## **INDUSTRY OVERVIEW**

Certain information and statistics set out in this section have been extracted from various government publications, market data providers and other independent third party sources, which include the industry reports we purchased from Frost & Sullivan. The industry report issued by Frost & Sullivan reflects estimates of market conditions based on samples, and is prepared primarily as a marketing research tool. Apart from the above, none of the information in this Industry Overview section is based on or otherwise derived from reports or sources commissioned by our Company, our Connected Persons, the Sole Sponsor, the [REDACTED], the [REDACTED], the [REDACTED] or any other party involved in the [REDACTED].

Our Company believes that these sources are appropriate sources for such information and statistics and have taken reasonable care in extracting and reproducing such information and statistics. Our Company has no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information has not been independently verified by our Company, the Sole Sponsor, the [REDACTED], the [REDACTED], the [REDACTED] or any other party involved in the [REDACTED] and no representation is given as to its accuracy and completeness.

#### COMMISSIONED REPORT FROM FROST & SULLIVAN

In connection with the [REDACTED], we have engaged Frost & Sullivan, an Independent Third Party, to conduct an analysis of and to produce a report of the port service industry and the import and export agency service industry, with a special focus on Reusable Solid Waste in China. Frost & Sullivan received a total fee of RMB580,000 for research and preparation of the F&S Report. In compiling and preparing the F&S Report, Frost & Sullivan has adopted the following assumptions: (i) the economies of the PRC are assumed to maintain steady growth across the forecast period, (ii) the social, economic and political environments of the PRC are likely to remain stable in the forecast period, and (iii) there is no war or large scale disaster during the forecast period. Intelligence gathered has been analysed, assessed and validated using Frost & Sullivan's inhouse analysis models and techniques. Frost & Sullivan has given its consent to quote from the F&S Report and to include information contained in the F&S Report in this document. Our Directors confirm that Frost & Sullivan, including all of its subsidiaries, divisions and units, are Independent Third Parties.

Frost & Sullivan is a global consulting company founded in New York in 1961 and has over 40 global offices with more than 2,000 industry consultants, market analysts, technology analysts and economists. Frost & Sullivan's services include technology research, independent market research, economic research, corporate best practices, advising, training customer research, competitive intelligence and corporate strategy.

#### ECONOMIC GROWTH IN THE PRC AND FUJIAN

Over the past years, the Chinese economy maintained growth under the global financial crisis, during which the Chinese government has taken stimulus policies to prevent the economy from drastically declining. According to the National Bureau of Statistics of China, the Chinese economy grew at a CAGR of 9.0% from 2011 to 2016 in term of nominal GDP growth.

Going forward, the Chinese authorities are expected to maintain the consistency and stability of macroeconomic policies by increasing government expenditure, encouraging consumption and promoting infrastructure development. In the meantime, structural adjustment of the economy is predicted to be pushed forward strongly by the Chinese authorities to improve the quality and efficiency of economic development. Under this trend, the Chinese economy is likely to maintain a sound and healthy development. According to the International Monetary Fund, the Chinese economy is forecasted to keep growing at a CAGR of 7.9% from 2016 to 2021.

During the period from 2011 to 2016, Fujian's economy witnessed fast growth with a CAGR of 10.2%. According to the Fujian Provincial Bureau of Statistics, the nominal GDP of Fujian Province grew from RMB1.8 trillion to RMB2.9 trillion. As the overall economy of the PRC is likely to maintain a sound and healthy development, it is forecasted that the nominal GDP of Fujian Province will continue to grow at a relatively stable rate with a CAGR of 8.5% from 2016 to 2021, reaching RMB4.3 trillion in the year of 2021.

### THROUGHPUT IN THE PRC





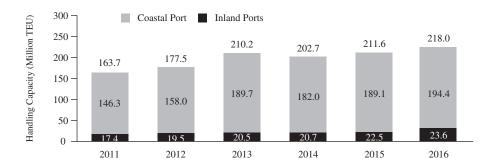
Source: National Bureau of Statistics of China

In general, China's commodity import value and export value kept at a moderate level, during 2011 to 2016, and only declined slightly in 2015 and 2016, which was influenced by increasing domestic labour costs and dropping prices of international bulk commodities. In addition, the exchange depreciation in 2015 and 2016 also affected the import and export value to a certain extent.

According to the National Bureau of Statistics of China, China's total commodity import value and export value increased from RMB23,640.2 billion to RMB24,338.7 billion during 2011 to 2016, representing a CAGR of 0.6%.

## **INDUSTRY OVERVIEW**

Container Handling Capacity (China), 2011-2016

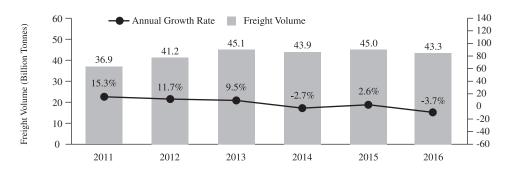


Source: The Ministry of Transport

A container is one of the most common cargo transport modes in China, especially for shipping. Along with the massive port and harbour construction and upgrading in China, as well as the increasing demand for container shipping, China's container handling capacity had kept its growing trend in the last several years. Approximately 89% of containers in China are circulated in the coastal ports of the PRC, as the coastal ports normally have better ship berthing conditions for higher tonnage container ships.

According to the Ministry of Transport, China's container handling capacity increased from 163.7 million TEU in 2011 to 218.0 million TEU in 2016, with a CAGR of 5.9%.

China's Total Freight Volume, 2011-2016



Source: National Bureau of Statistics of China

China's total freight volume includes the volume of overland freight, waterway freight, air freight and other freight transportation modes. Following the development and prosperity of commodity economy and improvements in transportation infrastructure, China's freight volume maintained at a stable level in the last few years. According to the National Bureau of Statistics of China, China's total freight volume increased from 36.9 billion tonnes in 2011 to 43.3 billion tonnes in 2016, with a CAGR of 3.3%.

#### **OVERVIEW OF XIAMEN**

Xiamen is a major transportation and logistics hub for China's international and domestic trade and is of strategic importance to the nation's economy. Xiamen has a natural deep-water port area located inside the Xiamen Bay in the south-eastern side of Fujian and is one of the deep sea ports in the south-eastern coast of the PRC. The Xiamen port area is ice-free all year long and has an extended area with deep water channels. The Xiamen port area has a water frontage of 122.8 kilometres ("km") suitable for port development and a channel length of 212.6 km in which the channel for more than ten thousand tonnes extends for 126.0 km, with water depth ranging from 15.5 meters to 16.0 meters and channel width ranging from 410 meters to 600 meters, capable accommodating vessels of 100,000 dwt.

The economic hinterland surrounding Xiamen port covers a substantial part of Fujian, including Xiamen, Quanzhou and Zhangzhou and extends inward to central and western parts of Fujian including Longyan and Sanming, Jiangxi province, Hunan province, southern Zhejiang province and the north-eastern part of Guangdong province. The road transportation network of Xiamen connects the Shenhai Highway, Xiarong Highway, Xiasha Highway and National Highway 319 and 324, which further connects with other national highway networks to other parts of the PRC. In regard to railways, the Xiamen's railway network connects the national railway network through Yinxia Railway, Longxia Railway, Xiashen Railway and Fuxia Railway. Since 2015, freight trains connecting Haicang port area in Xiamen to Europe via Chongqing have been in operation. The Xiamen Gaoqi International Airport provides one of the international routes connecting the inland Yangtze River Delta and Pearl River Delta, and is regional aviation hub. The air transportation network connects Xiamen with other cities in the PRC, Southeast Asia, Japan, Korea and the rest of the world.

Located on the west side of the Taiwan straits and facing Taiwan and the Peng Hu Islands, Xiamen is one of the designated port areas in the PRC under the "Mini Three Links" (小三通) which comprises postal, transportation and trade links between Fujian of the PRC and Quemoy and Matsu of Taiwan.

Xiamen is one of the seven designated special economic zones in the PRC which have benefited from the economic reform, open-door policy and economic development of the PRC.

In addition, on 21 April 2015, the China (Fujian) Pilot Free Trade Zone with a total land area of 43.78 square kilometres in Xiamen was officially launched, which endows Fujian with the privileges to carry out pilot programs with a view to deregulation in respect of investment, facilitation of trade and internationalisation of finance.

Benefiting from the economic development of the PRC, Xiamen as a key port area of Fujian has continued to maintain a stable economic growth and improve its international trade. According to Xiamen Municipal Bureau of Statistics, the GDP of Xiamen amounted to approximately RMB378.4 billion in 2016, representing a year-on-year growth of approximately 8.3% from 2011. The total value of exports and imports in Xiamen was approximately RMB509.2 billion in 2016, representing a year-on-year growth of approximately 2.4% over the previous five years. Xiamen

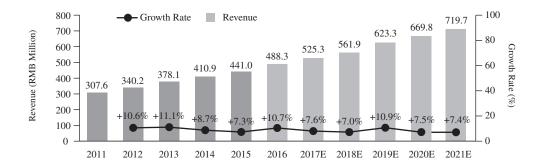
ranked the seventh and the fifteenth amongst the container ports in China and the world respectively in terms of container throughput in 2016. According to Frost & Sullivan, there is no official source for the historical trend of rental costs in Xiamen. However, it is an industry norm that rental costs usually increase with the land price. According to Xiamen Municipal Bureau of Land Resources and Real Estate Management, the standard land price of Xiamen's industrial land increased by approximately 45% in 2016 for the first time in the last 10 years. According to Frost & Sullivan, considering the land development cost by the PRC government, the standard land price of Xiamen's industrial land is likely to rise further and realize a CAGR of approximately 3% to 5% from 2016 to 2021 and the rental costs in Xiamen are likely to rise further accordingly.

#### OVERVIEW OF INTRA-PORT SERVICES MARKET IN THE PRC

The Intra-Port Services involve the whole process of berthing and mooring inbound vessels, assisting in loading and unloading containers onto and off from the ships, on-spot verification of the containers and transportation of the containers inside the port area.

## MARKET SIZE OF INTRA-PORT SERVICES IN FUJIAN AND XIAMEN

The following chart illustrates the revenue of the Intra-Port Services market in Fujian from 2011 to 2021:

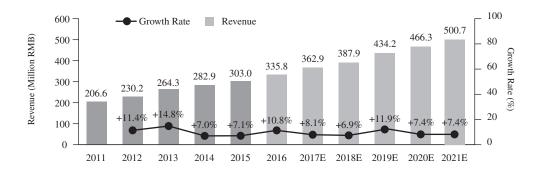


Source: Frost & Sullivan

The revenue of Fujian's Intra-Port Services market increased with a CAGR of 9.7% from 2011 to 2016. The total market size in term of revenue reached RMB 488.3 million in 2016, from RMB307.6 million in 2011. Along with the substantial development and active international trade in Fujian's three major ports, namely Xiamen, Fuzhou and Quanzhou, the Intra-Port Services market in Fujian has also well-developed. Fujian's Intra-Port Services is expected to reach RMB719.7 million in term of revenue in 2021, representing a CAGR of 8.1% from 2016 to 2021. This is because, as one of the departure points of "Maritime Silk Road" and key hubs for sea communications in the south-eastern coastal lines, more investments in the development of port infrastructures are expected to be put on Fujian, which will likely boost the further development of the Intra-Port Services market in Fujian.

## **INDUSTRY OVERVIEW**

The following chart illustrates the revenue of the Intra-Port Services market in Xiamen from 2011 to 2021:



Source: Frost & Sullivan

Xiamen's Intra-Port Services market has shown an upward growth trend with a CAGR of 10.2% in term of revenue growth from 2011 to 2016. The total market size of Xiamen's Intra-Port Services market in term of revenue reached RMB 335.8 million in 2016 from RMB206.6 million in 2011. Along with the future promotion of Xiamen's free trade zone and the construction and upgrading of new ports like Gulei port area, the growth potential of Xiamen's Intra-Port Services market is expected to be further unleashed.

According to Frost & Sullivan, Xiamen's Intra-Port Services market is forecasted to reach RMB500.7 million in term of revenue in 2021, representing a CAGR of 8.3% from 2016 to 2021.

## COMPETITIVE ANALYSIS OF INTRA-PORT SERVICES MARKETS IN FUJIAN AND XIAMEN

## Competitive landscape

Both the Intra-Port Services markets in Fujian and Xiamen are highly concentrated. The top five and top three Intra-Port Services providers in Fujian and Xiamen together accounted for 94.6% and 98.2% of the total market shares (expressed in term of revenue) in the respective regions. According to the F&S Report, most Intra-Port Services providers in China are local state-owned port companies which provide a wide variety of Intra-Port Services.

The following tables illustrate the ranking of top five market players in Fujian and top 3 market players in Xiamen in term of total revenue generated respectively:

Top 5 Companies in the Intra-Port Services Market (Fujian Province), 2016

Ranking	Company	Revenue (RMB Million)	Share %
1	Xiamen International Port Co., Limited	264.5	54.2%
2	Fuzhou Port Group Co., Limited	74.7	15.3%
3	The Group	59.8	12.2%
4	Quanzhou Harbor Group	54.8	10.6%
5	Jinjiang Pacific Ports Development Co., Limited	11.1	2.3%
Top 5		461.9	94.6%
Others		26.4	5.4%
Total		488.3	100.0%

Top 3 Companies in the Intra-Port Services Market (Xiamen), 2016

Ranking	Company	Revenue (RMB Million)	Share %
1	Xiamen International Port Co., Limited	264.5	78.8%
2	The Group	59.8	17.8%
3	Zhangzhou Development Zone Xinhai Logistics Co., Limited	5.3	1.6%
Top 3		329.6	98.2%
Others		6.2	1.8%
Total		335.8	100.0%

Both the intra-port services markets in Fujian and Xiamen are highly concentrated, the top 5 and top 3 intra-port services players in Fujian and Xiamen together accounted for 94.6% and 98.2% of the total market shares in terms of revenue in the respective regions. Normally, most intra-port services providers in China are local state-owned port companies which provide a wide variety of intra-port services. The same situation also confirms with the intra-port services market in Fujian

## **INDUSTRY OVERVIEW**

and Xiamen, Xiamen International Port Co., Limited, Fuzhou Port Group Co., Limited and Quanzhou Harbor Group are three state-owned port companies who respectively serve Xiamen port, Fuzhou port and Quanzhou port.

## **Competitive strengths**

Customers generally prefer service providers who have more years of experience in their practice. The more skilful the service providers are, the higher confidence the customers have in such service providers.

#### **Key drivers**

China's port handling capacity is closely in line with the development of its macro economy. According to the F&S Report, as China's macro economy is estimated to maintain stable growth, the demand for port operation services, Intra-Port Services and the relevant logistics services is expected to increase.

China has already several excellent natural ports and harbours owing to its inherent geographical advantages and stretching coastlines. Along with China's growing role in international trading, most ports and coastal cities have launched port upgrading and construction plans in order to satisfy the anchorage conditions for higher shipping tonnage and container handling capacity. In 2014, the MOT issued the "Guiding Opinions on Promoting the Transformation and Upgrading of Ports" (交通運輸部關於推進港口轉型升級的指導意見), which accelerated the pace of the upgrade of China's major coastal ports. Coastal ports such as Qingdao Port, Dalian Port and Ningbo Port have conducted port upgrading and launched upgrading plans in recent years. This round of port upgrading is expected to facilitate the growth of China's Intra-Port Services market.

As one of the important cargo transport modes in China, container shipping has become increasingly popular among traders and manufacturers due to its standardized services, guaranteed safe delivery and high transport efficiency. According to the MOT, the contribution of China's container cargo handling capacity to its entire cargo handling capacity has increased from 17.7% to 19.3% from 2011 to 2015. The increasing demand for container shipping in China is expected to improve the revenue of Intra-Port Services and thus promote the further development of the Intra-Port Services market.

The development of China's port trading and Intra-Port Services is often connected with the country's macroeconomic policies and government planning. In recent years, national strategies such as One Belt, One Road, the reconstruction of the Maritime Silk Route in South China and the encouragement of cross-straits trade, are expected to unleash the growth potential of China's international trade, and directly drive the further development of China's Intra-Port Services industry, especially in south China coastal regions like Fujian and Guangdong provinces. One Belt, One Road (一帶一路) initiatives are the continuation and development of the spirit of the ancient Silk Road. Xiamen is set to become a center on the network of the 21st century Maritime Silk Road, seeking to further intertwine the trade policies, economies and transport routes of countries from China to Europe. The PRC government and the local government have invested a lot in

## **INDUSTRY OVERVIEW**

developing Xiamen's transport, service and other industries, which is vital for the One Belt, One Road strategy. The establishment of a set of trans-Eurasia railways departing from Xiamen in August 2015, and the development of China (Fujian) Pilot Free Trade Zone combines land and ports together and therefore becomes a catalyst for the growth of Xiamen's financial, transport and port service industry. Also, the PRC government's encouragement and push of cross-straits trade is expected to stimulate the demand for cargo and container shipping and then also accelerate the development of Xiamen port. Major players in the industry related to Intra-Port Services and Logistics Services are expected to benefit from that on aspects such as transportation and trading.

## **Entry barriers**

However, in order to remain competitive and maintain a prominent position in the industry, Intra-Port Services providers have to incur substantial capital outlays to equip themselves with sufficient vehicles and equipment to enable them to meet the customers' requirements, which remain a major barrier for potential competitors.

Intra-Port Services are composed of a wide variety of mechanical operations, which requires skilled and experienced labour force to carry out a full process of the service. Workers in port normally need a period of time to master and learn the work flow, technical know-how and other safe operation matters. It is relatively difficult for new entrants to cultivate a skilled team to run the Intra-Port Services in a short period of time. Therefore, skilled labour force can be also regarded as a major barrier for the new entrants.

#### **Opportunities and threats**

The major energy consumption of Intra-Port Services comes from cargo handling, container stacking and inner port transportation. Thus, electric and vehicle gasoline are the major energy sources consumed in Intra-Port Services. Under the call of government's eco-friendly production, an increasing number of green and energy-saving equipment and vehicles are likely to be applied in the Intra-Port Services process in order to achieve energy conservation and economic benefits. The "Standard for Green Port Grade Evaluation" (綠色港口等級評價標準) released by the Ministry of Transport in 2013 has set a series of target for eco-friendly operation of the port. The policy guidance and future trend are likely to pose challenges for those traditional Intra-Port Services providers who are unable to reduce service pollution in the port like vehicle emission. Therefore, measures about pollution control in Intra-Port Services process are expected to be one of the major future concerns and threats for the incumbent Intra-Port Services companies.

#### **Business** Expansion

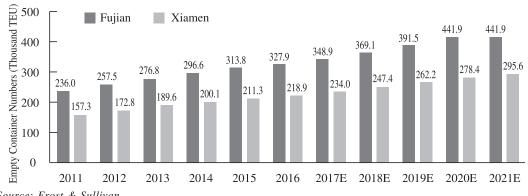
Intra-Port Services companies are likely to expand their business scopes in the near future by providing other supporting services for both terminal operators and shipping companies. For example, faced with the limited land source of the container port, terminal operators may look for certified third-party empty container yards for empty container storage. Intra-Port Services companies are also expected to offer this service and further extend their service chain by taking advantage of their original transportation capability. Along with the growing container throughput

in the foreseeable future, the demand for and the market of empty container yard service is expected to experience further expansion, which also gives a good business opportunity for Intra-Port Services providers to extend their service chains and increase service revenues in the future.

## MARKET SIZE, FUTURE DEMAND ANALYSIS AND COMPETITIVE OVERVIEW OF EMPTY CONTAINER SERVICE IN FUJIAN AND XIAMEN

The following chart shows the market size of empty container services in Fujian and Xiamen:

## Average Empty Containers Per Day (Fujian and Xiamen), 2011-2021E



Source: Frost & Sullivan

Note: Empty containers refers to those discharged containers without any cargos inside. Generally, most empty containers need places for storage and waiting for new batches of cargo for export. Empty containers must be put in the empty container stacking yard for inspection and quarantine in order to ensure sanitation and hygiene of the empty containers. Most ports have these kind of empty container yards for the storage service of those empty containers generated everyday. The consignors have the final say in the selection of empty container stacking yards as the lift on lift off fees are ultimately payable by them to the empty container stacking yard operators. However, it is market practice that they would leave such matters to shipping companies to handle unless (i) the consignors are not satisfied with the services of the empty container stacking yard companies or (ii) they are provided with a rebate of lift on lift off fee as an incentive, where the consignors will give the instructions to the shipping companies to change to a different empty container stacking yard and the shipping companies will follow the consignors' instructions accordingly.

The number of empty containers generated everyday reflects the market demand with respect to the empty container stacking yard. Normally, the number of empty containers is highly correlated with the port container throughput as the container throughput determines the overall turnover number of containers in the port. According to the Action Plan for the Acceleration of Port Development (2014-2018) (《關於加快港口發展的行動綱要(2014-2018年)》) issued by Fujian provincial government in 2014, by 2018, the provincial government will invest RMB10 billion on Fujian's port infrastructure construction and the container throughput of Fujian is expected to reach over 16 million TEU as compared with 14.4 million TEU in 2016. The foreseeable growth of container throughput in Fujian demonstrates substantial potential demand for empty container stacking yard facilities.

### **INDUSTRY OVERVIEW**

As one of the most important port cities in Fujian province, Xiamen accounted for approximately 67% of the container throughput of Fujian province in 2016. In order to cater to the Action Plan for the Acceleration of Port Development (2014–2018) issued by provincial government, Xiamen government also issued Opinions on Fully Implementation of the Action Plan for the Acceleration of Port Development (2014–2018) 《關於貫徹福建省加快港口發展行動綱要 (2014–2018年) 的實施意見》 in 2014. The policy stated out that Xiamen's container throughput should reach around 12 million TEU by 2018 as compared with 9.61 million TEU in 2016, and Haicang Port Area in Xiamen is designed to be built as the core port area in Xiamen. By 2018, it is estimated that RMB4.5 billion would be cumulatively invested in Haicang port and 6 deep-water berths would be constructed in Haicang Port Area according to the policy. Under such policy as supported by the Xiamen government, the container throughput of Xiamen (especially in Haicang Port Area) is estimated to be further increased and therefore bolster more demand for empty container stacking yards in Xiamen as well as in the Haicang Port Area.

In general, the demand and supply of the empty container stacking yard services in Xiamen Port was quite balanced with a resulting slight excess demand in 2016. In 2016, the empty container stacking yard participants in Xiamen had an average daily container storage capacity of approximately 210 thousand TEU in total, which was slightly lower than the average number of daily generated empty containers in Xiamen Port of 218.9 thousand TEU. However, as regards empty container stacking yard services in the Haicang port area, there was a shortage in the supply of such services.

Following the rapid development of the Haicang port area, the container handling capacity in the Haicang port area rose by 12.6% to 6.33 million TEU in 2016 against the previous year, and drove its proportion of the overall container handling capacity in Xiamen Port from approximately 61% in 2015 to around 66% in 2016, which showed Haicang port area's increasingly significant role in Xiamen's container port. Notwithstanding this, in 2015, the empty container storage capacity in the Haicang port area was less than half of the total empty container storage capacity in Xiamen Port. Considering the existing limited capacity of empty container stacking yard services in the Haicang port area, some shipping companies have had to lift off their empty containers in the Dongdu port area after uploading in the Haicang port area, which is a waste of time and effort. Moreover, the number of daily generated empty containers in Xiamen Port is estimated to increase to 295.6 thousand TEU, with a CAGR of 6.2% from 2016 to 2021, which will create an increasing demand for empty container stacking yard services in Xiamen Port, especially in the Haicang port area. Considering the current shortage in supply of empty container stacking yard services in the Haicang port area, together with such increasing demand for empty container stacking yard services in Xiamen Port, especially in the Haicang port area, there is still room for new entrants of empty container stacking yard services or established players to expand.

The average daily empty containers in Fujian and Xiamen's were around 327.9 and 218.9 thousand TEU in 2016, respectively. Whilst the growth pace of the empty containers stacking yard service market in Fujian and Xiamen is likely to slow down slightly during the period from 2016 to 2021 due to the sluggish growth pace of both the China's macro economy and the overall global shipping market, the average number of daily generated empty containers in Fujian and Xiamen are

## **INDUSTRY OVERVIEW**

still estimated to have an increase trend and attain to 441.9 and 295.6 thousand TEU per day in 2021, representing CAGRs of 6.1% and 6.2%, respectively. During the period of 2016 to 2021, the average number of daily generated empty containers in Fujian and Xiamen is forecasted to increase 114.0 and 76.7 thousand TEU, respectively.

Leading players in the empty containers stacking yard service market in Xiamen include Xiamen Sinotrans-Yufeng Refrigeration Engineering Service Co., Limited ("Sinotrans-Yufeng") (with a market share of around 20–25%), Greating-Fortune Container Service Co., Limited (with a market share of around 20%–25%), and Xiamen CIMC Haitou Container Service Co., Limited ("Xiamen CIMC") (with a market share of around 15–20%). The top 3 players in Xiamen's empty containers stacking yard service market took up around 55%–70% of the total Xiamen market share by the end of 2016. XIPC (Xiamen International Port Co., Ltd) is also an empty container stacking yard service provider in Haicang port area and Xiamen with a market share of around 7% in 2016. XIPC is currently the only one-stop services provider providing intra-port services, logistics services and empty container stacking yard services in the Haicang port area and in Xiamen.

Most of the leading incumbents in Xiamen's empty containers stacking yard service market such as CIMC HT, Sinotrans-Yufeng and XIPC have already acquired their land use rights for operating their empty containers stacking yards. As a market which requires sufficient land to carry out daily operation, most market incumbents in the empty containers stacking yard service market believed that having their own land use rights for their business operation would ensure the business stability and sustainability for their operating empty containers stacking yard service.

#### ENTRY BARRIER ANALYSIS OF EMPTY CONTAINER STACKING YARD MARKET

#### **Government Relations**

As an industry closely related to customs and port affairs, participants in the empty container stacking yard market normally maintain good relationships and communications with the local government. Meanwhile, potential market entrants have to obtain government approval for land-use rights before they may commence the construction of container stacking yards. Thus, a close government relationship is likely to be a key barrier to the new entrants.

### **Capital Investment**

New entrants to the empty container stacking yard market need a large amount of initial and operating investment to establish their container stacking yards and operate their business. It is crucial for new entrants to have sufficient capital support to pay wages and for daily site maintenance and equipment procurement such as fork trucks. Thus, capital investment also sets a high barrier for new entrants.

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#### **Customer Relations**

The empty container stacking yard business is normally carried out among shipping companies and consignors. Empty container stacking yard service providers usually pay much attention to customer relations because shipping companies and consignors usually maintain stable service partnerships with empty container stacking yard services providers and seek long-term cooperation. It is relatively difficult for new entrants to establish such customer relations without any previous cooperation or relationship.

## **Legal Restrictions**

As advised by our PRC Legal Advisers, under the Administrative Measures for Customs Supervision and Control Locations of the PRC (中華人民共和國海關監管場所管理辦法) and the Customs Law of the PRC (中華人民共和國海關法), Customs Supervision and Control Locations could only be used to store cargoes under the supervision of customs, excluding any other empty containers (which refers to those discharged containers without any cargos contained therein). Accordingly, any existing companies which operate on such Customs Supervision and Control Locations could not provide empty container stacking services without a separate parcel of land outside the Customs Supervision and Control Locations.

# OVERVIEW OF THE PRC IMPORT AGENCY SERVICE MARKET IN RESPECT OF REUSABLE SOLID WASTE

The import agency service in respect of Reusable Solid Waste in Xiamen includes container stacking yard services, disinfection and sterilization services for containers and cargoes therein, customs clearance services with XEIQB and Xiamen Customs, and delivery services. It also includes road freight forwarding services of containers from container stacking yards to the designated locations of the customers.

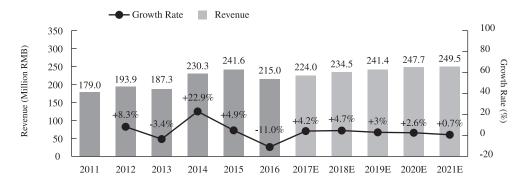
# MARKET SIZE OF IMPORT AGENCY SERVICE MARKET IN RESPECT OF REUSABLE SOLID WASTE IN FUJIAN AND XIAMEN

In the past few years, Fujian's import agency service market in respect of Reusable Solid Waste grew with a CAGR of 3.7% from 2011 to 2016. The total market size of Fujian's import agency service market in respect of Reusable Solid Waste in terms of revenue reached RMB215.0 million in 2016, approximately 20.1% larger than that in 2011, due to the development of plastic and paper wastes and scrap imports up to 2015. In 2016, the market size dropped due to the decrease in import volumes of waste.

It is expected that the market will keep this upward trend in the coming years to 2021 with a CAGR of 3.0% from 2016, reaching RMB249.5 million in 2021.

## **INDUSTRY OVERVIEW**

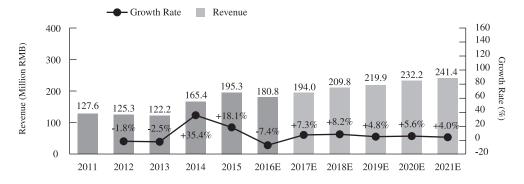
The following chart illustrates the revenue of the import agency service market in respect of reusable solid waste in Fujian from 2011 to 2021.



Source: Frost & Sullivan

During the period from 2011 to 2016, Xiamen's import agency service market in respect of Reusable Solid Waste increased from RMB127.6 million to RMB180.8 million, representing a CAGR of 7.2%. In 2016, the import agency services market in respect of Reusable Solid Waste in Xiamen accounted for around 84.1% of Fujian's total market.

According to the F&S Report, Xiamen's import agency service market in respect of Reusable Solid Waste is expected to grow at a CAGR of 6.0%, reaching RMB241.4 million in the year of 2021. The following chart illustrates the revenue of the import agency service market in respect of reusable solid waste in Xiamen from 2011 to 2021.



Source: Frost & Sullivan

## COMPETITIVE ANALYSIS OF THE PRC IMPORT AGENCY SERVICE MARKET IN RESPECT OF REUSABLE SOLID WASTE

### Competitive landscape

The import agency service market in respect of Reusable Solid Waste is highly concentrated in Fujian and Xiamen. In 2016, the top five service providers accounted for 73.5% of the total market. The Group was the largest import agency service provider in respect of Reusable Solid Waste in Fujian, with a market share of 15.7% in 2015.

## **INDUSTRY OVERVIEW**

The import agency service market in respect of Reusable Solid Waste in Xiamen is also concentrated. In 2016, the top five players took up 73.1% of the whole market. The Group was the largest import agency service provider for Reusable Solid Waste in Xiamen, with a market share of 18.6% in 2016.

The overall import agency service industry in Fujian province is a huge market with a large number of players. In 2016, the total revenue of the overall import agency service market in Fujian province was around RMB10 billion, which was 40 times as large as the market for Reusable Solid Waste. Among all the players, Sinotrans Limited and Fuzhou Asia Shipping Declaring Co., Limited are the leading agency services players, who provide import agency services for consumer goods, industrial equipment, chemicals and other products.

The following table illustrates the ranking of the top five market players in Fujian in terms of total revenue generated in 2016 respectively:

Ranking	Company	Revenue (RMB Million)	Market Share
1	The Group	33.7	15.7%
2	Xiamen Haitou Logistics Co., Limited	32.8	15.3%
3	Sinotrans Limited	32.7	15.2%
4	Xiamen Port Baohe Logistics Co., Limited	31.2	14.5%
5	Fuzhou Asia Shipping Declaring Co., Limited	27.4	12.8%
Top 5		157.8	73.5%
Others		57.2	26.5%
Total		215.0	100.0%

#### **INDUSTRY OVERVIEW**

The following table illustrates the ranking of the top five market players in Xiamen in term of total revenue generated in 2016 respectively:

Ranking	Company	Revenue (RMB Million)	Market Share
1	The Group	33.7	18.6%
2	Xiamen Haitou Logistics Co., Limited	32.8	18.2%
3	Xiamen Port Baohe Logistics Co., Limited	31.2	17.2%
4	Sinotrans Limited	23.2	12.8%
5	Greating-Fortune Container Service Co., Limited	11.4	6.3%
Top 5		132.2	73.1%
Others		48.5	26.9%
Total		180.8	100.0%

Source: Frost & Sullivan

#### Government Support

In line with the government's and the public increasing environmental awareness, energy-saving and environment-friendly products are becoming increasingly preferable. In 2013, the State Council issued "Opinions of the State Council on Accelerating the Development of Environmental Industry" (國務院關於加快發展節能環保產業的意見). The document highlights the need to create a favourable policy environment for the development of environmentalism, and encourage central and local governments to purchase energy-saving products and products made from renewable resources. The government support for the manufacturers and traders of Reusable Solid Waste.

## **Entry barriers**

During the Track Record Period, to enter the import agency services industry in respect of Reusable Solid Waste in Xiamen, an enterprise had to obtain a licence from the Customs in respect of inspection in order to operate the stacking yard.

In addition, an enterprise, in order to operate import agency services in respect of Reusable Solid Waste has to incur substantial capital outlay such as the cost of land in order to meet the rigorous standards for operation. It is difficult for new entrants to achieve economies of scale by running on minimum cost. Thus, the scale of initial capital is of vital importance to the survival of the market players. Thus, the scale of initial capital, which is normally used for land lease and equipment purchase is of vital importance to the survival of the market players.

### **INDUSTRY OVERVIEW**

## Opportunities and threats

Import agency services in respect of Reusable Solid Waste are still at the development stage, whilst the demand for Reusable Solid Waste is expected to continue to grow in the PRC, given its relatively low cost compared with other raw materials. However, if such business becomes increasingly profitable and favoured by the PRC government, more competitors may be attracted to enter into the market and compete with our Group.

In recent years, Chinese government has issued several policies and regulations concerning environmental protection in respect of imported waste and scrap materials. Owing to the rising environmental awareness of the Chinese government, the quarantine requirements for imported Reusable Solid Waste are likely to be stricter in the future. Hence, it would be difficult for some players to meet the requirements as they become stricter.

## OVERVIEW OF THE CONTAINER ROAD FREIGHT FORWARDING SERVICES MARKET IN THE PRC

The container road freight forwarding services markets in Fujian and Xiamen increased with CAGRs of 13.4% and 13.6% from 2011 to 2016, respectively. Benefiting from the rapid development of trading businesses and services in Fujian, it is forecasted that the markets in Fujian and Xiamen are expected to grow with CAGRs of 9.1% and 9.3%, respectively, from 2016 to 2021.

The market of container road freight forwarding services in Fujian province is highly fragmented in 2016. Some players such as the Group offer container road freight forwarding services apart from their import agency services in order to provide one-stop service to customers. Most players are private small players who only deliver loaded and empty containers between the designated locations of customers and the designated ports.

In line with the increasing container throughput of Xiamen port, the container road freight forwarding service market also developed during the past five years. In 2016, the total revenue of Xiamen port's container road freight forwarding service market reached RMB4.1 billion. The market was highly fragmented with more than 200 companies operating similar business. The Company, with total revenue of RMB13.4 million, accounted for approximately 0.3% of the total market. The leading companies in this market include Xiamen Port Transportation Co. Ltd., Xiamen RongLiDa Logistics Co., Ltd., and Xiamen Xiangyu Taiping General Logistics Co., Ltd.

The major driver of Xiamen container road freight forwarding service market is the development of Xiamen port. In recent years, the container throughput of Xiamen port increased from 6.5 million TEUs in 2011 to 9.6 million TEUs in 2016, representing a CAGR of 8.3%. It is expected that the market will keep this trend in the coming years in light of the large demand for container road freight forwarding services.

## **INDUSTRY OVERVIEW**

The transportation capacity of the service providers is a significant entry barrier to the market. The leading companies who have already established transportation fleets have stronger capacities. New entrants without strong transportation capacity are less likely to have access to customers with a large demand on container road freight forwarding services.

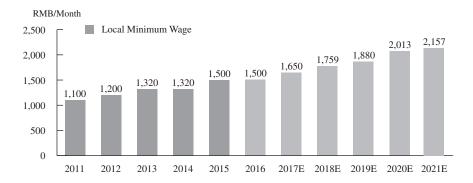
The container road freight forwarding services market still has a large potential due to the fast development of Xiamen port, which is expected to reach a container throughput of 13.7 million TEUs in 2021. The companies who provide integrated services of both import and export agency business and container road freight forwarding services are expected to have a great advantage over others.

However, companies face fierce competition in this fragmented market. The companies who are not able to establish stable relationships with their clients or to enhance their transportation capacity are less likely to gain market share amidst the fierce competition.

## MAJOR COSTS FOR THE INTRA-PORT SERVICES AND LOGISTICS SERVICES MARKET

#### **Labour Costs**

The following chart illustrates the local minimum wage of Fujian Province from 2011 to 2021.



Source: Ministry of Human Resources and Social Security; Frost & Sullivan

According to the Ministry of Human Resources and Social Security, the minimum wage in Fujian Province has shown an upward growth in the past five years, from RMB1,100 per month in 2011 to RMB1,500 per month in 2016, representing a CAGR of approximately 6.4%.

Under the further development of national economy and increasing living standards, as well as the expected inflation in the coming years, the labour cost in Fujian Province is expected to increase continuously in the next few years. According to the F&S Report, the minimum labour wage in Fujian Province is anticipated to reach RMB2,157 per month in 2021, representing a CAGR of 7.5% from 2016 to 2021.

## **INDUSTRY OVERVIEW**

#### **Diesel Oil Costs**

The following chart illustrates the retail price of diesel oil in China from 2011 to 2021.



Source: Historical Data: Ministry of Commerce

Forecast Data: U.S. Energy Information Administration; CME Group; Frost & Sullivan

Number 0 diesel oil is used by most trucks and ships as vehicle fuel in China. The price of diesel oil is highly correlated with the price of international oil. Between 2010 to 2014, the price of number 0 diesel oil fluctuated along with the price of international oil and remained stable at around RMB8,000 per tonne. Since the second half of year 2014, along with the steep fall of international oil price due to the increasing production volume and supply of U.S. shale oil and China's weak oil demand for as a result of the downturn in the economic trend, the diesel oil prices in China slumped from over RMB8,000/tonnes to around RMB6,000/tonnes in that period. During the period between 2011 and 2016, the average price of number 0 diesel oil has dropped from RMB8,366 per tonne to RMB6,195 per tonne, respectively, representing a CAGR of -5.8%.

Based on the estimation and linear regression with the crude oil price, the price of number 0 diesel oil is estimated to have a steady rebound from approximately RMB6,195 per tonne in 2016 to RMB6,841 per tonne in 2021, representing a CAGR of 2.0%.