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## **INDUSTRY OVERVIEW**

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*This section contains certain information which is derived from official government publications and industry sources as well as a commissioned report from Frost & Sullivan. We believe that the sources of the information are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information. We have 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 derived from the above sources has not been independently verified by us, the Sponsor, the [REDACTED], the [REDACTED], the Underwriters or any of their affiliates or advisers, nor any other party involved in the [REDACTED] and no representation is given as to its accuracy. Please refer to the section headed “Risk Factors – Risks relating to this document – Statistics and industry information contained in this document may not be accurate and should not be duly relied upon” in this document for further information. We believe, after taking reasonable care, that there have been no material adverse changes in the market information since the date of issue of the Industry Report which may be qualify, contradict or have an impact on the information in this section.*

### **SOURCES OF INFORMATION**

We commissioned Frost & Sullivan, an independent market research consulting firm, to conduct an analysis on the car park flooring market in Hong Kong and to report on the industry, development trends and competitive landscape of the market. The market research covers the historical years of 2010 to 2014 and the base year of 2015. The forecast years are 2016 to 2020. A total fee of HK\$380,000 was paid to Frost & Sullivan for the preparation of the market research report, and our Directors consider that such fee reflects market rates. The payment was not conditional upon the results of the Industry Report or the successful listing of our Group. The report was prepared independently from our influence.

The information and statistics on the car park flooring industry in Hong Kong contained in this section are extracted from the Industry Report. The Industry Report derived its data from interviews with industry experts and competitors, official statistical sources, and market indicators for modeling.

Frost & Sullivan is a global consulting company founded in 1961 in New York and has over 40 global offices with more than 2,000 industry consultants, market research 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. Frost & Sullivan has been covering the Chinese market since the 1990s. Frost & Sullivan has four offices in China and direct access to the knowledgeable experts and market participants in the car park flooring industry and its industry consultants, who have more than three years of experience on average.

All statistics are based on information available as at the date of the Industry Report. The study took 2015 as the base year and 2016-2020 as the forecast period. However, since the study was conducted in 2016, some of the 2016 figures were not available from public statistical sources at the time of the study. Under such circumstances, Frost & Sullivan would use the latest information available (e.g. 2015) or make projections based on historical trends.

The analysis in the Industry Report may derive information from sources such as government agencies, trade associations and marketplace participants.

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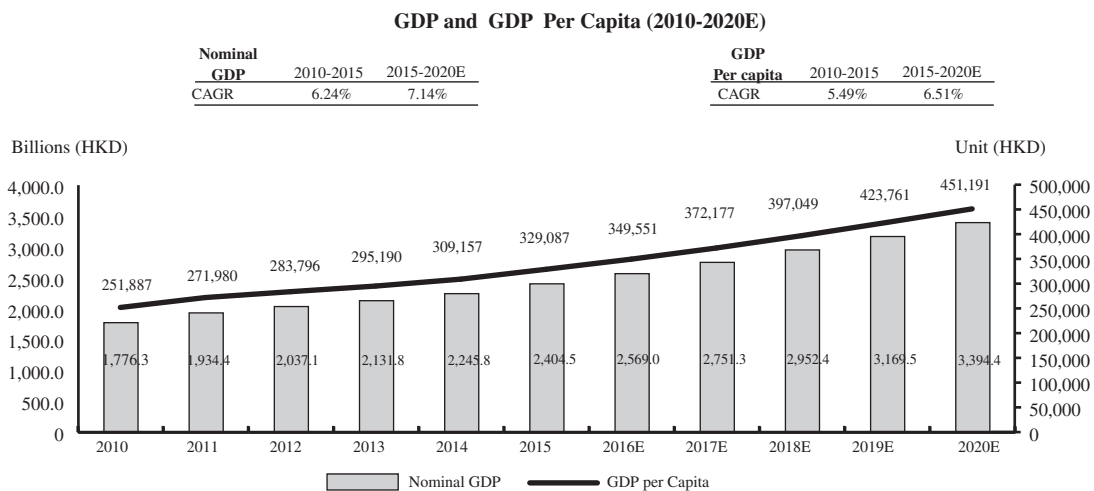
Frost & Sullivan developed estimates and forecasts on the following assumptions: (i) the global economy is assumed to maintain a steady growth across the forecast period; and (ii) it is assumed that there is no external shock such as financial crisis or the wide outbreak of diseases to affect the demand and supply of construction and refurbishment services, including car park flooring services, in Hong Kong during the forecast period.

### MARKET OVERVIEW OF THE MACRO-ENVIRONMENT IN HONG KONG

#### (a) Nominal GDP and GDP Per Capita

Nominal GDP has seen stable growth since 2010 and growth will remain steady throughout 2015-2020.

Over the past five years, Hong Kong has experienced a steady growth in its economy. Nominal GDP increased from HK\$1,776.3 billion in 2010 to HK\$2,404.5 billion in 2015, growing at a CAGR<sup>1</sup> of 6.24%. It is expected that it will reach HK\$3,394.4 billion by the end of 2020, moving up at a faster CAGR of 7.14% during 2015-2020. GDP per capita has increased steadily during 2010-2015, at a CAGR of 5.49%, from HK\$251,887 to HK\$329,087.06. By the end of 2020, it is estimated that growth will accelerate at a CAGR of 6.51%, reaching HK\$451,191 per head.



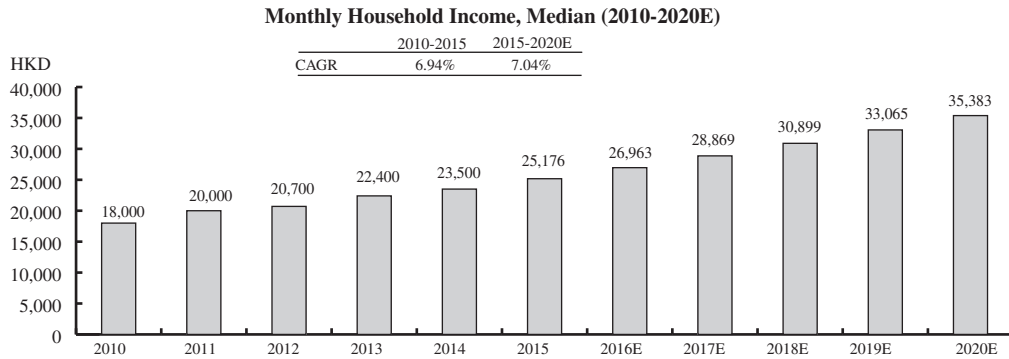
Source : IMF, Frost & Sullivan

<sup>1</sup> CAGR represents the compound annual growth rate which is the mean annual growth rate of an investment over a specified period of time longer than one year.

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### (b) Monthly Household Income

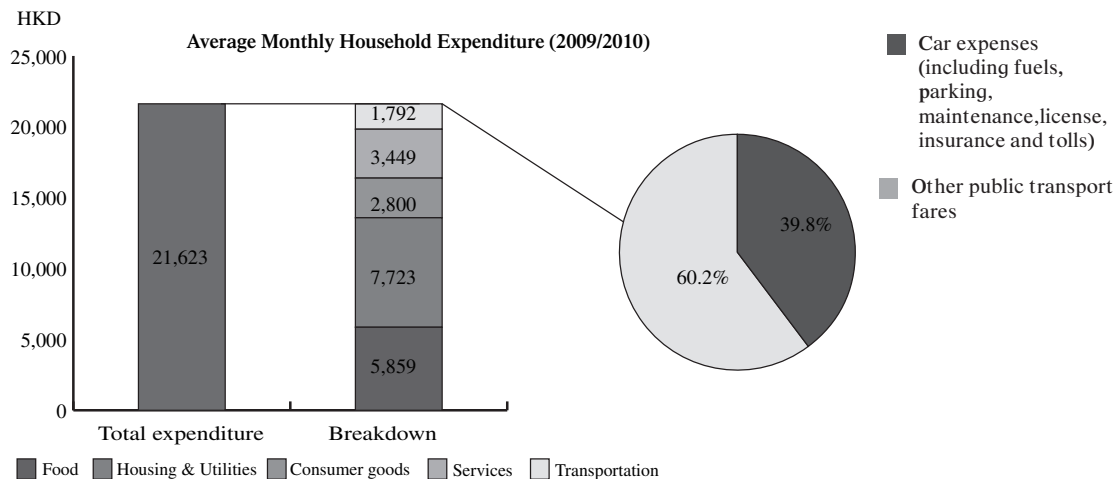
The monthly household income in Hong Kong is expected to continue to grow in the next five years. During 2010-2015, average monthly household income in Hong Kong grew at a CAGR of 6.94% from HK\$18,000 to HK\$25,176. In the next five years, monthly household income is expected to grow at a CAGR of 7.04%, reaching HK\$35,382 by the end of 2020. The accelerating growth in household income is expected to bring higher demand for private cars. As a result, this would also increase the demand for car parks, which would bring potential growth to the car park flooring industry in Hong Kong.



*Source: HKSAR Census and Statistics Department, Frost & Sullivan  
Notes: Average household size=2.9 from 2009-2014*

### (c) Monthly Household Expenditure

Car expenses accounted for 40% of the total transport expenses in 2010. In 2010, average monthly household expenditure was HK\$21,623, in which food as well as housing and utilities accounted for over 60% of the total expenditure. Other expenses such as transportation, consumer goods and services such as medical services, school fees and entertainment expenses, according to the HKSAR Census and Statistics Department, amounted to HK\$1,792, HK\$2,800 and HK\$3,449 respectively. More importantly, car expenses took up 40% of the total transportation expenses whereas other public transport fares such as bus, tram, subway, taxi and ferry fares added up to roughly 60%.



*Source: HKSAR Census and Statistics Department, Frost & Sullivan  
Note 1: Household Expenditure Survey is conducted once every five years  
Note 2: Latest survey recorded as 2010*

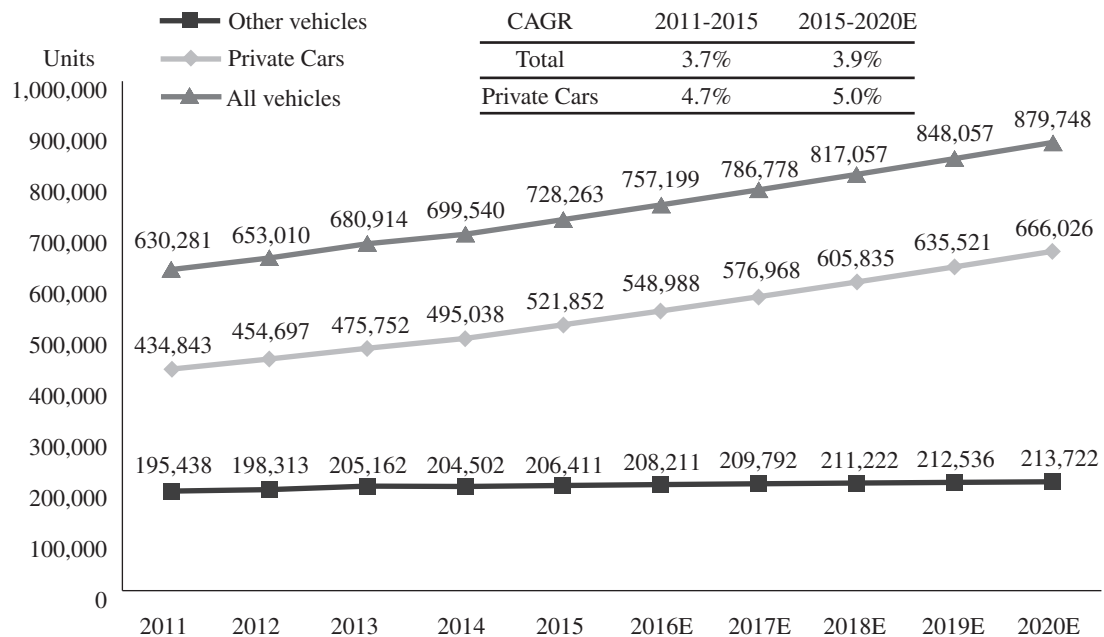
**INDUSTRY OVERVIEW**

**(d) Total Vehicle Population**

Hong Kong has seen a rise in the total number of licensed vehicles since 2011. During 2011-2015, total vehicle population grew at a CAGR of 3.7% from 630,281 to 728,263, in which the year-on-year growth of private cars was 4.7%. In 2015, private cars accounted for almost 70% of the total vehicle population in Hong Kong, becoming the main driver for the demand for car parks and parking lots.

It is estimated that total vehicle population in Hong Kong would continue to grow at a CAGR of 3.9% during 2015-2020, when private cars will present a CAGR of 5.0%. By 2020, the number of private cars would amount to 75.7% of the total vehicle population, which implies a market need of expanding the total area of car parks, creating more growth opportunities for the car park flooring market.

**Total Licensed Vehicle Population, by types (2011-2020E)**



Source: HKSAR Transport Department, Frost & Sullivan

Note 1: Oldest data recorded as 2011

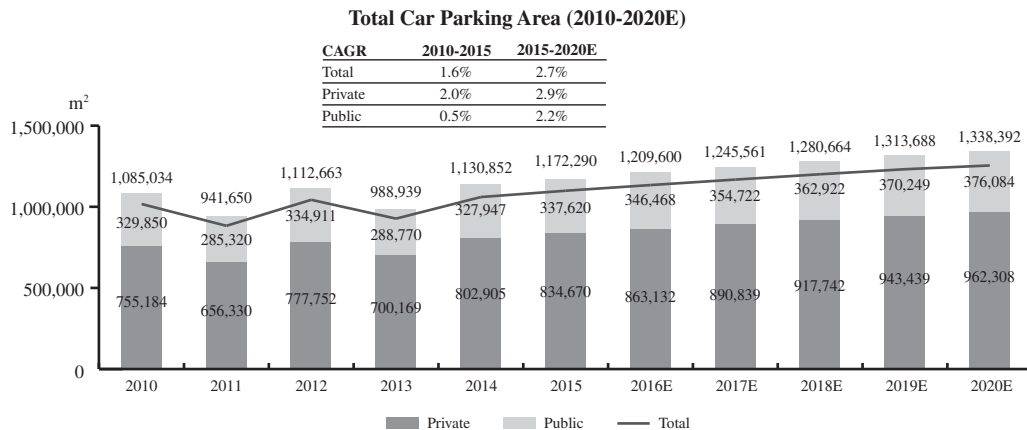
Note 2: Other vehicles included public and private buses, minibuses, taxis, motor cycles, goods vehicles, special purpose vehicles & government vehicles

## INDUSTRY OVERVIEW

### (e) Total Car Parking Area

The car parking area in Hong Kong is expected to keep growing gradually in the future. Total car parking area in Hong Kong rose from 1,085,034.2 m<sup>2</sup> in 2010 to 1,172,290 m<sup>2</sup> in 2015, demonstrating a CAGR of 1.6%. Fluctuations in car parking area increased during the past five years, and they were mainly attributed to the ups-and-downs in gross floor area of newly completed building projects. Driven by the growing population of total vehicles in Hong Kong, especially private cars, it is estimated that the total car parking area in Hong Kong would continue to grow at a CAGR of 2.7% during 2015-2020 in order to meet the future car parking area demand. To a certain extent, the increase in car park areas reflects the Hong Kong Government’s increasing push of residential units supply in the medium term.

Table below sets out the historical and forecasted supply of both private and public car parking areas:



*Source: HKSAR Buildings Department, HKSAR Transport Department, Frost & Sullivan*

Table above shows total private carparking spaces – target market of the Group’s current business – is expected to increase by 2.9% per annum from 2015 to 2020, compared to an increase of 2.0% per annum for the period from 2010 to 2015. This increase is due primarily to expected increase in the number of vehicles coupled with increased supply of private residential units.

### GOVERNMENT POLICIES IN RELATION TO CAR PARKING AREA

The Hong Kong Government’s plan of increasing housing supply and the standards of car parking spaces in property developments governed by the Planning Department are the major key drivers to the supply of car parking area in Hong Kong. Details of these government policies are set out in the paragraphs below.

#### (a) Hong Kong Housing Market

In December 2015, Hong Kong Government published the Long Term Housing Strategy Annual Progress Report 2015. In that report, it was mentioned that the Hong Kong Government has adopted a total housing supply target of 460,000 units for the ten-year period starting from 2016-2017. Of the above 460,000 units, supply target for public housing (including public rental housing and subsidized sales flats) is 280,000 units whereas private housing supply target is 180,000 units.

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With the continuous supply of housing land by the Hong Kong Government, medium-term supply of private housing units has significantly increased. As at the end of March 2016, the Hong Kong Government announced that projected supply from new private residential property market for the coming 3 to 4 years was approximately 92,000 units, a record high since the first release of the quarterly statistics on supply in September 2004. This was compared to completion of 68,200 private residential units during the period from 2010 to 2015.

During the fiscal year ended 31 March 2016, the Hong Kong Government sold a total of 14 residential sites under its Land Sale Programme with a capacity to produce about 8,940 private residential flats. Together with other sources of private housing land supply (including railway property development projects, projects of Urban Renewal Authority (URA) and private redevelopment/development projects), the aggregate land supply had an estimated capacity to produce about 19,870 private residential flats, exceeding the land supply target of 19,000 private residential flats set for that year. This was the second highest outturn since the Hong Kong Government introduced a private housing land supply target in 2010.

### **(b) Hong Kong Standards Relating To Car Parking Spaces In Property Developments**

The Planning Department of Hong Kong Government sets out standards of car parking spaces for different types of developments. Under the guidelines of the Planning Department, the overall intention of the standards is to ensure that subject to road capacity considerations, all residential developments should have sufficient parking provision to match car ownership of residents; whereas commercial developments should have sufficient on-site parking to match manifest operational requirements.

The Transport Department commissioned a consultant for the “Review of Parking Standards for Private Housing Developments in Hong Kong Planning Standards and Guidelines” between 2009 and 2012. The review results showed that the overall utilization of private car parking spaces in private residential housing was about 70%. Although the supply was generally satisfactory, it was found that the utilization rate of small and medium-sized units of private residential housing (i.e. flats of area smaller than 100 sq.m.) was relatively low, while the supply of private car parking spaces for large units of private residential housing (i.e. flats of area not smaller than 100 sq.m.) was inadequate.

In February 2014, in order to better utilize the newly developed lands for private residential housing and to reduce the overall vacancy rate of private car parking spaces, the Hong Kong Government revised the standards and guidelines concerning the provision of private car parking spaces in private residential housing. The revisions were mainly to revise the parking facilities standards to cater for the latest situation, taking into account factors such as the various flat sizes of private residential housing, distances between the residential developments and railway stations, and the development densities, etc.

Currently, the number of car parking spaces in residential developments under planning standards and guidelines for new developments depend on (1) whether the development is public or private – fewer car parking spaces will be allocated to public housing compared to private developments; (2) density (or plot ratio) of a private residential development – more car parking spaces will be needed for a denser development; (3) flat size of private development – more car parking spaces will be allocated to larger units compared to smaller ones; (4) proximity of the development to Mass Transit Railway or rail stations – less car parking spaces will be needed for those development within 500 meters of such station.

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Table summarizing parking standards for both residential developments and commercial developments are set out below:

**Parking Standards for residential developments**

Type of Development	Parking Requirements			Remarks
	Standards			
1. Public Housing –	– Private Car:			See Notes (1) – (3).
	Global Parking Standard (GPS)		1 car space per 6-9 flats	
	Demand Adjustment Ratio (R1)	All Public Housing	0.23	
	Accessibility Adjustment Ratio (R2)	Within a 500 meters-radius of rail station <sup>(Note 2)</sup>	0.85	
		Outside a 500 meters-radius of rail station <sup>(Note 2)</sup>	1	
	<b>Parking Requirement = GPS x R1 x R2</b>			
	– Light Goods Vehicle (LGV):  1 LGV space per 200-600 flats			
– Medium Goods Vehicle:  No fixed standard. To utilize estate commercial centre loading/unloading bays for overnight parking in estates.				

**INDUSTRY OVERVIEW**

Type of Development	Parking Requirements			Remarks	
	Standards				
2. Private Housing –	– Private Car:			See Notes (1) & (4) – (6).	
	Global Parking Standard (GPS)		1 car space per 6-9 flats		
	Demand Adjustment Ratio (R1)	Flat Size (FS) (m <sup>2</sup> ) (GFA)	Flat Size (FS) ≤40		0.4
			40<FS≤70		0.7
			70<FS≤100		2.1
			100<FS≤130		5.5
			130<FS≤160		7.5
			FS>160		9.5
	Accessibility Adjustment Ratio (R2)	Within a 500 meters radius of rail station <sup>(Note 4)</sup>			0.75
		Outside a 500 meters-radius of rail station <sup>(Note 4)</sup>			1.00
Development Intensity Adjustment Ratio (R3)	Domestic Plot Ratio (PR)	0.00<PR≤1.00	1.30		
		1.00<PR≤2.00	1.10		
		2.00<PR≤5.00	1.00		
		5.00<PR≤8.00	0.90		
		PR>8.00	0.75		
<b>Parking Requirement = GPS x R1 x R2 x R3</b>					

Notes:

All Residential Developments

- (1) Within the limits of the Global Parking Standards, Transport Department establishes district-based parking standards for each district according to the prevailing demand/supply conditions in respective districts. The district-based parking standards are subject to periodical review.

Public Housing

- (2) A 15% discount should be applied to the provision of residential car parking spaces where over 50% of the site area of the development fall within a 500 meters radius of rail stations. The 500 meters-radius catchment area of a rail station should be drawn from the centre of the station irrespective of the configuration and layout of the station.
- (3) “One person/two persons” flats shall be excluded from the calculation of the overall parking provision of both car parking spaces and light goods vehicle spaces.



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Notes:

Private Housing

- (4) A 25% discount should be applied to the provision of residential car parking spaces where over 50% of the site area of the development fall within a 500 meters radius of rail stations. The 500 meters-radius catchment area of a rail station should be drawn from the centre of the station irrespective of the configuration and layout of the station.
- (5) The standard for the developments of flat size greater than 160 sq.m. is a minimum requirement. Request for provision beyond the standard will be considered by Transport Department on a case-by-case basis.
- (6) Visitor car parking for private residential developments with more than 75 units per block should include 1-5 visitor spaces per block in addition to the recommendations, or as determined by the Government. For other private residential developments, the visitor car parking provision will be advised by Transport Department on a case-by-case basis.

**Parking Standards for Commercial Facilities**

Type of Development	Parking Requirements	
	Standards	Remarks
1. Retail	<ul style="list-style-type: none"> <li>– For the first 200-300 m<sup>2</sup> GFA: 1 car space per 200-300 m<sup>2</sup> GFA.</li> <li>– For the first 2,000 m<sup>2</sup> GFA: 1 car space per 40-50 m<sup>2</sup> GFA.</li> <li>– Above 2,000 m<sup>2</sup> GFA: 1 car space per 150-200 m<sup>2</sup> GFA.</li> </ul>	<ul style="list-style-type: none"> <li>– Generally nil provision is permitted for small road-side retail shops which are mainly serving local residents.</li> <li>– Retail is taken to include restaurants and related services commonly found in shopping complexes, but not retail markets apart from those integrated in location and design with the centre.</li> <li>– For retail centres within public housing developments, the requirement should be related to the findings of the pertinent Housing Department retail viability study.</li> </ul>
2. Office	<ul style="list-style-type: none"> <li>– For the first 15,000 m<sup>2</sup> GFA: 1 car space per 150-200 m<sup>2</sup> GFA.</li> <li>– Above 15,000 m<sup>2</sup> GFA: 1 car space per 200-300 m<sup>2</sup> GFA.</li> </ul>	<ul style="list-style-type: none"> <li>– For office blocks with car lifts, adequate queuing spaces should be provided to avoid tailing back onto public roads.</li> <li>– Flexibility should be applied to permit a reduction of standards or nil provision for office blocks located very close to high capacity public transport systems, or for cases with severe site constraints.</li> </ul>

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In summary, it is expected that increasing housing supply will lead to a corresponding increase of car parking areas; while the standards of car parking spaces as set out by the Planning Department (the “PD Standards”) aims to provide a better match in terms of demand and supply of car parking spaces in different developments taking into consideration the type of developments, density and flat size of private residential development, and proximity to Mass Transit Railway or rail stations.

Despite the Planning Department’s intention of reducing the overall vacancy rate of private car parking space, the effect of Hong Kong Government’s current policy in increasing housing supply, both in the private and public sectors, will outweigh the effect of the PD Standards and is expected to be the main driver in increased supply of car parking spaces which contribute to the forecasted growth of car parking area of 2.7% per annum from 2015 to 2020.

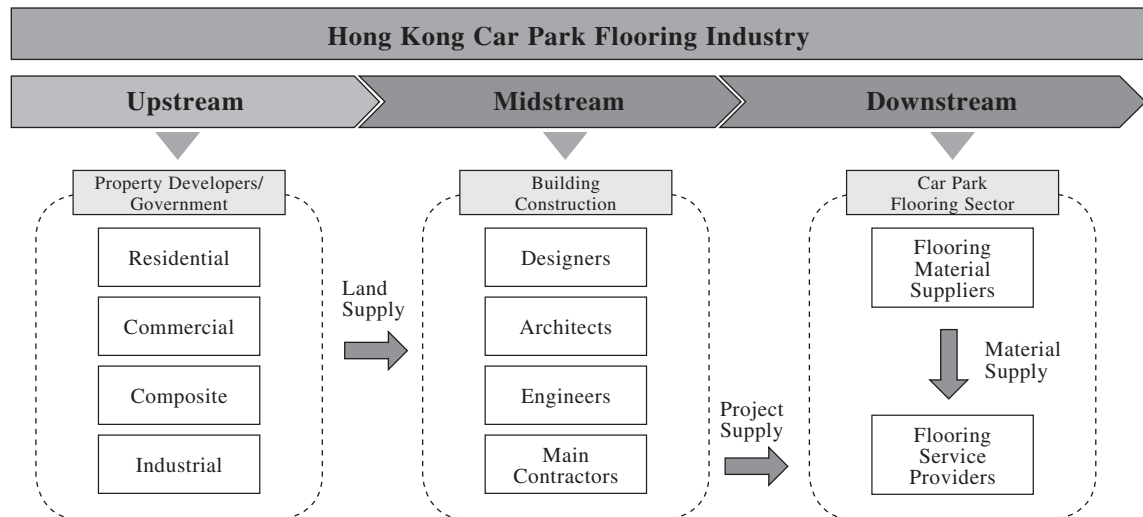
### MARKET OVERVIEW OF THE CAR PARK FLOORING INDUSTRY IN HONG KONG

#### (a) Value Chain Analysis and Business Model

##### *Value Chain Analysis*

When property developers or the government has land that they want to develop, they are providing opportunities and projects for the construction industry. Some of these projects require car park flooring services – and this is where the car park flooring industry comes in.

The car park flooring service providers procure their materials from flooring material suppliers, and utilise the materials to produce their outputs.

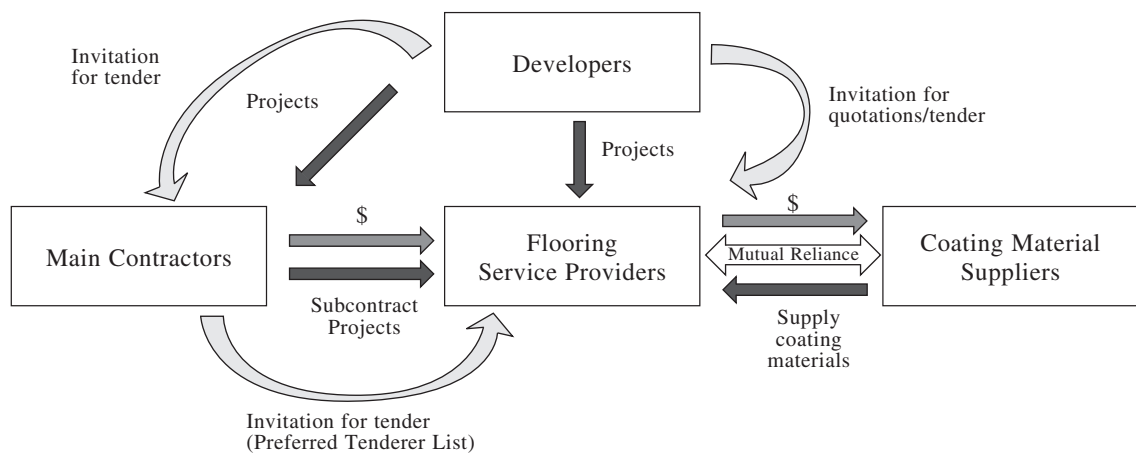


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### *Typical Business Model*

In the car park floor coating industry of Hong Kong, there are two main sources where flooring service providers get their project deals from: (1) property developers send out invitations for tender to main contractors, main contractors will then engage subcontractors appearing on their preferred tenderer lists to work on their development projects; (2) In some instances, subcontractors such as flooring service companies would also get direct invitations of quotations from property developers.

The flooring service companies mentioned above then produce tender prices based on the material and labour costs and period and project spans after considering competition, site conditions and the types of customers – e.g. the Hong Kong Government, property developers or construction companies. Flooring service companies pay their suppliers for the materials, and they receive payment from the main contractors by way of progress payments and final settlements.



Source : Frost & Sullivan

Mutual reliance between flooring service providers and coating material suppliers is regarded as an industry norm within the car park flooring industry in Hong Kong. This is due to the fact that coating material suppliers intend to find good applicators of their coating materials securing sales channels through establishing long-term relationship with flooring service providers; while flooring service providers also prefer using high quality coating materials with their services to ensure that the best service is delivered to their end customers.

Sourcing from a small number of floor coating material suppliers is regarded as a norm for car park flooring industry in Hong Kong as flooring service providers tend to minimise the number of suppliers to one or two suppliers in order to increase their bargaining power and reduce purchasing costs when it comes to bulk buying. Maintaining a sustainable business relationship with floor coating material suppliers is effective in raising bargaining power of floor coating service providers in the long term, as flooring service providers can take advantage of their position as a significant buyer to exert pressure on floor coating materials suppliers to negotiate for better terms, such as lower prices of floor coating materials, as well as more technical and marketing support.

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Car park flooring industry is not capital intensive due to the nature and procedures of car park flooring work that only a few types of small-scale machineries such as shot-blasting machines and screeding machines are required. Comparatively, more emphasis is placed on the expertise and experience of the car park flooring service providers. It is a common understanding that the correct handling of proprietary floor coating products is crucial to producing high quality car park flooring work; failing which, the duration, performance and long term condition of the car park floor would be adversely affected and therefore it is important that the car park flooring service provider has the requisite skills and experience to perform the flooring work. Given that we are (i) one of the approved applicators or the sole distributor of the proprietary car park floor coating materials, which are well recognised by our customers, and (ii) one of the leaders in the car park flooring industry in Hong Kong, we had been in a better position to negotiate or to win tenders at a favorable price, which might lead to a higher gross profit margin for our Group as compared with the industry average of the construction industry as a whole. The profit margin of our Group is in line with the industry norm.

It is an industry norm for car park flooring service providers to have higher gross profit margin compared to other construction companies as (i) in most cases, users of car park flooring service prefer specific brands of flooring materials which are exclusively applied by approved applicators. These flooring materials, which are usually made overseas, are proprietary branded products that last up to 10 years. In addition, car park flooring materials are required to be applied by specialised car park flooring applicators. Hence, high-quality applicators have an advantage of higher profit margin, compared to profit margins of local construction firms that undertake normal building construction work; and (ii) car park flooring works require knowledge and experience as well as expertise, as specialized application work is involved. Hence, users of car park flooring services often need specialised flooring service contractors such as the Group (not just an ordinary house building contractor) to apply such products. Due to higher requirement and complexity of such work, gross profit margin for such work is usually higher compared to that of normal builders.

### **(b) Key Suppliers and Customer Segments**

The identified key suppliers of car park floor coating materials in Hong Kong are Supplier A, Supplier B, Supplier X, Supplier Y and Supplier Z, in no particular order. They mainly supply car park coating materials such as epoxy, polyurethane as well as methyl methacrylate to flooring services companies in Hong Kong.

Main customers of car park flooring companies are segmented into five groups: the Hong Kong Government, property developers, construction companies, as well as property owners and property management companies acting on behalf of incorporated owners of existing buildings seeking renovations. They are the sources of demand for car park flooring services including new and renovation projects.

Unlike new construction market whose customers are property developers and professional property construction companies, customers in refurbishment market are mainly property management companies, main contractors focusing on buildings refurbishment works as well as incorporated owners of existing buildings seeking car park flooring services.

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Unlike customers of new developments (such as property developers and construction companies) where architects and developers have pre-determined or preferred products in their main contract tenders, materials are usually proposed by car park flooring service providers and chosen by customers of refurbishment markets at the start of the renovation projects.

It is common to see that car parks in new or renovated buildings in Hong Kong using car park coating materials that provide a colourful, slip-resistance, hard wearing surface that is resistant against water and petrochemicals.

### *Review of Major Suppliers*

The market of suppliers for car park flooring coating materials is estimated to be highly concentrated in Hong Kong with top five floor coating materials providers accounted for 58.6% in 2015 in terms of product usage. Supplier Z was estimated to be the largest floor coating material provider in Hong Kong with a market share of 19.0% in the same year. A comparison of the background and features among major suppliers in the Hong Kong car park flooring industry are listed below.

	Supplier A	Supplier B	Supplier X	Supplier Y	Supplier Z
<b>Year of Establishment</b>	1982	1928	1988	1972	1910
<b>Headquarters</b>	United Kingdom	United Kingdom	Hong Kong	Britain	Switzerland
<b>Key Manufacturing Location for Flooring Products (For Asia Market)</b>	Malaysia	United Kingdom	Hong Kong	China	China
<b>Approved applicators in Hong Kong (Note)</b>	Our Group, Competitor C	Our Group	Competitor A	Open to the market with no specific approved applicator	Competitor D, Competitor E, and other small players
<b>Geographic Coverage</b>	32 countries	25 countries	1 country	20 countries	93 countries
<b>Green Assessment Highlighted in relation to Flooring Product Application</b>	✓	✓	N/A	N/A	N/A
<b>Leadership in Energy and Environmental Design (LEED) Building Research Establishment Environmental Assessment Methodology (BREEAM) Building Environmental Assessment Method (BEAM)</b>	✓	✓	N/A	N/A	N/A
	✓	N/A	N/A	N/A	N/A

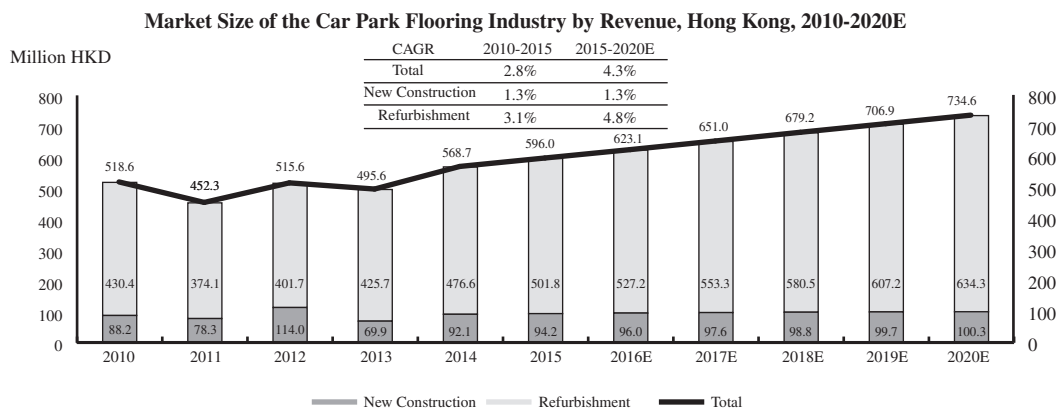
*Note:* Please refer to the paragraph headed “Ranking” in this section for details of our competitors.

## INDUSTRY OVERVIEW

### (c) Market Size of the Car Park Flooring Industry

The market size of the car park flooring industry in Hong Kong will likely maintain steady growth in the future. The total market size of car park flooring industry in terms of revenue in Hong Kong rose from approximately HK\$518.6 million in 2010 to approximately HK\$596.0 million in 2015, representing a CAGR of 2.8% during 2010-2015. The number of private cars in Hong Kong is estimated to have a CAGR of 5.0% during 2015-2020, so more demand for car parking lot will be generated. However, the shortage of land supply in Hong Kong tends to limit the new construction. Therefore, it is estimated that the total market size would grow at a CAGR of 4.3% from 2015 to 2020, driven by the increasing demand for car park refurbishment.

The market size of car park flooring refurbishment works has been larger and achieving higher CAGR than that of car park new construction because of the limited land supply in Hong Kong. The general situation of large car park flooring refurbishment market with higher CAGR will likely to remain in the next five years. In 2015, the market size of car park flooring refurbishment was five times as large as that of new constructions, as car park flooring refurbishment took up 84.2% in the whole market size.

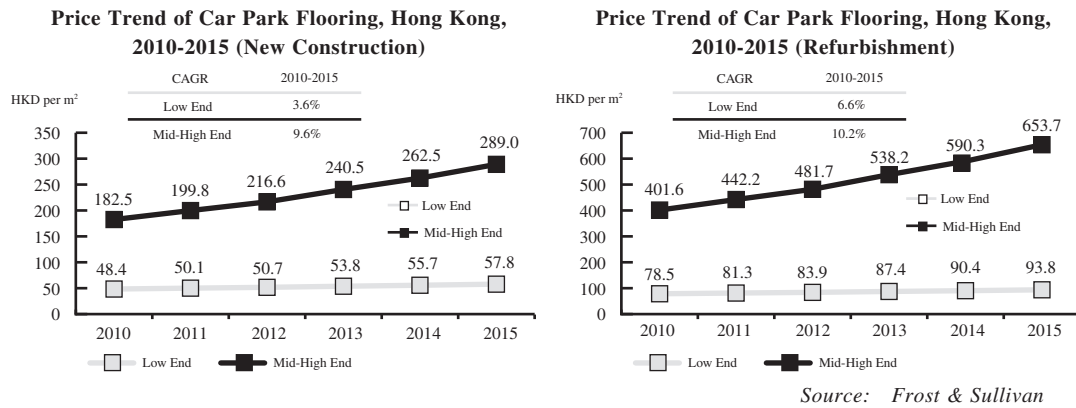


### (d) Analysis of Historical Price Trend of Car Park Flooring

Car park flooring services in Hong Kong had recorded a growing trend in terms of price over the historical period. Due to additional procedures in flooring work (e.g. removal of old coating material and screeding), average price of car park flooring for refurbishment was higher than that of new construction projects.

In general, car park flooring service could be segmented into mid to high end and low end based on various criteria such as perception from customers, pricing, quality and grading of building, and property involved. The growing price trend for car park flooring service providers was attributed to escalating operation cost including coating materials (e.g. epoxy, cement) and labour cost. On the other hand, mid to high end players showed a higher CAGR than low end players due to the application of high quality materials, while the low end players maintained their competitiveness through lower project pricing.

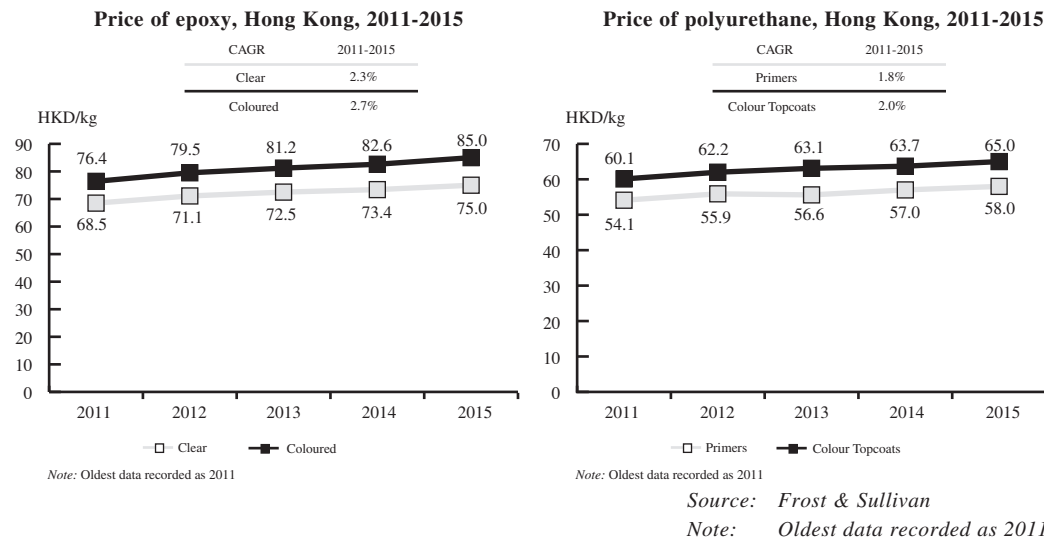
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**(e) Analysis of Historical Average Price Trend for Key Raw Materials**

The period of 2011-2015 saw a rise in the prices of coating materials in Hong Kong. Epoxy and polyurethane are the two mostly used paints in car park floor coating which are made from oil and resins while methyl methacrylate is also an option with faster installation. Polyurethane can be divided into primers and colour topcoats in which colour topcoat is generally slightly more expensive than primers, whilst coloured epoxy is also more expensive than the clear ones. Polyurethane and epoxy are used in different contexts for different purposes, while polyurethane is more preferred for anti-skid purposes, and epoxy is used in heavy-duty surfaces.

Due to increasing health concerns and government restrictions on volatile organic compounds levels in painting materials, the demand and prices for epoxy, which has a lower volatile organic compounds level, climbed faster than that of polyurethane. Meanwhile, coloured coating are growing in popularity due to a rise in the demand for better looking car parks.



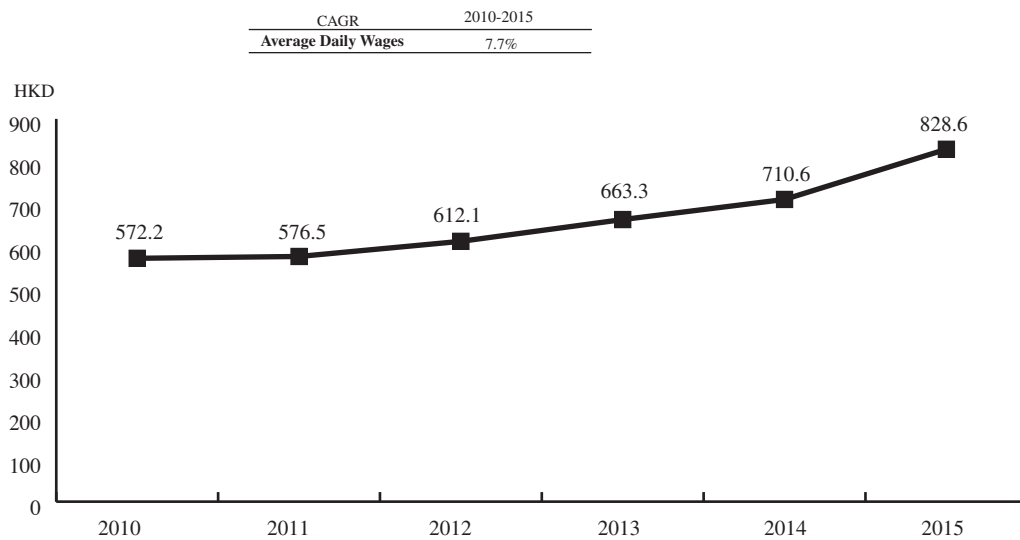
## **INDUSTRY OVERVIEW**

### **(f) Historical Average Salaries of Workers in Car Park Flooring Services**

The average daily wage of car park flooring workers had increased over the past five years, mainly driven by inflation and the substantial demand for labour. The average daily wages for Hong Kong car park flooring workers had witnessed a growing trend from HK\$572.2 in 2010 to HK\$828.6 in 2015 at a CAGR of 7.7%.

Inflation, substantial demand for workers in construction industry due to increasing number of property development projects, announcement of development goal by the government (e.g. 10-year housing supply target) and shortage of labour served as key drivers for the increase in daily wages in the car park flooring industry over the historical period.

**Average Daily Wages of Car Park Flooring Workers, Hong Kong, 2010-2015**



*Soucre: Frost & Sullivan*

### **COMPETITIVE LANDSCAPE OF THE CAR PARK FLOORING INDUSTRY IN HONG KONG**








The Hong Kong car park flooring industry can be separated into two segments, the new construction market and the refurbishment market. However, there is no difference in the competitive landscape between new construction and refurbishment markets in Hong Kong as all players in the industry can become eligible candidates for tender submission in any new construction and refurbishment projects.


The new construction market is relatively concentrated compared to the refurbishment market. This is because customers of the new construction market such as property developers and construction companies usually have pre-determined or preferred products in their main contract tenders. This resulted in a market that is dominated by a few approved floor coating applicators. Comparatively, the refurbishment market is fragmented as customers in this market can choose from many flooring service providers.



**INDUSTRY OVERVIEW**

**(a) Customer Behavior and Choosing Criteria on Service Provider**

<b>Criteria</b>	<b>Power of Influence</b>	<b>Customer Behaviour</b>
Quality		Quality of coating materials and coating work is the most important criteria that customers would consider when it comes to choose a service provider for car park flooring.
Experience and Job References		The more experiences service provider has the higher the chance it get picked as this would mean the service provider has got involved in a lot of relevant projects which helps to provide more comprehensive solutions for its customers.
Price		Better quality materials and works often cost more and last longer. However, customers are more willing to pay higher price for better quality flooring work.
Brand and Reputation		Word of mouth has become increasingly important when it comes to choose the right service provider to perform the task as poor coating work would impose extensive monetary losses and time cost to the customers.
After-Sales Service		Providing warranty is the industry common practice. Therefore, customers expect after-sales-service when things went wrong. The longer the warranty is, the higher the consumer confidence in choosing that particular service provider as this would mean longer durability of the products.
Service Scope		The wider range of services a company can provide, the more likely the customers would choose a particular company as they tend to have different requirements and various kinds of works to be completed in a project e.g. waterproofing with floor coating and anti-skid surface systems.
Eco-friendliness of materials		With the increasing awareness of environmental protection, eco-friendly coating materials are increasingly preferred by customers.

Notes: From low to high 

Source: Frost & Sullivan

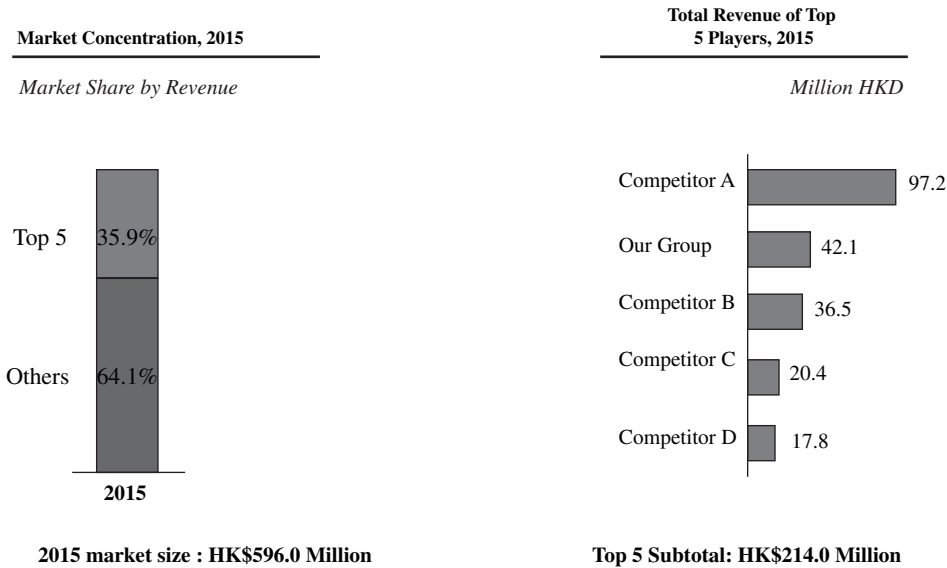
**(b) Market Concentration**

In the year of 2015, top five companies took up an aggregate market share of 36% in the car park flooring market of Hong Kong.

Our Group is leading the new construction market of car park flooring in Hong Kong, as we occupied 33.7% in the new construction segment in the year of 2015. We have contributed approximately HK\$42.1 million dollars in the new construction market and the refurbishment market, representing 19.7% of the aggregate market share of the top five players.

## INDUSTRY OVERVIEW

Competitor A ranked first among other players, contributing an estimated revenue of HK\$97.2 million and 16.3% of market share in the car park flooring market of Hong Kong in 2015, because the focus of Competitor A is on refurbishment business.



**(c) Ranking**

*Ranking by Revenue and Market Share*

In terms of the revenue from car park flooring services, the top five players in Hong Kong in 2015 were Competitor A, our Group, Competitor B, Competitor C and Competitor D. The following table shows the revenue and market shares of the top five players:

Ranking	Company	Revenue from Car Park Flooring in Hong Kong in 2015 (HK\$ million)	Market Share of Hong Kong Car Park Flooring in 2015
1	Competitor A	97.2	16.3%
2	Our Group	42.1	7.1%
3	Competitor B	36.5	6.1%
4	Competitor C	20.4	3.4%
5	Competitor D	17.8	3.0%
	Top 5 Total	214.0	35.9%

*Source: Frost & Sullivan*

## **INDUSTRY OVERVIEW**

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### *Profiles of Competitors*

<b>Company</b>	<b>Year of Establishment</b>	<b>Description</b>
Competitor A	1988	Competitor A was established as an electronics chemicals supplier in Hong Kong. Over the years, the company has grown and diversified to become a leading manufacturer, equipment and materials supplier, and specialist applicator of epoxy, polyurethane, polyurea and other high performance materials for building construction and industrial applications. In the car park flooring sector, the company has been focusing on the refurbishment projects.
Competitor B	2002	Competitor B is an engineering company undertaking contracting works with imported Taiwanese branded floating products. Competitor B started its business as wall painter and slowly shifted to the part of flooring and has successfully grasped some market share in the car park flooring market of Hong Kong.
Our Group	2002	We are an established contractor in Hong Kong in the car park flooring industry.
Competitor C	1981	Competitor C is mainly involved in the service of waterproofing, flooring, external refurbishment and additional services or material supplies. Competitor C has a stronger presence in Macau than in Hong Kong as it has concentrated on works involving casinos in Macau. As for car park flooring, Competitor C has been focusing on the new construction market.
Competitor D	1991	Competitor D is a contractor for epoxy floor coating, anti-skid coating for car park, floor hardener and joint sealant installation. In the past few years, the company has successfully completed many projects, especially renovated car park flooring projects.

It is observed that all of the competitors above are either having office displaying car park flooring coating samples or owning showrooms for products demonstration in Hong Kong.

*Source: Frost & Sullivan*

## **INDUSTRY OVERVIEW**

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### **(d) Market Entry Barriers**

New players in the Hong Kong car park flooring market may encounter the following entry barriers:

#### *Relationships between Main Contractors and Existing Market Players*

Main contractors play a key role in construction part of development projects in Hong Kong and they may have their own tender lists with preferred subcontractors for coating and decoration works, which include flooring in car parks. Hence a greater effort would be required for a new entrant without a track record to the car park flooring market to be included in the tender lists and acquire projects.

#### *Limited Pool of Experienced Labour and Soaring Labour Costs in the Market*

In the car park flooring industry, there are limited number of specialised and experienced workers serving existing flooring service providers. Meanwhile, the overall shortage of labour in the construction industry may further narrow down the manpower available for car park flooring. In addition, escalating costs for labour may also lead to an issue for new service providers to initiate and sustain their businesses in the market.

### **(e) Market Drivers and Opportunities**

#### *Vehicles and Parking Lots*

According to the Transport Department, there were 731,073 licensed vehicles in 2015, while the total number of parking lots was 695,000 (exclude off-street parking). In view of the substantial number of vehicles, there will be a strong demand for parking lots, especially in urban areas and housing estates. The demand is also driven by speculation and escalating prices of parking lots in housing estates during the recent years. As a result, a potential growth in car parking lots is expected in the future to meet the increase in demand, which will bring more car park flooring businesses.

#### *Housing and Development*

According to the Housing Authority, the number of general applicants for public housing has increased from 77,800 in 2010 to 121,900 in 2014, which indicate a growing demand for parking lots in public housing estates. To address the increasing demand for housing, the Government had proposed the target of housing supply in its Policy Address since 2011. As estimated in the 2014 Policy Address, there will be 470,000 housing units in total in the next ten years, which will bring more car park construction needs in residential buildings and thus related car park flooring projects.

## **INDUSTRY OVERVIEW**

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### *Renovation Projects*

With rising living standard and quality, property developers and management companies have increased their efforts on renovation of facilities. As estimated by Planning Department, there are 12,220 buildings aged above 40 years in Hong Kong in 2016, while there were 4,340 buildings aged between 30 to 39 years. The Mandatory Building Inspection Scheme (“**MBIS**”) has come into full implementation in 2012, which highlights the inspection and related repair works to be conducted for buildings aged 30 years and above. Apart from Mandatory Building Inspection Scheme, the Government has taken initiatives to boost their renovation projects. For instance, the Urban Renewal Authority has contributed HK\$150 million to repair and maintenance work. Hence, it is expected that more renovation work would be carried out on the aged buildings and related facilities including car parks, thus increasing the demand for car park flooring works.

### *Rising Quantity and Quality of Parking Lots*

In view of the trend of escalating number of automobile possession in Hong Kong along with the speculation of parking lots, supply of car parking lots in the forms of underground and multi-storey car parks will likely be increased to meet the growing demand.

Meanwhile, it is expected that more old car parks will be refurbished and upgraded together with other common areas in the building under the MBIS. Meanwhile, higher living standards will increase the demand for modern designed car parks with better protection to vehicles, and car owners are more willing to store their vehicles in car parks rather than outside for security reason. Hence more flooring projects in car parks can be anticipated in the future.

## **(f) Threats**

### *Advancement in Floor Coating Materials and Technology*

Epoxy and polyurethane resin are the commonly used coating materials in car park flooring. With technological developments and thus the emergence of new materials, efficiency and quality of flooring work will likely be enhanced in the future.

For example, methyl methacrylate becomes one of the options for refurbishment projects due to its fast-curing installation time and high resistance to ultraviolet, which minimises the disruption to regular operation of the car park. However, cost of methyl methacrylate is currently approximately twice that of existing flooring products on the market. In addition, it has the disadvantage of emitting odour upon application, resulting in the limitation of application in outdoor spaces only. On the other hand, new systems with less consumption of materials, aggregates, higher durability, resistance to extreme conditions, and lower staff assignment are likely to appear in the future.