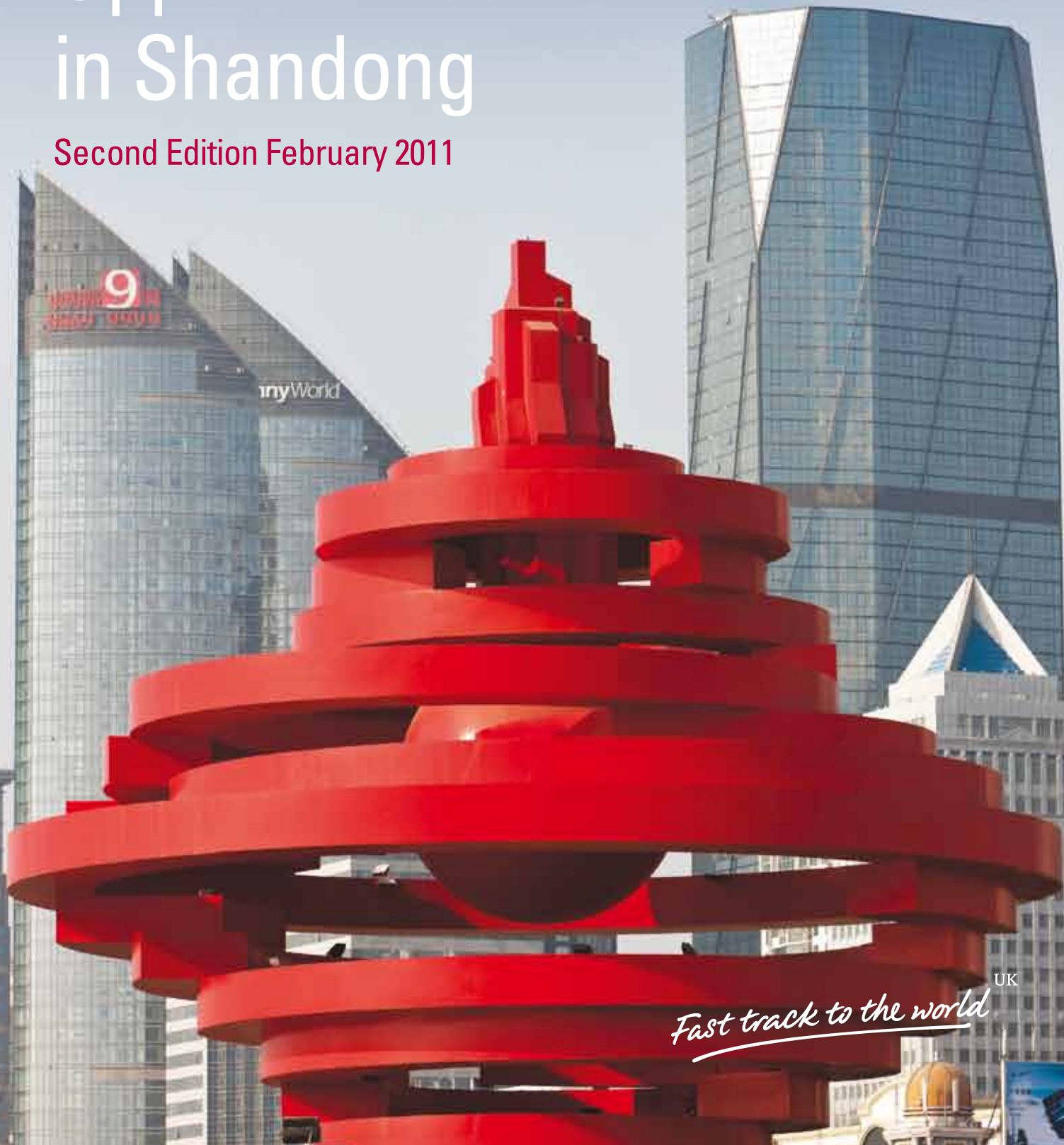




ACCESSING INTERNATIONAL MARKETS

# Opportunities in Shandong

Second Edition February 2011



UK  
*Fast track to the world*

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# 1

## Introduction

In 2008 the China-Britain Business Council (CBBC) and the University of Leeds conducted a major piece of research into the opportunities for UK businesses in China's regional cities. Delivered on behalf of UK Trade & Investment (UKTI), the research report shortlisted 35 cities across China as offering the best opportunities for UK companies and provided practical guidance on how to win business in them.\*

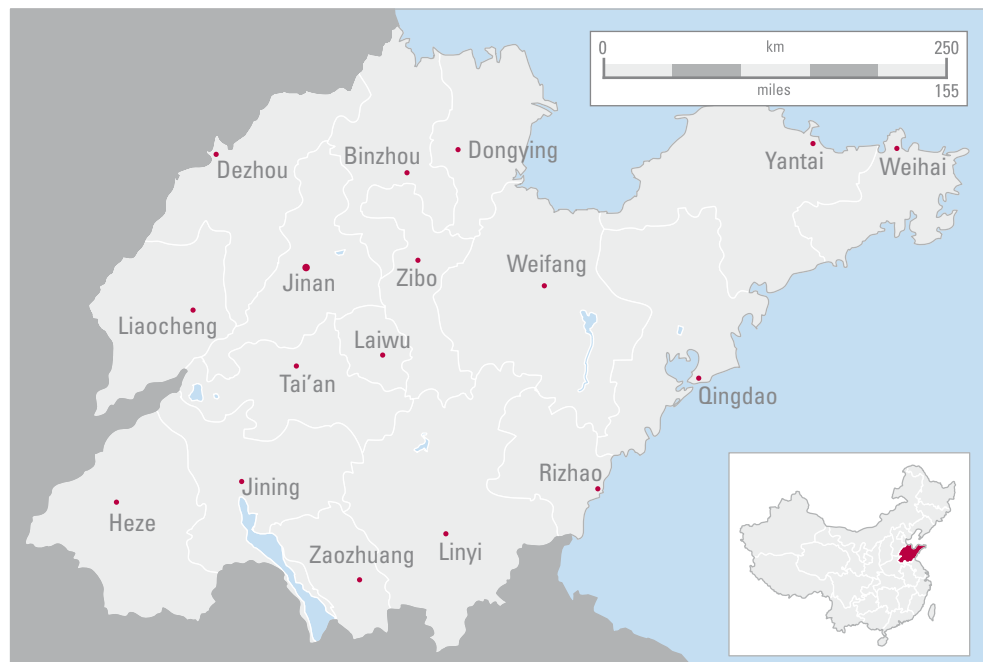
The 35 cities all offer their own individual strengths and opportunities – as well as challenges – but they also share certain key characteristics: rapid economic growth, relatively low input costs, large and developing consumer and industrial markets, strong local government support and favourable economic policy momentum.

Here we focus exclusively on Shandong Province which is China's third most populous province and also ranks third in order of GDP. Seven of the cities from the original report are in Shandong, providing the highest density of opportunity in a single province. These are Jinan, Dongying, Yantai, Weihai, Qingdao, Weifang and Zibo.

The interplay of these seven cities and other smaller ones within the province, its connections with the rest of China and international markets, and the diversity and dynamism of its economy, make it an especially promising destination for UK companies to investigate.

Our report highlights the trends and themes of Shandong's development, the reasons why Shandong will be attractive to a number of UK companies, and where the opportunities for British businesses lie. The research is based on the analysis of statistics and a range of government reports, as well as interviews with UK businesses, Chinese companies and government officials.

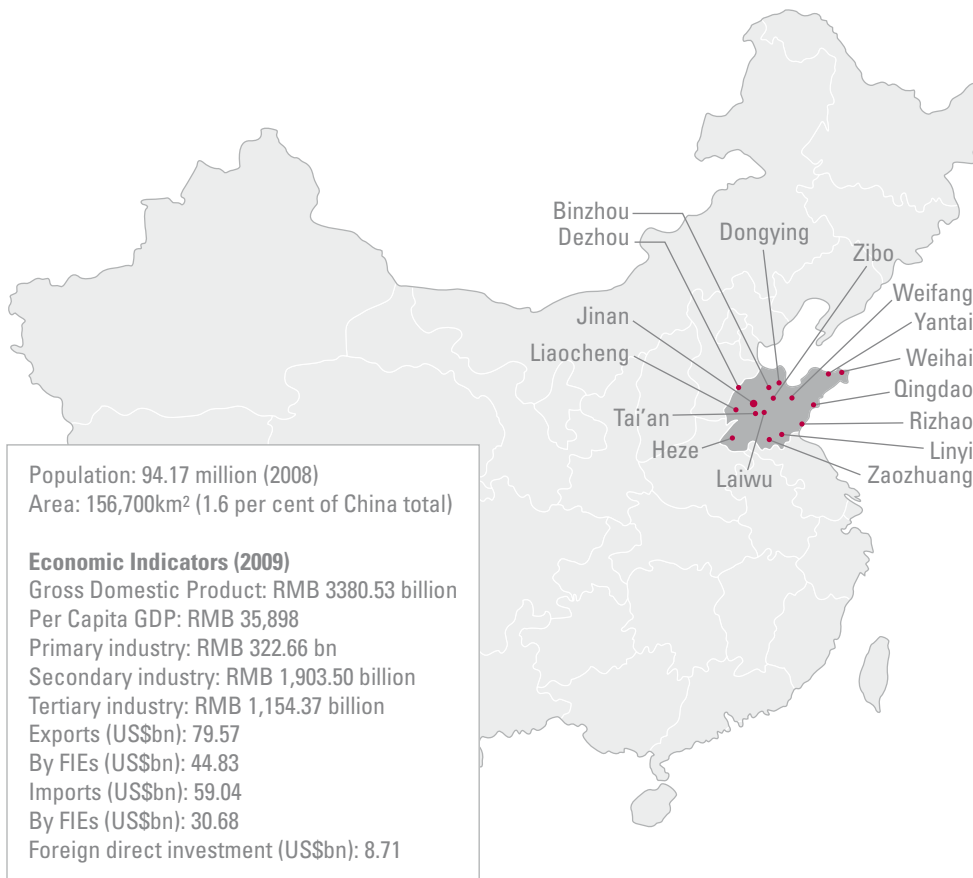
Here we focus exclusively on Shandong Province which is China's third most populous province and also ranks third in order of GDP.



\* The report "Opportunities for UK Businesses in China's Regional Cities", can be downloaded in full at <http://www.ukti.gov.uk/export/countries/asiapacific/foreast/china/chinacities.html>

# Shandong: An Overview

# 2



Located towards the north of China's eastern seaboard, Shandong's population of 94 million makes it the third most populous of China's provinces, with 50 per cent more residents than the UK. Its RMB 3.38 trillion economy is approximately a quarter of the UK's. GDP has grown at a continuous double digit rate for 18 years and expanded 11.9 per cent in 2009.

## Key Findings

### The Breadth of Opportunity

Substantial natural resources and fertile land make Shandong's primary industry the largest in China by output. Good transport links and reasonable input costs support its position as a leading manufacturing hub, second only to Guangdong and although the tertiary sector's share is smaller, the Government is addressing the shortfall and is keen to bring in expertise from overseas, presenting opportunities for UK companies.

Shandong's rapid development has given rise to a burgeoning consumer class. It has the second highest retail sales (RMB 1.038 trillion in 2008) of any province in China and is home to some of China's best-known brands, including the consumer and white goods manufacturers Haier and Hisense, and also Tsingtao Beer.

In short, all major industries are represented within Shandong and its broad range of industrial and commercial activity translates into considerable potential for UK businesses across many sectors.

# 2

## Sector Opportunities

There are particularly good opportunities in the following sectors:

- Food and agriculture
- Infrastructure
- Energy, minerals and chemicals
- Renewables and the environment
- Advanced engineering
- Professional services
- Retail and consumer goods

## Interlinked Regions

Our research has focused on the interplay between Shandong's regions, rather than on individual cities. In particular, the growing interconnectivity of developing "city clusters", backed by government policy, is giving UK companies the opportunity to access a wider geographical region, and in turn a larger share of Shandong's 94 million inhabitants, through presence in just one location.

Qingdao is the province's main economic centre and it is the base for many foreign companies based in Shandong, but the province has more to offer, including:

- Dongying – oil extraction and related chemical industries
- Jining – mining and washing of coal
- Weihai, Weifang, and Yantai – agricultural industries
- Liaocheng – textile industry
- Dezhou – solar energy
- Jinan – construction, heavy industry and the centre of government
- Laiwu – production of ferrous metals
- Zibo – heavy industry and key minerals including oil, gas, coal and metals

## Government Initiatives

In addition to the provincial Government's work, there are a range of national level government programmes focused on the province, which will help spur Shandong's development. As well as core infrastructure construction the Government is investing heavily and supporting industrial upgrades, energy conservation, agriculture, services and social programmes. They have also designated development zones and announced overarching plans for the development of "city clusters".

## Challenges

In addition to the opportunities, Shandong does present a number of challenges for UK companies. The time and resources needed to succeed should not be underestimated, business culture can be less westernised and red tape can be a hindrance for some. There is also a smaller talent pool than in more established centres like Beijing or Shanghai and human resources can be a problem. The quality of production can also be an issue. However, as this report shows, there are ways of mitigating or avoiding these problems and UK companies who have navigated them well have been extremely successful.

## Why Shandong?

### First-Mover Advantage

There are fewer foreign companies active in Shandong than in Guangdong, Zhejiang and Jiangsu, and significantly fewer than in Beijing and Shanghai. For this reason, competition from international companies is likely to be less intense, offering a “first-mover advantage”. Of course, many domestic companies will possess a strong management team, well established relationships and a good local sales network. However, in certain sectors the domestic competition will have less sophisticated operations and lack international experience. Competition in these cities will intensify over the next few years as domestic companies acquire more experience and technology, and more foreign companies enter the market. However, at this stage there is still a real opportunity to be one of the early movers and to establish a successful position before the competition increases.



### Access New Markets

Shandong's cities are seeing rapidly rising income levels and consumer purchasing power. In addition, as more businesses begin to move to regional cities, or extend their activities to encompass more diverse markets, existing and potential suppliers will need to consider following suit. With the number of rapidly growing cities in Shandong, the province's burgeoning wealth and the clusters of cities that can be served from a single location, the province is likely to be one of the leading destinations for business expansion.

# 2

## Low Costs

Shandong offers favourable input costs. Specifically, it offers some of the best-priced land on China's eastern seaboard and lower average wages than Zhejiang, Jiangsu and Guangdong. Proximity to the province's abundant natural resources will also lower costs in certain industries. What is more, there are considerable differences in costs within Shandong itself, providing a range of possible solutions to suit individual business needs. While securing experienced talent can be an issue, the low costs, natural resources and good infrastructure lend themselves well to a range of manufacturing activities.

## Location and Logistics

Shandong is well located on China's eastern seaboard between Jiangsu and Hebei provinces. Most cities are well connected with the rest of the province through the highway and rail network, which also extends to other regions of the country. Its long peninsula coastline is home to the four major ports of Qingdao, Rizhao, Weihai and Yantai allowing access to international markets.

"We were profitable in 2009 despite the global downturn and we are confident in the continued robust growth of the Chinese domestic market. The opportunities are immense in our sector in Shandong and China's other rapidly developing regions. Success will not come overnight and companies have to take a long term approach, working with the right partners and building a strong localised team."

**John McLean, Chairman, China Food Company Plc**

## Help is at Hand

UK Trade & Investment (UKTI) and the China-Britain Business Council (CBBC) are well placed to help you take advantage of the range of opportunities introduced in this report. If you would like to learn more about how we can help, please contact your local UKTI International Trade Team or the China-Britain Business Council.

## Useful links:

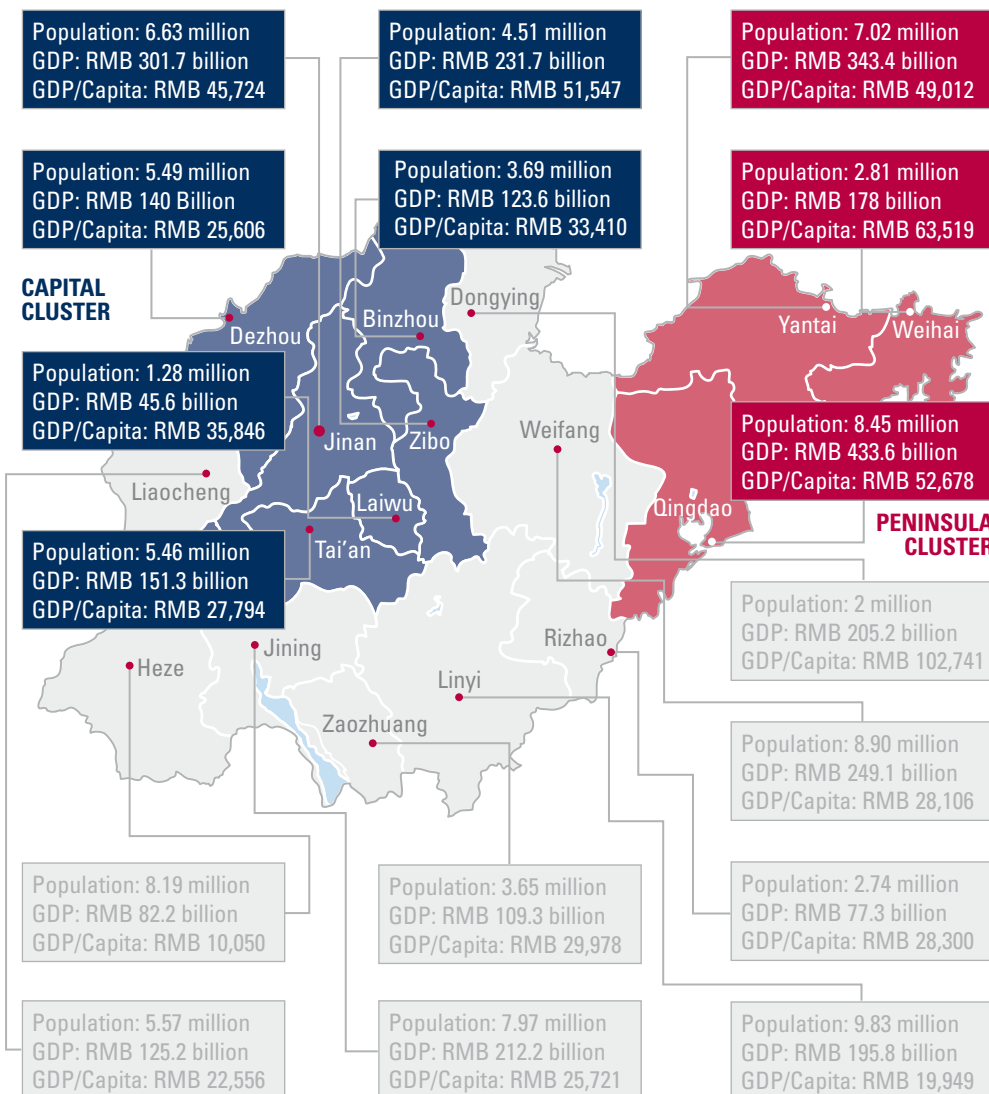
- UKTI International Trade Teams: <http://www.ukti.gov.uk/export/unitedkingdom>
- China-Britain Business Council: [www.cbcc.org](http://www.cbcc.org)
- British Diplomatic Posts in China: <http://ukinchina.fco.gov.uk/en/>
- British Chamber of Commerce in China: [www.britcham.org](http://www.britcham.org)
- China Business Guide: <http://www.ukti.gov.uk/export/countries/asiapacific/fareast/china/doingbusiness.html>

# Shandong's Sub-Regional Clusters

# 3

Shandong possesses a diverse economy and geography. One of the central planks of any market entry strategy is location and the range of options within Shandong offer businesses good scope for choice. The different cities within the province have different strengths, including: access to natural resources, low-cost land or labour, developed consumer markets, logistical connections, ease of doing business and quality of life.

Shandong has a total of 17 prefecture-level cities (which encompass both the city and the surrounding region). Despite their differences, these cities do have important similarities, providing a large degree of common ground in any strategy to tackle them. Indeed, rather than consider them individually, it can be useful to group them into “city clusters”.



Shandong's “city clusters” allow multiple cities to be serviced from one location. This provides cost-effective access to wider markets, without the need for additional investment in establishing or replicating your physical presence, sales, marketing, supply and distribution.

# 3

## The Peninsula and Capital Clusters

The Peninsula and Capital Clusters are the two principle city clusters in Shandong. The **“Peninsula Cluster”** in the east of the province encompasses the Jiaodong Peninsula, including the coastal cities of Qingdao, Weihai and Yantai. The Peninsula boasts the most advanced levels of industry, manufacturing, technology and infrastructure in the province, as well as the best human resources and a superior service sector. Qingdao, the province’s main economic centre is China’s second largest foreign trade port and the first-choice location for many international companies.



City clusters are specifically backed by government policy, which aims to encourage the cities within a cluster to benefit from their relative strengths and weaknesses in their interactions with each other. The Government has given particular recognition to the cluster of cities around Jinan, the provincial capital. This **“Capital Cluster”** includes the cities of Zibo, Tai’an, Laiwu, Dezhou and Binzhou in the central and western part of the province. Jinan is a major transport hub and has strong ferrous metal, heavy machinery, and construction industries.

In a recent study by McKinsey, (*Annual Consumer Report 2009*), Shandong is reported as China’s third largest “mega cluster” of cities (following the Beijing and Shanghai clusters), accounting for 9 per cent of China’s total GDP. Significantly, Shandong does not have a particular hub city which dominates economic contribution, but rather has a large number of growing urban centres, spread through the Peninsula and Capital clusters. It is therefore important for companies to carefully choose which city will act as their principal location and which will be outlying targets for expansion. Businesses will need to consider each city’s demographics, industrial structure and government policies when developing a regional strategy.

The Government intends to increase GDP in the Capital Cluster substantially by 2020, pushing its share of the provincial total to 50 per cent and increasing GDP per capita to as high as RMB 100,000.

Jinan and Tai'an have been designated as service focused, Zibo and Laiwu as centres for heavy base industries and Binzhou, Tai'an and Laiwu as areas to receive environmental improvement and protection. Within these allocations, there is a focus on creating modern manufacturing facilities and services that are competitive on a national scale. To support the cluster further, the North is linked to Tianjin and Beijing, the South to Shanghai and Nanjing and the East to the Jiaodong Peninsula.

Government development plans outline Jinan as the Capital Cluster's centre for rail, banking, politics, culture, teaching, education, finance and transport. The surrounding area is then divided into two rings. The first is a 40 mile broad ring which is particularly strong in resources, chemicals, light industry and agriculture including the areas of Jiyang, Shanghe, Pingyin and Qihe. Development in this ring is to continue in metalwork, cement and building materials, specialised agriculture and agricultural processing. The second ring includes Zibo, Liaocheng, Tai'an, Laiwu, Dezhou, and Binzhou where industrial infrastructure and operating machinery are to be the focus for development.

There are some stark contrasts between Shandong's two city clusters. The Government is keen to promote interaction and synergies between the two areas, which in many ways are complementary to each other. Although more economically advanced, the Peninsula Cluster lacks space for development, is short of certain natural resources, and has higher levels of competition; the Capital Cluster has available land for development and abundant natural resources, but needs better technology, capital, human resources and services.

The Government plans focus on how rapid development of the coastal region is to have a knock-on effect on the province's interior, particularly from the North and East, with a flow to the West. The North is to co-operate with other areas in the Bohai Rim including Tianjin and the Binhai area, and the South is to link with Jiangsu and Shanghai. The Capital Cluster will combine with the Peninsula Cluster and together they will account for 80 per cent of the province's population.

### **Government Development Projects**

In addition to these designated clusters, the national Government has announced several projects focused on Shandong, driving both further growth and exchange between cities and regions. Directives such as the "Development Plan of an Efficient Eco-Economic Zone in the Yellow River Delta" and the "Blue Shandong Peninsula Economic Zone" (blue refers to marine industries) will play an important part in the development of the province and the interplay between the cities that it encompasses. The emphasis on the Yellow River Delta will lead to more interconnections between the cities in this area, overlapping with the development of the Capital and Peninsula Clusters.

## The Yellow River Delta Plan

Instigated by the central Government, the plan outlines a total area of 10,000 sq miles in Shandong province chosen for ecological development and construction over the next ten years. The economic entity encompassed by the plan is much larger than just the plain surrounding the mouth of the Yellow River, and will include the prefectures Dongying, Binzhou, Weifang, Dezhou, Zibo and Yantai. Broken into two phases, the strategy delineates a total of RMB 1.5 trillion to be invested over the first five years with the aim of transforming social economic development and resource management into an efficient and ecological model. The second phase looks to promote the area to the forefront of the country's economy.

Whether the region, or Shandong province as a whole, will be able to meet such a task has yet to be seen, however, it will certainly act as a major driver for the development of the province's economy as a whole. It will encourage the spread of industry away from the Jiaodong peninsula (centred on Qingdao) to an area with much lower costs and ready access to natural materials. Used in the official title, efficient also implies a transformation of industrial structure, whereby greater emphasis will be laid on reducing the effects of heavy polluting industries, establishing well founded infrastructure, good public services and creating an official body for innovation – all of which look to provide business opportunities in key sectors.

The plan is likely to affect all areas of the economy, however, with a particular focus on ecology and efficiency, service industries and environmental protection, the plan will likely require the support of foreign industry.

## Development and Export Zones

By the end of June 2008 there were 155 development zones registered at provincial level. Of these, ten were also registered state level zones, three were state level economic and technology development zones, one was a bonded area and six were export processing zones. UK companies shouldn't overlook these state level export processing zones (Qingdao, Qingdao West Coast, Jinan, Weihai, Yantai and Weifang). Export processing zones are designated areas administered by customs (goods moving in and out of the zones are regarded as imports and exports).

Development zones are the main windows and areas of activity in Shandong's opening to the outside world. In 2007, the development zones' actual usage of foreign capital accounted for 53.8 per cent of the whole province while imports and exports reached US\$64.29 billion (52.4 per cent of the provincial total). The development zones' total tax revenue reached RMB 47.3 billion, a 30 per cent rise year-on-year. These development zones can offer an attractive environment for foreign companies, though some do have minimum investment levels, which could preclude SMEs from taking advantage. For example, the new development zone in Jiaozhou requires a minimum investment of US\$10 million. Not only may these zones offer centres appropriate for UK companies to establish operations, but they also offer a centralisation of Chinese companies who may be appropriate partners, particularly in the ten state level zones.

# Market Profile: Shandong's Economy

# 4

Perhaps the strongest attribute of the provincial economy is that it is diverse, large and particularly well founded in its ready access to natural resources and base industries. The province is represented in industries across all primary, secondary and tertiary sectors, with a notable dominance in oil, manufacturing, construction, mining and processing industries. A strong contribution from the secondary sector has been a common trend for the last nine years. It is important to note that definitions for economic sectors differ from those used in the UK the definitions are noted below, but most significant is that the mining of natural resources is categorised as secondary industry.

Industry Breakdown						
2008	Shandong	Shanghai	Jiangsu	Zhejiang	Guangdong	National
Primary industry	300 RMB bn 9.6%	11 RMB bn 0.8%	210 RMB bn 7%	110 RMB bn 5%	197 RMB bn 5.5%	3,547.7 RMB bn 10.58%
Secondary industry	1,770 RMB bn 57%	624 RMB bn 45.5%	1,666 RMB bn 55%	1,158 RMB bn 54%	1,840 RMB bn 51.5%	1,5695.8 RMB bn 46.8%
Tertiary industry	1,036 RMB bn 33.4%	735 RMB bn 53.6%	1,155 RMB bn 38%	881 RMB bn 41%	1,532 RMB bn 43%	1,4291.8 RMB bn 42.62%



# 4

Primary industry, referring to agriculture, forestry, animal husbandry and fishery, is strong. Shandong has China's largest primary industry by output, and this forms a much more significant proportion of the economy than in other areas of the east coast – almost double that of Zhejiang and Guangdong. This serves not just the province, but the wider China market, indeed, Shandong is Beijing's largest source of agricultural produce. Absolute production has increased dramatically in recent years, but the primary sector has seen its share of the province's GDP slip as the secondary sector has boomed.

Secondary industry referring to mining and quarrying (including the extraction of oil and gas), manufacturing, production and supply of electricity, water and gas, and construction forms the lion's share of the provincial economy. In 2008 secondary industry as a whole was second in the country, no doubt due to the province's abundant resources and large manufacturing and construction industries. Secondary industry has a larger share of Shandong's economy than it does in Jiangsu, Zhejiang or Guangdong.

Key Cities	Key Industries (by output value)
Qingdao	Electrical Machinery and Equipment (RMB 101 bn); General Purpose Machinery (RMB 64 bn); Processing of Food from Agricultural Products (RMB 62 bn); Transport Equipment (RMB 61 bn); Communication, Computer and Other Electronic Equipment (RMB 58 bn)
Yantai	Communication, Computer and Other Electronic Equipment (RMB 110 bn); Food Processing (RMB 82 bn); Manufacture & Processing of Non-ferrous Metals (RMB 77 bn); Chemical Raw Materials and Products (RMB 60 bn); Transport Equipment (RMB 57 bn)
Jinan	Manufacture and Processing of Ferrous Metals (RMB 72 bn); Construction (RMB 66 bn); Transport Equipment (RMB 60 bn); General Purpose Machinery (RMB 39 bn); Chemical Raw Materials and Products (RMB 26 bn)
Weifang	Chemical Raw Material and Products (RMB 69 bn); Textiles (RMB 62 bn); Food Processing (RMB 60 bn); Transport Equipment (RMB 44 bn); General Purpose Machinery (RMB 37 bn)
Zibo	Chemical Raw Materials and Products (RMB 91 bn); Manufacture of Non-metallic Mineral Products (RMB 88 bn); Processing of Petroleum, Coking and Nuclear Fuel (RMB 84 bn); Construction (RMB 34 bn); Manufacture and Processing of Ferrous Metals (RMB 30 bn)
Dongying	Extraction of Petroleum and Natural Gas (RMB 130 bn); Processing of Petroleum, Coking and Nuclear Fuel (RMB 72 bn); Chemical Raw Materials and Products (RMB 67 bn); Electrical Machinery and Equipment (RMB 30 bn); Textiles (RMB 30 bn)
Weihai	Food Processing (RMB 83 bn); Communication, Computer and Other Electronic Equipment (RMB 47 bn); Electrical Machinery and Equipment (RMB 35 bn); General Purpose Machinery (RMB 27 bn); Manufacture of Rubber (RMB 26 bn)



Manufacturing represented an astounding 80 per cent of overall output value in 2008, emphasising its role as the most vital section of Shandong's economy. Construction accounted for 11 per cent of Shandong's secondary industry, with mining making up 6 per cent and the production and supply of utilities 3 per cent. The manufacturing and processing industries are not limited to a few commercial areas but spread across various industries. The largest manufacturing areas are: chemicals, textiles, ferrous metals, non-ferrous metals, non-metallic minerals, white goods, communications equipment, machinery and electronics – food processing linked to the large primary sector should also not be overlooked. These activities are across the whole province, but UK companies' manufacturing bases are likely to be Qingdao, Yantai (particularly food processing), Zibo, Weifang or Jinan.

The province is a cradle for many national giants in light industry such as: Haier Electronics, Hisense Electronics, Tsingtao Beer, China Qinghai Motorcycles, Kongfujia Liquor and Weifang Kite. High-tech industries grew rapidly by 43.7 per cent in terms of gross output value to RMB 1,478 billion in 2007, accounting for 29.2 per cent of the province's total gross industrial output. In the same year, the NDRC published the "11th Five-Year Plan for High-Tech Industries", setting ICT, bio-tech, new materials, aerospace and aeronautics, high-tech services, new energy, marine and ocean technology, and the use of technology to upgrade traditional industries as priorities for development.

Despite this emphasis and strength, heavy industry has the larger share of output, and this is increasing. In 2003 heavy industry accounted for 55 per cent of total industrial output (with light industry the remaining 45 per cent). By 2008 this had increased to a 66 per cent share.

Tertiary industry in China refers to all other economic activities not included in primary or secondary industry. While the tertiary industry is a smaller percentage overall than in other provinces, it is growing rapidly and there will be a range of opportunities as it catches up with developments in other sectors. Although total output value figures are not available for the tertiary industry, it is assumed that technical services, tourism, transport, information services, retail and financial services accounted for the majority of output.

# 4

## State Owned Enterprises

State Owned Enterprises (SOEs) still play a large part in Shandong's economy, and state-owned assets are supervised and managed by the "State-owned Assets Supervision and Administration Commission" (SASAC). Shandong Iron and Steel Group, an SOE, is one of the top five steel producers in China, with an annual output of over 30 million tonnes of steel. Examples of other large SOEs with significant operations in Shandong include: China Shandong Group, Weichai Power, SEPCC Shandong Electric Power Construction Corp and Yanzhou Coal Mining Group.

Average wages are higher in SOEs (RMB 31,169) than the provincial average (RMB 26,404) and for foreign funded units (RMB 23,170). This, combined with a higher number of co-operative agreements with universities, means that SOEs will generally have access to the best talent.

SOEs are generally less efficient than private enterprises, however with government support, they can be more financially stable. Inefficient companies can become a drain on the state and so development initiatives have been outlined to address this, aiming to restructure SOEs in the province. This will often mean increased privatisation, listing and merger and acquisition activity.

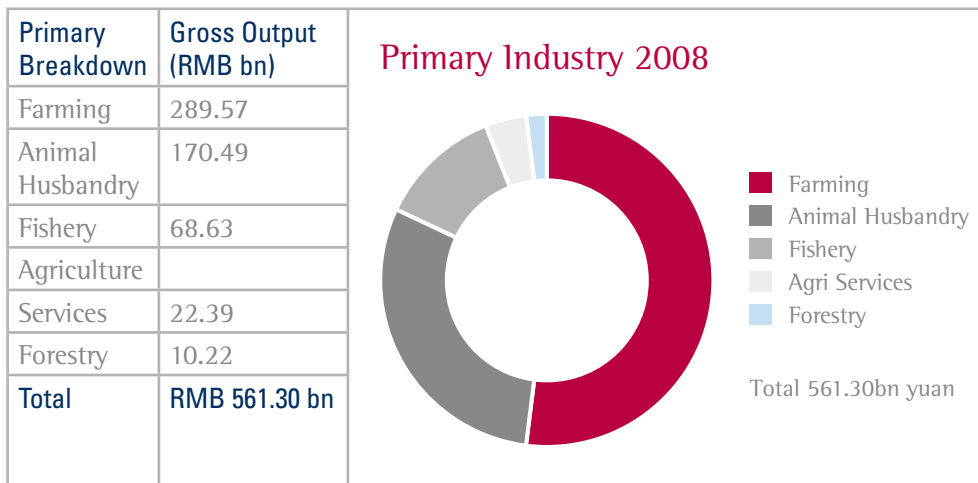


## Sector Opportunities

Due to the range of industry in Shandong there are opportunities across most sectors. Some are particularly well suited to UK expertise and we particularly highlight the opportunities in agriculture and food, infrastructure, energy, minerals and chemicals, renewables and the environment, advanced engineering and the service sector.

### Agriculture and Food

Shandong is China's biggest agricultural province in terms of output and growth. Collectively defined as primary industry, agriculture, forestry, animal husbandry and fishery are important parts of the provincial economy. Farming and animal husbandry are particularly important, together accounting for over 80 per cent of all primary industry in 2008.



The province yields large amounts of agricultural produce. Notable leading products include various grains, fruits, vegetables, oil seeds, cotton and tobacco, which are supplied to both foreign and domestic markets.

There is a strong food manufacturing and processing industry in Shandong, particularly throughout Weifang, Qingdao, and Yantai. The latter of which is an especially important export base for agricultural products (including being China's largest exporter of apples and peanuts).

Textile products from the region also continue to add momentum to the economy, with several of the country's largest producers operating within its borders. For example, Weiqiao Textiles, situated in Shandong's Zouping prefecture, is China's largest cotton producer.

Due to the range of industry in Shandong there are opportunities across most sectors.

Foreign companies in market include: Chaucer Food, Sumitomo, Unilever, Nestle, Sinoanalytica, China Foods, Tesco

# 5



## Opportunities

- Shandong's economy will continue to drive a number of food and agricultural product markets, potentially resulting in significant growth. Foreign investment in modern agriculture will be encouraged in a bid to develop the province into one of the largest processing bases for agricultural products in China. For UK companies involved in food processing, agricultural services or trading, the province offers a range of opportunities and will be a hub of interest – particularly Weifang, Yantai, Jining, Linyi and Qingdao, which have the largest shares of the agri-food industry.
- Major opportunities exist in value-added products and services in the food supply chain – from plant and animal genetics for breed improvement through to processing and production technologies.
- Renewed emphasis on food quality and safety offers potential opportunities for collaboration on food safety/hygiene/traceability issues and modern processing equipment.
- Addressing environmental concerns and calls for a more sustainable approach may translate to opportunities relating to conservation and preservation of biodiversity. In particular, the local Government will be keen to address soil degradation and water pollution and conservation.
- There is a drive to increase and modernise the fisheries industry, part of the Government plan for the Shandong peninsula's "blue economy".

## Case Study – China Food Company Plc (CFC)

CFC is a manufacturer of soy sauce, consumer condiments and animal feed with operations located in Weifang and Shouguang City. The AIM-listed company is owned by London-based Albany Capital, a privately-owned investment firm, specialising in investing in high growth pre-IPO Chinese companies.

CFC has grown strongly, benefiting from increased urbanisation. Consumers are becoming increasingly savvy and large supermarket chains are expanding. CFC also expects to further benefit from rising food safety and quality standards. Currently the ninth biggest soy sauce manufacturer in China, production will soon begin at a new modern soy sauce factory in Shouguang.

CFC sees Shandong as a base for building new markets in the future. The province remains CFC's largest market, however once the new factory is opened, there are good prospects for growth and expansion into neighbouring provinces such as Hebei and Henan. CFC plan to further increase their product range, distribution channels and logistics. They will also explore the possibility of sourcing international products and utilising the company's extensive distribution network in Shandong.

## Infrastructure

Shandong province currently has the highest number of construction projects in China (followed closely by Jiangsu, Zhejiang and Guangdong). Infrastructure development is a major driver for economic growth and a key sector for local employment. The cities with the greatest spending on construction are Qingdao, Yantai, Weifang and Jinan.

There is rapid expansion on major transport networks within the province, and according to the five-year plan a network of six new major railways, seven motorways, three ports and two new airports will be completed by the end of 2010.

## Featured Company – Shandong Luneng Group Co Ltd

Luneng Group is a major brand name and is involved in industries as diverse as mining, real estate, construction, assets, power equipment and resource investment. They have been involved in both residential and commercial real estate projects, and have now stepped into port logistics and are involved in large projects in Qingdao.

Shandong province currently has the highest number of construction projects in China.

# 5

The new and improved transport network will enable faster movement of personnel and trade within the province, linking coastal city clusters and the inland economic centres.

A new 820 mile high-speed railway will be completed by 2012 connecting major regional economic centres in the Bohai Rim, stopping at Beijing, Tianjin, Jinan, Nanjing and Shanghai. It is the single most expensive government project in the pipeline, with a total investment of RMB 221 billion.

A number of key railways projects are being built in order to source raw materials for the mining and energy industries. Particularly there will be an increase in transport capacity for coal from Inner Mongolia, Shaanxi and Shanxi. Third tier cities, smaller townships and rural areas will be further integrated into logistics hubs and ports.

Foreign companies in market include: P&O, Maersk, CSX World Terminals



## Opportunities:

- Rapid urbanisation and significant infrastructure upgrading provides a wide range of opportunities for UK companies in sustainable development, planning, design and engineering consultancies.
- There are particular opportunities in the supply chain with companies that have large scale projects, but may lack certain technologies.
- Architecture, training and consultancy services; “Intelligent building”; and urban regeneration.
- Transportation networks.

## Energy, Minerals and Chemicals

Shandong province has excellent access to natural resources. Extracting 147 million tonnes of coal and roughly 28 million tonnes of crude oil in 2008; the energy sector, mainly made up of large state owned companies, continues to perform well.

### Shengli Oilfield Profile

Shengli is China's third largest oilfield in terms of production (having been recently taken over by Changqing). Dongying is the key city for oil, though the Shengli oilfields are spread across a further seven cities including Binzhou, Dezhou, Jinan, Weifang, Zibo, Liaocheng and Yantai. This area now incorporates 75 different oil and gas fields, 98 oil production platforms, 72 gas gathering stations, 57 crude oil processing stations, three large storage facilities and 60 plants processing waste water. An extensive programme is already underway to enhance production of oil through expansion and upgrading of refineries, crude oil terminals and oil pipelines.

New supporting facilities and infrastructure means potential shallow-sea offshore oil and gas production as well as the drilling of new wells can be exploited. Greater attention is being paid to health, safety and the environment with the strengthening of new regulations.

Over 150 types of metals and minerals can be mined within the province including gold (Pingdu, Laixi, Anqiu), diamonds (Changle, Weifang), lime-stone (common throughout the province), graphite (Laixi, Weifang), salt, sulphur bromine, ferrous (Jinan, Zhanqiu, Anqiu, Linju) and non-ferrous metals (Zhanqiu, Pingdu, Laixi, Zibo, Zaozhuang, Anqiu). There are also rich coal reserves, particularly in the southern part of the province (Jinan, Zhanqiu, Zibo, Zaozhuang, Tengzhou, Shouguang, Linju).

Foreign companies in market include: Mitsui, Itochu, Électricité de France, DuPont, Alcoa, Degussa

Shandong province has excellent access to natural resources.

### Opportunities:

- Dongying is Shandong's oil city, but cities such as Qingdao and Jinan are also supporting the growth of their petrochemicals industry (particularly for the diversification of products), while Weifang is hoping to develop its capital-intensive chemicals industry (ie petrochemicals and refining).
- Hydrocarbon exploitation and recovery; offshore oil and gas production.
- Drilling and downhole technology.
- Education and training; health and safety.
- Niche technologies.

# 5

## Renewables and the Environment

Like many other regions in China, rapid economic development comes with environmental costs and the Government is keen to address environmental and ecological issues. Part of the central Government's RMB 6 trillion stimulus plan includes initiatives and targets to increase energy efficiency and reduce greenhouse gas emissions by reducing energy intensity, increasing the share of renewable energy used, implementing tough auto emissions standards and investing in clean energy. The local Government will establish a number of pilot projects involving the development of biomass, earth thermal energy, photovoltaics and the promotion of green buildings.

The last few years has seen the construction of new wind farms across Shandong but the region's potential remains untapped compared to other provinces in China. Development of offshore wind power lags behind onshore development, but the potential is good.

The China National Offshore Oil Corporation (CNOOC) built Asia's first 140 metre high-tech wind tower in Weihai, and began building the world's largest offshore wind power project in 2008. The 1.1 million kW facility will require a RMB 21 billion investment in total.

Two solar energy industry bases will be built, respectively in Jinan and Dezhou. To a lesser extent, solar energy business clusters will be developed in Zibo, Dongying, Weifang and Weifang. Research and development (R&D) is to be expanded on fuel cell and other solar energy based battery accessories.

### Featured Company – AUCMA Solar

"Qingdao AUCMA Solar Energy Technology & Engineering Co Ltd" manufactures solar heaters – they have four factories with about 800 workers, all located in Shandong and 200 sales staff nationwide. Turnover totalled RMB 220 million in 2008, making it one of the two largest solar heater producers in China. The other is Haier, a close neighbour – making Shandong China's leading solar heating manufacturing base. AUCMA list Shandong's human resources, incentives, development zones and reasonable land and labour costs as the key advantages.

Its parent, AUCMA Group, is a major electronic goods company, and they leverage these distribution networks to sell products throughout China. They are particularly strong in rural areas, where they have gained from government subsidies.

**Foreign companies in market include: Total, Bombardier, CLP**

### Opportunities:

- Wind power: in principle, business opportunities for UK companies are considerable as China has not yet fully developed indigenous wind power technology. Wind farm developers have little practical knowledge or experience of offshore wind farms. There are opportunities in wind resource measurement, wind farm design, installation engineering, offshore power transmission and electric power transformation substations.
- Opportunities may also exist in assisting Chinese companies to develop the necessary grid network needed to support the development of large scale wind power.
- Water management and conservation is a key area of concern. Water storage, waste and contaminated water treatment and clean technologies will be in demand and foreign collaboration is welcomed.
- Cities with heavy and polluting industries (such as chemicals and energy) will need environmental technologies to help tackle the problems these industries cause.
- There is potential for UK companies in advanced power generation systems, control, monitoring and safety equipment, energy-efficient and environmentally friendly equipment, and management support systems for power generation and electric utilities.



Opportunities may also exist in assisting Chinese companies to develop the necessary grid network needed to support the development of large scale wind power.

# 5

## Advanced Engineering

### Delcam, Clear-cut in China

Since its beginnings as a development project at Cambridge University in 1965, Delcam has grown steadily to become a specialist in computer-aided design and computer-aided manufacturing technology (CAD/CAM). CAD/CAM facilitates the precise design and manufacturing of products, and is used in a range of industries, including aerospace, automotive, medical, dental, and general engineering.

Today, Delcam has over 700 employees, 230 of which are based at its UK headquarters in Birmingham. With over 35,000 customers across 90 countries, it has over 150 offices around the world and a turnover of close to £35 million a year.

Delcam has been exporting to customers around the world since the early 1980s. The company has been trading with China for over 25 years, initially in Hong Kong and Taiwan, and began to export significantly into Mainland China around 12 years ago.

In recent years, Delcam's business in China has grown, with contracts with First Auto Works, Xi'an Aircraft Industry Group and Dongfang Electrical Machinery, to name but a few. The Delcam China subsidiary now employs 50 staff between its head office in Beijing, and its regional offices in Shanghai, Shenzhen, Chengdu, Xi'an, Wenzhou, Qingdao and Quanzhou.

"We continue both to work with UKTI and to invest in our business in China," says Peter Dickin, Marketing Manager at Delcam. "At the moment, this is our single biggest market for new software sales and we recently secured our landmark 1,500th Chinese customer. The Chinese Government is so involved in all aspects of business out there, that having UKTI's support really makes a difference. I would highly recommend using its services to any company looking to do business in China."

Advanced engineering has become one of the cornerstones of the Shandong economy. The sector grew by 18 per cent in 2008, despite the economic downturn around the world. Further growth is expected as the Government looks to foster the development of high-tech industries including aerospace, automotive and machinery. We may see greater consolidation across different sectors and with foreign partners in order to boost the competitiveness of local firms.

The advanced engineering sector covers a broad range of fields from agricultural equipment to chemicals. A strong priority for the Shandong government is to improve the technological capabilities of local companies and thus foreign investment, knowledge and expertise would be welcomed.

**Foreign companies in market include: Mitsubishi Heavy Industries, Sanyo Industry, Daewoo, GM, Lucent, Emerson Motor, ThyssenKrupp, Alstom, Ricardo, Caterpillar, Daewoo, Volvo, Howden**

Advanced engineering has become one of the cornerstones of the Shandong economy.



Shandong is a big producer of agricultural vehicles, including 27 per cent of China's light trucks and 75 per cent of China's three-wheel vehicles.

### Opportunities:

- Local policies are in place to encourage greater collaboration with overseas companies to upgrade product portfolios and in the long term to build domestic firms able to compete internationally. Given the high concentration of equipment manufacturers in Shandong, the local Government will look towards consolidation through mergers and acquisitions (M&A).

### Machinery

Shandong is a big producer of agricultural vehicles, including 27 per cent of China's light trucks and 75 per cent of China's three-wheel vehicles. A host of automotive companies, including suppliers of engines and other components, have established in Shandong, although these are still fragmented. The general technological level is rising, but the commercial auto industry remains comparatively small.

### Featured Company – China National Heavy Duty Truck Group Co Ltd (CNHTC)

Located in Jinan, CNHTC is the largest heavy duty truck manufacturer in China. In the first 11 months of 2009, CNHTC reported selling 114,700 heavy trucks, a 11.2 per cent rise year-on-year; realising over RMB 50 billion sales revenue which puts it in the global top three. It is listed in both Hong Kong and mainland China.

CNHTC has invested heavily in R&D in recent years, and has also worked with foreign companies who can bring advanced technology to the table.

# 5

Although a well established machinery production system has been developed in the area, the majority is still resource intensive and falls within the middle and lower end of the value chain. As a result, there is a recognised need to move away from these methods through the adoption of advanced technologies.

## Opportunities:

- Jinan is a centre for heavy vehicles, including motorcycles, automotives and rolling stock components, and there are opportunities for companies with technology in these areas.
- Hybrid engines.
- Co-operation and licensing agreements with international companies are becoming more common as organisations recognise the need to move up the technology value chain. Such R&D projects are strongly encouraged by the Chinese Government through state subsidies.

## Challenges of Business – Quality of Production

There is a perception that the quality of products made in Shandong often does not match those of Guangdong. Many local businesses have less experience than counterparts in Guangdong of dealing with foreign companies and making products for export, and may not be used to manufacturing to the standards required. It is essential that companies take precautions (as is good business practice anywhere) to make sure the quality of the product is of the required standard.

## Shipbuilding

There are plans to expand current capacity and build on its existing strengths to consolidate Shandong and its coastal ports as a focal point for shipping, shipbuilding, maintenance and logistics in China. This will also provide a solid foundation for the development of the planned “Blue Economy”.

Current shipbuilding capacity is four million freight tonnes per annum. This capacity will be upgraded to six million by end of 2010. Attention will focus on Qingdao, Yantai and Weihai as the local Government looks to cement the three as the leading ports in China. The local Government intends to elevate the size of local players through M&A so that the industry is capable of competing at an international level.

## Opportunities:

- Qingdao and Weihai have industrial clusters for shipbuilding.
- R&D is needed to enhance capability in design, OEM order management and the use of new technologies and new materials is needed to improve high-end and high value-adding repair and ship transforming services.

## Blue Shandong Peninsula Economic Zone

China will place the marine and ocean economy high on the agenda of its next five-year development plan (2011–2015). Shandong, along with other coastal regions, such as the Yangtze River Delta, Bohai Rim and Pearl River Delta, will become key growth areas. Central to the plan will be the promotion of marine related industries such as fisheries, shipping, bio-pharmaceuticals, oceanic engineering, new energy exploration, tourism, marine transportation and logistics.

The marine economy presents significant opportunities in Shandong. Its coastline and marine resources are all among the most highly regarded in China. At the same time, the growing strength of the province's agricultural, leisure and tourism, shipping and logistics sectors provides a solid foundation for the overall development of the marine economy. According to reports, a total investment of RMB 1.4 trillion will be made by 2020. The main area of focus will be on the formation of nine individual industrial districts (including Dingzi Bay New City, Weifang New City and the Dongying cluster of petroleum industries) and the nurturing of advanced sectors such as marine biology, ship-building, marine chemicals, new marine energy and high-tech marine industries. The marine economy plan is part of the central Government's move towards sustainable development, recognising the need to protect its ecology and valuable coastline. For Shandong, the move could provide a major boost for coastal cities outside of Yantai and Qingdao, which currently dominate with their shipping, port and logistics operations. The huge investments will look to develop the region's marine and maritime resources and to establish high-end industries as Shandong looks to readjust its economic development.



# 5

The added value of the services sector was RMB 1,036.7 billion in 2008, an increase of 14 per cent from 2007.



## The Service Sector

Tertiary industry in the province is the country's third largest, but as a percentage of the economy lags behind other provinces, there is vast room for development here. The figure for 2008 accounts for about two-thirds of Guangdong's and is just lower than Jiangsu's. The provincial Government has outlined the need to upgrade this underdeveloped sector by increasing efficiency and changing business models and structures. Notably the Government also wishes to invite foreign enterprises with expertise in the services sector to invest in the province – providing opportunities for the UK's world-leading professional services. The inefficiencies in a range of sectors also give British companies with well established operational procedures a competitive advantage.

The added value of the services sector was RMB 1,036.7 billion in 2008, an increase of 14 per cent from 2007. In this sector, domestic wholesale trade and retail trade accounted for the largest proportion with an output value of RMB 873.06 billion (23 per cent increase). The finance sector enjoyed the fastest growth at 24.6 per cent to RMB 84.2 billion. Tourism also accounts for a large part of the tertiary sector in Shandong (16 per cent in 2008), with a total value of RMB 165.36 billion that accounted for over 200 million domestic and over two million international tourists.

Incorporated in several of the key areas singled out in the Government's RMB 1.6 trillion development plan, the tertiary sector enjoyed rapid year-on-year growth of 9 per cent in the third quarter of 2009. Already having 198 banking establishments (nine of which are foreign-funded bank branches or representative offices), 49 insurance centres, 3,000 enterprises operating in logistics, 11 software parks, 485 accounting firms and 821 law firms in the region, the services sector will continue to grow, particularly in Shandong's key cities. Qingdao is by far the most developed city in terms of tertiary industry, and is where many foreign services industry companies have established operations. Jinan has a sizeable proportion of the tertiary sector, partly due to being the provincial seat of government. Yantai also has a more developed services industry by comparison.

## Case Study – PricewaterhouseCoopers

PwC is a leading international commercial services company. The firm now has 12 offices in mainland China. While they have been providing information on Shandong for the last two decades, PwC established an office in Qingdao in 2006. Qingdao was first choice for the company because of its commercially driven regulation, infrastructure and strong domestic purchasing power. In addition they were already familiar with some of the city's most prominent businesses. The city's inclusion in the national development plan outlining investment for the blue marine zone also provided a promising outlook for future foreign and local business in the region.

They have worked with large state owned enterprises looking to modernise, assisted local companies expand overseas and helped international clients locate there. PwC suggest the major reasons why their clients are interested in Shandong are its rich resources, its transport facilities, the historical significance of the province and the lower costs across all industries.

Closely followed by Jiangsu, Shandong had China's highest levels of fixed assets investment (as well as investment in urban floor space for real estate development) in 2008.

**Foreign companies in market include: PwC, HSBC, Standard Chartered, Morgan Stanley**

### Opportunities:

- With several major ports there are opportunities in maritime and trade finance.
- The Government has identified the need to upgrade inefficient industries in the province – this will involve restructuring and M&A, a UK strength.
- A number of Shandong companies have expanded internationally, accessed foreign capital and some have listed overseas. More Chinese businesses will look to “go global” over the coming years, providing a need for British expertise in financial and professional services.
- For private equity or venture capital investment, the major development zones are often hot-spots for high-tech companies.
- For banking and wealth management, Dongying has the highest per capita GDP due to its petrochemicals industry – the other wealthiest cities are Qingdao, Jinan, Weihai, Zibo and Yantai.

Shandong had China's highest levels of fixed assets investment in 2008.

# 5

## The Domestic Market: Growing Wealth and Urbanisation

Shandong is one of the largest consumer markets in mainland China. In 2008 the province's figure for total domestic retail sales of consumer goods was RMB 1.038 trillion, the second largest in the country (behind Guangdong). Retail sales continue to rise, as does the average disposable personal income, which for city residents increased 14.5 per cent in 2008 to RMB 15,781. This increase means that companies originally located in Shandong for manufacturing purposes are now looking at moving into domestic sales as well to increase future growth.



Shandong's cities are seeing rapidly rising income levels and consumer purchasing power.

Per capita expenditure for urban households increased by over 100 per cent between 2000 and 2008. On average 34 per cent is spent on food, 11 per cent on accommodation, 12 per cent on recreation, culture and education, 13 per cent on transport and communications, 7 per cent on healthcare, 7 per cent on household articles and 5 per cent on clothing. In some cities the average income is notably higher, Dongying has an average of RMB 33,672, Jinan RMB 32,336 and Qingdao RMB 30,235. Here, Dongying's elevated average income is likely to be as a result of the oil industry, its high profits and higher requirements for skilled labour. Major commercial centres are located in Jinan, Qingdao, Yantai and Weifang. The landscape of retail distribution in Shandong is changing rapidly. It is however important to note that Shandong's per capita income, and disposable income for urban households, is behind Shanghai, Beijing, Zhejiang, Guangdong, Tianjin, Jiangsu and Fujian.

While the importance of traditional department stores has declined, supermarkets, warehouse-type markets, chain stores and convenience stores are prolific. It is a very price-sensitive market, and where there is competition margins are often low.

## Case Study – Tesco

Tesco is a UK-based international grocery and general merchandising retail chain. Tesco works with more than a thousand suppliers in China and has more than 23,000 staff employed in its retail, logistics and sourcing operations. Shandong, with a large population, and growing wealth, was attractive to Tesco and they have recently opened a purpose built mall in Qingdao, anchored around a Tesco store. This is in addition to two stores in Weifang and Jinan. Qingdao, Jinan and Weifang are within three hours of each other by train, but the retail landscapes are quite different and each store has adapted accordingly. Customer affluence levels, for example, are on average higher in Qingdao than either Jinan or Weifang. However customers in all three cities are highly price conscious.

International retail competition is less intense across the cities of Shandong than is currently the case in China's major population centres such as Beijing and Shanghai. However, there remains considerable competition from some very impressive local operators. In establishing and developing a business in Shandong, Tesco has received strong support from the provincial Government who have been keen to attract multinationals to invest in the region, not only to create new employment opportunities but also to foster competition and to raise industry standards. Tesco sees the keys to success as good local management, a long term outlook, and a thorough understanding of local customers through research and preparation before entering the market.

Although large, the retail market is still underdeveloped and the majority of consumer products are low priced goods, which may not suit British companies' strengths. However, there is also a growing luxury goods market in some areas. They are still not common in most of the province, but the key exception is Qingdao, where there is already a reasonable market for luxury goods. We would expect this segment to grow further in other major cities over the next few years as they develop economically.

The Government has noted that Qingdao leads in consumer goods and aims for this to spread to Jinan, and then on to other cities. They have identified the need for branding, human resources, technology, intellectual property rights, domestic trade and modern services to facilitate this, and because these areas are currently lacking, there will be opportunities for UK expertise in these fields.

The city clustering, and good transport links mentioned earlier, will be of benefit to UK companies looking to serve the domestic market. Many Chinese firms produce goods in Shandong for the wider China market – highlighted by the presence of some of China's biggest names such as Haier Electronics, Hisense Electronics, and Tsingtao Beer.

# 6

## Government Policy: Investment, Incentives and Development Plans

The provincial Government is investing heavily in development. They are focusing on industrial and technological restructuring, high-tech industry, energy conservation, modernising services, agriculture, social programmes and core infrastructure construction.

### Government Encouraged Sectors

The provincial Government, through its industry promotion plans, has designated 13 encouraged emerging sectors for the next decade. They are: biotechnology, marine industry, integrated circuits, logistics, planar display technology, rail transit, aerospace, nuclear power equipment, new energy and environmental protection technology, new materials, software, RFID and semiconductor illumination.

Officials also indicated a desire for foreign companies to locate in Shandong, with particular emphasis on: equipment manufacturing (including auto parts, ship building, rail and transport equipment), large scale power supply equipment, Information Technology, creative industries, science and technology research and development (R&D), finance, education, trade and commerce, healthcare, construction (particularly new residential construction) and tourism (the leisure industry and resorts).

The National Development and Reform Commission (NDRC) have recognised the need in Shandong to increase efficiency and change business models and structures. One of the methods outlined is to invite foreign enterprises in the services sector, though no specific incentives have been mentioned to achieve this. The Government is also investing in developing the provinces R&D, and local companies are also looking to establish co-operative links with foreign organisations.

While there are not any tax breaks, fiscal benefits are possible (mirroring practice in many industrial parks around China). These normally take the form of refunds of certain proportions of the locally retained VAT. These benefits however are not law, but are local municipal level policies, which can and do change. Generally speaking, projects with high capital intensity, advanced technology, low land consumption, or of leading international companies, are in a good position to negotiate with local government to gain fiscal benefits. Other benefits that may possibly be provided by government or its service posts include free of charge procedural services, market investigation, local human resources advice and even support in developing supply chains.

There are also a wide range of development zones and export processing zones which are often keen to attract foreign investment. UK companies can benefit from this and can often be given help in establishing their business there – though offers which sound too favourable should always be carefully investigated.

On top of this, the Government has announced several national level projects focused on Shandong. These include the “Development Plan of an Efficient Eco-Economic Zone in the Yellow River Delta” and the ‘Blue Shandong Peninsula Economic Zone’. These plans will give Shandong’s coastal cities momentum for future development.

## The Credit Crunch and the Stimulus Package

Despite an impressive growth rate of 11.9 per cent in 2009, Shandong was not immune from the effects of the global economic downturn. According to a recent report published by the provincial Government, exports and foreign direct investment (FDI) saw a significant fall. In particular, exports of steel products and textiles dropped by 70.7 per cent and 14.3 per cent respectively while contractual FDI dropped by 14.2 per cent, although these figures were far less severe than in more export-oriented provinces like Guangdong and Jiangsu.

The global financial crisis has given the Shandong Government greater impetus to move away from its traditional industrial structure to a higher “value-added” based economy. There is now a push for the development of high-tech industries such as aerospace with the establishment of industry clusters and various other incentives. Innovation and R&D projects will also be actively promoted, including for existing key industries like agriculture, chemicals and energy. At the same time, however, there is a renewed call for a more balanced and sustainable economic development. As a result, industries such as new materials and renewable energy will be likely to feature prominently.

Other priorities include boosting domestic consumption, improving rural living standards and expanding social provisions (eg social security, housing, education and healthcare).

As part of the nationwide fiscal stimulus package, considerable spending has been earmarked for Shandong. Chinese companies will benefit most from this, but there are opportunities for British companies as well, particularly those with high-tech and value-added products and services that may not be available domestically. While full projects will be difficult to secure, there will be potential to work as subcontractors or part of the supply chain.

Stimulus Spending Outlined for 2010	
Housing for the poor, rural properties, urban infrastructure, as well as education, healthcare, culture, sports and social security.	RMB 283 billion
Agricultural irrigation and forestry planting projects.	RMB 79 billion
Newly emerged strategic and high-tech industries eg new energy, ICT, new materials and new medicine.	RMB 273 billion
Supporting technological upgrading, purchase of new equipment and R&D.	RMB 760 billion
Railroad, expressway, seaports, airports and environment projects.	RMB 58 billion
High-efficiency coal fired power generation units, transmission of electricity, LNG and natural gas.	RMB 114 billion
Service industry including establishing modern logistics and outsourcing facilities.	RMB 149 billion
Real estate, mainly low-cost properties.	RMB 268 billion

Source: Shandong NRDC

# 7

## Existing International Business Links

UK Trade & Investment (UKTI) can help UK companies of all sizes to identify the opportunities created by fiscal stimulus packages and major spending programmes around the world through the Fiscal Compass Programme.

Please visit [http://www.ukti.gov.uk/zh\\_cn/uktihome/item/108928.html?null](http://www.ukti.gov.uk/zh_cn/uktihome/item/108928.html?null) for more details.



### Trade

In 2008, bilateral trade between the UK and Shandong amounted to US\$2.75 billion, of which exports to Shandong accounted for US\$430 million. Imports from Shandong accounted for US\$2.32 billion; making the UK Shandong's third largest EU trade partner.

Japan and Korea are Shandong's major international trading partners due primarily to geographical proximity, followed by the USA and Hong Kong.

In 2009, Shandong's total exports were US\$79.6 bn, higher than 2007, but falling by 14.6 per cent from US\$93 billion in 2008. The processing trade using imported materials has been gradually increasing its share, and now accounts for 41 per cent of Shandong's exports. Partly due to the fall in prices of bulk goods like ore, beans, refined oil and rubber, the total value of imports in 2009 fell by 9.1 per cent to US\$59 billion; however, this remained higher than the 2007 total of US\$47 billion. Major imports included steel, machinery, plastics, rawhides and skins, man-made fibres, chemicals, other raw materials, computers and complete sets of equipment and technology.

<b>Foreign Trade 2008</b>	<b>US\$ bn</b>
<b>Exports (Shandong Total)</b>	<b>93.1</b>
Nuclear Reactor, Boiler and Accessories	13.9
Electric Equipment and Accessories	9.6
Toys, Games, Sporting Goods and Accessories	4.6
Iron and Steel	4.2
Knitted or Crocheted Garments and Clothing Accessories	4.2
Iron and Steel Products	4.1
Rubber and Related Products	3.4
Vehicles and Related Parts and Accessories	3.3
<b>Imports (Shandong Total)</b>	<b>64.9</b>
Ore, Slag and Mortar	12.5
Electric Equipment and Accessories	11.1
Nuclear Reactor, Boiler and Accessories	7.9
Seeds and Fruits, Plants for Industrial and Medicinal Use, Straws and Forage	3.5
Mineral Fuels, Lubricants, Asphalt, Mineral Wax	3.1
Rubber and Related Products	3.1

Source: *Statistical Year Book, 2009*:  
Shandong NDRC

# 7

Wholly foreign owned enterprises and equity joint ventures make up the majority of imports and exports by FIEs in Shandong.



Exports by foreign invested enterprises (FIE) dropped 11.5 per cent in 2009 to US\$44.8 billion, imports dropped 9.5 per cent to US\$30.7 billion. Wholly foreign owned enterprises and equity joint ventures make up the majority of imports and exports by FIEs in Shandong, contractual joint ventures account for a much lower proportion. Electronics and machinery accounted for 54 per cent of FIEs' imports and exports.

## Challenges of Business – Business Culture

Less developed cities have had less contact with foreign companies and can be more reserved. Business culture in Shandong is more traditional than in Guangdong. Relationship building has an important role and contract negotiations can be lengthy. Cities with more experience of dealing with foreign organisations will often be more westernised. Qingdao's Government has been praised by foreign companies for its 'commercial attitude'.

## Investment

The UK is the largest European Union (EU) investor in Shandong and the main areas of investment include manufacturing, chemicals, food, electronics, textiles, fashion, building materials and infrastructure. At the end of 2008 there were 459 contracts at a total contracted value of US\$1.9 billion, with US\$1.19 billion utilised. The Shandong Government reported in November 2009 that the number of UK invested companies had risen to 472 in the province (1.2 per cent of the total).

In 2008, there were 1,527 foreign direct investment (FDI) contracts in Shandong, with US\$10.1 billion contracted, and US\$8.2 billion utilised. FDI shrank in 2009, but while contracted FDI figures fell quite substantially, FDI utilised only decreased marginally. Sixty-six per cent of FDI in Shandong is in secondary industry, mainly in the manufacturing sector including textiles, raw chemical materials and chemical products, medical and pharmaceutical products, electrical equipment and machinery, ordinary machinery and equipment for special purposes.

By far the largest source of FDI is South Korea, followed by Hong Kong. Other major investors come from the US, Japan and Taiwan. Over 100 Fortune 500 companies, including Siemens, Carrefour, Daewoo, LG, Samsung, Toyota, Lucent, Kodak and Pepsi Cola have already set up subsidiaries in Shandong. Qingdao, Yantai and Weihai are the primary destinations for overseas investments.

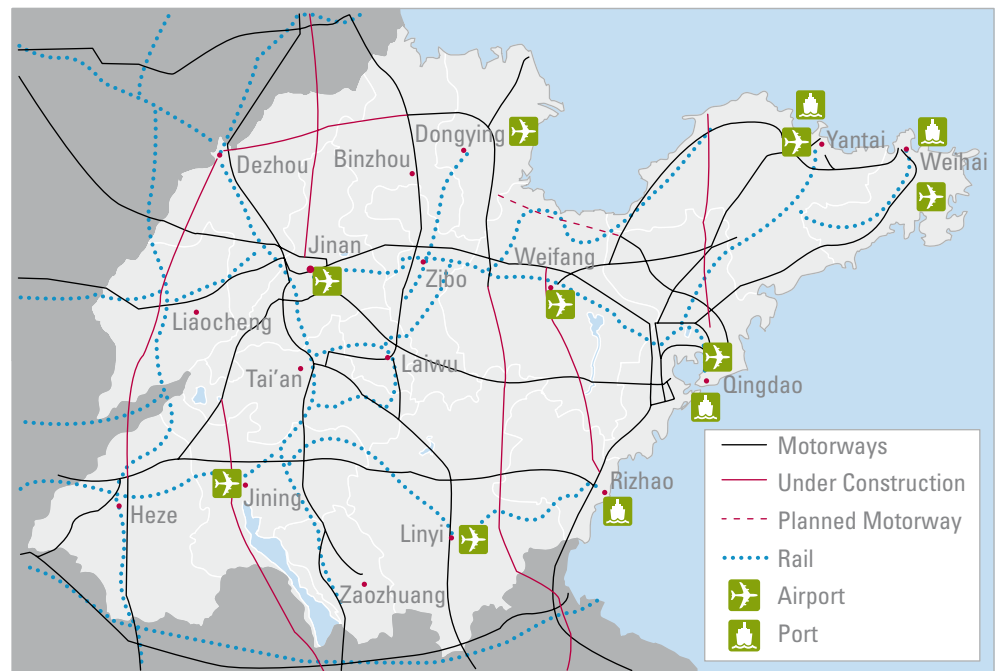
Utilised FDI by Sector (2008)	Value (US\$ m)	Proportion (per cent)	Growth Rate (per cent)
<b>Primary</b>	<b>384</b>	<b>5</b>	<b>-36.1</b>
<b>Secondary</b>	<b>5386</b>	<b>65</b>	<b>11.3</b>
Manufacturing	4968	60	13.7
Construction	174	2	-36.2
Production and supply of electricity, gas and water	157	2	-10.5
Mining	87	1	276.9
<b>Tertiary</b>	<b>2432</b>	<b>30</b>	<b>21.4</b>
Real estate	726	9	-1
Wholesale, retail, hotel and catering	357	4	72.5
Transport, storage, telecoms and ICT	259	3	227.4
Leasing, business services, household services	134	1	98.5
Financial services	108	1	-32.2

Source: *Statistical Year Book, 2009: Shandong NDRC*

# 8

## Shandong's Location and Communications

Shandong's ports, airports, railways and roads have seen huge investment in recent years and it is Government policy to continue this development. The government's plan to develop the province through city clusters hinges on creating the infrastructure and communications to facilitate interaction between regions. For example, to help foster the "capital cluster" around Jinan, several axes of highways and railroads have been specifically designed to aid exchanges between different areas.



Extensive rail connections closely link Shandong's cities with each other as well as to Beijing, Shanghai, Hong Kong and even Europe. Jinan will be one of the stops on the planned high-speed rail link between Beijing and Shanghai. The line is expected to be completed in early 2012 and will put Jinan just two to three hours from two of China's most important cities. On top of this Rizhao has been named as one of the bridgeheads for the Eurasian Continental Bridge rail line, connecting the region to Europe via a route 2,000km shorter than the previous Trans-Siberian Railway. This is of particular significance as it not only provides Western Europe with direct links to the province, but also to Japan and Korea via Shandong's ports.

The province's highways are reputedly some of the best and most extensive in the country, further hastening the connections within Shandong and further afield. Sixteen of the 17 cities at prefecture level are connected via the main highway, and Binzhou, the one exception, will be joined to the major highway network in 2010.

Shandong's railway and highway freight traffic and freight tonne-kilometres are both much higher than in Shanghai, Jiangsu, Zhejiang and Guangdong. In addition, the extensive links between Shandong's cities, the rest of the country and international destinations puts Shandong in a strategically advantageous position.

Shandong's long coastline encompasses the Bohai Rim (one of the busiest areas for shipping in the world) and the Yellow River Delta. With major international ports at Qingdao, Yantai and Rizhao able to cater for a comprehensive range of products, as well as the important ports of Weihai, Weifang (currently for bulk but a container terminal is planned) and Dongying (mainly for petrochemicals), Shandong has excellent shipping routes, and is particularly well connected to Korea and Japan. In addition eight airports, three of which are international, provide excellent connections to the rest of China and beyond.

According to DSV Air & Sea Ltd, shipping from Qingdao back to the UK is generally cheaper than from Ningbo, but fractionally more than from Shanghai. Comparable quotes for a 20 foot container with the same carrier to the UK asked for £1,956.47 from Qingdao, £1,988.74 from Ningbo and £1,942.58 from Shanghai.

### Challenges of Business – Infrastructure and Living Standards

Many smaller cities don't cater as well for foreigners as first tier cities. These cities are still developing, and many have not yet had much contact with foreigners from either a business or social perspective. In many areas there are few foreign businesses (particularly western companies) and expatriates. Communications networks can be poor outside the larger cities, and even in the major cities networks like mail services are underdeveloped and can be slow. International schools are not common and this can be a problem for the relocation of expatriates with children.

Qingdao and to a lesser extent Yantai and Jinan are much more accommodating. Qingdao is regularly rated as one of the most liveable cities in China by western expatriates. The climate is agreeable, pollution is relatively low, and it is less crowded than many of China's larger cities. It has several international schools and more affordable top quality accommodation than Shanghai and Beijing. These advantages are often a major driver for investors.

It should be remembered that comparative underdevelopment also provides opportunities – for example communications will be bolstered as foreign logistics companies expand into the main hubs.

Shandong has excellent shipping routes, and is particularly well connected to Korea and Japan.

# 9

## Input Costs: Some of the Cheapest Land and Labour on the East Coast

Compared to other well developed areas on the East Coast, Shandong offers favourable input costs with some of the best priced land on the eastern seaboard and lower average wages than Zhejiang, Jiangsu and Guangdong. Proximity to the province's abundant natural resources will also affect costs in certain industries. What's more, there are considerable differences in costs throughout the province, providing a range of possible solutions to suit individual business needs. While securing experienced talent can be an issue, the low costs, natural resources and good infrastructure lend themselves well to a range of manufacturing activities.

The cost of land for industrial use (including manufacturing workshops for raw materials, warehouses and affiliated piers) is determined through a bidding process, while commercial property prices can be decided individually on a contractual basis. Minimum prices for industrial use are specified, and Shandong has some of the cheapest land on the East Coast, with prices in cities such as Cangshan, Chengwu, Dongping, Guang County, Juye, Ningjin, Qingyun, Wulian, Xiajin, Yangxin starting at RMB 60/sq metre. The most expensive land for industrial use is in Jinan and Qingdao at a minimum of RMB 480/sq metre. Land costs vary dramatically across the province and offer a range of options suitable for a variety of business uses.

Land use rights for industrial property are valid for 50 years. Land for commercial property refers to sites where store buildings, office buildings and other profit-making facilities are to be built, and land use rights are valid for 40 years. Rights for residential property are valid for 70 years.

Land costs vary dramatically across the province and offer a range of options suitable for a variety of business uses.



Labour costs in Shandong are considerably more favourable than most of the East Coast. The average wage in 2008 for employees of foreign funded organisations in Shandong was RMB 23,170, this compared to the national average of RMB 32,653 and RMB 31,020 in Guangdong, RMB 28,524 in Jiangsu, RMB 25,326 in Zhejiang and RMB 75,517 in Beijing.

It is also worth noting that employees of foreign funded organisations on average receive less than other workers, the average wage being RMB 26,404, and the average for an employee of a state owned enterprise being RMB 31,169 (the national average for SOE employees is 31,005).

### Challenges of Business – Human Resources

When it comes to unskilled labour or manufacturing, Shandong's position is quite strong, particularly due to comparatively lower wages. However, for businesses in the tertiary sector there is a lack of qualified workforce with the right level of education and work experience. Shandong doesn't yet have the same quality talent pool as Shanghai or Beijing. Where qualified talented individuals have been found a tendency has been reported for stronger employees to move towards first tier cities, making staff retention difficult. One company we spoke to solved this by hiring from smaller cities to work at their Qingdao base and staff turnover is now minimal. Training is key, increasing the quality of staff, and also playing a large part in staff retention. Companies reported that with effective training programmes the problem of experience can be surmounted and costs remain lower than in first tier cities.

There are a total of 114 universities and colleges in Shandong, with 1.5 million enrolled students. The top universities are:

1. Shandong University (Jinan)
2. China University of Petroleum (Dongying)
3. Ocean University of China (Qingdao)
4. Shandong Agricultural University (Taian)
5. Shandong Normal University (Jinan)
6. Qingdao University (Qingdao)
7. Shandong University of Science and Technology (Jinan)

In addition to wage costs, companies are required to pay five types of social insurance (pensions, unemployment, medical, occupational injury and maternity), as well as contribute towards a housing fund. The employer proportion of the pension is required to be 20 per cent throughout the province, but apart from this there is no unified standard across Shandong – the rest is regulated at municipal level. Individual income tax is covered by staff, at the same rate throughout China. A problem in Shandong can be a limited talent pool and retaining high calibre staff. An increasing number of companies are providing additional optional benefits such as commercial insurance and annual medical checks.



Like land costs, wages vary across the province and it is important for British companies to identify locations that offer reasonable prices, but can also supply the requisite talent. As land and labour costs have increased in the more developed cities like Qingdao, some companies are finding that moving to other cities in the province allows them to find a lower cost base for manufacturing.

Shandong's wage advantage, and reasonable industrial land price, offers comparatively low input costs for foreign businesses.

### Case Study – DCK Concessions

DCK's services in China include designing jewellery and sourcing manufacturers to produce their designs for resale in foreign markets. The company came to Qingdao to take advantage of cheaper costs (notably labour and materials) and to be closer to their primary supply base. A key concern is rising labour costs in Qingdao which is forcing factories and suppliers to consider relocating. However, with notable differences in labour costs between Qingdao, Jinan and the rest of Shandong, producers will not have to go far to reduce their costs.

The rise in disposable income and growing retail consumption may also provide the company with future prospects regarding the domestic market.

Shandong's wage advantage, and reasonable industrial land price, offers comparatively low input costs for foreign businesses. This, combined with the province's connection to the internal and international markets, is a great advantage for companies interested in manufacturing.

# How We Can Help You

# 10

In China, UK Trade & Investment (UKTI) works in partnership with the China-Britain Business Council (CBBC) to deliver trade services.

A partner network accessible through the British Embassy in Beijing, the British Consulate-Generals in Shanghai, Chongqing and Guangzhou, and through CBBC's presence in 11 cities in China, can assist UK companies by providing advice and information on primary and regional cities. Market information and sector reports are available through [www.ukti.gov.uk](http://www.ukti.gov.uk) and [www.cbcc.org](http://www.cbcc.org)

Trade development services delivered by UKTI and CBBC include a wide range of options to help you develop your business with China:

- **Overseas Market Introduction Service (OMIS):** a chargeable, tailored UKTI service to access market and industry information, identify potential contacts, or assist in organising an event.
- **Passport to Export:** a UKTI service that provides new and inexperienced exporters with the training, planning and ongoing support they need to succeed overseas.
- **Gateway to Global Growth – Where Next?:** a free service to experienced exporters which offers a strategic review, planning and support to help grow your company's business overseas.
- **Events and seminars:** including sector based activities addressed in events and seminars across China and the UK.
- **Missions:** missions to China help UK companies visit the market, while visits from China allow UK companies to meet with potential partners or potential investors in the UK.
- **Business Opportunities:** opportunities arising from China are shared with UK companies. <http://www.ukti.gov.uk/export/accessinginternationalmarkets/businessopportunitiesalerts.html>
- **Fiscal Compass Programme:** UKTI can help UK companies of all sizes to identify the opportunities created by fiscal stimulus packages and major spending programmes around the world.
- **Export Communications Review:** assessment of your company's export communications followed by practical recommendations for improvement (managed by the British Chambers of Commerce).
- **Export Marketing Research Scheme:** provides companies with the facility to collect systematic and objective market research to assist in the development of a market entry strategy (managed by the British Chambers of Commerce). [www.britishchambers.org.uk/exportzone](http://www.britishchambers.org.uk/exportzone)
- **CBBC membership:** could help your business succeed in China, please contact CBBC's Membership Director Fenella Barber on +44(0)20 7802 2008 or by email at [membership@cbcc.org](mailto:membership@cbcc.org)
- **Commercial enquiry service in China and the UK:** Please contact [enquiries@cbcc.org](mailto:enquiries@cbcc.org) with your questions. Alternatively, please call CBBC UK on +44 (0)20 7802 2000 or CBBC China on +86 (0)10 8525 3113.
- **Practical support:** translation, interpretation and logistics advice are all available from CBBC.
- **FCO Country Updates:** reports by UK Embassies in key emerging markets, providing authoritative analysis and drawing on high-level government and other contacts, providing timely assessment of key issues relevant to UK business. <http://www.ukti.gov.uk/export/fcoupleupdatesinfo.html>

# 10

For more information on any of these services please contact your local UKTI International Trade Team or the China-Britain Business Council.

## Further Useful Links:

- British Diplomatic Posts in China: [www.uk.cn](http://www.uk.cn)
- British Chamber of Commerce in China: [www.britcham.org](http://www.britcham.org)

## The Overseas Market Introduction Service

OMIS is a UKTI service delivered by CBBC in China. This service can assist you by undertaking tailored research using our extensive network of dedicated researchers across China, including Shandong.

Possible ways in which OMIS can help your business in Shandong include:

### Market research and analysis

- Sector reports
- Market initiatives
- Regulatory environment
- Market opportunities

### Identification of local contacts

- Agents
- Distributors
- Suppliers
- Potential partners

### In-market activities

- Meeting arrangements
- Event organisation, such as workshops, seminars, promotional activities and product launches

For more information about how OMIS might be used to assist your company's strategy for China, please contact the OMIS team on [omis.london@cbbc.org](mailto:omis.london@cbbc.org), or contact your local UKTI International Trade Adviser.

## Visiting the Market

As well as co-ordinating your visit through the Overseas Market Introduction Service, UKTI & CBBC co-ordinate regular missions to China, and organise visits to trade fairs and exhibitions as well as mini-missions in Shandong.

Please visit [www.cbbc.org/what\\_we\\_do/events/](http://www.cbbc.org/what_we_do/events/) for more information.

If you would be interested in joining one of these events or a trade mission to Shandong please contact CBBC.

<b>Population:</b> 94.17 million	<b>GDP/Capita:</b> RMB 35,898
<b>Area:</b> 156,700 sq kilometres (1.6 per cent of China total)	<b>Average Income:</b> RMB 26,404 (2008)
<b>GDP:</b> RMB 3.38 trillion	<b>Average Disposable Income of City Residents:</b> RMB 15,781
Primary Industry: RMB 322.66 billion (9.75 per cent of total)	<b>Exports:</b> US\$79.57 billion
Secondary Industry: RMB 1.90 trillion (57.53 per cent of total)	<b>Imports:</b> US\$59.04 billion
Tertiary Industry: RMB 1.15 trillion (34.89 per cent of total)	<b>Utilised FDI:</b>
<b>GDP Growth:</b> 11.9 per cent (Eighteenth year of double digit growth)	Primary: US\$384 million
Primary Industry: 4.2 per cent	Secondary: US\$5,386 million
Secondary Industry: 13.7 per cent	Tertiary: US\$2,432 million
Tertiary Industry: 10.7 per cent	<b>Domestic Sale of Retail Goods:</b> RMB 1.038 trillion

17 Prefecture level cities	GDP (RMB bn)	GDP Primary	GDP Secondary	GDP Tertiary	GDP Per Capita (RMB)	Retail Sales (RMB bn)	Export value (US\$ m)	Average Income (RMB/Year)
Qingdao	433.6	223.4	2,255.45	1,957.33	52,678	146.5	32,631	30,235
Yantai	343.4	275.55	2,090.97	1,067.66	49,012	102.3	20,647	28,718
Jinan	301.7	175.01	1,330.68	1,511.73	45,724	135.6	4,597	32,336
Weifang	249.1	281.69	1,455.05	755.07	28,106	83	6,541	23,722
Zibo	231.7	82.18	1,500.45	734.15	51,547	72.9	3,633	26,690
Jining	212.2	256.81	1,183.49	681.86	26,721	72.8	1,865	27,983
Dongying	205.2	70.08	1,570.93	411.6	102,741	25.4	1,972	33,672
Linyi	195.8	235.93	1,001.7	720.58	19,949	81.7	2,630	24,100
Weihai	178	132.28	1,088.56	559.51	63,519	48.3	7,455	24,123
Taian	151.3	161.08	839.29	512.93	27,794	46.7	921	21,843
Dezhou	140	169.73	783.41	447.77	25,606	47.6	1,219	18,588
Liaocheng	125.2	187.03	738.98	326.66	22,556	39.6	1,515	18,715
Binzhou	123.6	122.69	753.67	360.47	33,610	30.2	2,301	20,711
Zaozhuang	109.3	96.09	686.16	310.58	29,978	29.7	518	24,682
Heze	82.2	195.51	415.15	211.13	10,050	40.4	837	16,740
Rizhao	77.3	82.74	419.74	270.67	28,300	21.2	2,525	25,028
Laiwu	45.6	27.98	308.99	118.82	35,846	13.5	1,366	28,774

### Key Provincial and Municipal Contacts:

- Department Of Commerce of Shandong Province, (86-531-89013333), <http://shandong.mofcom.gov.cn/> (Chinese language)
- Jinan Municipal Bureau of Foreign Trade and Economic Co-operation, (86-531-86911387), [www.jinan.gov.cn](http://www.jinan.gov.cn)
- CCPIT Jinan Sub-Council, (86-531-82075663), [www.ccpitjinan.org](http://www.ccpitjinan.org)
- Qingdao Economic and Technological Development Zone, (86-532-86988615), [www.qda.gov.cn](http://www.qda.gov.cn)
- Qingdao Free Trade Zone, (86-532-86766622), [www.qdftz.com](http://www.qdftz.com)
- Logistics Park of Qingdao Free Trade Zone, (86-532-86908972), [www.sdeport.gov.cn](http://www.sdeport.gov.cn)
- Qingdao Export Processing Zone, (86-532-88160668), [www.qdepz.com](http://www.qdepz.com)
- Qingdao Westcoast Export Processing Zone, (86-532-86988979), [www.qwepz.gov.cn](http://www.qwepz.gov.cn)
- Zibo Municipal Bureau of Foreign Trade and Economic Co-operation, (86-533-3190761), [www.zbboftec.gov.cn](http://www.zbboftec.gov.cn)
- Zibo Investment Promotion Bureau, (86-533-2777902), [www.invest-zibo.gov.cn](http://www.invest-zibo.gov.cn)
- Dongying Municipal Bureau of Foreign Trade and Economic Co-operation, (86-546-8081569), <http://www.dongying.gov.cn/eng> (English), [www.dongyingbusiness.gov.cn](http://www.dongyingbusiness.gov.cn) (Chinese)
- Weifang Municipal Bureau of Foreign Trade and Economic Co-operation, (86-536-8266722), [www.weifang-moftec.gov.cn](http://www.weifang-moftec.gov.cn)
- Rizhao Municipal Bureau of Foreign Trade and Economic Co-operation, (86-633-8816912), [www.rztrade.gov.cn](http://www.rztrade.gov.cn)
- Liaocheng Municipal Bureau of Foreign Trade and Economic Co-operation, (86-635-2119296), [www.liaocheng.gov.cn](http://www.liaocheng.gov.cn) (Chinese), [www.liaocheng.gov.cn/Default.aspx?alias=www.liaocheng.gov.cn/english](http://www.liaocheng.gov.cn/Default.aspx?alias=www.liaocheng.gov.cn/english) (English)

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We also help overseas companies bring their high-quality investment to the UK’s dynamic economy – acknowledged as Europe’s best place from which to succeed in global business.

UK Trade & Investment offers expertise and contacts through its extensive network of specialists in the UK, and in British embassies and other diplomatic offices around the world. We provide companies with the tools they require to be competitive on the world stage.

For further information please visit [www.ukti.gov.uk](http://www.ukti.gov.uk) or telephone +44 (0)20 7215 8000.

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