# **Section Two**

# A Flowchart Approach to the Haier Household Electrical Appliances Industrial Cluster

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# A Flowchart Approach to the Haier Household Electrical Appliances Industrial Cluster

# 1. From Industry Chain to Industry Group

Supply Chain Management (SCM), a new management idea and mode brought forward in 1990s as a countermeasure to the drastic competition, is an innovation at microcosmic level. SCM is taken as "the third origin of profit" in the time of tiny margins when the profit space is compressed by competition. The basic idea of SCM is a net-chain-framework comprised by providers sub-supplier, shopkeepers and the eventual users circling the core enterprise. The core enterprise rapidly accommodates itself to the variation market by transferring, integrates all the resource advantages on the supply chain. Instead of the pure competitive relationship, enterprises on the chain are partners who have formed an all-win relation comprise both competition and cooperation. The supply chain is a material chain but an information chain, a capital chain and an increment chain.

Industry group intimately relates to a city's competitive advantages. First, an industry group can integrate a city's resources to form the industry aggregative effect. A city can arrange its local characteristic industry group according to the market demands on the basis of local resource conditions and industry basis. This local characteristic industry can exert the advantage of group predominance such as specialization, low costs, market-sensibility, and scale economy, then, engenders a territorial scale economy and accelerates the development of the produce industry. Second, an industry group can aggregate information and forward it to the industry chain. The middle and small firms have to firm the specialization of a kind of production from its accessory because of the limitation of capital, technique and human resource. However, when the specialization is promoted to a certain stage, it is necessary to rearrange the work division complying with the mutual complementary principle in order to extent the industry chain and aggregate the certain industry to form a group. In this process,

the enterprises have developed a mutual complimentary mechanism that can activate the inner resources of the enterprise and promote the ability of mutual complement, competition and cooperation. Third, an industry group can form a group character of large enterprises then promote the brand effect of a city. In recent years, with the affect of the industry group, a brand character symbolized with special industry group has emerged. In these cities, the industry bands have enlarged the effect of the cities' band effect such as what happened in Qingdao, which has developed a characteristic industry aggregating around electrical equipment industry represented by Haier and improved its competitive power. The aggregation of large enterprises and industries can prolong industry chain, exert the effect of industry air fleet, enlarge the brand effect all over and found a firm base of durable development of industry economy.

The competitive predominance of industry group mainly comes from four aspects; First, the effect of external economy. In an industry group, a firm may disperse its special technology to the cooperative firms through various paths and benefit those firms in the knowledge dispersion. A great amount of technology intercourses result in the decrease of space costs and urge the firms to cooperate while competing. By this way, the productivity is improved eventually. Second, the effect of human resource aggregation. A group comprising of professionals attracted by the industry group will gather to serve the industry congregation. The aggregation of professional leads to the human resource flowing among firms in group thus provides a support to the industry upgrade and technology innovation. Third, the effect of knowledge innovation. The competition among enterprises in one industry group results in knowledge innovation, which transfers in the group and makes the firms in one group get new knowledge as well as technology. Fourth, the effect of industry aggregation. Industry aggregation will affect correlative mutual complementary goods and gender a predominant industry group. Generally speaking, industry aggregation at growing stage may become not

only the hotspot attracting professionals but the emphasis area of technology import and innovation, the concentration area of correlative firms, moreover, the develop and research center of the world.

The strategic aims of promoting industry congregation for a city or region are as follows. First, by industry congregation, a city can fabricate a durable development industry system and found its brand and resource predominance, based on which the city may attract international capital, enterprises and technology transfer and promote a new round of congregation and cooperation. Second, by industry congregation, a city can perfect industry supply chain and accessory provision network and corresponding soft and hard environment. Third, by the effect of aggregation and attraction, a city can proceed with the attraction to certain group of enterprises and consumers. In the condition of global industry transfer and the competition of capital and business invitation, industry aggregation has become an important factor. So many regions in and out of China have built regional brand by industry aggregation, as the result, they obtained predominance of regional industry and realized the durable development of industry economy.

The industry congregation, deriving from either market or capital transfer, plays an important role in regional industry-framework upgrade and the emergence of the industry competition predominance.

First, industry aggregation helps the enterprises in the region to keep information predomination by bring them valuable technology and market information. In the aggregation region, information about market such as price condition, variation of provision and demand, fashion style, etc. is abundant and acquirable, which makes firms in the region obtain the usable information at a low cost comparing to the external firms and promotes their competitive advantage.

Second, industry aggregation realizes the share of resources and productions in industry. The external benefits come from the public resources attracting more external cooperation and opportunity for the firms internal. Actually, the industry aggregation adds intangible assets to the firms in the aggregation region that reduce the distance between enterprise and market as well as clients.

Third, industry aggregation promotes the productivity and makes the firms pursue the advanced technology. Generally speaking, firms adopt advanced technology and system will survive in the competition with others. The action of imitation in the aggregation region also speed the spread of advanced technology, high additional value and modern enterprise system. Innovation is the endogenous variable in the technique of durable development and improvement of competitive ability.

Fourth, industry aggregation favors the internal specialization. Some working procedure will separate gradually and develop as an independent integrate department participating into the aggregation net when the aggregation reaches to a certain scale. Specialization working division is the important precondition to both the increase of scale yield and the innovation.

In general, industry itself has a competitive predominance that can transform to the competition ability of the region. By using the industry aggregation rule, a city can import more international investment and create a better foreign capital utilization environment. As the result, regions where have higher aggregate densities are more competitive and attractive to foreign capital. It has been verified by the affect to competitive predominance and the relation between industry aggregation and direct investment, a number of industry aggregation regions will emerge with international competitive ability when global industry transfer combined with the promotion of industry aggregation. Meanwhile, if more attention is paid to attracting the direct investment and taking part in regional competition, an industry aggregation can also emerge without the base of specialization market.

# . The Mode of Industry Aggregation

Industry aggregation is a phenomenon of firms in a common industry tight aggregate together and a process in which industry capital factors continuously gather together in a certain space. The certain mode of industry aggregation is the competitive and cooperative relation of enterprises in an aggregation forming with the core of production. It has a direct relation to the construction of regional industry system.

Now, there are five main types of aggregation in China. This aggregation is developing on different ways in different backgrounds and has participated in the global competition of value chain by different methods.

- 1. Depending on local entrepreneur spirit and tradition of industry, aggregations on base of country or town industry have formed some small professional towns, such as the labor-congestion-industry regions in Wenzhou, Zhejiang province, hundreds of which can be found in Zhejiang. With the great help of the aggregations, the export of Zhejiang has kept increasing in the competition of global value chain for 3 years from 1999 on.
- 2. High-tech-industry aggregation based on the carving out of the high-tech businessmen. In the industry group in Zhongguan village, Beijing, there is an obvious phenomenon showing the emersion and development of new firms accompanied with the growth of the enterprisers and the transform of the industry culture. The main experience of the "electron street" full of Chinese characters in 1980s is the enterprises use original accumulation coming from operating trade and technique service or OEM and sale delegation to competed independently in market and enter the field of research and develop consequently.
- 3. Small business aggregation based on local enterprises such as labor-congestion-industry professional towns in Dongguan, Guangdong province. At the very beginning of the innovation and open, Dongguan entered the global value chain and rapidly developed as the

"plant" of Hong Kong and Taiwan taking advantage of favorable policies, abundant and low-cost human and ground resources as well as the district predominance relating with Hong Kong, Macao and Guangdong. PC aggregation in Qingxi town has developed on this base from the first PC factory founded in 1994 and congregates more than 30 PC enterprises from USA, Japan, Taiwan, Hong Kong, etc. now.

- 4. Aggregation based on the accessory firms brought by foreign capital, such as the tech-congestion-industry aggregation in Yaxing net industry park, Yizhuang, Beijing, in which 15 enterprises has settled such as, SANYON energy, ltd, etc and in the few coming years, the aggregation will attract more than 30 global accessory providers, facilitators and R&D institutions.
- 5. Aggregation based on the reorganization of the public ownership. Relative enterprises have emerged and developed around company bloc such as Haier in Qingdao, Jaling Motor in Chongqing. These enterprises have promoted the growth of their accessory industry and wakened the innovation and upgrade in the competition.

# Table one: the types of aggregation in the new industries

Driving	Inner power			Outer power	
powers					
types	one	Two	five	three	four
Driving	Farmer	Urban	State-	Enterprises	Enterprises
bodies	entreprene	technologic	owned	from	from foreign
	urs	al	enterpri	foreign	nations and
		entreprene	ses	nations	Hong
		urs		and Hong	Kong ,and
				Kong ,and	Taiwan
				Taiwan	
types	Labor-	Technolog	Technol	Labor-	Technology-
	intensive	y-intensive	ogy-	intensive	intensive
			intensiv		
			е		
Typical	Wenzhou	Zhongguan	Qingda	Dongwan	Yizhuang of
cases	of Zhejiang	Village of	o of	of	Beijing
	Province	Beijing	Shando	Guangdon	
			ng	g Province	
			Provinc		
			е		

# . The Framework of Haier Group

#### ) Industrial Zone

# .National-level High and New Technology Industrial Development Zone

#### 1. The HNTIDZ

The high and new technology industrial development zone of Qingdao (the HNTIDZ) set up with the approval of the State Council in May of 1992. It covers an area of 58 sq. km, of which 16.7 sq. km. is the industry district. The high and new technology industrial development zone of Qingdao adjoins the scenic spot of Mountain Lao and Old Stone Man. With perfect facilities, convenient traffic conditions and beautiful sceneries, it is a wonderful commercial district with high-qualified ecological and natural environment.

In 2000, the industry garden of marine organisms of Qingdao and new and high technology export base were listed and started formally. Also, the Qingdao Life Sciences was established with eight projects for the first year. There was a tentative agreement that Qingdao Software Zone (the second term), OUC (ocean university of China) Technical Zone, Software Industrial Zone and Magnesium R&D Base would be established. Many research institutions including the Life sciences Research Center were introduced to the zone, reaching 38 totally. The second term of the Qingdao Software project attracted many software companies here. The Beijing University Academic Center, with an investment of more than 300 million Yuan was being built. Besides, the Qingdao Polytechnological University and International e-business University were building subsidiaries there to make the zone much bigger. It also brought in forty high-tech projects and 32 innovation enterprises in the zone. In order to better technology "hatch" net, the government issued a regulation "the rules to govern the enterprises in HNTIDZ". As a result, 32"hatch" companies were brought in, of which 18 were high-tech enterprises, with a total of 100. The high-tech enterprises had a sale income of 17.5 billion in 2000. All the 70 projects approved in 2000

brought in 370 million dollars in contract and 250 million dollars in reality. The project introduction had a character of large scale and high technology. Many projects, including the Haier CCT (Qingdao) communication Co., Ltd. Lucent cell-phone base stand; Tide Qingdao Software Research and Develop Base, Treasure Laser Co., Ltd. were introduced. In order to promote trade and investment in the tertiary industry and infrastructure project, the government has introduced pul Smart supermarket, seascape hotel, golf yacht club, red island develop, national ocean investigate base and sand mouth aquatic products wholesale market .An export base was established with the approval of National Science Department and Economic Trade Department.

In 2001, the HNTIDZ was given the title of advanced high-tech zone of national level. By the end of 2001, enterprises with a total 824 from many countries, including the USA, Britain, Italy and Korea had been built with the official approval, reaching 1.33 billion dollars totally. In 2002, the zone was accepted as an industrial base for "National Torch Plans" and a university science zone, with a GDP of 12.6628 billion Yuan, financial income of 826 million and a tax income of 1.785 billion. At present, the zone has become a popular place for foreign investment with IT, life science ad new material as its main industry, attracting even the top 500 companies of the world including Lucent, Coca cola to the zone. In conclusion, after ten years of fast development, the HNTIDZ has become a zone characterized with perfect R&D, innovation hatch and industrialization.

#### (1) Constitution of the zone

The Hatch Base supported and built by the government in the zone covers an area of about 100,000 square km. the Hatch Base includes many institutions, such as Invention Department, the Life Sciences Academy, oversea talents zone and the software zone. Many famous R&D institutions and Research centers also find their way there, for example, the Dike Intricate Chemistry, Haier Center Research Academy, Yiqi R&D center and National Marine Bureau. Universities including OUC, Qingdao University and Qingdao Polytechnological University

supply the zone with rich human resources. Complying with the market laws and technological innovation rules, the zone now has developed a sound system, guided by the government, supported by the venture investment, characterized by the close connection of talents, education, R&D, Industrial hatch and industrialization.

# **High-Tech Industrial Zone**

This zone is an area which the government put emphasis on and gives preference to. Recently, many famous enterprises, such as Haier, Lucent, Fusong Intricate Chemistry, Jingu Magnesium, Aucma Science industrial zone and Gaoke Communications, establish subsidiaries in the zone. The object of the zone is to become a new city of high-tech emphasizing on the following five industrial chains.

#### A. The Communications Hardware Production Chain

The projects of Haler, Lucent, and Newkeda Daoguang Numerals should be made full use of to enlarge the investment scale.

#### B. The Biology Medicine Industry Chain

In order to enhance the development of the biology medicine, the chain, supported by Huaren Medicine, Aucma Biology Industrial Garden and Huanghai Medicine, puts emphasis on marine biology project, DNA project, biology product and biology medicine, making full use of the rich marine resources.

#### C. New Material Industry Chain

Its emphasis is magnesium base, 8 copper screen projects, and carbon fiber project. The chain should make advantage of the rich human resources in the University of Science and Technology of Qingdao, introduce big, high industrialized new material projects with high-tech and foster the new material industry.

# D. Food and Beverage Chain

A food and beverage chain based on Tsingtao beer, Laoshan mineral water, silk lake food, carrying food, East China grape wine, Daniel's grape wine, utilizing the high-quality water resource in Laoshan and clean natural environment, will be extended to build a food and beverage processing base.

#### E. The Software Industry Chain

The zone takes advantage of the blessed environment in Laoshan, with the help of Haier software institute and fast development of the consumption electronic communications industry fosters, introduces high-level, export-oriented software enterprises, such as Tide, Ericsson to accelerate the development of the software industry.

#### **Incubator Function District**

The scientific and technological small- and medium-sized enterprises with independent intellectual property right will be emphasized to promote the transformation of scientific and technical results. At present, The Hatch Base supported and built by the government in the zone covers an area of about 100,000 square km. the Hatch Base includes many institutions, such as Invention Department, the Life Sciences Academy, oversea talents zone and the software zone. The popular areas of inviting outside investment in the district: science and technology hatch enterprises; scientific research institution and center of development of research; related service facility of technology; intermediary services and management advisory corporation; investment company.

#### **University Garden**

Mainly made up with OUC, Qingdao University, University of Science and Technology of Qingdao, the garden is expected to strengthen the cooperation with universities at home and abroad in order to play an important role in education and innovation. The popular areas of inviting outside investment in the district: key laboratory, some of graduate student's teaching

and training centers of the university, famous university branches and long-range educational bases.

#### (2) Physical Infrastructure

#### Roads

The road network extends in all directions. Traffic main roads are Haier Road, Hong Kong East Road, Donghai Road, Qinghai-Yinchuan expressway, Zhuzhou Road, Yinchuan Road, Songling Road, and Li Shandong Road. The road covers an area of 60 kilometers in and around the area. In an area of 1.8 million sq.km., the road is covered with harden surface.

# **Water Supply**

In the region, water pipeline is 79.2km long with a diameter of  $\Phi$  800mm .It can supply general 80,000 cube meters, or 100,000 cube meters at most to the residence. The area service pressure is 70m; water quality complies with the drinking water standard.

#### **Sewage System**

The drainage system in the area has a rainwater pipeline of 200km, with a total drainage area of 56.42 sq.km.

#### **Power Supply**

The electricity is supplied by the city electricity network. Two 10KV public standings and three 35KV transformer substations have been built with a supply capacity 160,000KVA now in the district. The error range of the voltage is voltage +5%- 10%, and the absolute value does not exceed 10%. The routine index of the voltage of the electric wire netting is 220V, 380V in the district: the voltage supply power is 220V, 380V, 10KV, 35KV, and 110KV.

# **Heat Supply**

A heating-supply plant is planned to be built to support vapor 134t/h for production purpose of 0.981mpa outside. With a heating load of 198MW, the plant can meet the heating need of

the perfect and key district. Another heating-supply plant is designed with a capacity of 16MW to meet the heating need of the extended area.

#### **Gas Supply**

The system uses natural gas as the main source, and adopts the medium single network to transport, transporting pressure 0. 35mpa.

## **Sewage**

The total length of the sewage pipeline is 270.9km (discharge ability as 70,000 cubic meters every day). The wastewater is dealt in the Licun River Waste Factory. The rules, "GB8978-1996" should be observed. The sewage companies within the district are expected to level the second standard or the line standard; the Licun River Waste Factory is expected to the third level.

#### **Communications**

The total amount of the program-control exchange is 43,000. A perfect communication network has been built, offering the multiple communication service including business, such as mobile communication, data transmission, faxing, etc. The zone has adopted the access technology of optic fiber, inserted the city ATM broadband network of Qingdao, public networks, such as frame relaying of FR, etc. through the optic fiber.

# (3) Tax Polices

All enterprises in the Laoshan District can enjoy every preferential policy of the national development zone for new and high-tech industries. According to national relevant rules and the rules of the Qingdao government, the enterprises of garden mainly enjoy the following preferential policies:

# Corporate income tax

- a. The enterprises which are regarded as new high-tech enterprises have a tax reduction of 15%.
- b. Newly-set-up domestic-investment new high-tech enterprises, are exempt from the corporate income tax in 2 years commencing from day going into operation
- c. When the term of the exempt and the reduction expire by law, new high-tech enterprises whose output value of export product reaches more than 70% of gross output value can enjoy a tax reduction of 10%.
- d. For the productive foreign-investment enterprises, those whose management time is above 10 years since beginning in profit-making year, can be exempt from the corporate income tax in the 1st year and the 2nd year, and can have a corporate income tax reduction from the third year to the 5th year. When the favorable term expires, those who are confirmed as technologically advanced enterprises can also have a tax reduction for another three years.
- e. The foreign high-tech enterprises are exempt from the local income tax in the zone
- f. When the favorable term expires, all the export-oriented enterprises with foreign investment whose export product output value reaches enterprise products more than 70% of output value in that year can have a half income tax reduction, but not less than 10% altogether.
- g. Scientific processing and research equipment of high-tech foreign enterprises is approved to accelerate depreciation.
- h. Provided the foreign enterprises use domestic equipment and if this kind of equipment belongs to the national duty-free catalogue range, the enterprises can return the home equipment value- added tax fully, and avoid the corporate income tax according to the regulation.

i. For the foreign investments new high-tech enterprises, if their technological annual increasing degree of fee is above 10%, they can have a 50% deduct according to the taxable income volume actually.

#### **Business Tax**

The business tax imposed on the income of the service like technology transfer, technology development and the related consult service to the unit and individual (Including foreign-funded enterprises, foreign-funded research and development centers, foreign enterprises and foreign individual) can be exempt.

# **Export &Import Taxes**

- a. For the equipment, fittings, and the spare parts which are imported to produce products of "national new and high technology catalogue" in the enterprises (including foreign-investment enterprise, foreign enterprise), tariff and imports value-added tax are exempt except the goods listed is the according to File No. 1997137 Regulation "domestic investment project will not duty-free import goods catalogue"
- b. The software fee paying to the advanced technology of "national new and high technology catalogue" in the enterprises (the same as mentioned in "a") is exempt from the tariff and the value-added tax.
- c. Products listed in the "China's new and high technology commodity exports catalogue" of Ministry of Foreign Trade and Economic Cooperation, can refund the tax with the approval of the State General Tax Bureau after the export if their rate of return tax of export is not to the standard.

# Refund of the Reinvest of the Foreign-investment Enterprises

Provided the foreign investors reinvest in the enterprises with the profits they get in the enterprises, or to increase the registered capital, or to reinvest in other foreign-investment enterprises with an operational period more than five years, they can have a refund 40% of the

corporate income tax paid to the investment .If the profits are used to extend the exportoriented enterprises or the enterprises possessing advanced technology, all the income tax for the reinvestment can be returned.

#### (4) Policies on the Talents

Subsidies of certain number monthly or regularly can be granted to the high-level talents introduced in the zone according to their post duty and contribution besides their normal salary.

High salaries can be granted to the key talents who will take on the specific projects and who are urgently needed.

Honor and ample rewards are offered to the high-level talents who have made a contribution to economic and social development of Laoshan district, producing the remarkable economic benefits or social benefits.

- a. If a scientific results or a project can make a profit of more than 5 million Yuan after-tax in three year's operation or in the highest year 3 million, the host of the project can be rewarded a set of house about 100 square meters.
- b. If a scientific results or a project can make a profit of more than 8 million Yuan after-tax in three year 's operation or in the highest year 5million, the host of the project can be rewarded a set of house about 100 square meters and a car valued 20,000 Yuan.
- c If a scientific results or a project can make a profit of more than 11 million Yuan after-tax in three year's operation or in the highest year 7million, the host of the project can be rewarded a set of house about 100 square meters and a car valued35, 000 Yuan.
- d. If a scientific results or a project can make a profit of more than 15million Yuan after-tax in three year 's operation or in the highest year 9million, the host of the project can be rewarded a set of house about 200 square meters and a car valued35, 000 Yuan.

If talents of high-end come to Laoshan District and make investment engaging in new high-tech product and product which has not been produced in Qingdao, they can enjoy the preferential policies of the foreign-investment enterprises as approved.

For the introduction of talents of high-end ,the government can break the limit on time, number and post as approved.

High-level talents who resigned before they come to the Laoshan district, can resume their post after the investigation of the personnel department .

The spouse and minor children of the talents of high-end can move into the city exempt from the city holding fee. If the spouse has a job, the unit which brings in the talent takes the responsibility to find the spouse a job. If the unit cannot, the personnel, labor department should take the responsibility. If the spouse and children of high-level talent are agricultural registered permanent residences, they will have priority to go through the formality that "agricultural people to be given non-agricultural status".

For the children of the high-level talent, they have the priority to enter the schools and kindergartens and to enter the key high middle schools in another district and get a job if they have the condition.

# (5) Social Service System

#### **Education**

There are 65 famous schools in the area, including the OUC, the Qingdao university, University of Science and Technology of Qingdao, Qingdao two, overseas Chinese's school, international school of Qingdao, etc. 400 foreign students from 17 countries and regions, such as U.S.A., Japan, South Korea go to school in the district.

#### **Public Residence**

Five inland residential areas have been built. There are also 37 top modern apartments and villas which are capable of dining, amusement and location.

#### **Cultural and Amusement**

In the zone, there are all kinds of cultural and entertainmental establishments, such as International Beer City, Ocean Amusement City, Sea Hog Hall, Sculpture Park, Modern Hotels, coastal Vacation Village, International Golf clubs, art galleries museums, Technology Hall of Haier, international Convention and Exhibition Center of Shandong, sports center of Qingdao. Foreign economy and trade conference, culture festival, International Beer Festival of Indio are held in the zone every year.

#### Hygiene

In the zone there is perfect medicine system capable of precaution, recovering, health care and scientific research. There are also many international-standard medical organizations, such as the health center of women and children, Qingdao Wanjie Hospital which occupies more than 300 hector.

#### 2. Economic and Technological Development Zone of Qingdao (the ETDZQD)

#### (1)General Introduction

The economic and technological development zone of Qingdao (the ETDZQD) is one of the first 14 national coastal economic technology development zones approved by the State Council in 1984. The construction started on 28th March 1985 with all the privilege policies for the national-level coastal economic and technological development zones. There is Qingdao duty-free zone of national standard, QD new pilot development zone of technical industry and Xuejia Island for provincial traveling. It is one of the regional most centralized functional areas. Now it has been built into a new flourish economic zone with excellent

investing environment. It is the very place from which people at home and abroad can have a good view of the reform and opening-up of Indio.

The ETDZQD lies in the west shore of the Jiaozhou Gulf and on the other side of the sea. It lies in the urban area with only 2.26 mile on the sea. In 1992, the ETDZQD and the hereby Huang Island Zone join as one, now covering an area of 220km and a population of 30,000, 80% of which live there. There are mainly plain in the zone (extending 56km) and its northeast is highland (724.9m as the highest attitude). The main access to the Qingdao urban area are planes by air, boats by sea, the express way encircling the Jiaozhou Gulf which extends 66km.By the year 2002, 1700 million Yuan had been invested on the infrastructure, such as, Qian Bay, Yellow Island Oil Port, Jiaozhou Railway and express way cycling Jiaozhou Gulf. The perfect systems of transportation, water supply, sewage, power supply, heating, gas supply make the zone one of the most popular places for investing.

After the construction, we tried our best to improve the environment for investing and offered the best service according to the international standard, which attracted investors of more than 50 countries and more than 20 provinces within China. More than 17billion Yuan had been invested in the infrastructure. The modern city frame, characterized by modern ports, heavy industry, biology pharmacy, international trade and vacations, has been formed, gathering development zones, tax-free zones, new technology development zones and vacation zones. Besides, the investing environment has been greatly improved. The committee of the development zone, assigned by the Qingdao government is in charge of the administration there. It also has the right to investigate and approve of the foreign-funded programmers. The Qingdao development zone offers around-clock and high-efficient services.

According to its capabilities, the Qingdao development zone is divided into six parts: oillaboratory industry area, international manufacturing and storing industry area, ports-nearby industry area, ecological agriculture area, administration and business center and touring area. There are many reprehensive companies: household electrical appliances industry represented by Haier, Panasonic, Hisense, Aucma; building material industry represented by Sun-glass, Jinijing glass, Yinhua Hatchway; chemical fabric industry represented by Gaohe, Rimao, rohapurico; mechanical industry represented by Qingqi Motor, Yizhong Automobilic and Beihai ship manufacturing company. Industrial development frames of electrons, building material, oil -refining, machinery, and medicine and touring, have been formed.

According to the economy layout of "big ports, big industry and big touring", sticking to the principle of "being bigger, stronger and higher", the Qingdao development zone pays its attention to investor attraction and programmer-building, which has been proved successfully. Since 1995, the economic index of the zone has increased by 30% yearly. The Qingdao government made the strategy of "taking Qingdao development zone as center and developing new economic centers in Qingdao," which offers a great chance to Qingdao development zone. The zone is trying its best to develop "four big bases" (bases for electrical appliances, oil chemistry, ship manufacturing and steel) and "two centers" (for international air transportation in the north China and logistic) and "one famous scenic spot" (first -class coastal touring place of national standard)

On the 26th March, 2001, the Qingdao government holds a conference in the zone, which the mayor attended himself and made the strategy" the economy development center is moving towards the Qingdao Development Zone". On 30th April, the Qingdao government made out the policy of "Resolution of speeding up the development of Qingdao Development Zone" and endowed the zone the rights of speeding up policies, which marked the Qingdao Development Zone into a new era. The Qingdao Development Zone will develop itself according to the four strategies "economy-internatioalized, developing the zone by ports, civilized, developing the zone by technology and education" In the year 2002, as the government's policy moving towards the west coastline and developing economy focus in

Qingdao" put into effect and container-waterway of foreign trading in Qingdao port moved totally towards west, the Qingdao Development Zone made great improvement in economy and foreign-opening, which outstandingly bettered the city environment and every part of social affairs. This year GDP reached 16.92billion Yuan, increased by 30%, total industrial product 35.3 billion Yuan, local financial 0.96 billion Yuan, foreign exporting 0.47 billion Yuan, increased by 51%. Its economy power became the fourth in all the development zones in China. By the year 2002, there are 1464 foreign investing programs and the total investment reached 5.67 billion dollars, of which 4.45 billion dollars are foreign investment. In the first half year, the Qingdao Development Zone's GDP reached 11.95 billion dollars, total industrial product 23.63 billion Yuan, local financial 0.673 billion Yuan, foreign exporting 0.393 billion Yuan, increased by 27.5%, social consumption retail 0.41 billion Yuan, increased by 65.7%. 34 big programs were brought in, six of which were from the top 500 companies in the world. The actual foreign investment reached 0.347 billion dollars, increased by 97.3%, which for the first time surpassed Guangzhou and Kunshan Development Zone and became the third in the development zones of the national level, and second in the coastal zones. By the end of June 2003, Qingdao Development Zone, the zone had attracted foreign investment of 2.63 billion dollars and brought in many big programs, 207 of which are over ten thousand dollars, and 35 of which are from the top 500 companies in the world. In 2003, the Qingdao Development Zone made the very choice of what should be done in the next five years\_\_\_\_six big programs" oil-refining, automobile, bout-manufacturing, steel, ports and containers) and "ten projects" (major transportation projects of the city, water project, heating international project, trading center project, project, afforesting project, "new badaguan"project, well-to- do project and university city project). A modern international city is rising in Qingdao' west coastline.

#### (2)Physical Infrastructure

#### **Power Supply**

The electricity of the Qingdao Development Zone comes from the electrical system of Shandong Province. The Yellow Island Power House in the zone has the capacity of 670,000 kilowatt, which makes it one of the four biggest fire power stations in Shandong Province. A project capable of 600,000 kilowatt is under construction, which will make better use of the electricity. In the zone, there is one substation of 220KVA, 2 substations of 110KVA and 3 of 35KVA, which can offer double-loop.

# **Water Supply**

It can supply general 100,000 cube meters to the residence every day. The project which supplies 100,000 cube meters from the Jihongtan Reservoir to the zone was set up and put into effect in 2002.

#### **Sewage System**

In the south part of the zone, there is a Nibuwan company which is capable of disposing 40,000 tons per day. In the north part of the city, the first term of the Lianwan River Project has been finished and the whole project will soon be finished and put into use.

#### **Heating Supply**

The Qingdao Development Zone executes heat supply concentratedly. Currently, the capacity of boiler is 285 tons per hour. The main steam pipeline is 60 kilometers, and the exchange station of steam to water to heat is 11. The boiler steam of 3\*20 tons per hour and 4\*75 tons per hour have been put into use. And the 150-meter chimney, coal adding system and sediment sink which belong to the second period boiler system of 6\*75 tons per hour. At present, the centralizing heat supplying project whose heat supply area is 1.60 million square meters is conducting successfully, utilizing the remaining heat of Huangdao electricity plant in Huangdao old city area.

#### **Gas Supply**

The Qingdao Development Zone mainly supplies natural gas, liquid petrol and canned liquid gas.

#### **Communications**

The Qingdao Development Zone owns 100,000 programs controlling exchange machines and can supply telephone service, data transmission, faxing, etc at home and abroad in the zone, every 100 hundred people have an average of 37.5 telephones. In 2000, it had reached telephone area standard firstly in the scope of the whole province. Corresponded level, technology means and quality of service have achieved advanced level at home.

The Development Zone information harbor operates business of CHINANET and China Public multimedia Communication net at Qingdao Development Zone. It aims at pushing the fast development of the information industry, perfecting the industrializing infrastructure of the zone and supplying all edged Internet service. Data business offers data communication network service such as DDN data network, packet switching network, auspicious relaying network, ATM network and ISDN comprehensive digital network. They try to offer service such as "giga to building, one hundred trillion to floor, ten trillion to tabletop "and offer the high-speed access Internet service really up to 10M or 100M to user of office building. Meanwhile, it is convenient for enterprise's user to set up the land network of one's own city.

#### (3) Procedure of Investment

Negotiating --Feasibility research report --Environmental protection appraising and giving a written reply --The name registering --The land selling and contracting --Contract rules give a written reply --Apply to get the business license --Register the chapter of carving --The other tube registering --The bank opens an account --Tax registration - -The finance registering --The customs is put on record --Construction project planning and design

examining and approving --Go into operation in the report and give a written reply --Final acceptance of construction -Operation

# (4) Taxes Policies

Value-added Taxes: If the foreign-investment enterprises are engaged in the external processing of investor's raw materials business, their processing fees are exempt from the value-added tax; for those that engage in the agriculture, forestry and stock-raising, their own products sale are exempt from value-added taxes.

# **Corporate Income Tax**

- a. The productive foreign- investment enterprises in the zone are imposed the corporate income tax by 15%.
- b. For the productive foreign-investment enterprise, those whose management time is above 10 years, since beginning in profit-making year, can exempt from the corporate income tax in the 1st year and the 2nd year, and can have a corporate income tax reduction from the third year to the 5th year.
- c. Productive foreign-investment enterprises whose management period is more than ten years are exempt from the corporate income tax in the first year and the second year. The corporate income tax can be reduced by half from the third year to the fifth year. Advanced technology enterprises can enjoy the tax reduction for another three years; the export-oriented enterprises can enjoy the tax reduction by half if output value of export product reaches more than 70% of output value of enterprise in that year.
- d. Engaged in agriculture or forestry, the foreign-investment enterprises can continue being allowed to reduce 15% to 30% of the corporate income tax according to the tax liability within ten years, after the period they enjoy duty-free, reducing or remitting.

- e. If the foreign –funded advanced –technology enterprises remain advanced after the preferential period of "two exemptions and three reductions", the enterprises can enjoy another three- year preferential period of half reduction according to the tax law.
- f. Provided the foreign investors reinvest in the enterprises with the profits they get in the enterprises, or to increase the registered capital, or to reinvest in other foreign-investment enterprises with an operational period more than five years, they can have a refund 40% of the corporate income tax paid to the investment. If the profits are used to extend the export-oriented enterprises or the enterprises possessing advanced technology, all the income tax for the reinvestment can be returned.
- g. Provided the foreign investors reinvest in the enterprises with the profits they get in the enterprises, or to increase the registered capital, or to reinvest in other foreign-investment enterprises with an operational period more than five years, they can have all corporate income tax back paid to the investment .If the profits are used to extend the export-oriented enterprises or the enterprises possessing advanced technology, but the products are not to the standard or the enterprises are nor confirmed as advanced technology enterprises,60% of the refund should be handed in.
- h. The profit that the foreign investor obtained from the foreign-investment enterprise is exempt from the income tax
- i. Those that supply service as storage and transportation with their own transporting devices and storage equipment can be confirmed as productive enterprises and can enjoy the preferential treatment of "two exemptions and three reductions".
- j. Those foreign enterprises that engaged in the R&D can be called productive enterprises and can enjoy the preferential treatment of "two exemptions and three reductions".

#### **Tariff and Value-added taxes on Imports**

The products listed in the "Guide on Foreign Investment Industry" and the equipment used by themselves within the investment total amount are exempt from tariff and value-added taxes on imports.

#### **Education Taxes and City Construction Taxes**

Those foreign enterprises are exempt from the education taxes and the city construction taxes.

# (5) Human resources

The beautiful natural environment and convenient living condition of development zone have great appeal to all kinds of talents. Meanwhile, in order to attract more talents, the government puts emphasis on the talents selecting, introducing and training. At present, there are 5 academicians of the Chinese Academy of Sciences and Chinese Academy of Engineering and more than 50 doctors, more than 300 masters and more than 38,000 graduates from universities or academies in the development zone.

There are 12 scientific and technological research institutes in the district (The 41st research institute of electron of Ministry of Information Industry, Tepper electronic research institute of Qingdao, braking technology research institute of Qingdao, electric research institute of development zone of Qingdao, etc.), 5 technology centers (such as centers in Aucma group company, Qingdao Chuangton ltd.) and a key laboratory base.

The population in the development zone has already exceeded 300,000, and the workforce resources are abundant. In addition, large quantities of workforces over 1 million people are available in Jiaonan, Jiaozhou which have a population of more than one million.

The vocational skills training centers and technical schools in the zone can carry on short time or regular training according to enterprise's specification requirement Enterprises can recruit skilled workers and administrative staff independently in accordance with the law across the country.

#### 3. The Tax-Free Zone

#### (1)General Introduction

The tax-free zone of Qingdao is one of the 15 tax-free zones of the whole country set up with the approval of the State Council on November 19, 1992. Setting up according to the free trade norms of the international convention of Kyoto, it is the only tax-free zone both in Shangdong Province and along the Yellow River, with an area of 3. 8 sq. km. On March 28, 1993, Confirmed the General Administration of Customs, it started operation with the same principle of convention in the free trade area in the world, characterized by "domestic treatment outside the boundary", with the policy of "no card, no tariff, duty-free", in order to foster and develop modern international logistics, international trade, export processing, goods storage and exhibit. Now it has become one of the most opening-up areas with the most flexible operational and most favorable opening-up policies in the mainland.

The tax-free zone of Qingdao is located on the west bank of the Gulf, next to economic and technological development zone of Qingdao and the front gulf area. There are 38 million tons coal, ore, groceries, a deep-water berth that can unload 6000 standard containers and a harbor that can handle crude oil and readymade oil quay of 30 million tons. Connecting with 450 ports of more than 130 countries and regions, it is the international harbor of shipping center of the North of China. The Jiaozhou- Huangdao railway link with railway of Jinan-Qingdao and with Beijing-Shanghai, Beijing-Kowloon, which makes the goods transported to all parts of the country rapidly and freely. The tax-free zone of Qingdao links with the railway of Jinan-Qingdao, Beijing-Fuzhou, Tongsan and expressway of Qingdao-Yingchuan and roads of Yantai-Qingdao, Qingdao-Weihai through Jiaozhou Bay expressway.

# (2)Infrastructure

Since the construction of the area, the total investment on the infrastructure has reached 840 million Yuan. There is a perfect system of road, power supply, water supply, draining off water, heating, air supply, communication, which makes the area is a good place for investment.

# **①Power Supply**

The power plant of Huang Island of Qingdao, with a capacity of 670,000 kilowatts, is one of seven major power plants in Shandong. There is a substation of 110KVA with a capacity of 31.5\*2MVA.

# **Sewage System**

There is a water supply facility with a capacity of 150,000 tons per day, a water treatment plant with a capacity of 250,000 tons per day sewage treatment plant and a with a capacity of 150,00 tons per day. At present, sewage discharge of the zone can reach 12,000 tons per day. The west district sewage is 3200 tons per day, and the east district sewage is 8800 tons per day.

# **Heating Supply**

The thermoelectric gas head office, in the south of Qingdao, offers central heating for the zone with a supply of 285 tons per hour.

# **Gas Supply**

Xinao Gas Company offers the natural gas. The company adopts internationally advanced natural gas to compress (CNG).

# Communication

The zone offers the multiple service business, such as program-controlled telephone, mobile communication, information data transmission, etc. In terms of network

communications and e-commerce, the zone offers service such as DDN special line, HDSL/ADSL, ISDN and broadband inserting service with a speed of 10M to 100M.

(3) Procedure of Investment Approval for Project---Approval for Feasible Report--Approval for Environment Protection---Approval for names of the Company---Rules
Approval---- Approval Certificate----Commercial Registration----Enterprises ID Code----Public
Security Registration----Foreign Fund Registration----opening account in a bank----taxes
Registration----Finance Registration----Customs Registration

# (4) Taxes Policies

Corporate Income Taxes:. The enterprises in the zone are imposed the corporate income tax by 15%; the productive foreign- investment enterprises in the zone can enjoy" exemption of tax in 2 years and reduction in 3 years"; The enterprises outside the zone are imposed the corporate income tax by 33%.

Value-added Taxes: If the foreign-investment enterprises are engaged in the external processing of investor's raw materials business, their processing fees are exempt from the value-added tax; for those that import a piece of processing of material and sell the finished product inside the country, enterprises can choose to hand in the tariff retroactively flexibly with raw materials or the finished product; for those that purchase the material at home and sell the finished product abroad, export taxes can rebate; for those that purchase the material at home and sell the finished product within the country, the tax rate is 17% ;Enterprise's export tax rebates outside the duty-free zone.

#### **Tariff**

For the enterprises that import material and export finished product, the customs only needs put on record of their activities; enterprise's export tax rebates outside the duty-free zone.

#### **Individual Income Tax**

The collection method is: The personal salaries income of the foreign workers minus 4000 Yuan while the personal salary income of the Chinese workers pays taxes according to the tax rate stipulated in the tax rate form of progression of 9 grades after deducting 880 Yuan.

# **House Property Tax**

The collection method is: The initial value of the house is multiplied by 70% and multiplied by 1.2% more; the tax is collected every year.

**Type royalties**: Large-scale car costs 300 Yuan per year; compact car is 260 Yuan per year; Load car costs 60 Yuan per year

#### **Preferential Policies**

The duty-free zone not only has all the preferential policies but also have its own preferential policies as follows:

- a. The business scope of enterprises of the zone is not limited.
- b. The goods in and out the boundaries are exempt from the tariff and avoid getting the imports and exports licenses except the goods that are forbidden import and export.
- c. The following goods are exempt from the tariff entering the zone: the equipment, capital construction goods and materials for the infrastructure and production projects and storage; management equipment and office supplies and necessary maintenance fittings; the fuel for production purpose; the raw materials, spare part, components and parts, and packs that the export products need.
- d. Transit goods and goods stored in the duty-free zone are exempt from tax and it is unrestricted to store time limit.
- e. Encourage enterprises of the zone to be engaged in international trade, export trade and processing trade.

#### (5)Human resources

The beautiful natural environment and convenient living condition of development zone have great appeal to all kinds of talents. Meanwhile, in order to attract more talents, the government puts emphasis on the talents selecting, introducing and training. At present, there are 5 academicians of the Chinese Academy of Sciences and Chinese Academy of Engineering and more than 50 doctors, more than 300 masters and more than 38,000 graduates from universities or academies in the development zone.

There are 12 scientific and technological research institutes in the district (The 41st research institute of electron of Ministry of Information Industry, Tepper electronic research institute of Qingdao, braking technology research institute of Qingdao, electric research institute of development zone of Qingdao, etc.), 5 technology centers (such as centers in Aucma group company, Qingdao Chuangton ltd.) and a key laboratory base.

The population in the development zone has already exceeded 300,000, and the workforce resources are abundant. In addition, large quantities of workforces over 1 million people are available in Jiaonan, Jiaozhou which have a population of more than one million.

The vocational skills training centers and technical schools in the zone can carry on short time or regular training according to enterprise's specification requirement Enterprises can recruit skilled workers and administrative staff independently in accordance with the law across the country.

# ii. High and New Technology Industrial Development Zone if Provincial Level

# 1. Economic and Technological Development Zone of Jiaozhou (the ETDZJZ)

#### (1) General Introduction

The ETDZPD is a provincial processing district of export-oriented industry that was established with the approval of the government of Shandong in April of 1992. It lies in east of Pingdu, with an area of 30 sq. km and 9.7sq.km for the first term. It lies in the east of the urban area of Jiaozhou, boarded by the Jinan-Qingdao Expressway in the north, close to the Jiaozhou Gulf Expressway in the south. It has Jiaozhou-Jinan Railway, Jiaozhou-Huangdao Railway and Jiaozhou-Xinjiang Railway and 204 national roads across the region. It is within 30 kilometers from the International Airport and the front gulf harbor.

Both the soft and hard environment for investing have been greatly improved since the foundation of the ETDZJZ.Immobile investment is 2.3 billion Yuan, of which 0.6 billion has been put on the infrastructure. Only in 1999, the municipal government has put nearly one hundred million Yuan on the projects such as Lanzhou East Road, Yunxi Park, Haier Road and 204 national roads in the zone. The zone has realized "seven one tie " (namely road, sewage, communication, electricity, heating, air supply, broadband network, land preparation of), trying to reach the standard of green, brightness, beauty and cleanness. In terms of soft environment for investment, great preferential policies are given. At the same time, they put emphasis on all kinds of function zones construction and improving service quality. They also make effort to supply one-stop and all-round service to investors in respects of contract making, construction, transportation, declaration in the customs, storage, manufacturing and living.

A so-called "Korea city", which is the only one in China, has been set up in the zone with a service system supplying service such as entertainment, amusement, accommodation, board, shopping and health care. By now, the zone has more than 200 projects, utilizing 600 million

dollars in contract and 330 million dollars actually, earning 1.5 billion dollars foreign fund. Many famous enterprises, including many of the top 500 companies in the world, have set up subsidies in the zone. It has been honored as the Advanced Economic and Technological Development zone.

In the early part of 2003,the fixed investment has reached 144.58 million Yuan, a 2.5% increase of 2002;utilizing16.15 million dollars foreign fund, a 28.6% increase of 2002; utilizing11.089 million dollars domestic fund, a 1.9increase of 2002;earning foreign fund of 202.73 million dollars, a increase of 32.1%. Now the first term is under construction, and a "garden of the zone" in under the way. That is, the Haier (jiaozhou) International Industrial Zone, Aucma Industrial Zone, Taixu Industrial Zone and the New Development Industrial Zone are in the garden.

#### (2) Infrastructure

#### Road

Three vertical and three horizontal main highways make the overall arrangement in the form of graticule mesh of the road in the district, and communicate with old town. Haier main road that is named by the international known enterprise Haier Group passes through the developing zone. It is close to a chain of expressways of Jiaozhou Bay in the south; close to Jinan-Qingdao Express way in the north; national road 204 crosses the developing zone from the east to the west. The Tongsan Express way (from Tongjiang, Helongjiang Province to Sanya, Hainan Province) is about to be put into use.

#### **Water Supply**

DN500 pipeline has been laid with a capacity of 100,000 tons per day to satisfy enterprise's production and domestic need in the district

#### Sewage

A sewage system of DN600 drainage pipeline along main arterial dealing with 50,000 tons sewage had been put into use at the end of 2002.

# **Power Supply**

There are one35 kilovolts transformer substation one 110 kilovolt-ampere (KVA) s of transformer substations in the developing zone, which can satisfy the need of the zone.

#### **Communications**

64,000 digital program-controlled telephone exchangers have been built; so international and domestic communications are very convenient.

# (3) Preferential Policies

#### **Corporate Income Tax**

a. Reduction time limit: For the productive foreign-investment enterprise, those whose management time is above 10 years, since beginning in profit-making year, can exempt from the corporate income tax in the 1st year and the 2nd year, and can have a corporate income tax reduction from the third year to the 5th year.

b. Tax rates: The long productive foreign-invested project with a capital cost above 30million dollars and long recovering time or the projects engaged in the productive foreign-invested projects of energy, traffic, construction can reduce the corporate income tax according to 15% of the tax rates

The investment orientation regulatory tax of fixed assets of foreign-investment enterprises: For the productive enterprises newly entering the zone and the houses for productive use are returned fully; the house property tax is returned to after soliciting in 5 years after deducting the tax revenue cost.

# The expenses reduce or remit:

- a. The expenses of infrastructure, special fund of capital construction of water conservancy, earnest money of electric rate, electric load and control the fee are exempt for the enterprises newly entering the zone;
- b. The fee for the use of site is exempt from the current standard in two years.
- c. Many projects can have a 50% reduction. The projects are project construction fee, project quality investigation fee, bit management fee, land management fee and city plan fee.

### **Duty-Free for Equipment Imported**

The import equipment which is permitted 100% exported products is exempt from the tariff and imports value-added tax in the total investment.

## Tax Rate of The Refund of the Export Products

- a. The rates of return tax of export of such four major kinds of electronic products and costumes as mechanical equipment; electric apparatus and electronic product, means of transport, instrument and apparatus, etc. are 17%.
- b. Textile raw materials and products of clothing except clothes, other electronic products except the major kinds of electronic products above-mentioned, clocks, watches, silicon, pottery, steel and products, cement, aluminum, lead, zinc, organic industrial chemicals, inorganic industrial chemicals, pigment, rubber products, toy, sport articles, plastic products, travel articles and case and bag can enjoy 15% return tax rate.
- c. Other goods except that have been mentioned above and other products enjoy 13% statutory tax rate except agricultural product have 13% return tax rate.
- d. The rate of return tax of export of agricultural products is 5%.

# 2. Economic and Technological Development Zone of Pingdu (the ETDZPD)

# (1) General Introduction

The ETDZPD is a provincial processing district of export-oriented industry that was established with the approval of the government of Shandong in December of 1992. It lies in east of the urban area of Pingdu, with an area of 10. 18 sq. km and 3. 8 sq. km for the first term. In 4 national-level development zones and 59 provincial development zones of the whole province, it ranked among the top 8 in 1997, and it is classified as one of the eight provincial development zones specially supported by the government. It has been chosen as the provincial advanced unit of development zone by Economic and Trade Commission outside the province for five years in succession, and direct contact unit of association of development zone of China.

The infrastructure is becoming perfect in the district with an investment of 327 million Yuan. The whole industrial park with the infrastructure construction of the road network of "six verticals and eight horizontals" have realized "seven one tie" (namely road, sewage, communication, electricity, heating, air supply, broadband network, land preparation of). The investment service system is sound, which implements "closed "management and offer" one-stop" service. The development zone has built the biotope related to industrial park, set up such service as the bank, hospital, market, house, food and beverage amusement and set up departments of the market as the policeman, industry and commerce, tax, administration of justice, environmental protection, and electricity.

After more than ten years of development, electro mechanics' electronic industry represented by the refrigerator of Haier and Sanying electron, clothing industry of textile represented by the woolen of Daiei is woven and new fine landscape clothing, pack and develop with the paper industry of good field constantly for representatives' paper products packages printing industry, industry of food represented by Greek food in Thailand the gold

dragon, become the pillar industry of the development zone. At present, the whole district sanctions 171 projects in the entering area altogether. The contract capital cost is 3.417 billion Yuan, 91 of which are foreign investment. The contract utilizes 315 million dollars, 160 million dollars, actually, earning foreign currency 160 million dollars.

### (2) Physical Infrastructure

#### Road

A road of 22.35 kilometers has been built and backbone road of 32\*24meters and a network of 32\*12 has been into use, which makes it convenient to travel.

# **Power Supply**

There are three transformer substations: one is 110kv (4500KVA), two transformer substations (2\*8000KVA), adopting 35KV and 10KV grade, which can guarantee the power supply.

### **Water Supply**

Two main domestic water pipelines adopt 800mm and 500mm diameter with a capacity of 20,000 tons per day; industrial water pipelines adopts 600mm diameter with a capacity of 50,000 tons per day.

#### **Communications**

There are the programmer-controlled computer labs of telephone of 20,000 in capacity, and telephone and fax are dialed directly internationally and domestically. It has set up the postal business of Express Mail Service with 194 countries and regions and can go Internet.

# **Steam**

Central heating is implemented, which can guarantee the deliverability of 120 tons per hour.

# Sewage

The zone is only one kilometer from the sewage company, adopting the way that rainwater and sewage are treated independently with a capacity of 120 tons per hour. Solong as the sewages of enterprises reach the discharge standard, they discharge to the sewage conduct that is already laid directly.

#### Ground

It is flat in the zone, and the earth is flexible with good conditions for engineering.

# **Living Service Facilities**

There are flats, all kinds of schools, hospitals, post offices, gyms and entertainment facilities in the zone, which guarantees the living standard of the residence.

# (3)Organization Structure

In order to create a satisfactory investment environment in the development zone of Pingdu, all departments of Pingdu administration are take on their own responsibilities, implementing "closed management".

The Pingdu administration is made up of economic Development Authority, personnel bureau, land construction bureau, financial tax bureau, rural job office and administration office. Their functions are as follows:

Economic Development Authority: Responsible for the examination and approval of the project; the feasibility research of making the investment entrusted by investor; acting as the agent to register in the tax office and open an account; offering consulting service.

**Personnel Authority:** Coordinating the recruitment of working of enterprise; going through formalities of recruiting; offering service of consulting in such respects as work, personnel, etc

**Land Construction Bureau:** Going through such formalities as the area, water, and electricity; responsible for constructing and supervising in project; offering consulting service such as the environmental protection, land, etc.

**Financial Tax Bureau:** Responsible for enterprise's tax collection and management in the district; offering consulting service such as tax, audits, finance.

Rural Job Office: Land acquisition and management of the village in the garden in the district.

**Administration Office:** Responsible for the reception, acidulation and other logistic affairs of the traveling traders.

# (4)Service System

The development zone administration is an agency of the municipal government of Pingdu, entrusted by the government to manage development zone affairs in an all-round way, implementing "closed management", offering" one-stop" service.

Entrusted by the inventors, the development zone administration prepares materials such as approval for establishment, feasibility report, contract and rules for them; The administration also goes through formalities such as getting certificate of approval and business license, tax registration and public security registration.

When the project is under construction, the development zone administration offers service such as land acquisition, planning and design, project management and supervision. The development zone administration also handles such construction formalities as the area, water, environmental protection, fire control, etc.

After enterprises go into operation, the development zone administration coordinates and conciliates various kinds of internal foreign relations for enterprises in the zone. The administration helps the enterprises to recruit the staff; it also offers service such as education,

finance, public security, administration of justice, industry and commerce, tax, environmental protection, food and beverage amusement, health care, etc.

Comprehensive bonded warehouse of district can act as agent to declare for enterprise sat the Customs, to make cabins, to transport by sea and by land, to export cancel after verification and to store duty-free.

# (5) Tax Policies

The tax rate of the corporate income tax of the foreign investments, calculated by taxable income volume, is 30%; The productive foreign-investment enterprise collects according to 24% of the tax rates.

. Productive foreign-investment enterprises whose management period is more than ten years are exempt from the corporate income tax in the first year and the second year. The corporate income tax can be reduced by half from the third year to the fifth year. Advanced technology enterprises can enjoy the tax reduction for another three years; the export-oriented enterprises can enjoy the tax reduction by half if output value of export product reaches more than 70% of output value of enterprise in that year.

Engaged in agriculture or forestry, the foreign-investment enterprises can continue being allowed to reduce 15% to 30% of the corporate income tax according to the tax liability within ten years, after the period they enjoy duty-free, reducing or remitting.

The long productive foreign-invested project with a capital cost above 30million dollars and long recovering time or the projects engaged in the productive foreign-invested projects of energy, traffic, construction can reduce the corporate income tax according to 15% of the tax rates.

Provided the foreign investors reinvest in the enterprises with the profits they get in the enterprises ,or to increase the registered capital, or to reinvest in other foreign-investment

enterprises with an operational period more than five years, they can have a refund 40% of the corporate income tax paid to the investment. If the profits are used to extend the export-oriented enterprises or the enterprises possessing advanced technology, all the income tax for the reinvestment can be returned.

If foreign-investment enterprises suffer loss, they can make up the loss with next year's income after tax or even the next two year' when the next year's is not enough, but the period can't exceed 5 years.

If the foreign-investment enterprise is open in the middle of year, they can choose to calculate the time limit to reduce the corporate income tax from the next year.

The profit that the foreign investor obtained from the foreign-investment enterprise is exempt from the income tax

**Note:** The development zone administration makes different preferential policies according to the scale of project.

#### (6) Workforce's Resource

Pingdu is a famous city of advanced basic education and vocational education in the country, so it has abundant high-quality workforce resources. At present, its population is about 1.33 million; of which 20,000 is mobile workforce. Every year, about 2500

University, junior college and special secondary school graduates return to the city, so the stock of workforce and the workforce quality lead among the city in Qingdao and the labor cost is relatively cheap.

#### 3. Economic and Technological Development Zone of Jiaonan (the ETDZJN)

# (1) General Introduction

The ETDZJN is a provincial processing district of export-oriented industry that was established with the approval of the government of Shandong in December of 1992. It lies in east of the urban area of Pingdu with an area of 3. 8 sq. km for the first term. For the second

term, 28 sq. km of industrial zone is planned, and in the starting area of 8 sq. km, "seven times and a tie" have been realized. It is classified as one of the eight provincial development zones specially supported by the government and has been chosen as an n advanced unit of development zone for years.

The ETDZJN lies in the coastal area of southeast of Shandong, east longitude is 30 fens for 119 degrees, and the north latitude costs 35 fens for 35 degrees. The climate is warm and humid and pleasant. It is boarded by the west coast newly developed area of Qingdao in the east, close to the Shijiu Harbor in the west, boarded by the Sea Huang in the south. With a distance of 20 kilometers, 40 kilometers from Jiaozhou-Huangdao railway and Jiaozhou-Jinan railway, it has Tongsan expressway, Qijnxue highway and 204 national roads across the region.20 kilometers from the front gulf harbor and 50 kilometers from the International Airport, it is convenient in transportation.

# (2)Physical Infrastructure

The infrastructure is becoming better. A total of 400 million Yuan has been put on the infrastructure construction, and the infrastructure system in on the way. The road becomes networks in the district, with an area of 20 kilometers; the supply and sewage system is perfect with two pipelines capable of 10,000 tons and a sewage treatment plant that can deal with 60,000 tons per day; the power supply facilities are complete, with 3 transformer substations of 35 kilovolts to meet with all kinds of needs of the enterprises. Besides, the heating, communications and post service are very convenient.

# **Power Supply**

The development zone of Jiaonan has 4 of 15 35KVA transformer substations in Jiaonan. There are branches in the development zone in the electric company of Jiaonan, which can offer series of services from designing to installing. Transmits digitization, exchanges figures programme-controlledly have been realized.

#### The Post and Telecommunications

The recent years has seen a great progress in the post and telecommunications of Jiaonan. There are the programmer-controlled computer labs of telephone of 20,000 in capacity, and telephone and fax are dialed directly internationally and domestically. Postal facilities are becoming better and approaching perfection day by day, and can offer all kinds of postal service express delivery service for user. The cable TV is distributed in the urban countryside, and the broadcast and television mansion is set up in the development zone

There are 6 scientific research institutions and more than 40 scientific research institutions

#### Scientific Research Institution and School:

of level of factory. There are 130000 students and a teaching and administrative staff 29700 people in all kinds of schools, including special S. Korea and Japanese school for children. Represented by the experimental middle school, a perfect education system has been formed, which is made of kindergarten, primary school, junior middle school and senior middle school. The vocational schools, which can train all kinds of qualified personnel for overseas-funded enterprises, are very outstanding. The social culture, such as New Year pictures, paper-cut, photography, opera, juvenile's artistic creation, New Year pictures are very popular in Jiaonan, which are honored as the "China folk painting draw township "and " national culture advanced city "by the national Ministry of Culture. Jiaonan has already formed the hygiene service system, made up with 32 medical organizations, can meet with all kinds of needs. Covering an area of more than 100 hector in Jiaonan, the developing zone hospital has many-advanced measuring and guardianship equipment.

# **Finance**

The financial insurance of Jiaonan is extremely developed. There is a perfect financial system, made up with Central Bank, commercial bank and other financial institutions, has the

capacity to handling various kinds of financial insurance business of domestic, world accurately

### (3) Organization Structure and Service System

The ETDZJN is the only provincial development zone of Jiaonan, enjoying vice city level administrative rank, so they have many rights given by the Jiaonan government. In September of 2001, the merchants of Jiaonan and the administration of the development zone joined and handled official business together, becoming the only professional trade and investment promotion department of Jiaonan, supplying "one-stop" service to foreign investors, responsible for investment inviting.

The administration is made up of "five offices and one bureau": the office, the economic Development Authority, planning construction bureau, social affairs office, and financial tax bureau. There are 18 middle level offices with a staff of 87.

The services are follows:

"one-stop" service in the early term of the project (including the project examination and approval, registration, opening an account, tax registration, putting on record in the customs)

All around service in the middle term for the project under construction.

Regular service of operation project on later stage.

Granting " Green Road Card ";Giving preferential treatment to foreign investors in respects of medical advice, travel ling and vehicle.

Offering such consulting services on policy, science and technology and economic information; Helping enterprises to implement every preferential policy that can be enjoyed.

Helping enterprises set up relations with the banks and widen the investment channel.

Maintaining the system of joint council of the association of foreign enterprises and the system of regular reception of foreign investors.

Offering "Green Road" service to those enterprises that have a capital of more than 10 million dollars or more than 80 million Yuan or to the top 500 enterprises in the world.

"zero charges" for the key garden.

# (4)The Procedure for Investment

```
!Set up;
!Get the certificate of approval of foreign-investment enterprise; ;
! Apply for industry and commerce registration;
!Scribe the seal;
!open an account in the bank,regester itself in the tax and commodity inspection
    Materials required:
!Feasibility research report, setting up the application;
!Certificate for Approval(Offering I.D. For the foreign investors)
!Credibility certificate;
!Contract, rules (individual proprietorship does not need the contract)
!I.D., resume, photo of the directors
!I.D., resume, photo of here general manager / vice president
!The approval of place use;
!Import equipment inventory
!Other files
```

# (5)Tax Policies

# **Income Taxes of Foreign Enterprises**

A. The productive foreign-investment enterprises in Jiaonan reduce the corporate income tax by 24%. Skill-intensive projects with intensive knowledge, the foreign investments in the above-mentioned 30 million dollars, energy, traffic; port construction projects and the new high-tech enterprises can reduce the corporate income tax by 15%.

- B. Productive foreign-investment enterprises whose management period is more than ten years are exempt from the corporate income tax in the first year and the second year. The corporate income tax can be reduced by half from the third year to the fifth year. Advanced technology enterprises can enjoy the tax reduction for another three years; the export-oriented enterprises can enjoy the tax reduction by half if output value of export product reaches more than 70% of output value of enterprise in that year.
- C. Engaged in agriculture or forestry, the foreign-investment enterprises can continue being allowed to reduce 15% to 30% of the corporate income tax according to the tax liability within ten years, after the period they enjoy duty-free, reducing or remitting.
- D. The long productive foreign-invested project with a capital cost above 30million dollars and long recovering time or the projects engaged in the productive foreign-invested projects of energy, traffic, construction can reduce the corporate income tax according to 15% of the tax rates.
- E. Provided the foreign investors reinvest in the enterprises with the profits they get in the enterprises, or to increase the registered capital, or to reinvest in other foreign-investment enterprises with an operational period more than five years, they can have a refund 40% of the corporate income tax paid to the investment .If the profits are used to extend the export-oriented enterprises or the enterprises possessing advanced technology, all the income tax for the reinvestment can be returned

### **Duty-free for the Export Product**

According to the regulation of national catalogue of industries, the import equipment that are encouraged and totally exported is exempt from the tariff and imports value-added tax in the total investment.

#### **The Rates of Return Tax**

a. The rates of return tax of export of such four major kinds of electronic products and costumes as mechanical equipment; electric apparatus and electronic product, means of transport, instrument and apparatus, etc. are 17%.

b. Textile raw materials and products of clothing except clothes, other electronic products except the major kinds of electronic products above-mentioned, clocks, watches, silicon, pottery, steel and products, cement, aluminum, lead, zinc, organic industrial chemicals, inorganic industrial chemicals, pigment, rubber products, toy, sport articles, plastic products, travel articles and case and bag can enjoy 15% return tax rate.

Couther goods except that have been mentioned above and other products enjoy 13% statutory tax rate except agricultural product have 13% return tax rate.

# **II)** Capacity Building

#### . Infrastructure

### 1. Port

Qingdao Harbor is the important window opening to the outside world of Qingdao. Established in 1892, it consists of the old harbor, the Huang Island oil harbor, and the new harbor of Qianwan. Now there are 16000 workers have 15 quays, 73 berths. AND among them 13 quays and 49 berths are under operation. There are more than 32 berths of 10,000 ton-class, 6 berths of 50,000 –ton shipping, 6 berths of 100,000

-Ton shipping, and 2 berths of 300,000 -ton shipping. It mainly engages in the loading and unloading of all kinds of imported and exported cargoes, such as container, coal, crude oil, iron ore, grain, etc. It also has the service of the international and domestic passenger traffic. Qingdao Harbor is the famous natural good harbor, It has deep and wide water, It does not choke or freeze, Its geographical position and natural conditions are very superior, and is the important international trade port of west bank of Pacific Ocean China and along the Yellow Sea and it is also the marine transportation pivot. Now it has set up trade contacts with 450 ports and more than 130 countries and regions in the world, It has already opened up 32 international main lines of container at present, and there are more than 300 flights every month, which connect the main navigating area of the east and west of U.S.A. Europe, Mediterranean, the Persian Gulf, Australia, Southeast Asia, etc. to an organic whole, It also offers special container train line service to Zhengzhou, Ian, Chengdu, and the Qingdao harbor to new Asian-European land bridge.

In 2002, Qingdao Harbor finished 122,130,000 tons of through put of the goods, increased by nearly 20% compared with the same period of last year. Among them, the throughput of the container finished 3,410,000 standard containers, increased by 29.2% compared with the same period of last year, In the same year it stride into the 15<sup>th</sup> world container harbor from its

former 19<sup>th</sup> place, and became China's Mainland most heavy international container entrecote at one blow. The throughput of foreign trade of Qingdao Harbor reached 82,190,000 tons, increases by 17.1% compared with the same period of last year.

The throughput of the whole harbor was over 140 million tons in 2003, and foreign trade goods accounted for more than 70%. The throughput of foreign trade toped 100 million tons, finishing 102,340,000 tons, increased by 24.4% compared with the same period of last year, Thus it became the second biggest foreign trade harbor of a hundred million tons in China. Container throughput broke through 4 million TEU, finishing 423.8 ten thousand TEU, and occupied the 14<sup>th</sup> place of world container. The amount of imported iron ore and the throughput of crude oil occupied the first place among the coastal port. The fact that Qingdao Harbor has developed into an export-oriented, comprehensive and a hundred million tons of world harbors has promoted the swift and vigorous development of the port economy of the city effectively.

New harbor of Qingdao is located in developing zone of Qingdao --it is a natural good harbor with deep and wide water. It does not freeze or choke. The total arrangement plan of the new harbor is, according to Qingdao Harbor, that it can build more than 60 berths. Its total through ability can be up to 118 million tons. At present the New Harbor has become one of the five major coal export base of our country and the biggest ore entropot of North China. There are 10 berths of ore, coal and bulk cargo. It can stop at 100,000 -ton collier and 200,000-250,000 -ton full-length ore boat. In 2002 the foreign trade container business in Qingdao Harbor moved west to the New Harbor, at present 6 berths have been in operation, and the depth of water is 11.6-18 meters, including 2 largest container berths of the third stage of the project, which can moor 10000TEU ultra large-scale container ship reliably. 4 deepwater berths of the third stage of the container project are under construction. The fourth and

fifth stage of the project has already been in the process of negotiation, the port is well equipped, and the depth is 1.5 kilometers.

The export oil ability of 30 million tons every year in the oil port of Huang Island located in developing zone of Qingdao makes it is the largest scale and most advanced equipped import and export port of crude and ready-made oil in China. The depth of water of the second stage of quay is 24 meters; it can berth the above 300,000 -ton oil ship. We are selecting the site and the previous planning for the third stage of the oil quay. The wharf for the liquid chemical single user under construction is of 14 meters of depth of water, it consists of a 10,000 tons berth and a 50,000 tons berth, after built up, and the handling capacity will be over 3 million tons every year.

During the period of over ten years, Qingdao Harbor has succeeded in transforming an old harbor and building two new harbors. We have the largest container terminal, crude oil quay, the second in the world and the first in Asia for most heavy ore quay and world first-class coal quay, the unload quay for grain in bulk, continent port EDI (Electronic Data Interchange) information center of the largest scale, the only national-level technique center of national port and only post-doctor's scientific research work station.

Insisting on expanding internal opening and the opening to the outside world, Qingdao Harbor has set up nearly 20 Sino- foreign joint ventures successively, and 7 world 500 top enterprises have already settled in Qingdao Harbor. It has already realized the combination among the strong ones, won together and developed. On July 21, 2003, the group of Qingdao Harbor, the second major shipping company of world, the British iron will walk in the group, the biggest shipping company Cosco Group of China, the first major Danish Maersk group of shipping company of the world, held the joint venture signing ceremony of container terminal of Qingdao Qianwan Harbour ceremoniously in the Great Hall of the People in Beijing. Premier of the State Council Wen Jiabao, British Prime Minister Blair and the political V.I.P.s

of two countries attended the signing ceremony in person. This time the cooperation among the four parties of the three countries manages the quay together, broke the way that China's Mainland coastal ports mainly adopt two parties jointly owned the quay. This time Qingdao Harbor not only has introduced the fund, but also introduced technology, management and a large number of container source. It became the largest and strongest enterprise of container terminal in the world. On January 9, 2004, the company of container terminal limited opened ceremoniously and revealed a brand-new page of the container undertaking for great development of Qingdao Harbor.

# 2. Expressway

The highway communication of Qingdao is very developed. The construction of highway of Qingdao has realized the great-leap-forward development in recent years; the major indicators occupy the first place in the same or similar cities of the whole country. It has realized the complete network of mainframe and other highways, making the national roads, provincial highways and county roads and township roads more rational.

At the end of 2003, the one that is praised as "the first express way of Qingdao" Tong (jiang) and San (ya) of Qingdao section opened to the traffic completely. So far, Qingdao has built up 9express ways, including Jinan-Qingdao, Jiaozhou Bay, Xiliu, Shuangliu, Weilai, Tongsan (Xilai), Qingyin, the 206 national roads and Qianwan Harbour road. The mileage of the expressway reaches 524 kilometers. The Qingdao the area accounts for 1/900 of the whole country, but the expressway mileage accounts for 1/60 of the whole country, 1/6 of the whole province. The density is up to 5 kilometers / one hundred sq. km. The major indicators, such as traffic total mileage of the expressway, one hundred sq. km. of density, superhighway proportion etc. occupies the first place among the same or similar cities in China. So far, the construction of the highway road network structure of Qingdao has already taken shape

basically. It has realized basically that "economy is enclosed in an hour "with the border areas.

The construction of the expressways has already reached the level of developed country.

In 2004, the road expansion and transformation of Qingdao City projected up to 13; the whole investment is 700 million. 217 kilometers of course will be transformed altogether. It is the highest of capital cost and mileage in history. The main projects are: 204 national road big Pearl Mountain to Rizhao Border and Fenghe Bridge to big Pearl Mountain sections of road surface and the expansion of the large and medium bridges; Xifu Town to the surface of the roads in Jiaozhou and large and medium bridge projects; Pingying Road to the section of road surface in Gaomi border; the Heishan Park on Xiaoji Road to Xueguan Road surface improvement project; the cement road surface improvement projects of Section of Chengyang of national Road 204; the improvement project of Wangxin circuit, the expansion project of Xiaolao Section. These reconstruction and extension projects will optimize and improve the general country, overall arrangement and road conditions of provincial highway of Qingdao greatly. It will have important function in driving the economic development of the border area, especially the development of the peripheral economy of urban area in Qingdao.

The Binhai Road is one of the main skeletons of the traffic system in Qingdao. This project starts from the east of Fengcheng Kaolao Dam of the north of Jimo in Qingdao, through Jimo city, Laoshan district, the southern district, the Huang Island district and Jiaonan city. It stops on the Liushudi Village of Boli Town of Jiaonan City near the 204 national roads. The total mileage of the Binhai Road is about 282.1 kilometers. It is the largest and grandest one in Qingdao's history. The gross investment of the project is about 3 billion Yuan. It plans to be finished and opens to the traffic in 2006 within 3 years.

#### 3. Aviation

Qingdao Liuting International Airport is one of the first class airports opening to the outside world sanctioned by the country. It has already opened direct passenger-cargo flights of 14

worlds (districts), to Tokyo, Osaka, Fukuoka, Seoul, Busan, Taegu, Paris (from Shanghai), 7 European countries (pass Beijing), Singapore, Bangkok, Hong Kong, Macao, etc. The flight of Frankfort will be opened soon, and will connect with main cities of the world through the five international pivot harbors, such as Beijing, Shanghai, Hong Kong, Tokyo, Seoul, etc., with more than 130 flights every week. It has already opened 47 courses of the main domestic cities, such as Beijing, Shanghai, Guangzhou, etc., with 784 flights every week. It has 3 maritime international courses of passenger traffic between Qingdao and Incheon, Pingchuan of Korea S., and between Qingdao and ShiShimonoseki of Japan. The passenger's throughput of aviation is 3,487,500 persons in 2003, increased by 8.31%; the aviation goods post 75,600 tons of throughputs, increased by 15.88%.

In April of 2004, the new station building of Qingdao Liuting International airport will be in use formally. The waiting room that is now in use was built up in 1985. Its designed annul supportability is 450,000 persons of passengers' throughput, During the past few years it has been expanded and reconstructed, but its supportability is only up to 700,000 persons, and the throughput of passenger of the airport has already been up to 3,490, 000 persons in 2003, which has gone beyond the supportability of the airport greatly. The extension project of Qingdao Liuting International airport began with 2001 and will be finished in 2010, which is designed to satisfy 5,200,000 persons of passenger's throughput, and at typical peak hours it can enable 2400 people in the entering and leaving port per hour, and will satisfy 119,000 tons of cargos and mails each year. The airport will no longer refuse the overtime work request of the airline for the reason of limited supportability.

The new station building covers an area of 32,000 square meters, and the whole area of the construction is up to 65,000 square meters. It has three layers altogether, and the height is 29.8 meters, and the total length is 450 meters. It is 120 meters wide. The hall span is 72 meters. There are two domestic flight islands and 32 flight counters altogether, and 1

international flight islands and 12 flight counters. There are also 13 pass ways of safety inspection and 8 board bridges. It also furnished with advanced safety inspection, luggage division and picking up and flight display system. In order to facilitate passenger's traffic, an overpass with the length of 600 meters is set up in front of the building, and there are the parking lots of 26,000 square meters.

At present, airfield runway and parallel taxiway have been extended from 2600 meters to 3400 meters, making it capable of the taking off of the large-scale planes. At the same time the blind landing ability of the airport has been increased greatly after extending; two fast exit taxiways were newly built. After the extension the flying area is grade 4D, the planes that have the room for about 300 passengers can take off and land there, such as the Air Bus 300-600 model, Boeing 767-300 model, etc. At the same time it gives consideration to the flight reduction of the ultra full-length plane. The newly built station ground is 108,000 square meters, and it is designed for the landing of 16 planes at the same time.

The long-term construction object of Qingdao Liuting International airport: taking in account the maximum capacity of one runway for calculation tentatively, by 2030, the terminal passenger throughput of the airport will be up to 12 million with 15 million per year, At the typical peak hours it enables 6000 people to enter and leave the airport, the throughput of the cargos and mails each year will reach 413,000 tons, The landing ability of the airport will be 36 planes, and the area of the station building will reach 160,000, The parking lots will cover up to 123,000 to 144,000 sq meters.

## 4, Land Route

There are 3 main railway lines in the charge of the Qingdao Railway Station: Jiaoji (from Qingdao to Jinan) Railway starting from Qingdao in the east to the Mingshui Station in the west, with the whole length of 338 km. It has a common boundary with the railroad suboffice of Jinan; Lan (cun) Yan (tai) Railway starts from in Lancun Village in the south to Yantai in

the north and the whole lenght is 183.710 kilometers; Xin (dian, now called linzi) Tai (shan) starting from the Linzi station of Jiaoji Railway Line in the north off 70 km of the southern side of Boshan station in the south, meeting with the railroad suboffice of Jinan. The branches are: Bu tou, Fangzi, Dong Zhang, Bo Xiao, Bo Ba, Nan luo, Zi hong, Dong tie, Tie nan, and Jiao huang.

The circuit includes Qingdao, Weifang, Zibo, Jinan, Dongying, Binzhou, Laiwu, Yantai, Weihai, etc. Station of Qingzhou of Jiao Ji Railway Line, leading to local railway of Yiyang Railway at the Bohai Sea and the local railway station of Dalailong that is under construction northwards, and leading to Qinglin local railway to the Linqu County southwards, thus connecting the Taiyin Mountain area and Bohai Sea Gulf. The Taocun village station of the Lanyan railway line leads the Taowei local station to Weihai of the east of peninsula, making Jiaozhou-Jinan Railway, Lanyan Railway and Tao wei Railway traverse Shandong Peninsula. The trains leaving from Qingdao for Beijing, Shanghai, Lanzhou / Xi'ning, Zhengzhou, Guangzhou, Fuzhou, Wuchang, Chengdu, Taiyuan, Tonghua, Dandong, Xuzhou, Jinan, Yantai, Mount Tai, Weihai, Heze, and the trains leaving from Yantai for Beijing, Shanghai, Jiamusi, Xi'an, Shijiazhuang, Xuzhou, Jinan, Zibo, and the trains leaving from Zibo for Jinan, Dongving, Mount Tai, and the train from Dongving to the west of Nanjing, are altogether 48.5 pairs. They have linked 16 provinces, including 3 municipalities directly under the Central Government Beijing, Shanghai, Tianjin, and Guangdong, Sichuan, Qinghai, etc. The interim trains leaving from Qingdao for Jinhua, Shenyang, Daqing, Harbin, have expanded its radiation of the provinces associated. The excursion trains and suburbs passenger trains from Qingdao to Weimar, Mount Tai, Qufu, Zhangjiajie, Mount Huang, Gui Lin, Shenzhen, Hong Kong, from Zibo to Weihai, Boshan, have actively prospered the festivals or holidays life of the mass. The Jiaoxin Railway under struction starting from the station of Jiaozhou of Jiao Ji Railway Line in the north to the Xinyi Station of Longhai Line in the south. The total length

is 306.6 kilometers, via the cities and counties, such as Jiaozhou, Zhu Cheng, Wulian, Ju County, Yishui, Yinan, Linyi, Tancheng of Shandong Province and Xinyi of Jiangsu Province, etc., It is an intact land sea pass way of our country, linking the Northeast Hada Line and Yanda railway and ferry line and Lanyan line to Xinchang line.

The project of Wanda railway and ferry line already launched starting from Yantai in the south, passing 79 sea miles to Dalian at sea, will change the situation that the railway transportation of the Northeast, North China, East China, make a detour from Bohai Sea Gulf after building up, and produce the enormous economic benefits.

# 5, the Supply of Water, Heating, Gas and Power

The urban construction of Qingdao changes with each passing day. The ability of urban water supply, power supply, heating, air supply, etc. are improving constantly. The installed power-generating capacity of the electric wire netting has already reached 1,780,000 kilowatts; four districts of the city daily water supply are 710,000 cubic meters. The supply ability of piped gas is 400,000 cubic meters every day. The urban gasification rate is up to 99%; the area of heating reaches 15,060,000 square meters totally; there are 4 sewage treatment plants, with 360,000 tons of daily handling ability. The green coverage rate of the finished area is up to 37.5%; the occupation of public green land per capita is 9.1 square meters. We have made outstanding achievements in the urban construction and environmental protection. In 2001, Qingdao strengthened the market-based operation paces of the construction of the infrastructure. The abilities, such as urban water supply, air supply, power supply, heating and public transportation, etc. continue to be strengthened. The urban functions become better and approaches perfection day by day. It finished the construction of many projects, such as the comprehensive renovation of road environment, garbage disposal, sea wall protecting, river environmental renovation and ecological protection, further

improving the production and living environment. The two major opportunities of "meeting the Olympics" and " entry into the WTO " make the urban construction of Qingdao begin to leap greatly.

Tremendous development in infrastructure construction, such as air supply, heating, etc. in Qingdao in 2003, was made. The four districts in the city finished the newly increased heating with an area of 1,500,000 square meters. The newly-increased residents using the heating are 18,000; the whole heating area is up to 14,600,000, and the heating rate is up to 22.7%. According to the main plan of natural gas, under the situation that there is much pipeline, time is short, the degree of difficulty of construction is big, we invested 12 million Yuan to finish Haier road and the west way of Liaoyang road in the construction project of 14 kilometers of natural gas pipeline, transforming 15363 natural gas users.15363, The daily supply of natural gas is 45,000 cubic meters At peak times it topped 58,000 cubic meters. The strength of bearing the weight of the whole city is strengthened further, offering a solid platform for fast development of the city.

**Table Two:** 

Water popularity	100%
Urban water supply amount	236 million ton
Urban gasification rate	99%
Piped gas deliverability	400,000 cubic meters per day
Urban heating area	1,5060,000 square meters
Urban heating rate	22.7%
Power supply each day	36 million kilowatt hours
Capacity of the generating	1,780,000 kilowatts
equipment	

# 6, Communication

Now Qingdao has got the ability of communicating with all the domestic parts and the big cities of the world through telephone and telefax. It has already operated electron

programmed-controlled long distance telephone, urban automatic telephone, microwave communication, etc. The total capacity of the exchanger of the whole city is up to 1,498,700. The popularity of urban telephone is 80%. The number of users of the local calls reaches 1, 135,800, the number of cellular telephones develops into 2,052,000, which has reached the full coverage.

In the aspect of the network and e-commerce communication, it offers various ways of Net surfing access, including DDN special line, HDSL/ADSL, ISDN and broadband inserting service. The Internet users' surfing time reached 1,134 million minutes in 2002.

The specific goal is that by 2005 it will finish the land wideband multimedia information networking of the city basically, build up a more perfect geographical information system of space foundation and realize the information resource sharing of the whole city. Population of broadband backbone network coverage rate is more than 95% in planned urban area and the broadband users' rate is up to 20%. The Internet users will exceed 1 million, and the digital TV users will be 10,000. The family's computer popularity is up to 30%; the annual output of information industry reaches 200 billion Yuan, increased by more than 30% every year, the value-added amount of information industry accounts for more than 20% of the whole city GDP, the value-added amount of service trade of information reaches 6 billion Yuan. The annual output of software industries will reach 4 billion Yuan and hope 5-7 enterprises will enter 100 tops national electronic company; It will realize the goal that the government will handle official business with no paper at all and examine and approve documents through the networking basically; 5000 enterprises will set up internal computer network and 10000 enterprises will set up their websites and launch electronic business application; It will play the role of driving the information technology, information industry, and realize that industrial structure adjustment will be upgraded, and try to become the base of domestic information products production and the base of technological innovation of information.

It will set up and perfect the basic network facilities, such as backbone networks, land network of the city and broadband access network etc. By 2008, it will finish the land multimedia information networking of the city, build up a perfect geographical information system of space foundation and realize the information resource sharing of the whole city. The coverage rate of broadband backbone network entry will be more than 95%. The number of broadband users will be more than 50%. The Internet user rate will reach 1,500,000, the digital TV user rates will reach 100,000 and family's computer popularity is up to 80%. The output value of information industry will reach 250 billion Yuan, increased by more than 30% every year. The value-added amount of information industry will account for more than 20% of the whole city GDP and the value-added amount of service trade of information will reach 10 billion Yuan.

### ii. Institutions

### 1, The Taxes policies

Our country implements the unified foreign trade system to safeguard the fair, free foreign trade orders. Our country encourages foreign trade and permits the free imports and exports goods and technology (exceptions in the laws and regulations). Electronic products are encouraged to export; processing trade, service trade and external processing trade are encouraged to develop. Our country Encourages importing the advanced technical equipment; encourages the foreign businessman to come to China to make the investment; encourages developing foreign contracted project and service cooperation. Our country implements the market pluralism and prospers the trade policy with science and technology.

Qingdao Enjoys the first class economic administrating power in the province and has many economic and technological development zones, high and new technology industrial development zones, travel resorts approved by the government. The city is sanctioned setting

up foreign capitals banks joint venture large-scale business retailer, making the city one of areas enjoying the most preferential policies. The main preferential policies are as follows:

### **Corporate Income Taxes**

Those enjoy a 15% reduction of the corporate Income Taxes

- a. Productive foreign-investment enterprises in the old urban area of city of economic and technological development zone engaged in the following projects (must be approved by the General Tax Bureau of our country): Skill-intensive and knowledge- intensive projects; the projects with foreign investments above-mentioned 30 million dollars; energy, traffic, port construction projects.
- b. Chinese-foreign joint venture engaged in port quay construction;
- c. Foreign-investment enterprises of high- tech enterprise standing set up in the national development zone for new and high-tech industries.

High-tech productive foreign-investment enterprises whose management period is more than ten years are exempt from the corporate income tax in the first year and the second year. The corporate income tax can be reduced by half from the third year to the fifth year.

.The ones that enjoy a reduction of 24% of the tax rates: Foreign-investment enterprises set in the coastal open economic development zones, special economic zones or in the old urban areas of the economic development zones.

. Productive foreign-investment enterprises whose management period is more than ten years are exempt from the corporate income tax in the first year and the second year. The corporate income tax can be reduced by half from the third year to the fifth year.

To the Chinese-foreign joint venture engaged in port quay construction, if their operational period is in above 15 years, they are exempt from the corporate income tax from first year to the fifth year since beginning for lucrative year, reduced by half and imposed the corporate

income tax from the sixth year to the tenth year approved by the province, autonomous region and municipality directly under the Central Government.

the export-oriented enterprises can enjoy the tax reduction by half if output value of export product reaches more than 70% of output value of enterprise in that year.

Advanced technology enterprises can enjoy the tax reduction for another three years after the period they enjoy the preferential treatment. But to enterprise income tax rate lower than 10% after reducing by half, they should pay the income tax according to 10%.

.The profit that the foreign investor obtained from the foreign-investment enterprise is exempt from the income tax.

. All foreign-investment enterprises set up in the economic and technological development zone of Qingdao and Hi-Tech industrial park with an operational period of more than 10 years (including 10 years) are exempt from the local income tax.

#### Circulate taxes

For the foreign-investment enterprise set up as approved after January 1, 1994, its exported goods (unless the state has other regulations) are refunded by the taxes policies.

Rate of return tax of export of some goods from January 1, 1999:

- a. For machinery, equipment and electric apparatus, electronic product and means of transport, instrument and apparatus, the rate of return tax is 17%; for the agricultural machinery, the rate of return tax is 13%.
- b. The rates of return tax of textile raw materials, export of the products, clock and watch, shoes, pottery, steel, products, cement rises to 13%.
- c. The rates of return tax of organic, inorganic industrial chemicals, scribbling, dyeing, pigment, rubber products toy and sport articles, and plastic products rise to 11%.
  - d. The goods suitable for 6% of the rates of return tax of export originally rise to 9%.

e. The rate of return tax of export of agricultural products rises to 5% in unison.

Other export goods still carry out the current rate of return tax of export.

.The foreign-investment enterprise produces and sells the products in the duty-free zones, is exempt from the value-added tax, consumption tax except that the state has other regulations.

#### The duty-free policies of customs' tariff, imports value-added tax

Since January 1, 1998, domestic investment project of development and import equipment of foreign-invested projects that are encouraged by the government are exempt from the tariff and imports value-added tax. There are the details:

Duty-free range of import equipment

For the projects according with the encouraging type of "Catalogue for the Guidance of Foreign Investment Industries" and limiting Class B, they are exempt from the tariff and imports value-added tax.

To the domestic investment project according with " industry, products and technological catalogue that the country encourages development especially at present ", they are exempt from the tariff and imports value-added tax

**2.** The procedure to simplify Investment (take economic development zone of Qingdao as an example)

Negotiating --Feasibility research report --Environmental protection appraising and giving a written reply --The name registering --The land selling and contracting --Contract rules give a written reply --Apply to get the business license --Register the chapter of carving --The other tube registering --The bank opens an account --Tax registration - -The finance registering --The customs is put on record --Construction project planning and design examining and approving --Go into operation in the report and give a written reply --Final acceptance of construction -Operation

#### iii. Human Resources

#### 1. Current Situation

Qingdao is a famous scientific and technological city of ocean of China. There are 25 marine scientific research, education and management organizations in the city. The national key comprehensive marine institution of higher learning ---- Ocean University of China is here. It is an eastern marine science town that incorporates marine scientific research, international academic exchange and personnel training into an organic whole. There are over half of the marine skilled personnel of China in the city. In 2001, output value of marine industry exceeded 28,660 million Yuan last year in the whole city. Among them the new developing output value of marine scientific and technological industry was up to 6,600 million Yuan, profits tax is 2 billion Yuan, proportion is up to 25%.

There are 262,000 professional and technical personals, 34 the Chinese Academy of Sciences, institute's academician of the project now in Qingdao. There are 68 independent scientific research institutions. Among them, the number of ministerial level is key 22, provincial level 27; city level 19. The city has 13 national key laboratories, 51 of technique center of enterprises, 9 of national- level technique center of enterprises, and 5 proving grounds. According the preliminary statistics, the whole city made 457 scientific and technical results in 2001. Among them, 56 items which world leads and 60 internationally advanced; 211 items led at home, 130 advanced items at home. Four scientific findings win the second prize of Progress in National Science and Technology of 2001. Scientific and technological marketing is active, making a deal of technological 8632 items of contract item altogether the whole year, increased by 3100 items; Turnover is 621 million Yuan, increased by 28.5%. 1417 patents were granted in the whole year. Qingdao regards marine science and technology as its advantages. It has more than6190 marine professional and technical personnel, 14 academicians Chinese Academy of Sciences, Chinese

Academy of Engineering, 10 of whom are famous scholars of the marine field. In 3 themes of national marine 863 Programs, two themes marine scientists of Qingdao serve as the chief expert.

### 2, Talents Market

There are many institutions of higher learning, such as Ocean University of China, Qingdao University, etc, which supply the society a large number of qualified talents every year. It is estimated that the students at school of the university will rise to 100,000.

According to the principle "government's macro adjustments and controls; enterprises choose the right person independently; individual chooses a job independently; market regulates the supply and demand", an effective human resources market system will be set up.

(1) Development plan of five years of human resources pool in Qingdao(issued by the personnel bureau of Qingdao)

Guidelines of the development plan and overall goal are in five years (2001-2005) of human resources pool of Qingdao are: To set up and perfect the mechanism with sound operation norm and courteous service according to what the Fifth Plenary Session of the Fifteenth Party Central Committee of the party put forward; to guide and supervise strong talent's market system, to promote talents to flow rationally; to accelerate the construction of talent's market system; to strengthen market management further; to perfect the operation mechanism of the market; to promote the grade of software and hardware construction of the market; to improve socializing; to modernized service level and to accelerate the market and dispose the process of talent resources. Efforts should be made to turn Qingdao city human resources pool into market-based district city talent dispose in the center basically. There are the details:

#### To build market-based talents centers

#### a. The goals

--A market system with affiliated human resources pool of government's personnel department as main body, with human resources pool of the trade, social talent's intermediary complementing one another and a lot of markets effective to operate with to link up the mechanism closely market system independently will be built.

-- To use the market mechanism, and implement " 111 " project which introduces talents. Namely more than 1000 masters, 100 doctors and 10000 undergraduates are introduced every year.

--To Widen the working field, and increase the depth of serving, turning the human resources pool of Qingdao into the regional exchange centers of Shandong and surrounding area.

#### b. Guarantee Measures

.To Study and issue " the management rules of human resources pool of Qingdao " to standardize market behavior, realizing the legalization of market management .

Adjust the total arrangement of the human resources pool of the city. In line with the principles of the employing unit and all kinds of talents, we try to form the east, middle part, whole related market pattern of western human resources pool.

Continue to perfect human resources pool management style of grouping. Make great efforts to carry out the transition to close management progressively by the present loose type, in order to give play to the role of market group better, forming " joint fleet " of the human resources pool.

.Perfect the professional construction of human resources pool further. Reconstruct 3-5 professional markets on the base of the existing 11. For instance: Old human resources pool, managerial talent assigns the market etc.

.Set up talent's part-time job market; act as a go-between in order to give full play to the role of existing talent.

.Optimize the environment of introducing talents further; raise the efficiency and introduce high-level talents especially; Annually organize units to go other places to recruit talent 10 or more than 10 times, to introduce talents with a degree above bachelor.

#### To build socialized talents centers

#### a. Goals

- --Widen field of acting. 10,000 acting people increase every year Strive to realize the goal that the whole city acts for the number of people and is up to 150,000.
- --Pursue talent's rental system in a more cost-effective manner.
- --Implementing the personnel and acting for the networking. Realize talent's resource information sharing and information transmission to reduce the burden of the employing units.
- --The file administration of the personnel reaches the first class standard in the province.

### b. Guarantee Measures

. Discuss and make "perfecting the personnel and acting for the system and pursuing the suggestion of personnel socialized management and service "to standard the acting work.

.Make and issue talent's rental system, and do a good job of the pilot projects of the units, such as Haier, Huaxia Bank, etc. Pursue in an all-round way on this basis and the focal point is pursued in the state-run collective enterprises and institutions.

.Summarize and perfect the whole personnel of the hygiene system and act for working experience, and pursue in the district, city. Do a good job of other public institutions' implementing the work that act for the system of personnel in comprehensive coordinated reform'.

.Continue jointly expanding the field in which the personnel act as agent with the relevant departments. Put emphasis on the private enterprises, state-owned enterprises and public institution.

.Do a good job of personnel talent work and the rest pilot project is fully under way thereafter.

.Implement whole personnel acting as agents to full-time university, junior college and special secondary school graduate.

.Set up personal file passing on system of acting as agent etc. to collect, expand personal file.

# **To build Modernized Talent's Training Centers**

#### a. Goals

Start talents' tapping train the system engineering, develop and train the market further in an all-round way, forming, masses popularizing, focal point outstanding, training patterns that meet the needs of market economy.

#### b.Guarantee Measures

.Set up consulting and booking windows; set up the post demand storehouse, train booking storehouse and talents storehouse to realize "three storehouses are interdynamic".

. Innate training modes and implement training strategy at many levels both at home and abroad.

.Establish talent's training bases, and set up the training branches through the country.

. implement distance train through network.

## To build the internationalized talent's information centers

#### a. Goals

- --Strengthen network capital construction, perfect networking function and turn "website of human resources pool of Qingdao of China "into a famous and big talent professional website --Form talents correlating with each other operation mode to realize the network service.
- --Strengthen online professional resources exchange dynamics.

--Promote the professional resources exchange of Qingdao to incorporate talent's global information-based process, forming the internationalized talent's information center tentatively.

#### b. Guarantee Measures

.Accelerate online market construction. Try to make human resources pool (including submarkets) set up online market within five years.

.Take effective measure, expand talent information storehouse. Make great efforts to meet all kinds of needs of the employing units.

.Perfect the online member system of human resources pool. Increase the member units by 20% every year.

.Increase the input in online market construction and realize the software and hardware facility modernization of the online market gradually.

### To build scientific talents appraisal centers

#### a. Goals

- --Build comparatively perfect talents appraisal system, which can be used in the fields of talent recruitment, talent introduction and talent's choosing.
- --Explore scientific appraisal means and evaluation index system, forming their own style.
- --Try to do a good job in the cultivation of the market; especially unit's group's portfolio increases by a fairly big margin every year; Consolidate the city market and try to expand the market inside the province.
- -- Optimize the post set-up and business flow. Try to make Qingdao talent quality appraisal first-class and among the advanced rank in the whole country.

# b. Guarantee Measures

.Do a good job in the pool construction and technology master of the "a group without a leader" and" file basket" appraisal technology.

.On the basis of talent's quality assessment, try to perfect simulation assessment and set up the expert opinion team.

.Strengthen the testing and assessing of the software and try to explore new test and assessment means and methods.

.Cultivate the market in all-round way and expand the talent's quality appraising market constantly.

.Strengthen the construction of the assessment team. Set up the duty of the work position, work standard and the basic requirement of work, making its professional qualifications develop to the direction of" "high, precise, and deep".

#### To build the Service Centers

#### a. Goals

--Put emphasis on the business of talents exchange, talents introduction, personnel agent, talents' tapping training, talent's information and the talent's quality appraisal. On the existing basis, make great efforts to make the service field broader, service content more various, and the method of service more flexible. Try to set up an all-round and "one-top" service system.

- --On the basis of the main business, the market needs to be expanded in the relevant business fields. Try to form diversified economy and comprehensive management to meet the demands of the employing unit to the maximum extent.
- --Improve the social benefits and the economic benefits of human resources pool a lot every year.
- --Explore and implement the way of commercialized operation in the human resources pool with more flexible mechanism to offer the effective service.

#### b. Guarantee Measures

.Insist on the policy of "innovation is the soul". Each department and every staff member should focus their work on the innovative service. Continue adhering to activity and system of

"an innovation, a month "of" conductive suggestion "to promote the industrialization with the reform.

.Set up the brand of perfecting the human resources pool and corporate culture. Put the corporate culture characterized by the ten ideas to practice: "objective, development, innovation, undertaking, method, standard, opportunity, condition, service, shortcut".

.Do a good job of ISO9000 authentication. Through authentication, try to standardize the workflow further, perfect service content, fulfill the service promise, improve the service quality, create the brand of serving, strengthen the credibility and popularity served and lay a solid foundation in order to set up the service center of industrialization.

.Facing market demand, develop market- based operation in a more cost-effective manner.

Under the guidance of " joint way ", social resource is attracted to participate in industrialization actively to industrialization talents disposal service system. Make every effort to attract foreign funds and develop the human resources pool. Support the domestic known enterprises and institutions to make the investment to develop some fields in the human resources pool, fastening the industrialization of the market.

.Standardize the talent's market behavior and promote the realization process of industrialization. Under the guidance of "management rules of human resources pool", try to set up market behavior that helps the standardization of the market.

Set up more concrete market access system to strengthen the regulation and control function of the human resources pool. The form of the market access is qualification reorganization and human quality reorganization. The qualifying examinations of professional technique and local job help to set up the employee qualification and human quality registration system of talent's intermediary. Talent's intermediaries with different strength and business performance can evaluate different human quality and different human qualities intermediaries are engaged in different talent's intermediary business.

Set up the system of independent management of the trades and strengthen market credit and appraisal. For those that do business out of their business scope or practice fraud, their licenses should be canceled once checked and verified.

.Make great efforts to build a team of high-quality talents

Implement many kinds of ways to choose talents in the human resources pools. According to various needs, the forms of in-staff personnel, phased employing personnel, enterprise personnel, borrowed talents, retired talents reemployed by the units and the interim recruitment personnel are adopted.

Strictly control personnel entry. Clear post plan and essential terms of quality are needed for any talents entry. Examine and screen the talents strictly, and implement the system of probationary period.

Adopt the encouraging management system. For the staff members of human resources pool, the systems, including the personnel agent system, the appointment system, the post-exchange system, the end location adjustment system and the distribution encouraging system, are adopted.

Do a good job of training in a all-round way, including the overall professional knowledge training for the staff members, exploiting and promoting ability training and the foreign language and computer knowledge training, to make the business of staff members meet the needs of industrialized development.

# 3. Talents Introduction

# (1)Outstanding Talents Introduction

On June 30, 2000, Qingdao municipal government prints and distributes "The Rules about Introducing Outstanding Talents in Qingdao". The contents are as follows:

Article 1 In order to attract domestic and international outstanding talents and to promote economic development of Qingdao, this rule is made.

Article 2 Here outstanding talents refer to: Talents of high-end in the fields of electronic information engineering, new materials, advanced management and administration, finance and financial accounting our city need badly.

Article 3 all the enterprises and institutions of the autonomy and independent legal personality in Qingdao can introduce outstanding talents according to this method.

Article 4 the principle "letting them go and come of their own will, two-way choice, bring into full play each one's ability, various informative" is insisted on. It can adopt the following ways:

- (1) Go to the Party and government offices, enterprises and institutions to hold a post or hold a part-time job, serve as the advisor or to be a the consultant expert;
- (2) Establish, contract; lease all kinds of economic entities and research and development organizations;
- (3) Establishes enterprises in the form of becoming a shareholder or making the investment with technology;
  - (4) Carry on activities such as R&D cooperation and introduction.

Article 5 if the talents are introduced to work for the Party and government offices, public institutions, and the number of them can be not limited.

If the talents have a degree above master's degree, they can be employed as the national civil servants directly through the special examination.

Article 6 According to the needs of work and their own working ability and political integrity, the talents can be given leadership position. For those who work in the government offices, doctors are not lower than the vice department in principle, the masters are not lower than the director.

Article 7 for the talents who engage the professional technique post, the number and salary are not limited.

Article 8 the salaries of the talents introduced are decided by the agreement of the market and the personal ability in the form of "agreement salary". The salaries should be listed actually. If the talents now engage in the government offices and the salary is lower than that of their former professional technique posts, they can choose to be treated as technique professional. All the foreign experts are given "agreement salaries". All units should try to adopt the factors division, that is talents can become shareholders with technology and share the profits, and the technology share can be as much as 35% of the registered capital.

Article 9 Set up the system of talent's information issuing, which offers the information of demand for talents of Qingdao and regulates the guide price.

Article 10 Spouse and the children of the talents exempt from infrastructure holding fee according to regulation. The ones that belong to agricultural registered permanent residence can handle "agricultural people to be given non-agricultural status". If they keep the household register in the original area, they can be applied for "printing the registered permanent residence bully" and enjoy the resident's treatment. For those who do not have job, their personal file relation and registered permanent residence can be acted for by the talents exchange service center of the city.

Article 11 To the talents' houses, the employing units should take the first responsibility to solve and issue the lump-sum housing allowance according to the housing system of our city. Offer a set of houses about 150 square meters to the academicians. The government should allocate some houses for the talents who work temporarily or have difficulty in renting houses. Intellectual's job leading group of the city is responsible for enjoying the sureness of the preferential treatment personnel of above-mentioned houses.

Article 12 When talent's children go to a nursery ,enters school or going to a nursery, they can select the school nearby and they are offered the preferential arrangement by the educational administrative service division, and exempt from the expenses besides the normal tuition and incidental expenses.

Article 13 the fee paid to intermediary's service for patented technology introduction is allowed to enter enterprise costs. If the fee is paid to individuals, the Individual Income Tax should be imposed on according to the relevant regulations of the tax law.

Article 14 In order to encourage domestic and international outstanding talents to establish enterprises in Qingdao, the projects of technological achievement have priority to enter the pilot park of overseas students and enjoy all preferential policies in the pioneer park.

Article 15 every year municipal government allocates certain funds for talents as starting fund. If the talents are introduced in to new high-tech enterprises, they can enjoy preferential taxes.

Article 16 The new high-tech enterprises entering the pilot park of the students overseas can have priority to apply for the scientific and technological project conversion fund, Hi-Tech industrialized country scientific and technical result hatch fund, small and medium-sized enterprises risk guarantee and the interest. The administration of the zone can be the agent for them to go through the formality.

Article 17 A special funds of 10 million Yuan is set aside to grant subsidies for their purchasing house and settling down and help to the talents who have financial difficulty and to improve the living condition, working environment for the talents. The intellectual's job leading group of the city is responsible for approving and managing of the fund, which cannot be used for other purposes.

Article 18 If the talents introduced made great contribution for economic construction and social development of this city, the municipal government will reward them according to"

temporary means to reward outstanding talents": 500,000 Yuan is given to those who are honored as "Special award for outstanding contributes"; 150,000 Yuan is given to those who are honored as " award for outstanding contributes" and the title of " outstanding talents".

Article 19 Try to attract talents at home and abroad. Every year organize large-scale recruiting activities to recruit a group of doctors, masters and graduates from the key universities in the country; choose selectively high-level professional and technical personnel and senior managerial personnel's in the national-level human resources pool; attrack American-European students abroad who already obtain the degree, understand thoroughly international practice.

Article 20 the branches of the municipal government in Beijing, Shanghai, Shenzhen are responsible for the contact service work.

Article 21 Encourage units to have domestic and international outstanding talents work irregularly or temporarily. The experts employed can apply the professional technique post can be honored as "excellent talents of the professional technique in Indio" and enjoy the treatment.

Article 22 The intellectual's job leading group of the city and Talents Exchange Service Center are responsible for all kinds of service of talents introduction. For those who want to work in the government office, they should be arranged in the proper posts; for those who want to work in the enterprises, they should be introduced to the enterprises suitable; for those who come to Indio with technical results, they should be arranged in the pilot park of the students overseas. Every department of the government bodies should simplify the procedure and be more efficient for the talents introduction. Office of leading group of the market intellectual's job and city talents exchange service center should give a preliminary reply in 15 days to the talents introduced. The Municipal Planning Commission and the public security

bureau are responsible for the accurate formality in 15 days after the talents are deemed to work here.

Article 23 The intellectual's job leading group of the city and Talents Exchange Service Center are responsible for such service as reception, information collection, the qualification asserting and management.

Article 24 when the city (district) introduces outstanding talents, the reality should be respected.

Article 25 Qingdao municipal Party committee and Qingdao city personnel bureau are responsible for explaining the rules.

Article 26 This method is constructed from the day of issuing.

# (2)Introduction of Personnel Overseas

On June 30, 2000, the Communist Party of China Qingdao municipal Party committee Qingdao municipal government prints and distributes "The Rules of introducing students overseas". The contents are as follows:

Article 1 In order to attract overseas talents especially those who have got the mater's degree, this rule is made.

Article 2 Here overseas talents refer to: the personnel's that are sent publicly or at one's own expenses to study and obtain above foreign master's degree; those who have been the long-term (permanent) residence or get the rights for re-entry; those who have already got a degree above master before going abroad.

Article 3 Qingdao Municipal Party Committee and Qingdao city personnel bureau are responsible for such service as reception, information collection, the qualification asserting and management.

Article 4 the principle "letting them go and come of their own will, two-way choice, bring into full play each one's ability, various informative" is insisted on. They can find jobs themselves or be introduced by the Personal department.

Article 5 the overseas talents can settle down for a long time, can serve in a short time. It can adopt the following ways:

- (1) Go to the Party and government offices, enterprises and institutions to hold a post or hold a part-time job.
- (2) Establish, contract, subcontract and lease all kinds of economic entities and research and development organizations;
- (3) Establishes enterprises in the form of becoming a shareholder or making the investment with technology in the form of patents, exclusive technology, scientific and technical result and fund;
- (4) Serve as the advisor or to be a the consultant expert of government offices, enterprises and institutions;
- (5) Carry on activities of technical cooperation, R&D, lecture.

Article 6 Encourage the overseas student to establish individual proprietorship, joint venture, cooperative new high-tech enterprise or purchase small and medium-sized enterprises in the form of making the investment with technology. The projects or scientific research institutions can enjoy the treatment of that of "three kinds of foreign-invested enterprises". To enterprises that the students overseas established, the relevant department should have priority to go through relevant formalities, and the enterprises are exempt from the service charge.

Article 7 For the overseas personnel's and personnel overseas who make the investment, establish enterprises and engaged in high-new technical research can enter the overseas talents pilot zone and can enjoy all the preferential policies.

Article 8 Overseas personnel's who have the doctor degree cannot be arranged lower than the post of the vice department in it.

Article 9 If overseas personnel's want to work in the public institutions but the institution has enough staff, the institution is allowed to overstaff and will receive more financial allocations accordingly.

Article 10 If overseas personnel's have gained degrees above mater degree abroad, their service life of studying abroad is calculated according to the continuous length of service; other personnel's count together with the length of service after coming back home before going abroad.

Article 11 Relatives of students overseas who are expelled or dismissed by the units for accompanying can go back to the unit or find job themselves, the former units should cooperate and go through relevant formalities for them. If the former units do have difficulty to arrange work, the personnel department should help.

Article 12 When overseas personnel's' children go to a nursery enter school or going to a nursery, they can select the school nearby and they are offered the preferential arrangement by the educational administrative service division, and exempt from the expenses besides the normal tuition and incidental expenses

Article 13 For the overseas personnel's who work in the five cities (districts belong to Indio) and three districts of Laoshan, Chengyang, and Huang Island, their spouses and children can register as permanent residence.

Article 14 For the overseas personnel's who have a degree above master', employing unit can provide jobs and go through settling, administrative relation formalities according to material sent by personnel department. Before the formality has not been finished, education department should go through the formalities of their children' entering school.

Article 15 The salary of the overseas personnel's is fixed with preferential treatment.

(1) For the overseas personnel's who work in the enterprises, the employing unit can consult with them and fix their salary with treatment.

Among them, those who work as managers can have yearly salary.

- (2)The overseas personnel's are allowed to become a shareholder in the form of patent, invention, exclusively owned technology, fund, etc and get the assignment. The proportion of assigning is consulted and confirmed by the employing unit and the overseas personnel's.
- (3) For the overseas personnel's who have doctors, or master degrees but no administration or professional degree, they can enjoy the treatment of associate professorship, intermediate professional title temporarily.
- (4) For the overseas personnel's who have made an outstanding achievement, the employing unit can dispatch some living allowances according to the actual conditions.

Article 16 For the overseas personnel's who come to work in Indio, the traveling expenses within the country can counted into the employing unit account.

Article 17 The housing problem of the overseas personnel's can be solved with preferential treatment according to the relevant policies and regulations of the housing system reform of our city.

Article 18 For the overseas personnel's who come to live in Qingdao, their research materials, and books document and scientific research instrument and equipment should be duty-free according to relevant identifications that the personnel department of the city provides.

Article 19 For the overseas personnel's who come to work in Qingdao for a short time or for a long time and have a degree above master degree, they can apply to relevant department in the country for some scientific research subsidy funds through the personnel department of the city. The city will locate as much as the country or commissions locate.

Article 20 There is no limit on the professional technique post of the overseas personnel's. The personnel departments handle the work of asserting about qualification at any time. After the qualification, the employing units have the choice to employ.

Article 21 For the overseas personnel's who come to work or make investment in Qingdao and those who are from other citied or provinces before going abroad and their former units keep their materials, they can have" blue to print the registered permanent residence' and "specially engage the employee's card" and enjoy the same treatment with the permanent residence.

Article 22 For the overseas personnel's who work in Qingdao, if they want to go abroad for further study, foreign academic meeting or other short-term academic activities, they should have the priority to be arranged according to the regulation.

Article 23 For the overseas doctors who work in Qingdao, they should enjoy the medical treatment and health care treatment of excellent talents in Qingdao. The government arranges for some students abroad to carry on the physical examination or have a holiday by stages every year.

Article 24 For the overseas masters who work in Qingdao, the employing unit should install a telephone for their families, install a Fax-machine and Internet in the office and offer some Net surfing and books, newspapers and magazines fee every year.

Article 25 For the overseas personnel who make outstanding contributions, the municipal Party committee, and municipal government should praise them once every three years. At the same time for the deed of the outstanding personnel's, the media should cover especially.

Article 26 For the overseas personnel's who pay attention and support the construction of our city for the long-term and who have a reputation and influence in their regions and countries, they can be made "honored citizen".

Article 27 The focuses of the government investment on overseas personnel's are: introducing the overseas personnel's of high ends; Offering the same amount money as the country; Offering services to the overseas personnel's coming back home in a short time; Organizing the physical examination.

Article 28 the branches of the country or the province should observe the rules.

Article 29 Qingdao municipal Party committee and Qingdao city personnel bureau are responsible for explaining the rules.

Article 30 This method is constructed from the day of issuing.

# (3) "Blue Collar Talents" System

In September of 2002, the personnel bureau of Qingdao of Shandong issued news: in the future, Qingdao will implement "blue-collar card" system," talents inhabiting card" system and " talent's landscaped roadway " system. This means Qingdao is opening its door to the nonlocal talents who have a degree below training academic credentials (including training) and nonlocal can enjoy "citizen's treatment".

Qingdao policies incline more to well educated talent. In recent years, with the fast development of economy, many enterprises need a lot of talents who are from academic credentials of university, junior college and special secondary school, but such talents of Qingdao are very scarce. For this reason, city personnel bureau is determined to relax the talent introduction policy and adopts the "blue-collar card" system. Namely: for the talents listed in the specialized catalogue in short supply, all talents of junior college and special secondary school who want to work in Qingdao will have the "blue-collar card" and can settle in Qingdao.

Qingdao personnel bureau announce all kinds of talents in 13 key industry and fields and relevant terms. For the talents of these conditions," landscaped roadway "will open to them.

To those high-level talents or who belong to 13 qualified personnel in a specific field, If they

are unwilling to have their materials in Qingdao, they can turn to "talents inhabiting card" system. If only they have the card, no matter how long they work in Qingdao, they can enjoy "citizen's treatment " in such aspects as children's schooling, medical treatment, insurance and house.

The 13 key industries and fields are: Electron of the electrical home appliances, chemical rubber, the type and containers made, beverage food, textile clothing, the trade and business, new material, ocean and bio-pharmaceuticals, financial insurance, logistics service and transportation, urban construction and environmental protection, modern agriculture and social service trade.

# 4. Labor Supply

# (1) General Introduction

Labor supply is the foundation of investigating the employment situation. The method is: forecast of age group; calculate out workforce resource and adjust the number according to the participation. Take 1% population data of sample investigation as base figure of population. The data is all-round and relatively reliable. The situation calculated according to this base figure is: First, workforce resources of Qingdao would be a peak in 2002. It is estimated that the urbanization level would be improved by 1% compared with 2001 in 2002. If the growth rate of the urban workforce exceeds the average growth level of "shiwu "(the tenth period of the "five year plan") and if the urbanization can not reflect the facilitation of employment, the city will have to face double pressure: urban workforce and shifting the workforce of countryside.

Second, workforce's supply will also keep the growth. On the whole, the participation rate in Qingdao will drop in the next several years. Firstly, with the development of China's education, people will have longer educational years on average. Secondly, If there is bigger perfection during the State's Tenth Five-Year Plan period in the social security system and if

the urbanization process will get very fast development, the reemployment rate of old population will drop to some extent. Moreover, the housework laborer of Qingdao is very low.

In 2002, unemployed people of the workforce are 133,000, were much more than the levels of 90,000 people of 2001, obviously higher than the prediction index of 50,000 during the State's Tenth Five-Year Plan period too. The workforce supply reaches its peak, which is partly influenced by the age structure.

In fact, in 2002, Qingdao municipal Party committee and the municipal government put emphasis on raising resident income and solving laid-off reemployment problem of unemployed people. While increasing the income for workers, the government increased the pension of the retired personnel of enterprises again, raised the laid-off worker's basic living cost standard, and strengthened social security dynamics.

The per capita disposable income of the urban citizens reached 8721 Yuan in 2002, increased by 13.5% compared with 2001, increased by 14.8% actually after deducting the price factor. It is the highest year of increasing degree since 1996. Meanwhile, the per capita net income of peasants reaches 4195 Yuan, increase by 7.5%. With the fast economy development in an all- round way and the constant improvement of enterprise's management state of Qingdao, employment total amount increases steadily. By the end of 2002, employees of the whole city unit are 1,064, 000, increased by 2.8% compared with 2001. The urban unit's worker's payrolls in the whole city are 15,380 million Yuan, increased by 13.3% the whole year. The average salary of the worker of urban unit is 12839 Yuan, increased by 12.4%; increased by 13.6% deducting the price factor of the consumption of resident of the same period. The whole city obtains employment the acceleration rate is greater than the unemployment acceleration rate for the first time. The whole year, 69,000 persons are arranged jobs and 23,000 are organized for training. At the end of the year, urban registered

unemployment rate 3.8%, dropping 0.1-percentage point, employment acceleration rate greater than unemployment acceleration rate for the first time.

The talent team of Qingdao is optimizing progressively, total amount of 644, 000. The proportion of talents to population in the whole city rises to 8.5% from 7.5% of 1999. Among 600,000 on-the-job talents in the whole city, junior colleges and the above academic talents are 299,000 people, compared with 1999 increase by 14.6%. Non-public talents of economic organization increase fast, 52.5% of whom work in the non-state-owned economic organizations, accounting for 31% of total amount of on-the-job talents in the whole city at present. Up to the end of 2001, there are 23 academicians, 35 young and middle- aged experts with outstanding contributions, 730 talents who enjoy special subsidies, 771 doctors, 323province and city level excellent talents, and more than 40,000 on-the-job high title talents. The talent's internationalization of Qingdao makes first appearance. At present, there are more than 2000 foreigners in Qingdao and nearly 1000 overseas personnel. In recent years, 116 foreign projects of intelligence and 193 foreign experts are introduced. Qingdao city pays attention to improving local talent degree of quality. In 2002 alone, 544 are sent outside to be trained; the number has increased by 41% compared with that of last year.

# (2) Methods for Hiring

# The Principle for Hiring

The needs of economic construction and reality of the social development of Qingdao should be considered. The key fields should be guaranteed, and the producing, scientific research, teaching forefront should be strengthened. Professional and technical personnel that are needed badly and overseas personals are welcome.

# **Personnel for Hiring**

Professional and technical personnel with higher level and administrative staff are needed.

Mainly including: Engineers and technicians, scientific researchers, agricultural technical staff,

technical staff of the hygiene, arts personnel, statistics personnel, lawyer, teacher and accountant, translate and enterprise, public institution managerial personnel and other professional and technical personnel in short supply of Qingdao.

#### **Conditions**

a. The personnel should support the routes, principles, and policies of the party, adhere to the Four Cardinal Principles, observe disciplines and obey laws. The personnel are competent and can undertake more than one professional technique job independently, especially engaged in the field that the Qingdao city economic construction and research need badly.

b. If the talents have high titles, the age cannot exceed 50; if the talents have medium titles, the age cannot exceed 45; if the talents have primary titles, the age cannot exceed 35; at most 2 persons can move here together with them.

c. The ones that have one of the following conditions can be hired preferentially: Persons who can bring the advanced technological project; Persons who get titles such as "outstanding intellectual "," excellent talent "," young and middle-aged experts that have made outstanding contributions in the country"; Persons who enjoy the special subsidies of the country; overseas personnel of high ends; Persons who volunteer to street, township enterprises and remote enterprises of suburbs and have signed the job contract for more than five years.

# **Preferential policies**

For the talents who want to settle in Qingdao, the employing units should grant certain settling down allowance once only according to the value assessment or prediction of the scientific and technological project they bring with them.

The housing should be treated with preferetial terms and those who have made great contributions should be given a set of house with two rooms or three rooms.

If the talents have the post qualifications of the professional technique, they can be offered the corresponding professional technique post.

If the talents' projects bring in great economic profits, the talents should be praised according to "the regulations to praise the outstanding technical contributions".

If the talents quit their job before they come to Qingdao, they can keep their jobs in Qingdao confirmed by the Personnel Bureau and the Labor Bureau.

if the talents volunteer to the countryside enterprises, the materials of the families can be kept in the city. The salaries can be fixed by the agreement.

The graduates with a degree above Master who want to work in Qingdao but have no job temporarily can go through formalities f shifting in the exchange service center.

These kinds of talents and their spouses and their children are exempt from city holding fee: Overseas personnel, graduates with a degree above Master, graduates with a major the city need badly, above- first -class teacher of middle school, senior technician personnel.

If the talents engaged in high-new technical research, developing, employing unit set up corresponding testing laboratory for them and offer corresponding research funds. If the projects have great promise, the Technological Commission, Municipal Planning Commission, Economic and Trade Commission offer the preferential arrangement

# .Living Conditions

#### 1. Environment

Emission of pollutants has reached the standard in an all-round way: urban surface water and surrounding. In 2000, it was granted" exemplary city of environmental protection" and become one of the most suitable inhabiting cities in China.

# 2. School

There are 1447 primary schools, 365 general high schools, 85 medium-sized vocational schools and 11 institutions of higher education with 68,000 students. The most important school is the Ocean University of China. There are 83 master stations, 12 centers for doctors and 2 mobile stations for the post-doctors in the city. The institutions have more than 100

doctor's tutors and more than 300 master's tutors. The international school of Qingdao, which lies in the national travel resort, is a school recruiting the children of foreigners working in Qingdao. In addition, there are 11 Chinese-foreign cooperative schools where nearly 300 foreign students and several hundred teachers from dozens of countries and regions.

#### 3. Medical and Health Care

The conditions of the medical care have been greatly improved. At present, the whole city owns 3199 health's organs (including the clinic), 217 of which are hospitals, 28 of which are epidemic prevention mechanisms, 8 of which are maternity and childcare institutions, 2895 of which are healthcare centers clinics. The hygiene technical staff is 32, 800, 15,800 of whom are doctors. There are seven scientific research centers where 30 experts enjoying the special subsidies. In fields of organ transplant, bone surgery, tumor prevention and cure, they have reached the domestic and international advanced level

By the end of 2003, there are 2398 health organ berths and 39036professional medical-care personnel in the city, every a thousand people 3.3 berths, 5 professional medical-care personnel, 1.9 doctors averagely.

Professional medical-care personnel's quality is being promoted rapidly too. In 80s of the last century, there were few masters in the medical institutions; while at present, there are 326 personnel with degree above master. Over the past 20 years, more and more professional and technical personnel have the chance to go out for further study, which promotes health care engineering level and service theory level of our city. In some large-scale medical organizations, it is very convenient for foreigners to see the doctors. The convenient medical care has become a strong support of the city' opening-up.

#### 4. Entertainment

The international golf club, which is the international standard court of 18 holes and covers an area of 1500 hectares, lies in the Stone Man National travel resort. The Qingdao Huashan

international golf rural club, which is the international standard court with 36holes and covers an area of 3000hectares, lies in the north of the Huashan of Huanshan town, Qingdao Jimo.

Table Three: The Supply Price of the Water in Qingdao City

Varieties of users	Price of the water	Fee for dealing with the waste water
Residence		Will the Waste Water
Units	1.30yuan/ton	0.30 Yuan/ton
Within the limit	1.35 Yuan/ton	0.80 Yuan/ton
The first degree above the limit	1.80 Yuan/ton	
The second degree above the limit	2.30 Yuan/ton	
Hotels and Restaurants		0.90 Yuan/ton
Within the limit	1.80 Yuan/ton	
The first degree above the limit	2.30 Yuan/ton	
The second degree above the limit	2.90 Yuan/ton	
Water for infrastructure	2.60 Yuan/ton	
Water used in the boats	3.00 Yuan/ton	
Level-price water	1.43 Yuan/ton	
Original water (for the Sifang airplane and Chengyang District	1.00 Yuan/ton	

# **Table Four: Fee for the Gas**

Residence	2.42Yuan/m3
Enterprises	2.88 Yuan/m3
Hotels and Restaurants	3.60 Yuan/m3

# **Table Five: Fee for Heating**

The adjustment of the heating fee in the hour districts of Qingdao

		Starting from Jan1.2005		
Charging Wa	ys and kinds of the user	Price after	0	
Onarging wa		•	the	the
		adjustment	adjustment	
	Residence Users (Yua	24	20%	
	Other kinds of users (Y	24	13.4%	
	According volumes	For units		
	(Yuan/per ton stream)	supplying for others	113	-
	,	Others	123	8.3%
		For units supplying for others	45	-
		Others	49	8.7%

Notes: the price for the residence includes 0.75 Yuan maintenance fee

The charge on the heating in different periods of 2004-2005 in the four districts of Qigndao

Qigndao		1					-	
Period	s	Nov 16,2004—Dec		Jan 1,2005—Apr				
Varieties o	f users	31,20	04		5,20	005		
	Kinds before adjustment	Day s	Price(Yu an/m²)	Relativ e price (Yuan/ m²)	D ay s	Price(Yu an/m²)	Relati ve price (Yuan /m²)	
Residenc e users (charge on the	Residence users (charge on the using areas)	46	20.00	7.02	95	24.00	24.00	16.17
construct ion areas)	Platform users (charge on the construction areas)	46	19.84	6.97	93			
	Army, school, hospital (charge on the construction areas)	46	20.70	7.27				
	Enterprises (charge on the construction areas)	46	21.62	7.59				

# Table Six: Utilization of Foreign Funds in the National-Level Economic Development Zone of Shandong Province

	as of Jan 8 <sup>th</sup> ,2004						
	, 22 0. 04 0 ,			Units of fund: ten thousand Dollars			
NO	Names of the	Projects		Utilizatio contracts	n in		n in reality
	development zones	Number	Compared with last year (%)	amount	Compared with last year (%)	amount	Compared with last year (%)
	Total	320	22.6	153189	8.3	110205	55.9
1	Economic and technology Development zone of Qingdao	76	-15.6	93198	31.8	78249	86.2
2	Economic and technology Development zone of Yantai	99	35.6	30882	-14.9	11783	-22.7
3	Economic and technology Development zone of Weihai	70	59.1	18559	-1.8	11709	80.9
4	Export and Processing Zone of Weihai	8	-20	3449	-40.7	4346	53
5	Duty-free Zone of Qingdao	57	58.3	5171	-13.5	2751	-7.6
6	Export and Processing Zone of Yantai	10	25	1930	-47.4	1367	19.7

	as of Jan 8 <sup>th</sup> ,	s of Jan 8 <sup>th</sup> , 2004					
			und: ten thou	lars			
No	Names of					Import	T
	the	Total am	ount	Foreign 6	enterprises	Amount	Compared
	development zones	Amount	Compared with last year	Amount	Compared with last year		with last year
	Total	207896	45.7	172216	70	245679	58.3
1	Economic and technology Development zone of Qingdao	81823	40.4	58924	112.3	56709	74.9
2	Economic and technology Development zone of Yantai	57707	44.5	54373	48.3	99754	36.7
3	Duty-free zone of Qingdao	276941	53.7	18818	75.5	52391	85.3
4	Economic and technology Development zone of Weihai	25600	40.7	25100	39.4	21000	61.5
5	Export and Processing Zone of Weihai	9197	60.1	9197	60.1	10633	96
6	Export and Processing Zone of Yantai	5878	131.2	5804	139.1	5192	65.1

Table Seven: The Exports and Imports of the Development Zones

Table Eight: Utilization of Foreign Funds in the Provincial-Level Economic Development Zone of Shandong Province

	as of Jan 8 <sup>th</sup> ,	2004					
	·			Units of	fund: ten tho	usand Do	llars
NO	Names of the	Projects		Utilizatio contracts			n in reality
	development zones	Number	Compared with last year (%)	amount	Compared with last year (%)	amount	Compared with last year (%)
	Total	270	53.4	131719	72.8	77053	118.7
1	Economic and technology Development zone of Zouping	1	-80	8375	751.1	8375	1978.2
2	Economic and technology Development zone of Rizhao	19	26.7	7836	-10.1	718	57.9
3	Economic and technology Development zone of Rongcheng	29	81.3	10480	115.1	6840	358.8
4	Economic and technology Development zone of Zibo	35	-18.6	13135	56.8	5607	76.5
5	Economic and technology Development zone of Jimo	21	16.7	13270	107.3	5200	44.6
6	Economic and technology Development zone of Wendeng	28	133.3	8990	304	5186	277.6
7	Economic and technology Development zone of Laishan	42		13500		5156	
8	Economic and	12	9.1	5994	52.7	5027	104.9

	technology Development zone of Moping						
9	Economic and technology Development zone of Huantai	8	33.3	5946	44.7	4095	38.3
10	Economic and technology Development zone of Longkou	17	13.3	10137	-10	3844	0.4
11	Economic and technology Development zone of Jiaozhou	18	5.9	7290	6.8	3692	43.1
12	Economic and technology Development zone of Angiu	11	450	4830	643.1	3600	554.5
13	Economic and technology Development zone of Dongying	7	-36.4	6044	132	3483	38.4
14	Economic and technology Development zone of Laixi	9		3911	-44	3296	30.3
15	Economic and technology Development zone of Jiaonan	10	42.9	10961	62.6	3270	12.8
16	Economic and technology Development zone of Qihe	3	-25	1020	34.4	3225	848.5

# )The Aggregation of Haier in Qingdao

During the course of the development, large Enterprise groups is the most important characteristic of the industrial economy of Qingtao, whose feature is the centralization of the powerful industries, such as Haier, and it also give a strong support to the development of Qingdao's economy and society. The industrial chain and the industry's system that came into being around large enterprises and the advantageous industries and enterprises groups is turning to be an important part of Qingdao's Urban competitiveness. Such progress goes as follows: at the beginning, they purse some basic assembling work and technical processing, then they turn their attention to key components and key technology, such as High-clear liquid display, Circuit board of the digital television, computer motherboard, advanced Electrical machinery and compressor and some other electronic components, further more they also take a large percentage in the complete machine. Such promotion arose the centralization of some organizations that major in the production and R&D of the basic and peripheral materials and components for military uses. It also causes some colleges and institutes to enter the concerning fields. And finally the industrial group comes into being.

In the Qingdao Economic Development Zone and bonded area, Electrical home appliances manufacturing has reached a quite large scale, and the level of the centralization is very rare in the world. Haier, Hisense and Aucma are the largest electrical home appliances producers in Qingdao .Now their industrial park have exceeded 3 kms, which turned to be a city of electrical home appliances. In 2002 the GDP of the electrical home appliances weighted more than half of that of the whole Qingdao city.

As the production base for the electrical home appliances, Qingdao has modern production lines, further more, it is also the R&D and production base for the high-technology product. It can produce a series of high-technology products, such as computer, communication apparatus, new resources, AI controlling systems etc. In addition to that, in this area there are

many projects invested by electrical home appliances producers famous in the world, many of which are cooperation with local electrical home appliances producers, such as cooperation between Haier with Sanyo, LG, Mitsubishi in capital and technical field.

The large electrical home appliances production base also causes a great development of the accessories industry. To present, around the three large electrical home appliances producers, there are more than 40 small and medium-sized enterprises that pursue accessories such as electrical machinery, cable, whose cooperation ability is keeping improving and industry is keeping prolonging.

# 1. The Characteristics of the Aggregation of Haier Electric Devices

The predecessor of Haier is a collective-owned enterprise that produced electronic devices. Its major product is a kind of electronic hair-dryer for home uses. In 1984, with the support of local government, it expanded to be Qingdao refrigerator enterprise, producing qingdao –libohaier refrigerator with the cooperation of a Germany company .In 1991 with the help of the local government, Qingdao refrigerator enterprise, Qingdao air-conditioner enterprise, Qingdao icebox enterprises incorporated into Hair group. Now, Haier group covers a large series of electrical home appliances including refrigerator, air-conditioner, washing machine, color-television, mobile phone.

It is based on all kinds of industrial zones. The new economy has a trend, that is industry group may start and develop in the industrial park. The industrial park has several advantages for investment, such as location, business environment with low risk, world-class fundamental devices, human resources and living environments. Those factors decrease the cost and risk of carrying out of a business so that it causes a centralization of those industries. So that the industrial park must be developed for the aim of centralization of industry.

Hair group has several industrial parks with different advantages

#### Haier Industrial Park

Haier industrial park have three features, those are advanced products ,modern management and green environment The park was founded in 1995 with a total investment of 2.5billion rmb. Haier industrial park is the largest base for the R&D and production for the electrical home appliances. In there is home office of Haier group and the Haier central research center. The industrial production scale goes as follows: 2000000 air-conditioner, 800000 cylinder washing machine and 5000000 mobile phones. In 2001, Haier industrial park's income reached 15billiion RMB, accounting for 25percet in the Haier's global income.

Haier (Jiao zhou ) International Industrial Park

Haier (Jiao zhou ) International industrial park was founded since July 2000 .Its investment scale reached 1 billion. It is another internationalized industrial park and base for the R&D and production of spare parts of Haier group. By the end of 2001, the investment on Haier (Jiao zhou ) International industrial park added up to 480 billion RMB, and the income reached 400billion RMB. If the whole construction is finished there will be 80billion us dollar can be used and income will reach 10billion RMB

# Haier Development Zone Industrial Park

The investment on this park is planned to be 3 billion RMB, and it is positioned to aim at international market and produce advanced products of world level and finally be the base for the export of electronic home appliances. This park is a part of Haier' global strategy, which is that for the products of Haier, 1/3 of Haier's products will be produced and sold in the civil, 1/3 of them will be produced in civil and sold in foreign market, 1/3 will be produced and sold in foreign land. Such strategy will have a result of high speed, large scale and high profit.

Haier Information Technology Industrial Park

Haier IT Industrial Park was founded in 1998 and came into being in 1999. This park represents Haier's strategy of entering into IT filed.

#### (3) The cultural Network of the group with characteristic of innovation

Haier has formed its own unique innovative corporate culture in the course of its own development. The slope spheroid management theory of Haier and the management idea that pursuing more outstanding than maintaining what has achieved are two typical examples. They respect work, serve the motherland pursue being outstanding. The management mode that everything is finished everyday and everyday is better is another example. The novel corporate culture makes Haier have enormous strength and develop into international known brand. Moreover, the overflowing effect of electronic electrical home appliances collecting group helps form the culture network. Take Mr. Qiu, director of the Huarun Electronics Co., Ltd for example. Though the company has a short history of four years, the company's annual output is rising every year, reaching 173 million Yuan in 2002. As an electronic spare part sub-supplier of Haier, the growth of is undoubtedly from Haier. However, Mr. Qiu thinks that flourishing upward enterprise is more important. He says," Having Cooperated with Haier for a long time, my company has been greatly effected by Haier, especially in the fields of speed, innovation, SBU. Haier not only puts up the platform of wealth for our enterprises, but also puts up the platform of a creation success."

# 2. The Forming and Development of the Haier Household Electrical Appliances Industry

In the area of Qingdao, Haier Group is an anchor firm. This key enterprise derives, innovates and becomes "the touching factor "of the area of Qingdao. It attracts enterprises of raw materials, spare part, production and auxiliary products. Together with the upstream, middle, and downstream enterprises, they form large- scale production, producing strong

overflowing effect to push the economic development of the area greatly. Haier Group' predecessor is Qingdao General Refrigerator Factory, which was established in 1984. In 1991, the Qindao Haier Group was established, including Qingdao General Refrigerator Factory, Qingdao air-conditioner factory, Qingdao electric freezer general factory and microwave electrical apparatus factory. In 1992, Qindao Haier Group was renamed as Haier Group formally, which moved its headquarters to the Haier Industrial Park in 1995.

As a pilot enterprise to develop industry chain, after the high growth of the 1990s, the industrial sales income of Haier Group is up to 16,200 million Yuan by 1998, increased by 50% compared with 1997. Haier Group has started an undertaking and kept annual average 82.8% of the growth rate over the past 14 years, occupying the first place of electrical home appliances trade domestically. At present, Haier products include 96 main kinds of 15100 more than specification product group of variety such as white domestic appliances black domestic appliances, cream-colored electrical home appliances, developing from only one refrigerator product of type in 1984. The products of Haier gain more and more consumers with high quality and individualized design. On the domestic market, the market share of the four major products of Haier, refrigerator, freezer, air conditioner, washing machine, is up to about 30%. In 2004, global turnover of Haier reaches 100 billion Yuan. In 2004, Haier is regarded the most valuable brand of China again, with a value of 61,600 million Yuan. On January 31, 2004 Haier is the only one in China selected by the one of the world five major brand appraisal agencies as one of the "world'100 most influential brands", ranking the 95th.In 2003, Haier gets permission to be in charge of making four national standards, indicating Haier has already turned engineering level competition, patent competition into standard competition.

At domestic market, according to the statistics of ZhongYikang Company, Haier is qualified first brand of China and the whole share on the Chinese electrical home

appliances market of Haier has already been up to 21%, leading the rival greatly. Haier is in the monopoly position on the white domestic appliances market with a market share 34%, already exceeding the line internationally acknowledged as monopoly greatly. Haier catches up from behind on the small electrical home appliances market: Haier little electrical home appliances market share 14%. At the same time, the Haier Group has 30,000 staff, offering the work position to 50,000 people in Qingdao, to more than 300,000 people in the whole country.

In the international market, at present, Haier set up a network with international competitiveness: as the world design network, marketing and service network. Now it has 18 design centers and 10 industrialized countries (2 are abroad, one in the USA and the other in Pakistan; 8 are in the country. 5 among them are in Qingdao; others are in Hefei, Dalian, Wuhan. There are 22 overseas factories and manufacture bases). There are 58800 sites of marketing, 11976 sites of service. Haier products have entered 12 of Europe 15 large chain stores and the top ten U.S.A. heavy chain stores. So far, the group has achieved the goal of "design, production and sale as a whole" as in our own country. Of all the parks, the largest one is in the south part of the USA. In March 2000, Haier refrigerators produced in USA enter American families. AHAM statistics show that on volume of 230-280 liters of refrigerators market in U.S.A., the refrigerator of Haier accounts for 35% of the market share. According to the global authority EUROMONITOR latest investigation, Haier Group ranks the fifth among global white electric apparatus manufacturers at present in terms of company's sales volumes, and Haier rises to the second largest white domestic appliances brand in the world according to the sales volume of the brand. With its promotion of internationalization strategy, Haier has developed its relation with the internationally famous enterprises from competition to multicooperation. On January 8 and February 20, 2002, it established relations with Japanese Sanyo and Taiwan sound treasure

group respectively to realize that mutual supplement with each other's advantages, resource sharing, and win-win cooperation.

So far, it has already constructed and built up a strong industry platform. In 1998, raw materials alone supplying enterprises are up to more than 2200, as if a huge industry's kingdom. Meanwhile, relying on this strong industry platform, Haier was in the leading status in the group and have the rights to say. Just because of this, Haier could reinvent the group on the idea that industry-collecting group must be outstanding enterprises collecting group. Adopting the resource strategy of endogens, the group reinvents the business procedure based on market chain to form the regional competition advantages. On one hand, the group tries to gain the market network advantages, form intact logistics procedure system and make large-scale production and enterprise's external large-scale production inside enterprises merge. On the other hand, the group tries to gain the technological innovation advantages. In order to satisfy the decreasing demand of the users, the enterprises in the" market chain" with Haier as center must promote the technological innovation level of the products as a whole.

With Haier's own enlargement and procedure, only after three years, the number of the Haier electrical home appliances industry group dropped by a wide margin, from 2200 to 721, while the quality is promoted by a wide margin. Among the 721 enterprises, 59 are world 500 top enterprises. Meanwhile, in the upper reaches of industry chain, Haier and the sub-suppliers break the traditional buying and selling relation, and many suppliers set up the factories near Haier. At present, more than 20 sub-suppliers like Sanyo compressor gather the Haier international industrialized zone in Jiaozhou. To the joy of the people, the internationalized sub-suppliers promote the ability of spare part of electrical home appliances in the Shandong Peninsula. Among Haier industry optimization process of chain, one invisible industry economic zone gradually takes the shape with Qingdao as source.

The upgrade of the spare part of manufacturing industry is only a part, the funds flow, talents flow and the management ideas directly or indirectly influence a lot of aspects of economic construction of Qingdao and even Shandong Peninsula.

Collection group melts and can not only guarantee the leading position of industry's technology in the fields of electrical home appliances of Qingdao, but also increase the technological contents of the products and keep its own development advantages. What's more important, it has developed the manufacturing industry chain of Qingdao and even of the Shandong Peninsula. The whole Qingdao and even peninsula manufacturing industry will put up this" express" going to this high-quality industry chain.

In 2001, the gross output value of the electronics and information industries in Shandong Peninsula is 117,855 million Yuan, accounting for 8.68% of that of the whole country. The total profits of the electronics and information industries in Shandong Peninsula are 2,728 million Yuan, accounting for 5.58% of that of the whole country. Details are in the following forms:

Table Nine: the indices of electronics and information industries around The Sea Bo in 2001

	Total industrial output value (Yuan)	l	Sales	Percentage in the whole country		Percentage in the whole country
Beijing	1092.8	8.05%	810.1	9.83%	42.10	8.61%
Tianjin	940.28	6.93%	712.7	8.65%	80.00	16.36%
Hebei Province	120.09	0.88%	77.81	0.94%	5.44	1.11%
Liaoning Province	401.05	2.95%	236.85	2.88%	7.03	1.44%
Shandong Province	1178.55	8.68%	734.84	8.92%	27.28	5.58%
Total	3732.77	27.50%	2572.3	31.23%	161.85	33.10%

# 3. Related firms (take the Shengbo Group of Taiwan for example)

In 1999, Haier Group set up a new department for advancing logistics. As an important link of Haier's Business Process Re-engineering (BPR), the logistics reforming starts according to the principle of selecting the superior and eliminate the inferior, and Haier optimize the existing network of suppliers in the world through internet—make international and professional enterprise Haier's suppliers and eliminate the suppliers not up to standard. Thereupon the quantity of supplier to reduce from more than 2,200 to 721, but quality is promoted greatly. Among present suppliers, there are 59 included in the world 500 top enterprises. From table 10 it can be found that in Qingdao, there are more than 40 affiliated factories producing accessories for Haier Group. Meanwhile, in the upper reaches of industry chain, Haier and suppliers break the traditional "buying and selling" relation, and some suppliers set up the factory nearby Haier, participate in the product design of Haier directly and set up the related industrialized area. Haier international industrialized park of Jiaozhou has already gathered more than 20 internationalized suppliers at present including Sanyo compressor, Emerson electrical machinery, and DSC electronics and so on. (See table ten in details). The big enterprise and great famous-brand effect of Haier, has attracted enterprises from upper reaches to backward position in industry chain to set up factories in Qingdao and the electrical home appliances industry's cluster of Qingdao has being formed gradually, which has improved not only the producing ability of the accessories of Qingdao, but also that of the whole Shandong Peninsula.

On February 21, 2005, Sampo group of Taiwan and Haier Group will finish the signing ceremony in Hong Kong for establishing the overall cooperation relation in the future, which includes the cooperation in producing the air conditioning compressor. Sampo invest 20 million dollars in initial stage and build an air conditioning compressor factory of 2 million-

set outputs per year in Qingdao. In two to three years, the outputs will be raised to 5 million, for Haier to use mainly. It is estimated that the total compressor outputs in China of Sampo Group will rise from more than 6 million this year to 10 million the year after next, and the annual outputs will exceed that of Hitachi for the first time. Thus Sampo Group will become the biggest OEM factory of compressor in the world.

Why Sampo group choose Haier to set up the intercoastal heaviest alliance of information, communication and electrical home appliances by way of resource sharing? There are two reasons mainly. Firstly, Haier occupy leading position of the electrical home appliances industry of the main land. The global turnover was 60,200 million RMB last year and Haier is the ninth major group of global electrical home appliances. Among all manufacturers of white home appliances (refrigerator, washing machine, air conditioner, etc.) in the world, Haier ranks the sixth, after ranking the big factory of Sharp, Toshiba, before Hitachi. The electrical home appliances of Haier occupy 21% of China's market share (see table 11), nearly in the monopoly position on the national market of white home appliances. Through the cooperation with Haier, both sides expect to have a collaborative project of 100 to 300 million dollars in three years, and then it is estimated that Sampo group's business income will increase from 1,400 million dollars per year to more than 2,000 million per year. Thus, economy of scale is a key reason for Sampo group of Taiwan to set up the factory in Qingdao—the site where the general headquarters of Haier is located.

On the other hand, the supply of air conditioner compressor to domestic large-scale conditioner factory, at present, is mainly controlled by Japan and Korea enterprises such as Hitachi, Panasonic, Sanyo, Daikin, Mitsubishi, LG and so on. As the overall increasing degree of the compressor outputs is greatly lower than the growth of the domestic air conditioner production, it causes a short supply in the market of compressor. According to the estimation, a gap of 6 million will appear this year. In a situation that the compressor is in

short supply, the domestic air conditioner manufacturer is forced to adjust--some enterprises stop producing certain types of air conditioner and some would rather protect the export business because the profit of exporting air conditioners is greater than selling inside the country, which makes the domestic air conditioner market appear the status of partly unbalanced.

In order to get rid of the restriction of the upper reaches resources, the domestic air conditioner producers tend to enter into partnership and found the factory with the compressor giant too. For this aspect, Meidi is the first enterprise to take action. Meidi took over original partners' stock of air conditioner compressor producer "Toshiba-Wanjiale" (share proportion is 6:4) in 1999- 40% stock of "Toshiba-Wanjiale" from Wanjiale and 20% stock of "Toshiba-Wanjiale" from Toshiba. Then a new company of air conditioner compressor named "Meidi-Toshiba" is established, with 2 million compressors produced per year, and the production capability expands to nearly 5 million per year. And in the beginning of this April, Meidi has made an announcement that it will furnish funds of 38,450,000 to found a new joint-venture company with Toshiba, the core business of which is producing advanced compressor. The production capability can exceed 3 million per year and it makes the cost of Meidi air conditioner reduce greatly with compressors made by Meidi itself. According to the first quarter report of 2004, the gross profit rate of the air conditioner business for Meidi is up to 21. 49% and the gross profit rate of the compressor business is not low, up to 20. 90% and the gross profit rate of Haier in the same period is only 10. 74%. To change such a passive state, Haier Group make a decision of setting up a joint-venture company, which can produce 2 million cold air compressors per year, with Sampo Group--most heavy household appliances enterprise in Taiwan District.

#### 4. Factors of restricting development of Haier's industry cluster

(1) The development of transnational purchasing and regional logistics of Haier influences the development of Haier's industry cluster.

The raw materials that Haier buys every day are up to 260,000 kinds and in order to seek the best supplier, Haier utilizes the Internet to bid and purchase in the world. In 1999, Haier operated Business Process Re-engineering (BPR) and established the new department for advancing logistics. Thereupon the quantity of supplier to reduce from more than 2,200 to 721, but quality is promoted greatly. Among present suppliers, there are 59 included in the world 500 top enterprises. Procedure of Haier's Business Process Re-engineering (BPR) reflects informationization and networked of modern logistics service with "one flow three network". The "one flow" refers to the information flow of the order. To design the structure of the information system inside enterprise, it is vital to be according to the order flow. "Three networks", refer to global supply network, global delivery network and computer management network for Haier, which are the foundation and support of the logistics.

Through the logistics reform, Haier has achieved unification to purchase and reduces 5% of material cost every year. Unifying the storage, the slash goods and materials are reduced by 90%, the fund for stock reduces by 63%. All purchasing orders are assigned through Internet, so that the average purchasing cycle is reduced from 10 days to 3 days and 20% of total payment is processed on line. The integrated supply chain management has been implemented, which makes the cycle to assign the order cut from more than 7 days to within 1 hour. Meanwhile, the response speed of the order is shortened from 36 days to less than 10 days through conformity.

The logistics integration not only enables Haier to purchase the high-quality accessory, have also reduces the cost of transportation greatly. It has brought the enormous economic

benefits to Haier. The purchasing cost reduced in 1999 was up to 500 million Yuan and the number of 2001 was 1,000 million Yuan. Nevertheless, the global Internet purchase of Haier will affect the scale of the electrical home appliances industry's cluster of Qingdao to a certain extent.

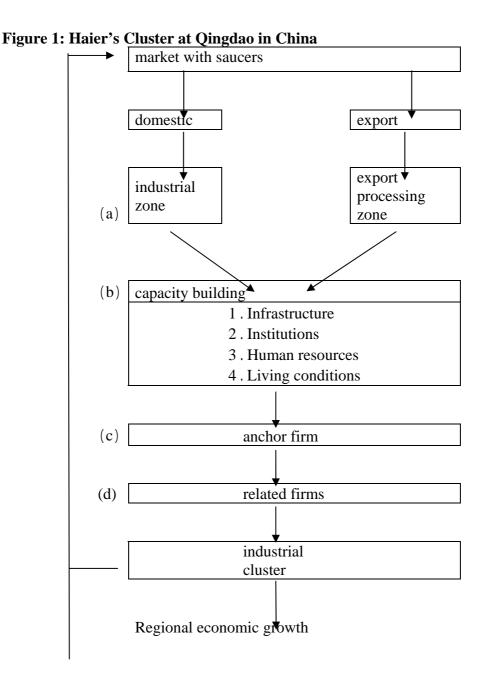
(2) In the value chain, the manufacturer of the electrical home appliances is in position of low income, low rate of return on investment and the relatively high cost to build up the factory. It is a negative factor in the development of industry cluster.

The emergence and development model of the electrical home appliances industry cluster of Haier belongs to endogeny industry gathering. The majority is located in the position of processing, assembling in industry's value chain with low income. Depend on producing and assembling, the scale of enterprise expands and the centralized benefit will come into force. There are few enterprises focusing on the aspect with high centralized benefit including research-development and sale. There is lack of original high-tech products in industry cluster of Haier and profit ratio is obviously less than the industry cluster of other areas. For instance, in Suzhou, the rate of return on investment of advanced electronic industry is generally in 25-50%, and the number of the industry of the accessory and part is about 25%. However the rate of return on investment of electrical home appliances industry in Qingdao is generally in 5-10%, the industry of the accessory and part is generally below 5%. So there is lack of hierarchy and industry structure in the area distribution, and vertical and specialized ability to supply accessories and parts. The industry cluster has not reached the status of "Japan and Korea in the south, southern Jiangsu in the west, to Central China in the north", which will bring industry gathering and investment. Without scientific and technological industries gathering, around "three big" (big enterprise, big project, big base) there are relevant industries' gathering, related function district of products and domestic medium and small enterprises producing accessory and part. Under this circumstance, a large

quantity of accessories and parts cannot be supplied by local enterprise, and the majority of products are still produced by <u>SDK</u>. The matching rate of products is relatively low and the <u>matching rate of accessories and parts</u> is less than 20%. And the main suppliers of Haier are distributed in Province Zhejiang, Province Jiangsu, etc. Even some key parts are imported from abroad mainly. So all these factors influence the forming rate and scale of industry cluster of the electrical home appliances of Haier.

# **Conclusion**

We have built a framework of a flowchart approach to industrial cluster policy and applied it to Haier's cluster in Qingdao. We proposed that four factors: (a) market and industrial zone, (b) capacity building, (c) anchor firms, and (d) related firms are key factors to forming industrial clusters in implementing industrial cluster policy. Capacity building means facilitation of physical infrastructure, institutional reform, human resource development, and preparation of living conditions. Institution reforms include one stop service and deregulation of investment procedures. We applied a prototype model of flowchart approach to Haier's cluster in Qingdao. The flow is as follows:



First of all, on the basis of a public-owned enterprise and under the guidance of government, Haier becomes an international famous-brand enterprise through endogenous mode and produces economy of scale and effect of <u>culture overflow</u> of big enterprise, which can be considered as the condition to be a core enterprise. Secondly, under the influence of Haier, other relevant enterprises make an investment in Qingdao and set up the factory, for instance Sanyo electrical machinery, Mitsubishi Heavy Industries etc. With Sampo group of

Taiwan as an example in the article, it can be proved that economy of scale is the key reason that relevant enterprises join Haier's industry cluster.

This article has been summarized in fig.1. In the case of Qingdao Haier, it can be seen that Haier is indigenous enterprises in Qingdao. Its growth mode is different from those industry clusters that depend on introducing foreign investment and it is an endogenous type of industry cluster mode. Its product market spread from domestic range to foreign countries. Qingdao has the condition of Saucers suitable for building the factory. (a) There are four national industrial parks in Qingdao, five provincial industrial parks. Haier has set up four industrial parks in Qingdao oneself, including the 49-hectare Haier Industrial Park. The member of the world 500 top enterprises, Sanyo electrical machinery, Mitsubishi Heavy Industries etc, set up the factory in Haier Industrial Park. (b) Qingdao can provide the fine port as the infrastructure in capacity building. The throughput of 2003 exceeds 140 million tons, more than 70% of which are foreign trade goods. The throughput of foreign trade goes beyond 100 million tons and the exact number is 102,340,000 tons that increases by 24.4% compared with the same period of last year. The Qingdao port has become the second port in China that can reach 100-million-ton throughput of foreign trade. And the throughput of the container breaks through 4 million TEU and the exact number is 4,238,000 TEU, which make Qingdao port rank the 14th of world top container port. Totally, Qingdao port is effective in forming an industrial cluster. And the expressway, railways, land transportation of Qingdao are being developed very fast and it will meet the condition of Capacity building. In addition Qingdao can offer 100,000 graduates for enterprises every year, also satisfying a condition of Capacity building. (c) An anchor firm for a cluster in Qingdao. With the success of strypped-down of Haier Group, Haier has occupied the leading status of the domestic electrical home appliances market gradually, holding 34% of the market share on the white domestic appliances market. Haier put forward the internationalization strategy in 1998, which started the procedure of Haier's internationalization and globalization. In 2004, the global turnover of Haier reaches 60,200 million Yuan, thus Haier is qualified to regard as anchor firm. (d) The scale effect of Haier has not only promote the development of local relevant enterprises, but also has attracted such world 500 top enterprises as Sanyo, Emerson, etc to go to Qingdao to make the investment and build the factory, Haier helped local government introduce funds of more than 4 billion Yuan. All these have greatly improved the supply capability of accessories and pars in Qingdao and even in the whole Shandong Peninsula and have driven the development of urban economy and regional economy.

But as Haier has executed Business Process Re-engineering (BPR) and utilizes "three networks"--global supply network, global delivery network and computer management network to purchase in the world, it has reduced the cost of transportation greatly. Hereupon the motility of enterprises to move to Qingdao has been weakened. In addition, most manufacturers of the electrical home appliances are in position of low income with low rate of return on investment, so it makes the cost of building the factory relatively high, which influences the scale and speed of Haier's industry cluster development.

Table Ten: The main sub-suppliers in Qingdao

Related firms	Established year	Products	Relationship with anchor firm
Qingdao Sanyang Electric Co., Ltd	Jan, 2001	Small-scale compressor	Technical assistance
Electric Co., Ltd. of Ai MoSheng (China)	Oct , 2001	Electrical machinery	Technical assistance
Electric apparatus Co., Ltd. of theMeigeer of Haier, (Qingdao)	Sep, 1998	Washing machine	Joint venture
Air conditioner Co., Ltd. of Haier of Mitsubishi Heavy Industries Ltd (Qingdao)	Aug, 1993	Shutting machine of air conditioner	Joint venture

Haier Yongshi Electric Co., Ltd. Of Qingdao	Dec, 1995	Washing machine	Joint venture
Qingdao Haiyongli Company	May, 2001	Electric apparatus, Integrated circuit	Joint venture
Haier Weicheng Electronic Plastic Products Co., Ltd.	July, 2001	Electronic plastic	Joint venture
Hongji The accurate copper managing Co., Ltd.	Aug, 2001	The accurate copper managing	Technical assistance
Haier Baihui Co., Ltd. (Qingdao)	July, 2000	Plastic, plastic products and Five metals mould	Joint venture
Haierfeng Printing Co., Ltd. Of Qingdao	May, 2000	Wrappings, printing technology	Joint venture
Haier New Material Co., Ltd. of Qingdao	July, 2001	Individualized engineering plastics and alloy material of high polymer	Wholly owned
Huarong Electronic Company	July, 2000	Electric apparatus	Joint venture
Hairun Electronic Co., Ltd. Of Qingdao	Apr, 2000	Electric apparatus,	Joint venture
Juxing Machinery Co., Ltd. Of Qingdao	June, 1998	Compressor	Joint venture
Haier Century Accurate Mould Co., Ltd. Of Qingdao	Aug, 2000	Accurate mould, an electron assembles, the circuit board	Joint venture
Haier Hongji Accurate Mould Co., Ltd. Of Qingdao	Dec, 2000	Electrical home appliances pipeline one, refrigeration fittings in common use	Joint venture
Haier Kaili Refrigeration Equipment Co., Ltd. Of Qingdao	Feb, 2001	Refrigeration equipment	Joint venture
Haier Digital Electronic Co., Ltd. Of Qingdao	Sep, 2003	Digital video products	Joint venture
Haier Mental Production Co., Ltd. Of Qingdao	Apr, 2000	Panel beating	Joint venture

Haier Mental		Panel beating	
Products Co., Ltd. Of Qingdao	Dec, 2001	mould	Joint venture
Haier Information Plastic Co., Ltd. Of Qingdao	June, 1999	Plastics products	Wholly owned
Haier Refrigerator Co., Ltd. Of Qingdao	Feb, 1996	Air conditioner, refrigeration equipment	Wholly owned
Haier Electronic Co., Ltd. Of Qingdao	Nov, 1998	Computers	Wholly owned
Haier Heath Home Electric Appliances Co., Ltd. Of Qingdao	Nov, 1998	Home electric appliances	Wholly owned
Haier Plastics Co., Ltd. Of Qingdao	May, 1996	Plastics	Wholly owned
Haier Kitchen Equipment Co., Ltd. Of Qingdao	May, 1996	Home electric appliances and Equipment in the kitchen	Wholly owned
Haier Equipment Management Co., Ltd. Of Qingdao	Jan, 2000	Electric apparatus, machinery	Wholly owned
Haier Communications Co., Ltd. Of Qingdao	Mar, 1999	Communications equipment	Wholly owned
Haier Plastic Steel Doors and Windows Co., Ltd. Of Qingdao	July, 1998	Plastic steel doors and windows	Wholly owned
Haier Cleaners Co., Ltd. Of Qingdao	Apr, 1997	Cleaners and polishes	Wholly owned
Haier Kitchen Equipment Co., Ltd. Of Qingdao	Apr, 1997	Kitchen electric equipment	Wholly owned
Haier Water Heater Co., Ltd. Of Qingdao	July, 1999	Water heater	Wholly owned
Haier Intelligent Technology Co., Ltd. Of Qingdao	Aug, 2000	Family intelligent robot	Wholly owned
Haier Dish Washer Co., Ltd. Of Qingdao	June, 1999	Dish washer, kitchen electric equipment	Wholly owned
Haier Special Ice Box Co., Ltd. Of Qingdao	Apr, 2000	Ice box	Wholly owned
Freezing Factory of the Haier Group	Sep, 1980	Parts of refrigerators	Wholly owned
Haier Conditioner Co., Ltd. Of Qingdao	Apr, 1999	Florida-free conditioner	Wholly owned
Haier Special Refrigerator Co., Ltd.	Dec, 1999	Florida-free refrigerator	Wholly owned

Of Qingdao				
Haier Ice Box Co., Ltd. Of Qingdao	Dec, 1995	Washing machine	Wholly owned	
Haier Special Stencil Plate Co., Ltd. Of Qingdao	Apr, 1999	Color membrane, colored stencil plate	Joint venture	
Haier Microwave Oven Co., Ltd. Of Qingdao	Dec, 1994	Microwave oven, water heater	Joint venture	
Haifu Rubber products Co., Ltd. Of Qingdao	Mar, 2000	Rubber products	Joint venture	
Yixing Plastics Co., Ltd. Of Qingdao	Oct, 2000	Plastics used in the projects	Joint venture	
Chengzhen Electronic Elements Products Co., Ltd. Of Qingdao	Nov, 2003	Electronic elements	Technical assistance	
Abet Electronic Co., Ltd. Of Qingdao	June, 2002	Electronic elements	Joint venture	
Aket Electronic Co., Ltd. Of Qingdao	Jan, 2002	Electronic elements	Technical assistance	
Xianyue Electronic Co., Ltd. Of Qingdao	May, 2002	Electric apparatus,	Technical assistance	
GuangYang Electronic Co., Ltd. Of Qingdao	June, 2002	Electronic elements	Technical assistance	
Dadong Electronic and New Technology Co., Ltd. Of Qingdao	May, 2002	Electronic elements	Technical assistance	
Hangjing Electronic Co., Ltd. Of Qingdao	July, 2002	Electronic elements	Joint venture	
Dongbang Electronic Co., Ltd. Of Qingdao	Sep, 2002	Electronic elements Products	Joint venture	
Grade Electronic Co., Ltd. Of Qingdao	Nov, 2002	Electronic elements Products	Technical assistance	
Yaxiya Electronic Co., Ltd. Of Qingdao	Aug, 2003	Electronic elements Products	Technical assistance	

Table Eleven: The production of the main electric devices in 2002

Table Eleve	n: The product	ion of the mai	n electric devic	es in 2002	
Regine	Household Refrigerators (10 000 units)	Air-	Household	Color	Micro-
		conditions	Washing	Television	
		for Room	Machines	Sets	computers (10 000)units
		(10 000	(10 000	(10	
		units)	units)	000)units	
Qingdao	518.2	433.1	408.6	593.2	
Shandong	420.55	358.73	358.64	450.09	43.63
Dailing	40.0	F F0	0.50		445.7
Beijing	16.2	5.56	8.52	70.07	415.7
Tianjin	19.14	121.62	0.88	76.35	0.9
Hebei	-	0.13	-	-	-
Shanxi	-	-	19.81	24.18	-
Inner	_	_	_	126.7	6.22
Mongolia				120.7	0.22
Liaoning	51.58	43.19	10.46	404.83	86.65
Jilin	1.21	5.44	4.85	41.88	0.03
Heilongjiang	10.76	-	-	15.8	4.38
Shanghai	35.97	217.57	95.92	137.02	75.25
Jiangsu	188.51	378.32	280.34	382.14	200.4
Zhejiang	33.31	361.37	376.02	46.34	5.78
Anhui	205.73	138.80	148.03	302.09	19.04
Fujian	-	-	-	226.62	174.25
Jiangxi	37.95	-	-	44.86	2.43
Henan	128.66	19.57	8.35	125.49	0.6
Hubei	-	97.2	68.88	0.09	2.23
Hunan	55.08	-	-	-	-
Guangdong	317.27	1323.66	162.16	1793.40	415.69
Guangxi	-	0.13	0.14	-	0.13

Chongqing	85.64	9.12	9.15	82.53	1.12
Sichuan	249.07	62.57	44.54	328.41	2.89
Guizhou	186.55	-	5.11	158.49	0.01
Yunnan	285.09	9.98	3.71	213.94	-
Shanxi	57.79	11.43	8.29	101.51	-
Gansu	91.58	15.28	7.53	54.75	6.2
Qinghai	3.6	5.26	1.03	77.29	-
Ningxia	9.59	-	7.16	75.09	-
Xinjiang	6.77	8.53	9.31	75.36	-
National	1599	3135	1595.76	5155	1464
total	1000	0100	1000.70	0100	1101