The information in the section below has been partly derived from various publicly available government sources, market data providers and other independent third-party sources. In addition, this section and elsewhere in this document contains information extracted from the Industry Report, for the inclusion in this document. The information has not been independently verified by us, the Sponsor, the [REDACTED], the [REDACTED], any of our or their respective affiliates, directors or advisers or any other persons or parties involved in the [REDACTED], other than Ipsos with respect to the information contained in the Industry Report and no representation is given as to its fairness, correctness and accuracy. Accordingly, you should not place undue reliance on such information or statistics.

The information extracted from the Industry Report reflects estimates of market conditions based on samples and is prepared primarily as a market research tool. References to Ipsos should not be considered as the opinion of Ipsos as to the value of any security or the advisability of investing in our Group. Our Directors believe that the sources of information extracted from the Industry Report are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information.

# SOURCE AND RELIABILITY OF THE INFORMATION

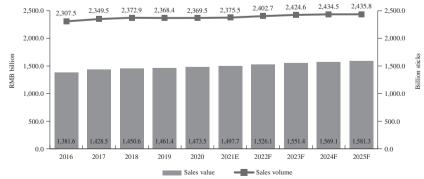
We have commissioned Ipsos, an independent market research company, to analyse and report on the industry development and competitive landscape of the cigarette packaging paper manufacturing industry in the PRC and Hubei for the period from 2016 to 2025 at a fee of HK\$1,030,000. Ipsos is an independent market research company, employing approximately 18,000 personnel worldwide across 90 countries. Ipsos conducts research on market profiles, analysis on market size, share and segmentation, distribution and value analysis, competitor tracking and corporate intelligence. Except as otherwise noted, all of the data and forecasts contained in this section are derived from the Industry Report, various official government publications and other publications. In compiling the Industry Report, Ipsos obtained and gathered data and intelligence by: (a) conducting desk research covering government and regulatory statistics, industry reports and analyst reports, industry associations, industry journals, and other online sources and data from the research database of Ipsos; (b) performing client consultation to obtain background information of our Group; and (c) conducting primary research by interviewing key stakeholders and industry experts. The information and data gathered by Ipsos have been analysed, assessed, and validated using Ipsos' in-house analysis models and techniques. The methodology used by Ipsos is based on information sourced from multiple levels, which allows such information to be cross-referenced for accuracy.

# OVERVIEW OF THE CIGARETTE INDUSTRY IN THE PRC AND HUBEI

Cigarettes are commonly preferred among consumers of tobacco products as they are generally considered to be the type of tobacco products that is more economical, convenient and easily accessible when compared to other tobacco products. Cigarettes are categorised into five tiers in the PRC. Tier 1 cigarettes refer to cigarettes with retail price above RMB18 per box whereas tier 2 cigarettes refer to cigarettes with retail price ranging from RMB13 to RMB18 per box. Tier 3 cigarettes refer to cigarettes with retail price ranging from RMB6 to below RMB13 per box. Tier 4 cigarettes refer to cigarettes with retail price ranging from RMB6 below RMB6 per box. Tier 5 cigarettes refer to cigarettes below RMB3 per box. Tier 1 and tier 2 cigarettes are generally recognised as high-end cigarettes in the PRC, tier 3 cigarettes refer to mid-end cigarettes while tier 4 and 5 refer to low-end cigarettes. Cigarette brands which were recognised as the "Dual 15 cigarette brands (雙十五煙草品牌)" by the STMA are key suppliers of high-end cigarettes in the PRC.

The PRC has the largest consumer base for cigarettes across the globe of approximately 300.6 million smokers in 2020, with male being the predominant consumer. In particular, Yunnan, Hunan, Henan, Guangdong and Hubei are the top five production bases of cigarettes in the PRC, accounting for approximately 40% of the national production volume in aggregate.

#### Sales value and volume of cigarettes in the PRC from 2016 to 2025

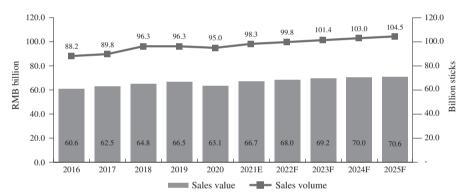


Source: Ipsos research and analysis

The sales volume of cigarettes in the PRC grew steadily from approximately 2,307.5 billion sticks in 2016 to 2,375.5 billion sticks in 2021 at a CAGR of approximately 0.6%, with a slight fall in 2019. In 2019, the PRC Government has issued the Opinions of the State Council on Carrying Out Health Operations (關於實施健康中國行 動的意見) to promote citizen's healthy living which resulted in slower growth for cigarette sales volume. Notwithstanding the tightened regulations on smoking control, it is expected that the demand for tobacco products and the number of smokers in the PRC will remain stable, mainly due to (i) the addictive nature of cigarettes leading to smokers' long-term reliance on tobacco products and hence they are less likely to withdraw from smoking despite the tightened regulations; (ii) the enforcement of smoking control is inherently difficult and often costly, taking into account the government cost to be incurred for deploying officers for patrol, human resources for responding to complaints and reports, as well as expenses in relation to prosecution or other enforcement actions against smokers who are in breach of the regulations; and (iii) the PRC Government has not imposed absolute ban on smoking, nor is there any indication that the PRC Government is inclined to do so in the foreseeable future. Owing to the perceived difficulties in withdrawing from smoking, it is expected that many smokers are more willing to adjust their behavior instead of withdrawing from smoking entirely. Hence, it is expected that the demand for tobacco products will remain stable in the forecast period. The number of smokers in the PRC is expected to remain stable at approximately 300 million and the sales volume of cigarettes is forecasted to increase from approximately 2,402.7 billion sticks in 2022 to 2,435.8 billion sticks in 2025 at a CAGR of approximately 0.5%.

The sales value of cigarettes in the PRC grew from approximately RMB1,381.6 billion in 2016 to RMB1,497.7 billion in 2021 at a CAGR of approximately 1.6% and is forecasted to grow from approximately RMB1,526.1 billion in 2022 to RMB1,581.3 billion in 2025, at a CAGR of 1.2%. Despite the slight drop in sales volume of cigarettes in 2019, the sales value of cigarettes is largely unaffected as the industry aims to increase sales by promoting mid-to-high-end cigarettes, which is also the major driver for the forecasted years.

### Sales value and volume of cigarettes in Hubei from 2016 to 2025



Source: Ipsos research and analysis

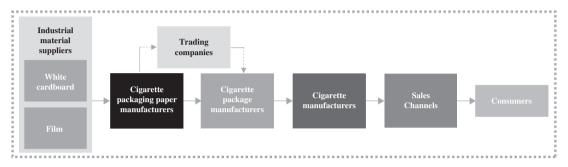
The sales volume of cigarettes in Hubei grew moderately from approximately 88.2 billion sticks in 2016 to 98.3 billion sticks in 2021 at a CAGR of approximately 2.2%. The drop in sales volume of cigarettes from 2019 to 2020 in Hubei was mainly attributable to the lockdown of Hubei from late-January 2020 to mid-March or early-April 2020 depending on the order imposed by the PRC Government on different regions in Hubei to contain the outbreak of COVID-19 which adversely affected all economic activities and weakened the market demand for cigarettes in Hubei. In particular, as the Chinese New Year holiday is the peak season of the cigarette industry, the lockdown of Hubei during the first quarter of 2020 has resulted in 5.1% year-on-year fall in terms of sales value of cigarettes in Hubei from 2019 to 2020. Along with the implementation of strict COVID-19 preventive measures and mass vaccination program as well as the resumption of normal production and business activities in Hubei, the sales volume of cigarettes in Hubei in 2021 is expected to increase to a similar level as 2019.

The sales volume of cigarettes in Hubei is expected to grow from approximately 99.8 billion sticks in 2022 to 104.5 billion sticks in 2025, at a CAGR of approximately 1.5%. Corresponding to the increasing trend in terms of sales volume of cigarettes in Hubei, the sales value of cigarettes in Hubei also grew moderately at a CAGR of approximately 2.0% from approximately RMB60.6 billion in 2016 to RMB66.7 billion in 2021. As one of the top five production bases of cigarettes in the PRC, Hubei is expected to pick up the pace of cigarette production after the recovery from COVID-19. Driven by the government's policy in promoting mid-to-high-end cigarettes, including the "Three qualities strategy (三品戰略)" which emphasises on improving the quality of cigarettes, variety of cigarette products and reputation of cigarette brands and the "136/345 development goals" which represent a series of targets related to the expansion of cigarette brands that the PRC Government is aiming to achieve in the next four to five years, it is forecasted that the sales value of cigarettes in Hubei will grow from approximately RMB68.0 billion in 2022 to RMB70.6 billion in 2025, at a CAGR of approximately 1.2%.

# OVERVIEW OF THE CIGARETTE PACKAGING PAPER MANUFACTURING INDUSTRY IN THE PRC, HUBEI AND OTHER REGIONS

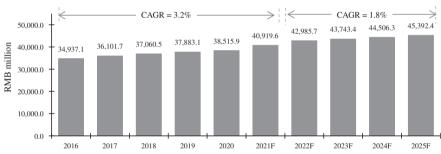
The cigarette packaging paper manufacturing industry in the PRC typically involves industrial material suppliers, cigarette packaging paper manufacturers, cigarette package manufacturers, cigarette manufacturers, sellers and consumers. Cigarette production of domestic brands is concentrated in specific provinces such as Yunnan, Hunan, Henan, Guangdong and Hubei. Accordingly, cigarette packaging paper manufacturers tend to follow a similar geographical trend as well since they mainly serve domestic cigarette brands in the nearby regions.

The diagram below highlights the value chain of the cigarette packaging paper manufacturing industry in the PRC:



The chart below sets forth the sales value of cigarette packaging paper manufacturing industry in the PRC from 2016 to 2025:

# Sales value of the cigarette packaging paper manufacturing industry in PRC from 2016 to 2025



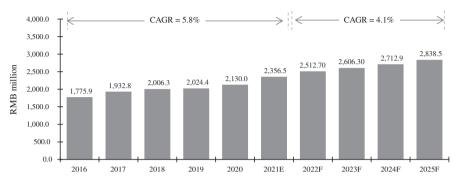
Source: Ipsos research and analysis

The sales value of cigarette packaging paper manufacturing industry in the PRC increased from approximately RMB34,937.1 million in 2016 to RMB40,919.6 million in 2021 at a CAGR of approximately 3.2%. The steady growth in sales value of cigarette packaging paper manufacturing industry in the PRC during the period was mainly attributable to (i) the relatively stable increase in the sales value of cigarettes in PRC from approximately RMB1,381.6 billion in 2016 to RMB1,473.5 billion in 2020 and is expected to reach RMB1,497.7 billion in 2021; (ii) the increasing focus of cigarette industry towards mid-to-high-end cigarettes, with greater emphasis placed by the PRC Government authorities on cigarette branding, quality, and variety. Cigarette brand companies also place emphasis on the consistency and standardisation of their cigarette packages as these are crucial to their brand recognition and product appeal. The quality of cigarette packaging to a large extent reflects the standing of the cigarettes contained in it. Cigarette packaging of higher quality which enhances the overall outlook of the products could attract consumers, and in turn boosts sales volume; and (iii) the increase in purchasing power of PRC citizens as evidenced by the rise in per capita disposable income in the PRC from approximately RMB23,821.0 in 2016 to RMB35,128.0 in 2021, resulting in the increase in spending on mid-to-high-end cigarettes by PRC citizens.

The sales value of cigarette packaging paper manufacturing industry in the PRC is forecasted to grow from approximately RMB42,985.7 million in 2022 to RMB45,392.4 million in 2025, at a CAGR of approximately 1.8%. The forecasted increase in sales value of cigarette packaging paper manufacturing industry in the PRC is mainly attributable to (i) the continuation of the focus of cigarette industry towards mid-to-high-end cigarettes. Mid-to-high-end cigarettes, which are charged at a higher selling price, generally entail the use of cigarette packaging paper with advanced technical requirements so as to enhance their brand recognition and product appeal; and (ii) the increase in purchasing power of PRC citizens will likely result in a growth in demand for mid-to-high-end

cigarettes. While the PRC Government has been tightening control on smoking by issuing a series of laws, regulations, and policies related to tobacco control, and it has been promoting tobacco withdrawal by increasing tobacco tax and placing advertisements, the demand for tobacco products is inelastic in general and the number of smokers in the PRC is expected to remain at approximately 300 million during the period from 2022 to 2025. Being supported by a huge tobacco consumer base, the cigarette and related manufacturing industries in the PRC are expected to expand moderately through 2025.

#### Sales value of the cigarette packaging paper manufacturing industry in Hubei from 2016 to 2025



Source: Ipsos research and analysis

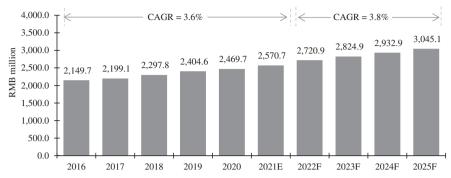
The cigarette packaging paper manufacturing industry in Hubei accounted for approximately 5.5% of the overall cigarette packaging paper manufacturing industry in the PRC in terms of sales value in 2020.

The sales value of cigarette packaging paper manufacturing industry in Hubei increased from approximately RMB1,775.9 million in 2016 to RMB2,356.5 million in 2021, at a CAGR of approximately 5.8%, representing a stable growth within that period. Despite the sales value of cigarettes in Hubei recorded a year-on-year fall of approximately 5.1% from 2019 to 2020, it is expected to rebound back in 2021, at a year-on-year increase of approximately 5.7% as noted in the graph of sales value and volume of cigarettes in Hubei from 2016 to 2025 above. Further, the sales value of cigarette packaging paper manufacturing industry in Hubei remained at an average year-on-year growth of approximately 7.9% from 2019 to 2021. The growth in sales value of the cigarette packaging paper manufacturing industry in Hubei in 2020 and 2021 could remain positive mainly because the manufacturers in Hubei had resumed operations since mid-March or early-April 2020, thus the cigarette packaging paper manufacturers were able to recoup the loss on work stoppage caused by the lock-down.

During 2022 to 2025, the sales value of the cigarette packaging paper manufacturing industry in Hubei is expected to grow at a pace similar to the period from 2016 to 2021 owing to economic recovery and post-COVID 19 reconstruction policy promoted by the PRC Government in Hubei. The cigarette packaging paper manufacturing industry in Hubei is expected to benefit from the government's policy in promoting mid-to-high-end cigarettes such as the "Three qualities strategy" and the "136/345 development goals". In addition, the PRC Government is also making efforts to boost the economic recovery of Hubei province by rolling out a series of subsidies after the COVID-19 pandemic. From the "Notice of the general office of the provincial people's government on issuing relevant policies and measures in response to the COVID-19 epidemic to support small and medium enterprises to overcome the difficulties (省人民政府辦公廳關於印發應對新型冠狀病毒肺炎疫情支持中小微企業共渡難關有關政策措施的通知)", the PRC Government aims to ameliorate the impact of COVID-19 to small and medium sized enterprises by implementing favourable measures, such as tax exemption, rent reduction and lowering the cost of financing. These measures are expected to support the local economy as well as production and manufacturing industry, including the cigarette packaging paper manufacturing industry in Hubei. The sales value of the cigarette packaging paper manufacturing industry in Hubei. The sales value of the cigarette packaging paper manufacturing industry in Hubei is expected to increase from approximately RMB2,512.7 million in 2022 to RMB2,838.5 million in 2025, representing a CAGR of approximately 4.1%.

The chart below sets forth the sales value of cigarette packaging paper manufacturing industry in Henan from 2016 to 2025:

Sales value of the cigarette packaging paper manufacturing industry in Henan from 2016 to 2025



Source: Ipsos research and analysis

The sales value of cigarette packaging paper manufacturing industry in Henan Province increased from RMB2,149.7 million in 2016 to RMB2,570.7 million in 2021, at a CAGR of approximately 3.6%, representing a stable growth during the period and showing a similar trend with the PRC cigarette packaging paper manufacturing industry. The stable growth in sales value of cigarette packaging paper manufacturing industry in Henan Province from 2016 to 2021 was mainly attributable to government support in cigarette industry development in this region, such as the Henan provincial government's announcement on further accelerating the transformation and development of the tobacco industry in Henan (河南省人民政府辦公廳關於進一步促進煙草產業加快轉變發展方式的意見) to promote the development of mid-to-high-end cigarettes in the region.

The sales value of cigarette packaging paper manufacturing industry in Henan Province is expected to increase from RMB2,720.9 million in 2022 to RMB3,045.1 million in 2025, at a CAGR of approximately 3.8%, which is slightly higher than that during the period from 2016 to 2021. The higher expected growth of the cigarette packaging paper manufacturing industry in Henan Province is mainly driven by the Henan provincial government's policy such as the "Henan Province's Implementation Plan for High-Quality Development of the Manufacturing Industry (河南省推動製造業高質量發展實施方案)" and "Made in China 2025 Henan Action Outline (中國製造2025河南行動綱要)" in support of the production of mid-to-high-end cigarettes and are expected to result in an increase in demand for high quality cigarette packaging paper.

The chart below sets forth the sales value of cigarette packaging paper manufacturing industry in North-east China from 2016 to 2025:

Sales value of the cigarette packaging paper manufacturing industry in North-east China from 2016 to 2025



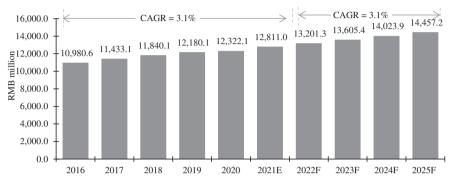
Source: Ipsos research and analysis

The sales value of the cigarette packaging paper manufacturing industry in North-east China increased from RMB1,423.0 million in 2016 to RMB1,702.7 million in 2021, at a CAGR of approximately 3.7%, representing a stable growth during the period. The growth in sales value of cigarette packaging paper manufacturing industry in North-east China from 2016 to 2021 was mainly attributable to the government support in cigarette industry development in this region, such as the Jilin provincial government's "Thirteenth Five-Year Plan for Jilin Tobacco Industry (吉林煙草工業十三五規劃)" and Liaoning provincial government's announcement on further accelerating the development of the tobacco industry in Liaoning.

The sales value of the cigarette packaging paper manufacturing industry in North-east China is expected to increase from RMB1,770.5 million in 2022 to RMB1,992.1 million in 2025, at a CAGR of approximately 4.0%, which was mainly attributable to the optimisation in production capacity of local cigarette manufacturers. In particular, a cigarette manufacturer in North-east China has optimised its production capacity by combining two old tobacco factories into a new tobacco factory in 2021. The production capacity of such cigarette manufacturer is expected to increase to 300,000 cigarette cartons per year, thereby promoting the future demand for cigarette packaging paper in North-east China.

The chart below sets forth the sales value of cigarette packaging paper manufacturing industry in East China from 2016 to 2025:

Sales value of the cigarette packaging paper manufacturing industry in East China from 2016 to 2025



Source: Ipsos research and analysis

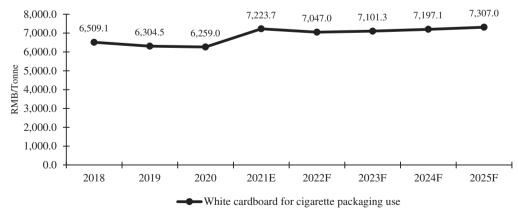
The sales value of cigarette packaging paper manufacturing industry in East China increased from RMB10,980.6 million in 2016 to RMB12,811.0 million in 2021, at a CAGR of approximately 3.1%, representing a stable increase during the period. East China, which include the provinces of Anhui, Fujian, Jiangsu, Jiangsi, Shandong, Zhejiang, as well as Shanghai Municipality, is a major cigarette production region in China, and accounted for approximately 28.6% of the PRC cigarette production in 2020. East China is well-known for the production of high-end cigarettes. For instance, over 40% and 60% of the cigarettes produced in Jiangsu and Shanghai were tier 1 cigarettes in 2020, respectively.

Going forward, the sales value of the cigarette packaging paper manufacturing industry in East China is expected to grow from RMB13,201.3 million in 2022 to RMB14,457.2 million in 2025, at a CAGR of approximately 3.1%, representing a growth rate similar to the period from 2016 to 2021, mainly attributable to (i) a stable production capacity and a steady growth in demand for cigarettes in this region; and (ii) the per capital GDP and population growth in East China is expected to increase at a higher rate than the PRC as a whole due to the rapid development of new economy and digital economy in the region.

# PRICE TREND OF MAJOR COST COMPONENTS

The major raw materials of the cigarette packaging paper manufacturing industry include white cardboard and films, where films are mainly composed of, BOPP, PET and aluminum foil.

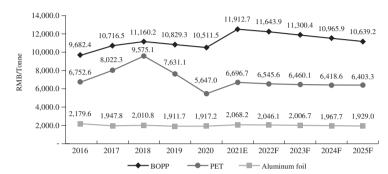
Price of white cardboard for cigarette packaging use in the PRC from 2018 to 2025



Source: Ipsos research and analysis

The price of white cardboard used in the production of cigarette packaging paper experienced an increase from approximately RMB6,509.1 per tonne in 2018 to RMB7,223.7 per tonne in 2021, at a CAGR of approximately 3.5%. The price of the cigarette packaging used white cardboard started to increase by the end of 2020 and reached approximately RMB7,223.7 per tonne in 2021, at a growth rate of approximately 15.4%. The fluctuation in the price of the cigarette packaging used white cardboard was attributable to the increase in price of wood pulp, which is a major raw material of cigarette packaging used white cardboard. The price of cigarette packaging used white cardboard is expected to increase from RMB7,047.0 per tonne in 2022 to approximately RMB7,307.0 per tonne in 2025, at an average year-on-year growth rate of approximately 0.3%.

# Price of BOPP, PET and aluminum foil in the PRC from 2016 to 2025



Note:

- BOPP, PET and aluminum foil are the key raw materials for films and thus are the closest proxies to illustrate the price trend of films.
- (ii) The prices of aluminum foil are represented by aluminum prices.

Source: Ipsos research and analysis

BOPP (biaxially oriented polypropylene) is a thermoplastic polymer. It is translucent, low electric static, and anti-slip, which makes it one of the most important materials for cigarette packaging paper. BOPP's price had increased moderately from approximately RMB9,682.4 per tonne in 2016 to RMB11,912.7 per tonne in 2021, at a CAGR of approximately 4.2%. In 2020, COVID-19 has temporarily halted industrial production in the PRC, resulted in lower demand for industrial raw-material including BOPP, which caused BOPP prices to slump for approximately 10% during the first half of 2020. Since the global outbreak of COVID-19 pandemic in 2020, the demand for face mask has surged which drove the demand for BOPP up since mid-2020 as BOPP is a major component of face mask. And the increased demand for BOPP is expected to spillover to 2021 bringing the price of BOPP up to approximately RMB11,912.7. The price of BOPP is estimated to gradually decrease from approximately RMB11,643.9 per tonne in 2022 to approximately RMB10,639.2 per tonne in 2025 due to the expected alleviation of COVID-19 pandemic.

PET (polyester or polyethylene terephthalate) has good optical clarity. It is highly glossy, and can be metalised by vapor deposition of metals, which makes it a good aroma barrier film for tobacco packaging. PET price in the PRC had experienced fluctuation from approximately RMB6,752.6 per tonne in 2016 to RMB6,696.7 per tonne in 2021, at a CAGR of approximately -0.2%, which peaked at RMB9,575.1 per tonne in 2018. As crude oil is one of the key raw materials of PET film production, prices of PET are correlated with the crude oil prices and therefore showed similar price trend. Crude oil prices are estimated to decrease slightly in the next five years, as the global supply of crude oil is expected to slightly overexceed market demand. PET prices are expected to follow a similar trend, with a slight decrease from approximately RMB6,545.6 per tonne in 2022 to RMB6,403.3 per tonne in 2025, at a CAGR of approximately -0.7%.

Aluminum foil is widely used in cigarette inner frames and external frames. Aluminum foil recorded a price decrease from approximately RMB2,179.6 per tonne in 2016 to RMB2,068.2 per tonne in 2021, at a CAGR of approximately -1.0%. Prices of aluminum foil is correlated with crude aluminum, the main component of aluminum foil. Historically in the PRC, the supply of crude aluminum has exceeded market demand, causing production surplus and subsequently drove down the prices of aluminum foil. It is expected that the aluminum foil prices are expected to rebound from approximately RMB1,917.2 per tonne in 2020 to RMB2,068.2 per tonne in 2021 with the government's economic stimulus policy in response to the outbreak of COVID-19. As aluminum is a raw material widely used in different industries including manufacturing and construction, the economic stimulus policy will create an intense demand for aluminum, resulting in the higher price of crude aluminum, so as aluminum foil. Thereafter, the prices of aluminum foil is expected to decrease from RMB2,046.1 per tonne in 2022 to RMB1,929.0 per tonne in 2025. The expecting decrease is attributed to (i) the fade out of the government's economic stimulus policy; and (ii) the increasing crude aluminum production, driving prices of aluminum foil downwards.

# COMPETITIVE ANALYSIS OF THE CIGARETTE PACKAGING PAPER MANUFACTURING INDUSTRY IN THE PRC, HUBEI AND OTHER REGIONS

The overall cigarette packaging paper manufacturing industry in the PRC is relatively fragmented with over 200 cigarette packaging paper manufacturers in the market, among which the top five manufacturers accounted for approximately 12.6% market share as of 2020 in terms of sales value. Our Group was ranked as the tenth largest cigarette packaging paper manufacturer (in terms of sales value) with a market share of approximately 0.8% in the PRC in 2020.

On the other hand, the overall cigarette packaging paper manufacturing industry in Hubei is concentrated with the top five manufacturers accounting for approximately 46.8% market share as of 2020 in terms of sales value.

The table below sets forth the top five cigarette packaging paper manufacturers in Hubei in 2020:

Rank	Company	Principal business	Year of establishment	Listed/private	Market Share
1	Our Group	Sales, production, and processing of cigarette packaging paper.	2011	Private	14.9%
2	Company I	Provision of composite paper, high-grade transfer paper and new environmentally friendly packaging materials.	2005	Listed on the Stock Exchange	10.2%
3	Company II	Provision of transfer paper and hot stamping foil with anti-counterfeiting technology.	2013	Listed on the Shenzhen Stock Exchange	10.0%
4	Company III	Focuses on anti-counterfeiting technology and related products such as holographic hot stamping foil and transfer paper.	2013	Private	6.9%
5	Company IV	Provision of high-tech products such as laser paper and laminated paper with anti-counterfeiting features.	2004	Private	4.8%
Total					46.8%

#### Notes:

- (i) The ranking is subject to amendments upon release of the 2020 revenue by the companies.
- (ii) The market share is calculated based on the sales value derived from cigarette packaging paper manufacturing.

Source: Ipsos research and analysis

The cigarette packaging paper manufacturing industry in Henan Province is relatively fragmented, with over 30 cigarette packaging paper manufacturers in the industry, which is mainly attributable to the cigarette production in Henan accounts for approximately 6.5% of the PRC cigarette production in 2020 and covering approximately 10 cigarette brands, and the estimated market share of the Group in this region was approximately 3.8% in 2020.

The cigarette packaging paper manufacturing industry in Northeast China is relatively concentrated, with just over 20 cigarette packaging paper manufacturers across Heilongjiang, Liaoning, and Jilin provinces. The cigarette production in this region is relatively low, accounting for approximately 5.0% of the PRC cigarette production in 2020 and covering just over 10 cigarette brands. As a result, the cigarette packaging paper manufacturing industry from the upper stream is relatively underdeveloped in the region, and the estimated market share of the Group in this region was approximately 1.0% in 2020.

The cigarette packaging paper manufacturing industry in East China is relatively competitive, with more than 40 cigarette packaging paper manufacturers in East China, which is mainly attributable to the relatively higher cigarette production in the region, accounting for approximately 28.6% of the PRC cigarette production in 2020 and covering over 40 cigarette brands, and the estimated market share of the Group in this region was approximately 0.1% in 2020.

The cigarette packaging paper manufacturing industry in Yunnan province is relatively concentrated, with more than 20 cigarette packaging paper manufacturers in this province. The cigarette packaging paper manufacturing industry in Yunnan province is supported by the relatively higher local cigarette production, which accounted for approximately 14.7% of the PRC cigarette production in 2020 and covering approximately 20 cigarette brands.

### **ENTRY BARRIERS**

## High capital requirements

The cigarette packaging paper manufacturers require a substantial amount of capital investment in production facility and machinery. As the PRC Government encourages cigarette manufacturers to develop mid-to-high-end cigarettes, the cigarette packaging paper is also expected to meet high quality requirements. In addition, the quality standards of cigarette packaging paper set by cigarette manufacturers may also vary by products. Established cigarette packaging paper manufacturers invest substantial amount on machinery to ensure the consistent quality of cigarette packaging paper. Cigarette packaging paper manufacturers are also required to employ workers with relevant capabilities and experience. New entrants may find it challenging to enter the industry since the capital requirement is high.

### Established relationship with cigarette package manufacturers

It is not uncommon for cigarette package manufacturers to identify a few established cigarette packaging paper manufacturers as their suppliers. Since different cigarette products may have different packaging requirements, cigarette package manufacturers typically select cigarette packaging paper manufacturers whom they have established relationship with or have proven track record to ensure quality production. Since accumulation of track record and establishing strong relationship with cigarette package manufacturers require time and effort, it is therefore considered as a major entry barrier for new entrants to compete with the existing market players.

# High production capacity

Cigarette packaging paper manufacturer which has high production capacity is able to meet the needs of different customers with various demands in terms of volume, packaging paper materials and size. In addition, sizeable cigarette packaging paper manufacturers have a stronger bargaining power with their upstream raw material suppliers owing to bulk purchasing. Since the scale of new entrants is likely to be smaller than the existing players, they are less likely to enjoy the economies of scale in the aspect of both production and purchase.

# Competitive research and development capability with constant innovation

Cigarette brands generally search for higher quality and better designed cigarette packaging paper in order to enhance their brand and product appeal. Hence, cigarette packaging paper manufacturers have to invest in their research and development capability so as to improve their design and manufacturing quality to attract more business opportunities. Innovation in the cigarette packaging paper manufacturing industry includes developing anti-counterfeiting and environmentally friendly material. New entrants may have limited capability in developing advanced technology and research and development to provide more product features to their customers, making them less competitive to face the market competition in the cigarette packaging paper manufacturing industry.

### INDUSTRY DRIVERS AND OPPORTUNITIES

#### Rising disposable income level

The disposable income of both urban and rural residents in the PRC sustained continuous growth. The disposable income per capita in the PRC increased from approximately RMB23,821 in 2016 to RMB35,128 in 2021, at a CAGR of approximately 8.1%. Due to the rising level of disposable income, purchasing power of consumers has been strengthened. It is expected that increasing number of consumers are willing to spend more on high quality cigarette products which are deemed to have better taste and impose less harm on health. Therefore, it is expected that there will be an increasing sales of mid-to-high-end cigarette products which in turn will drive the sales for high quality cigarette packaging paper.

### Government's policy on promoting mid-to-high-end cigarette

The CNTC aims to foster industry growth in the PRC cigarette market by encouraging mid-to-high-end cigarette brands to export local cigarette products. To make cigarette products more attractive, mid-to-high end cigarettes manufacturers generally emphasised more on product packaging as a marketing strategy. Cigarette manufacturers will therefore demand higher requirements with regards to the cigarette packaging paper materials. In addition, given the PRC Government receives higher tax income from mid-to-high-end cigarettes as they generate a higher profit margin, the CNTC and STMA have introduced various policy initiatives such as increasing tobacco excise tax and the "Three qualities strategy" and the "136/345 development goals" to further promote mid-to-high-end cigarettes.

The "Three qualities strategy" was announced by the General Office of the State Council in 2016 to strengthen the PRC consumer goods industry and accelerate the transformation of the consumer goods market in the PRC towards the higher-end market, with no exception of the cigarette industry as perceived. The relevant discussion among the three missions to drive the demand for mid-to-high-end cigarettes in the PRC are stated as follows—

- (i) Improving quality: Advanced quality management models and systems were advised to be promoted among all segments of consumer goods including the cigarette segment;
- (ii) Increasing variety: The market was advised to increase the supply of mid-to-high-end products, including the cigarette manufacturing segment, by developing personalized, functional, and greener products, and to also launch products of higher-technology threshold as well as higher value added;
- (iii) Enhancing reputation of brands: It was suggested to upgrade traditional domestic brands and cultivate new brands to accommodate the emerging demand for higher-end products. In the case of the cigarette market in the PRC, with the promotion of higher-quality cigarettes by various manufacturers, consumers were increasingly open to accept more expensive cigarettes with higher quality standards.

The "136/345 development goals" was mentioned by the State Tobacco Monopoly Administration in 2019, aiming to achieve the sales targets of (i) "136" and (ii) "345" in the mid-to-high end cigarette market in the PRC within the next four to five years:

- i. "136" refers to one cigarette brand exceeding a sales volume of 3.5 million cartons in a year, three cigarette brands exceeding a sales volume of 2 million cartons in a year, and six cigarette brands exceeding a sales volume of 1 million cartons in a year.
- ii. "345" refers to three cigarette brands exceeding a wholesale value of RMB150 billion in a year, four cigarette brands exceeding a wholesale value of RMB100 billion in a year, and five cigarette brands exceeding a wholesale value of RMB60 billion in a year.

The "136/345 development goals" encourages the development and consolidation of large cigarette brands, and at the same time motivates cigarette brands to move towards higher-end and to achieve higher sales. Together with the "Three qualities strategy", the PRC Government has promoted the transformation of the cigarette industry towards higher-end, thereby driving the demand for mid-to-high-end cigarettes.

With the CNTC and STMA's initiative on promoting mid-to-high-end cigarettes, the demand for mid-to-high-end cigarette packaging paper is expected to increase as well. According to the National Bureau of Statistics, the percentage of sales volume of mid-to-high-end cigarettes (i.e. tier 1 to tier 3) over the total sales volume of cigarettes in the PRC increased considerably from 77.8% in 2016 to 84.5% in 2018 and is expected to increase to 88.9% in 2020.

# THREATS AND CHALLENGES

### Fluctuation in raw material costs

The major raw materials of cigarette packaging paper are white cardboard and film. Any material fluctuation in raw material costs is likely to affect the prices and sales of cigarette packaging paper. Factors affecting the raw material prices of cigarette packaging paper include global supply and demand and seasonality. For example, PET which is a major component of film, is correlated with crude oil prices and may be subject to price volatility.

# Emerging alternatives, such as electronic cigarettes

In face of serious health issues caused by smoking, increasing smokers attempt to quit smoking or turn to alternatives of cigarette, such as electronic cigarettes. The increasing popularity of electronic cigarettes may capture the market share of traditional cigarette, which may further hamper the growth of cigarette packaging paper manufacturing industry in the PRC.

Along with the development and growth in the electronic cigarette market, tobacco companies around the globe have successively entered into the electronic cigarette market. As compared to traditional cigarettes, electronic cigarettes are generally perceived to be trendier, more environmentally friendly, less addictive and inflict less harm on smoker and on third parties. Smokers, especially younger generations, would generally consider electronic cigarettes as an alternative to traditional cigarettes, taking into consideration the aforementioned perceived advantages of electronic cigarettes over traditional cigarettes. Given no cigarette packaging paper is involved in the production of electronic cigarettes packaging, the rise of electronic cigarettes in the PRC is a potential threat to the cigarette packaging paper manufacturing industry.

Notwithstanding the rise in electronic cigarettes in the PRC in recent years, electronic cigarettes only accounted for less than 2.0% of the PRC cigarette industry in 2020. Therefore, electronic cigarettes are yet to be an immediate threat to the traditional cigarette industry. Further, many smokers in the PRC still perceive traditional cigarettes as classier and superior. Demand for traditional cigarettes is still relatively inelastic, and there is no sign of a major shift in demand from traditional cigarettes to electronic cigarettes up to date that could hamper the growth of the traditional cigarette industry in the PRC.

On 26 November 2021, China's State Council amended the "Implementing Regulation of the Tobacco Monopoly Law" to the effect that electronic cigarettes are also subject to the same monopoly requirements imposed on traditional cigarettes. The amendments are perceived to prevent an exponential growth of electronic cigarettes in the PRC in the future, which in turn protects the traditional cigarette industry as well as the cigarette packaging paper manufacturing industry in the PRC.

#### Government's effort in promoting healthy living

Smoking has been on a declining trend in the PRC since it is often related to many adverse health effects such as cancer, heart disease, etc. The PRC Government has also ramped up its tobacco effort control including the "Healthy China Action 2030" which aims to reduce the cigarette smoking population to 20%. The Beijing Tobacco Control Association has also developed a "tobacco control map" that permits citizens to report illegal smoking in public through social accounts. This may hamper the growth of cigarette packaging paper manufacturing industry in the PRC.

# IMPACT OF COVID-19 ON THE CIGARETTE PACKAGING PAPER MANUFACTURING INDUSTRY IN THE PRC AND HUBEI

The outbreak of COVID-19 in 2020 has affected the global economy. Subject to various pandemic measures imposed by the PRC Government, factories and schools were closed in the first quarter of 2020. Most of the economic activities were disrupted and the manufacturing sector was close to a full suspension. The PRC economy showed contraction in the first quarter in 2020, with a GDP growth rate of -5.3% year-on-year. While 2020 is the worst performing year for the PRC economy in terms of GDP growth rate since 1978, it showed strong resilience towards the pandemic and still achieved a GDP growth rate of 3.0% in 2020 in comparison to 2019. Being one of the former major outbreak regions in the PRC, Hubei recorded a 4.4% annual decline in GDP from 2019 to 2020, which is far below the GDP growth rate of the nation in the same period.

The pace for cigarettes production in the PRC started to pick up in the second quarter of 2020 and led to a spillover effect into the cigarette packaging paper manufacturing industry. Driven by the resumption of manufacturing production, the GDP in Hubei rebounded at a quarter-by-quarter rate of 74.0%, 10.8% and 11.1% in the second, third and fourth quarter of 2020, respectively.

In general, the disruption of the COVID-19 outbreak was temporary, and the production for cigarette packaging paper in the PRC as well as in Hubei have resumed normal business. The industry has shown solid resilience towards external shock due to the relatively inelastic supply and demand for tobacco products.