become one of the internationally important economic centers of the Pan-Yellow Sea Rim (North-eastern Asia) .

Step One (2008-2010): Paving. Foundation will be laid for the function of the city's position as "the leading city with reputation". The city has planned to enter the world's Top 200 most competitive cities, with the most competence in the Yellow Sea region. The city, primarily internationalized, will gain a firm foundation to enter the fundamental internationalized phase.

Step Two (2011--2015): Developing. The city's advantage as the leading city with reputation will be strengthened, and then the city's development will see positive results. Qingdao will strive hard to be one of the world's Top 150 cities and the Top 5 cities of the Pan-Yellow Sea Region, entering the primary internationalized phase.

Step Three (2016--2020): Establishing. The city's positioning goal will then be mostly fulfilled. Qingdao will endeavor to cultivate the competence of a world's Top 100 city, laying the foundations for a fully internationalized phase.

VII. The implementation of Qingdao's developing strategy (Embracing Jiaozhou Bay from inside and being surrounded by the Yellow Sea from outside).

Qingdao is one of the first cities to widely use the Balanced Scorecard (BSC), and also the one which saw the best results. On administrating Qingdao's Party and government's organizations, the municipal government has shown its advanced vision, open mind, perseverance, and expertise. Therefore, given the strategy's characteristics and the government's own administrative advantages, we have developed conceptual implementation suggestions, **using the BSC as the administrative tool for the city's developing strategy.** With the measures above, the government's administration level will be enhanced, which will guide enterprises and citizens to bring out positive economic and social changes, including an innovative government, highly capable of strategic management, which will serve as a strong back-up for the city's strategy.

When Qingdao municipal government implements the development strategy (embracing Jiaozhou Bay from inside and being surrounded by the Yellow Sea from outside), it's recommended to apply the strategic management concept of BSC to ensure that the strategy will be fully implemented. Qingdao's strategy implementation basically takes four steps--motivation, plan, operation, control and evaluation. Only by fully motivating the initiative of each related organization and person can the developing strategy be effectively implemented. Breaking down the strategic goal into specific development targets, annual plans, project plans, will truly support the implementation process. Safeguarding mechanisms including efficient organization are also necessary in the strategic operation stage; when enhanced supervision, error evaluation, control and correction are indispensable during the strategic implementation process, the strategic goals can be probable to fulfill.

The four steps will be taken as follows.

Step One: Motivating-- public voices are widely outspoken.

During this time, the city will use the idea of BSC to bring up the initiative from all the levels and all aspects to bring Qingdao's strategic goal into actions of the city's residents, enterprises and administrators.

During the period, the government should fully introduce the strategy from all angles very frequently through all kinds of media. They also need to train the key staff and implant new ideas and thoughts into them. New slogans and concepts should be brought forward to eliminate some old ideas and thoughts which go against the implementation of the strategy. The target is to make the most people accept the strategy step by step and understand the importance and meanings of the strategy.

Many people may doubt the strategy at the beginning when it is started, since it is a new development model leading to a new vision of the city, which may not earn support from the majority, if not thoroughly understood by the stakeholders. From

this perspective, the first step of the implementation is to motivate the stakeholder, explaining to all the people concerned the opportunities and challenges that will be brought by the changes inside and outside of the city, the flaws of the city's previous growth mode, the advantages and the risks as well of the new. The target is to make the majority figure out the necessity and urgency of the strategy, build confidence and be assured, ready to strive for the new blueprint of Qingdao. It is necessary to set clear emphasis and accomplish each task gradually, while trying to win understanding and support from key operators. Adjusting the mindset of organizations and people should also be considered to pave the way for the implementation.

Step Two: Planning--Separating the big goal into small ones

When planning for the implementation, Qingdao will take the BSC plan and take steps, in order to develop a specified and detailed plan according to different phases, places, value chain (industries, professions, management, etc.) and departments.

First, the trilogy of the developing strategy will be further specified, with each implementation phase lead by a clear target, as well as tailored policies, measures and guidelines. A timetable will be developed according to each target, which helps to arrange the work and remind the connections between the phases. Plans for the long-term targets can be more general while the short-term one should be as detailed as possible. Based on the goal of the big strategy, the first phase of the implementation should contain a well-designed transition from the old strategy, in order to minimize the resistance. The specified targets and plans must be operative. With the strategic goal separated into annual target, department measures, guidelines and communication purposes, the general goal will be thoroughly specified and turned into detailed tasks that can be accomplished.

Step Three: Operating--organizational safeguard for the implementation.

During the operating phase, the city shall use the idea of BSC for the coordination between each concerned departments to form a joined force to push the effective implementation. The following work must be done during this phase to ensure the implementation.

1. Establishing specialized organizations for the developing strategy, in order to maintain the relationship with brother cities and foreign sister cities.

A leading office will be founded to ensure the effectiveness of the operation. In order to effectively implement the measures, local departments shall communicate with the leading office and provide service for the previous work of the office. The leading office's work is backed by the Pan-Yellow Sea Region and facing world. It will

help with the economic cooperation and coordinated development between Qingdao and other cities in the world, building Qingdao as the leading city of the Yellow Sea Region.

2. Establishing the chief executive accountability.

Qingdao's developing strategy requires chief executive accountability, where the Party Secretary and the mayor shall the primary responsibility. It is important to keep the consistency of the strategy and avoid frequent changes caused by the chief leaders of the government. Effective supervision and evaluation system shall be developed to keep this consistence.

3. Equipping professional talents, civil service and expert panel.

Once the specialized organization and chief executive accountability have been established, professionals and the civil service shall be equipped for the work ahead. The expert panel will be needed to provide advice for implementation.

4. Building a service-oriented government

A service-oriented government realizes its functions and undertakes duties. It is built through legal process, under the guide of social standard and the frame of democracy of society, according to the will of citizens, with the purpose to serve the citizens.

A service-oriented government is different from the traditional ones, which have a reversed master-servant relationship. The functions of a service-oriented government show its humanity concerns. In other words, it focuses on how it can best serve its citizens with better service, in a better way. In a regional common market, a service-oriented government doesn't stick on the questions of how much it should be involved into the market. Instead, it pursues to serve its citizens best and achieve a maximized benefit for the whole of society.

Step Four: Controlling and Evaluating--Supervision, Control and Adjustment

It should be clear to Qingdao that the strategy is implemented in a changing environment. The tool of BSC is helpful in controlling and evaluating the implementation process. By this way the city can adapt to the changes and meet its goal. The main tasks for this phase are building controlling systems, monitoring results, finishing the evaluations, controlling and correcting mistakes.

In short, BSC is an effective tool for implementing Qingdao's developing strategy. The strategic development map made with BSC, shows us clearly, the vision, position, targets and measures of the city, which can be separated into key indicators for each department and individual concerned. It is a complete, scientific and

bottom-up tool, with which we can see the whole picture of the implementation. BSC shall be applied to the implementation of Qingdao's development strategy, in order to promote its implementation and ensure the realization of the goal.

Finally, Qingdao municipal committee and government are familiar with BSC, and have plenty of experiences; therefore, this report is just offering conceptual suggestions. After all, Qingdao municipal committee and government are most qualified to decide whether to use BSC as the managing tool for the city's development strategy.