



## Company Report: Xingfa Aluminium (00098 HK)

公司报告: 兴发铝业 (00098 HK)

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# A Leading Aluminum Product Manufacturer With Great Potential, Initiate With "Buy"

一家极具潜力的铝材制造龙头企业，首予“买入”评级

- **We initiate coverage on Xingfa Aluminium (the "Company") with a TP of HK\$11.73 and an investment rating of "Buy".** The TP corresponds to 5.0x/ 3.9x/ 3.1x 2022-2024 PER.
- **We expect Xingfa Aluminium's sales of aluminum extrusion products for new energy vehicles to benefit greatly from the fast development of the new energy vehicle industry and it to be the main source of growth for the Company in the next 3 years.** The Automobile industry is the single largest industrial user of aluminum products. Demand growth for aluminum will be driven by two aspects: higher penetration rate of new energy vehicles and higher demand for aluminum products in the new energy vehicle industry.
- **Xingfa Aluminium holds significant competitive advantages in the development and production of aluminum extrusion products for new energy vehicles.** Xingfa Aluminium has significant competitive advantages in the field of aluminum alloy material research, the development of aluminum extrusion products for vehicles, the design and manufacture of extrusion molds and the production of aluminum extrusion products. Xingfa Aluminium has developed aluminum extrusion products for new energy vehicles and has entered into development of aluminum for vehicle enterprises.
- **Catalysts:** Fast sales growth of new energy vehicles; recovery of domestic property market.
- **Key risks:** Development of aluminum extrusion products for vehicles may miss expectation; fierce competition from other aluminum extrusion producers; domestic property market may remain weak.
- **我们首次覆盖兴发铝业（“公司”），并给予 11.73 港元的目标价以及“买入”的投资评级。** 我们的目标价相当于 5.0 倍/ 3.9 倍/ 3.1 倍 2022 年至 2024 年市盈率。
- **我们预计兴发铝业新能源汽车用铝挤压材的销售将极大受益于新能源汽车产业的快速发展，并成为未来三年公司主要的增长来源。** 汽车产业是铝材的最重要消费者。两个因素将驱动铝材的消费增长：更高的新能源汽车渗透率和更高的新能源汽车铝材使用强度。
- **兴发铝业在开发和生产新能源汽车用铝挤压材方面具有显著的竞争优势。** 兴发铝业在铝合金材料研究、车用铝挤压材开发、挤压模具的设计和制造、铝挤压材的生产方面具有显著竞争优势。兴发铝业已经成功开发出新能源汽车用铝挤压材并进入了与汽车企业开发车型的阶段。
- **催化剂：** 新能源汽车销量的快速增长；国内房地产市场的复苏。
- **核心风险：** 车用铝挤压材的开发不及预期；来自其它铝挤压生产企业的激烈竞争；国内房地产市场持续疲软。

Rating:

**Buy**  
Initial

评级:

买入 (首次覆盖)

6-18m TP目标价:

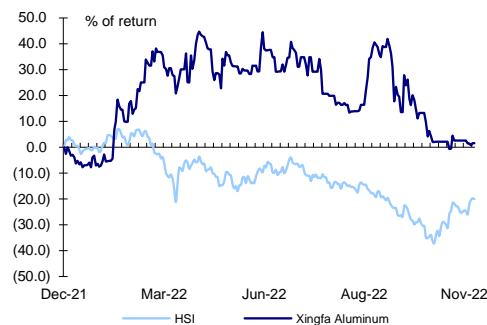
**HK\$11.73**

Share price 股价:

HK\$7.230

### Stock performance

股价表现



Change in Share Price	1 M	3 M	1 Y
股价变动	1 个月	3 个月	1 年
Abs. % 绝对变动 %	0.4	(23.9)	(4.9)
Rel. % to HS Index 相对恒指变动 %	(20.4)	(25.4)	13.0
Avg. Share price(HK\$) 平均股价 (港元)	7.2	8.1	8.5

Source: Bloomberg, Guotai Junan International.

Year End	Turnover	Net Profit	EPS	EPS	PER	BPS	PBR	DPS	Yield	ROE
年结	收入	股东净利	每股净利	每股净利变动	市盈率	每股净资产	市净率	每股股息	股息率	净资产收益率
12/31	(RMB m)	(RMB m)	(RMB)	(Δ %)	(x)	(RMB)	(x)	(RMB)	(%)	(%)
2020A	11,887	765	1.831	26.3	3.3	8.847	0.7	0.360	6.0	22.7
2021A	15,433	888	2.119	15.7	2.8	10.693	0.5	0.800	13.7	21.7
2022F	17,863	897	2.141	1.0	3.0	12.013	0.5	0.900	13.8	18.9
2023F	18,377	1,159	2.767	29.2	2.4	13.255	0.5	1.000	15.3	21.9
2024F	20,063	1,453	3.469	25.4	1.9	15.022	0.4	1.200	18.4	24.5

Shares in issue (m) 总股数 (m)	418.9	Major shareholder 大股东	Guangxin Aluminum Holdings 21.6%
Market cap. (HK\$ m) 市值 (HK\$ m)	2,995.1	Free float(%) 自由流通比率(%)	78.4%
3 month average vol. 3 个月平均成交股数('000)	22.1	FY22 Net gearing (%) FY22 净负债/股东资金 (%)	5.4
52 Weeks high/low (HK\$) 52 周高/低 (HK\$)	11.060 / 6.560	FY22 Est. NAV (HK\$) FY22 每股估值 (港元)	12.6

Source: the Company, Guotai Junan International.

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## 1. Core Investment Points

**We expect Xingfa Aluminium's sales of aluminum extrusion products for new energy vehicles to benefit greatly from the fast development of the new energy vehicle industry and to be the main source of growth for the Company in the next 3 years.** The automobile industry is the largest industrial user of aluminum products such as extrusion products, flat-rolled products and foundry products. The proportion of aluminum products in the construction of a new energy vehicle is usually much more than that of traditional vehicles as aluminum is currently the preferred light-weight metal material in the construction of new energy vehicles and manufacturers can extend driving range by reducing vehicle weight. Demand growth for aluminum products will be driven by two aspects: higher penetration rate of new energy vehicles and higher demand for aluminum products in the new energy vehicle industry. We believe that Xingfa Aluminium's sales of aluminum extrusion products for new energy vehicles will benefit greatly from the fast development of the new energy industry and it will be the main source of growth for the Company in the next 3 years.

**Xingfa Aluminium holds significant competitive advantages in the development and production of aluminum extrusion products for new energy vehicles.** Xingfa Aluminium has significant competitive advantages in the field of aluminum alloy material research, the development of aluminum extrusion products for vehicles, the design and manufacture of extrusion molds and the production of aluminum extrusion products. Xingfa Aluminium develops aluminum extrusion products for new energy vehicles and develops product types in conjunction with vehicle enterprises. Sales of aluminum extrusion products of the Company will grow with the sales of new energy vehicles. Xingfa Aluminium has more than 2 decades of accumulated experience in the research and production of aluminum extrusion products and is one of the largest producers of aluminum extrusion products. We expect Xingfa Aluminium to triumph over competition and to be one of the major suppliers of aluminum extrusion products to the new energy vehicle industry.

**We forecast Xingfa Aluminium's total sales of aluminum extrusion products to be 0.70 million tons, 0.76 million tons and 0.82 million tons in 2022-2024, respectively.** We forecast total sales of construction aluminum products to record a steady growth rate and will be 0.55 million tons, 0.59 million tons and 0.62 million tons in 2022-2024, respectively. We forecast total sales of industrial aluminum products to be 0.15 million tons, 0.17 million tons and 0.20 million tons in 2022-2024, respectively, representing a 3-year CAGR of 11.9%. Hence, we forecast Xingfa Aluminium's net profit to be RMB897.0 million, RMB1,159.4 million and RMB1,453.3 million in 2022-2024, respectively, representing a 3-year CAGR of 17.9%.

### Catalysts

1. **Fast sales growth of new energy vehicles.**
2. **Recovery of domestic property market.**

### Risk factors

1. **Development of aluminum extrusion products for vehicles may miss expectations.** Sales of industrial aluminum products will be the main growth driver of the Company in the next 3 years. If the development of aluminum extrusion products for new energy vehicles misses expectation, it will significantly impact net profit growth of the Company.
2. **Fierce competition from other aluminum extrusion producers.** The Company may confront fierce competition in the sales of aluminum extrusion products. Fierce competition may reduce profitability of the Company.
3. **Prolonged negative impact from the domestic property market.** Sales of construction aluminum products contributed more than 80% of total revenue. If the domestic property market remains weak and the sales of construction aluminum products may be negatively impacted. Besides, impairment loss from trade receivables may increase if the domestic market deteriorates.

## 2. Profit and Valuation

### 2.1 Earnings Forecasts

**We expect total net profit of Xingfa Aluminium to be RMB897.0 million, RMB1,159.4 million and RMB1,453.3 million in 2022-2024, respectively.** We expect total net profit of Xingfa Aluminium to grow at a CAGR of 17.9% in 2022-2024. The fast growth in net profit will mainly be attributable to more sales of aluminum products and higher average processing fees. We forecast sales of construction products to grow steadily. We forecast sales of industrial products to grow fast due to fast development of China's new energy vehicle market.

**We forecast sales of construction products of Xingfa Aluminium to grow at a CAGR of 15.4% in 2022-2024 and sales of industrial products to grow at a CAGR of 17.8% in 2022-2024.** Xingfa Aluminium produces high-end construction products and has great competitive advantages; sales of construction products will benefit from residential upgrades and has not been greatly impacted by fluctuation seen in the property market. Xingfa Aluminium develops industrial products for new energy vehicles and has entered into motorcycle product development with auto factories. The sales of industrial products for new energy vehicles will be the main source of growth in the future.

**We expect the average processing fees of construction products to be stable in 2022-2024, but we expect the average processing fees of industrial products to improve greatly due to more sales of industrial products for new energy vehicles.** Xingfa Aluminium has significant competitive advantages in sales of high-end construction products, and we expect the Company to maintain its competitive advantages and processing fees. We expect industrial products for new energy vehicles to start to grow from 2023 and to contribute more revenue. The processing fees of industrial products for new energy vehicles are much higher than that of other industrial products, so we expect the average processing fees of industrial products for new energy vehicles to improve greatly in 2022-2024.

**Table-1: Earnings Forecasts for Xingfa Aluminium**

	2020A	2021A	2022F	2023F	2024F
Revenue (million RMB)					
Construction Extrusion Products	9,262	12,094	14,012	14,036	14,913
Industrial Extrusion Products	2,320	2,870	3,356	3,821	4,604
Total Revenue	11,887	15,433	17,863	18,377	20,063
yoy	8.6%	29.8%	15.7%	2.9%	9.2%
Gross Profit (million RMB)	0	0	0	0	0
Construction Extrusion Products	1,246	1,431	1,569	1,684	1,834
Industrial Extrusion Products	229	212	238	329	553
Total gross profit	1,475	1,643	1,808	2,013	2,387
yoy	11.8%	11.4%	10.0%	11.4%	18.6%
Net Profit (million RMB)	765	888	897	1,159	1,453
yoy	26.3%	16.0%	1.0%	29.2%	25.4%

Source: the Company, Guotai Junan International.

### 2.2 Valuation

**Initiate coverage of the Company with "Buy" rating and TP of HK\$11.73.** Xingfa Aluminium is one of the leading aluminum extrusion product manufacturers in the PRC. Xingfa Aluminium insists on the strategy of "construction products + industrial products" dual-engine development to expand sources of revenue of the Company. We believe that Xingfa Aluminium will benefit from the fast development of the new energy vehicle industry. We believe that aluminum extrusion products and flat-rolled products will benefit most from the development of the new energy vehicle industry and will record significant growth over the next 5-10 years. Xingfa Aluminium has great advantages in the development and supply of aluminum extrusion products for new energy vehicles and we expect Xingfa Aluminium to be a main supplier of the new energy vehicle industry in the future. We forecast sales of construction products of Xingfa Aluminium to grow at a CAGR of 15.4% in 2022-2024 and sales of industrial products to grow at a CAGR of 17.8% in 2022-2024. We expect total net profit of Xingfa Aluminium to be RMB897.0 million,

RMB1,159.4 million and RMB1,453.3 million in 2022-2024, respectively. Our target price for the Company is HK\$11.73, which represents 5.0x, 3.9x and 3.1x 2022-2024 PER. Our investment rating for the Company is "Buy".

**Table-2: Peers Comparison**

Company	Stock Code	Currency	Last price	PE (fiscal year)				PB (fiscal year)				ROE(%)
				21A	22F	23F	24F	21A	22F	23F	24F	22F
International Listed companies												
Alcoa Corp	AA US	USD	50.39	21.9	12.2	14.1	8.7	2.0	1.7	1.5	1.3	18.0
Norsk Hydro Asa	NHY NO	NOK	74.52	12.6	6.4	10.8	9.5	1.8	1.4	1.5	1.4	25.6
Arconic Corp	ARNC US	USD	23.73	n.a.	20.5	10.4	7.6	1.6	1.5	1.2	1.0	2.7
Nippon Light Metal Holdings	5703 JP	JPY	1,548.00	28.5	5.7	7.6	7.0	0.5	0.5	0.5	0.4	8.5
Hindalco Industries Ltd	HNDL IN	INR	478.95	30.6	7.8	9.6	9.3	1.6	1.4	1.2	1.1	19.0
National Aluminium Co Ltd	NACL IN	INR	80.05	11.5	5.0	8.6	9.6	1.4	1.2	1.1	1.0	25.4
Simple Average				21.0	9.6	10.2	8.6	1.5	1.3	1.2	1.1	16.5
Weighted Average				21.0	8.6	10.8	9.0	1.7	1.4	1.3	1.2	19.9
PRC listed companies												
Henan Mingtai Al Industria-A	601677 CH	CNY	16.79	8.5	7.0	5.7	5.3	1.5	1.2	1.1	0.9	15.6
Shandong Nanshan Aluminum-A	600219 CH	CNY	3.62	12.5	10.9	9.9	8.7	1.0	1.0	0.9	0.8	8.4
Guangdong Haomei New Mater-A	002988 CH	CNY	14.57	24.4	36.9	11.6	7.5	1.5	1.5	1.3	1.2	4.0
Jiangsu Asia Pacific Light-A	002540 CH	CNY	5.53	15.0	15.4	12.0	10.2	1.4	1.3	1.2	1.1	8.6
Simple Average				15.1	17.5	9.8	8.0	1.3	1.2	1.1	1.0	9.2
Weighted Average				12.4	11.7	9.2	8.0	1.2	1.1	1.0	0.9	9.9
HK listed companie												
Aluminum Corp Of China Ltd-H	2600 HK	HKD	3.58	10.4	9.7	10.2	8.1	0.9	0.9	0.8	0.7	9.3
China Hongqiao Group Ltd	1378 HK	HKD	7.59	3.6	4.5	4.2	3.5	0.7	0.7	0.6	0.6	15.3
China Zhongwang Holdings Ltd	1333 HK	HKD	1.68	2.7	2.2	1.9	n.a.	0.3	0.2	0.2	n.a.	9.8
Xingfa Aluminium Holdings	98 HK	HKD	7.23	2.8	n.a.	n.a.	n.a.	0.6	n.a.	n.a.	n.a.	n.a.
Simple Average				4.9	5.5	5.4	5.8	0.6	0.6	0.6	0.7	11.5
Weighted Average				6.9	7.1	7.2	6.0	0.8	0.8	0.7	0.7	11.9
Jiangxi Copper Co Ltd-H	358 HK	HKD	11.60	5.9	6.8	9.0	6.9	0.5	0.5	0.5	0.5	7.3
Mmg Ltd	1208 HK	HKD	2.15	3.5	10.4	7.4	4.5	1.2	1.1	0.9	0.7	13.2
Cmcc Group Ltd-H	3993 HK	HKD	3.76	13.0	10.8	10.5	7.3	1.7	1.7	1.5	1.3	17.9
United Co Rusal Internationa	486 HK	HKD	3.98	2.4	3.2	3.2	4.2	0.7	0.6	0.5	0.5	25.3
Simple Average				6.2	7.8	7.5	5.7	1.0	1.0	0.8	0.7	15.9
Weighted Average				8.0	8.0	8.1	6.2	1.1	1.1	1.0	0.9	16.9

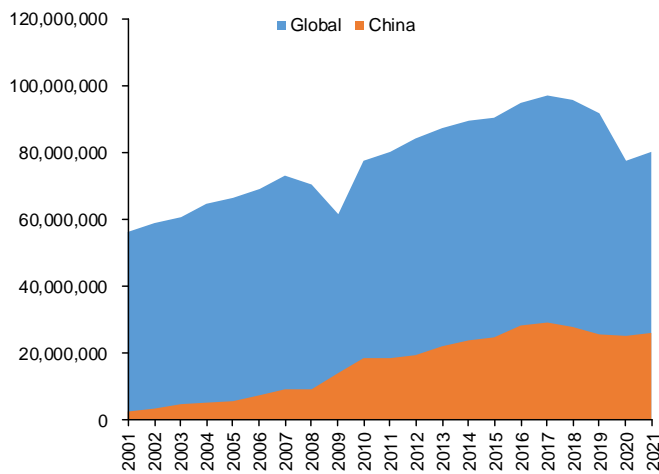
Source: Bloomberg.

### 3. Fast growth of the new energy vehicle industry will drive new demand for aluminum extrusion products

**We believe the fast development of the new energy vehicle industry will bring significant new demand for aluminum extrusion products.** The automobile industry is a major user of industrial aluminum products such as extrusion products, flat-rolled products and foundry products. Lightweight materials are more common in new energy vehicles which help to improve distance that can be travelled on one battery charge, and aluminum is the most popular lightweight metal material. The amount of aluminum products in new energy vehicles is usually much higher than in traditional vehicles. Hence, demand growth for aluminum products will be driven by two aspects: higher penetration rate of new energy vehicles and higher demand for aluminum products in the new energy vehicle industry. Global electric vehicle sales increased 108% yoy to 6.75 million in 2021 and represented about 8.3% of total sales of passenger vehicles. China is the largest new energy vehicle market in the world and total sales of new energy vehicles reached 6.6 million in 2021. Industry experts expect that global sales of new energy vehicles will exceed 10 million in 2022 and will maintain fast growth over the next 15 years. We expect that the fast development of the new energy vehicle industry will bring more demand for aluminum products.

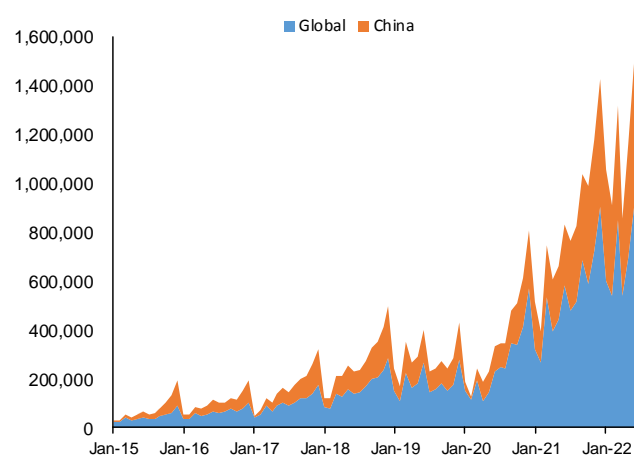
#### 3.1 New energy vehicle industry will drive demand for aluminum products

Figure-1: Global Sales of Vehicle



Source: The International Organization of Motor Vehicle Manufacturers.

Figure-2: Global Sales of Electric Vehicle



Source: EV Sales, China Association of Automobile Manufacturers.

**The auto industry is the largest civil industry in the world.** The global auto industry is the most important consumer of aluminum products, much larger than that of the railway industry and airplane manufacturing industry. In 2021, total output of passenger vehicles was 57.05 million, in which 8.55 million tons of aluminum products was used if we assume that each vehicle requires 150 kg of aluminum products. According to the US Aluminum Association, global consumption of aluminum products of the airplane manufacturing industry is around 0.35-0.40 million tons each year. Demand for aluminum products of the global railway industry is much less than that of the airplane manufacturing industry. China is the largest producer of railway equipment in the world and total aluminum products in the railway industry was only about 80,000 tons in 2021.

**New energy vehicle construction requires more aluminum products than traditional vehicles.** The application of aluminum products in the manufacturing of vehicles only started 40 years ago. Since the 1970s, more and more aluminum parts are being used in vehicles, such as vehicle body, heat exchangers, wheels, and also engine shells and gearboxes. The wide application of aluminum parts in traditional vehicles is to reduce vehicle weight and increase fuel economy. As battery systems in new energy vehicles weigh a lot, lightweight materials are in high demand in the new energy vehicle industry. The distance that can be travelled on one charge in new energy vehicles has not reached a satisfactory level currently. Hence, we believe more aluminum products will be applied in new energy vehicles and the development of new energy vehicles will bring ore demand for aluminum products.

**Table-3: Estimation of Aluminum Consumption Per Vehicle in China**

	2020A	2021A	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
<b>Passenger vehicle</b>	138.6	148.1	157.7	167.4	177.4	187.1	197.3	207.9	219.0	230.7	242.2
Fuel	136.4	145.2	153.9	162.5	171.2	179.8	188.5	197.2	205.8	214.5	222.8
EV	157.9	173.1	188.2	201.9	215.5	226.8	238.1	249.8	261.8	274.2	283.5
Hybrid	198.1	206.8	215.5	224.2	232.9	238.3	243.7	249	254.4	259.8	265.2
<b>Commercial vehicle</b>	122.6	133.9	145.1	156.2	165.9	180.1	194.8	209.1	223.6	238.3	253.2

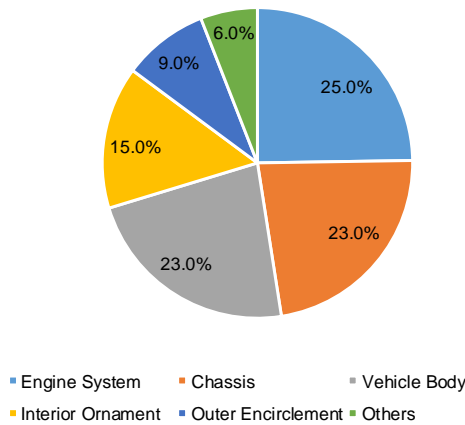
Source: International Aluminum Association, CM Group.

**Average usage of aluminum products in new energy vehicles is expected to increase steadily.** According to an estimation from the International Aluminum Association, average use of aluminum products in electric vehicles is 188.2 kg in 2022 and the average use of aluminum products in hybrid vehicles is 215.5 kg, much more than that of traditional vehicles. With the development of technology and the auto industry, average consumption of aluminum products in new energy vehicles is expected to increase steadily. The International Aluminum Association estimates that the average usage of aluminum products in electric vehicles and hybrid vehicles will be 226.8 kg in and 238.3 kg in 2025, respectively. The Chinese government also released policies to stimulate the use of aluminum products in new vehicles. According to the policy released by the central government "Energy saving and new energy vehicle industry development plan 2.0", the average usage of aluminum products in new energy vehicles will reach 250 kg in 2025 and 350 kg in 2030.

**The development of the new energy vehicle industry will bring significant new demand for aluminum extrusion products.** Aluminum products used in the auto industry will benefit from two aspects: firstly, higher penetration rate of new energy vehicles in auto industry and secondly, higher use intensity of aluminum products in each new energy vehicle. We expect total sales of aluminum products to the auto industry to maintain fast growth over the next 5-10 years.

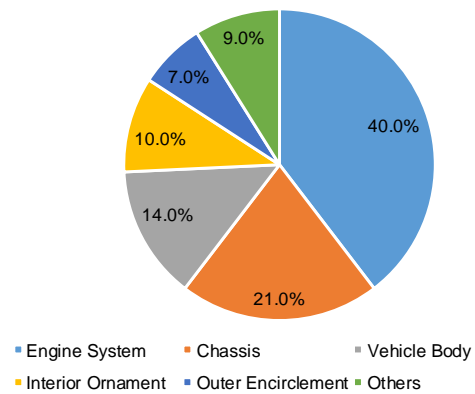
**3.2 Aluminum product consumption structure of new energy vehicle.**

**Figure-3: Weight Distribution of Fuel Vehicles**



Source: China Society of Automotive Engineers.

**Figure-4: Weight Distribution of New Energy Vehicles**



Source: China Society of Automotive Engineers.

**The most common use of aluminum products in traditional vehicles is aluminum foundry parts and the use of aluminum extrusion and flat-rolled products.** The use of aluminum products in traditional vehicles is mainly to reduce weight and improve fuel economy. The largest part of aluminum products used in traditional fuel vehicles is aluminum foundry products. According to an article written by Li Long (2017), about 77% of aluminum products used in traditional vehicles was aluminum foundry products, and only about 20% is aluminum extrusion products and flat-rolled products. In traditional vehicles, aluminum foundry parts are used for producing engine shells, gearboxes, boss-of-wheels, etc. The application of aluminum products in vehicle bodies is relatively small and only several top vehicles on the market, such as the Audi A8. The Tesla Model X uses solely aluminum vehicle white-body.

**Table-4: Application of Aluminum Products in Traditional Vehicles (2009)**

	North America		European Union		Japan	
	Weight	Ratio	Weight	Ratio	Weight	Ratio
Engine	55.6	37.6%	42.8	34.6%	48.7	41.1%
Gearbox and Driveline System	29.9	20.2%	15.7	12.7%	21.9	18.5%
Chassis and Suspension System	8.3	5.6%	11.6	9.3%	3.6	3.0%
Boss of Wheel	25.2	17.0%	20.2	16.3%	20.2	17.1%
Brake System	4.1	2.8%	5.1	4.1%	3.5	3.0%
Heat Exchanger	14.3	9.6%	12.3	9.9%	13.6	11.5%
Auto Body Panel	2.7	1.8%	5.2	4.2%	1.9	1.6%
Vehicle Body	0.6	0.4%	2.9	2.3%	0.1	0.1%
Heat Shield	1.9	1.3%	1.5	1.2%	1.1	0.9%
Bumper Bar	1.1	0.7%	2.7	2.2%	0.6	0.5%
Others	4.3	2.9%	3.9	3.2%	3.2	2.7%
Total	148.0	100.0%	123.9	100.0%	118.4	100.0%
Ratio of Foundry Parts	83.2%		77.0%		82.6%	

Source: Darko International.

**The structure of aluminum product usage in the new energy vehicle industry is much different from that of traditional vehicles.** Generally speaking, the use of aluminum foundry products in new energy vehicles will be cut significantly. The engine system in new energy vehicles is replaced by electric motors and batteries, so engine shells and gearboxes are not necessary. The engine system of traditional vehicles is the largest system that uses aluminum products. New energy vehicles do not have engine systems, so they do not need these aluminum foundry products. Instead, aluminum products are widely used in new energy vehicle bodies. As a result, more aluminum extrusion products and flat-rolled products are required in new energy vehicles. We estimate that the ratio of aluminum products used in foundry products, extrusion products and flat-rolled products in new energy vehicles is 3:3:4. Hence, the development of new energy vehicles will benefit producers of aluminum extrusion products and flat-rolled products greatly.

**Table-5: Maximum Usage of Aluminum Products in New Energy Vehicles**

Vehicle Parts	Maximum Usage of Aluminum (kg)	Ratio
Roof and Trunklid	8.9	0.8%
Hood	9.3	0.9%
Knuckles	10.2	1.0%
Bumper Beam and Crush Boxes	10.4	1.0%
BIW excl. closures	123.9	11.6%
Heat exchanger	7.5	0.7%
Steering	1.7	0.2%
Battery Pack	42.2	3.9%
Driveline	14.9	1.4%
Subframe	25.5	2.4%
Suspension Arm	7.5	0.7%
Brake	10.2	1.0%
Fenders/wings	7	0.7%
Front Doors	18.9	1.8%
Rear Doors	15	1.4%
Wheels	26.8	2.5%
IP Beam	4.8	0.4%
Heat Shields	4.8	0.4%
Others	11.8	1.1%
Total	361.3	33.7%

Source: International Aluminum Association, CM Group.

### 3.3 More consumption demand for aluminum extrusion and flat-rolled products.

**We expect that demand for aluminum products from the new energy vehicle industry will maintain fast growth over the next 5-10 years.** Total sales of new energy vehicles is expected to increase significantly over the next 5-10 years. Total sales of new energy vehicles in China is expected to exceed 7 million in 2022, and is expected to exceed 10 million in 2025. The ratio of



new energy vehicles to total may be more than 35%. In the meantime, aluminum products consumed by each new energy vehicle is expected to increase steadily over the next 5-10 years. Although technological advances in lithium battery technology was rapid over the past decade, it is still not satisfactory as travel distance of new energy vehicles in one charge is still much less than traditional vehicles with a full tank of fuel. Hence, cutting the weight of new energy vehicles is still a priority. We expect the application of aluminum products to increase steadily over the next 5-10 years, which is also in line with the government's policy orientation. We expect each new energy vehicle in 2022 to have about 150 kg-180 kg in aluminum products in its construction, and the amount to increase to 200 kg-230 kg in 2025. We expect total sales of new energy vehicles to exceed 10 million in 2022. We assume that each new energy vehicle will have 200 kg in aluminum products and total demand for aluminum products will reach 2 million tons.

**Aluminum extrusion products and flat-rolled products will be in high demand due to the development of the new energy vehicle industry.** About 70% of aluminum products in new energy vehicles are aluminum extrusion products and aluminum flat-rolled products. We estimate that these products will reach about 3.5 million-4.2 million tons in 2025 and more than 7.0 million tons in 2030. Although the quantity is relatively small, it is very large compared to the current quantity of extrusion products and flat-rolled products for new energy vehicles. According to China's Nonferrous Fabrication Association, China produced about 0.33 million tons of aluminum extrusion products for vehicles and 0.30 million tons of aluminum flat-rolled products for vehicles in 2021. We believe that demand for aluminum extrusion products and flat-rolled products will be high due to the development of the new energy vehicle industry and will record significant growth over the next 5-10 years.

4. Significant competitive advantages of Xingfa Aluminium.

**Xingfa Aluminium is a leading company in the aluminum fabrication industry.** Xingfa Aluminium is a leading producer of construction aluminum products and industrial aluminum extrusion products in China. Xingfa Aluminium produces high-end construction of aluminum products and is the single largest company in the aluminum products construction industry. Xingfa Aluminium is also a leading producer of industrial aluminum extrusion products. In 2021, Xingfa Aluminium produced more than 0.2 million tons of industrial aluminum extrusion products. Xingfa Aluminium has significant competitive advantages in research, development, production and sale of aluminum extrusion products for new energy vehicles. We expect Xingfa Aluminium to be one of the major aluminum extrusion products providers for new energy vehicles in the next 5 years.

4.1 Xingfa Aluminium is one of the largest aluminum products manufacturers in China.

Figure-5: Market Structure of China's Aluminum Fabrication Industry

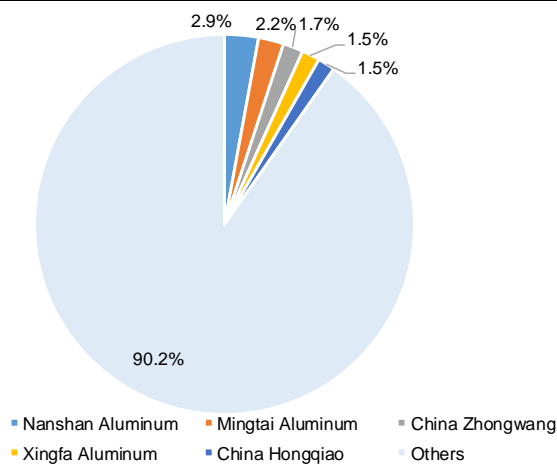
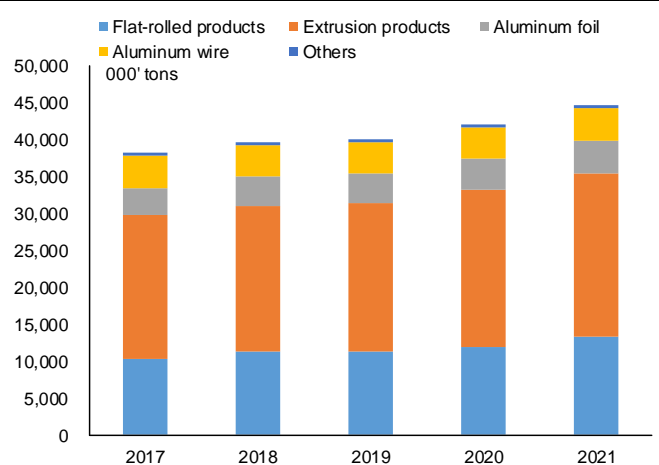


Figure-6: Product Structure of China's Aluminum Fabrication Industry

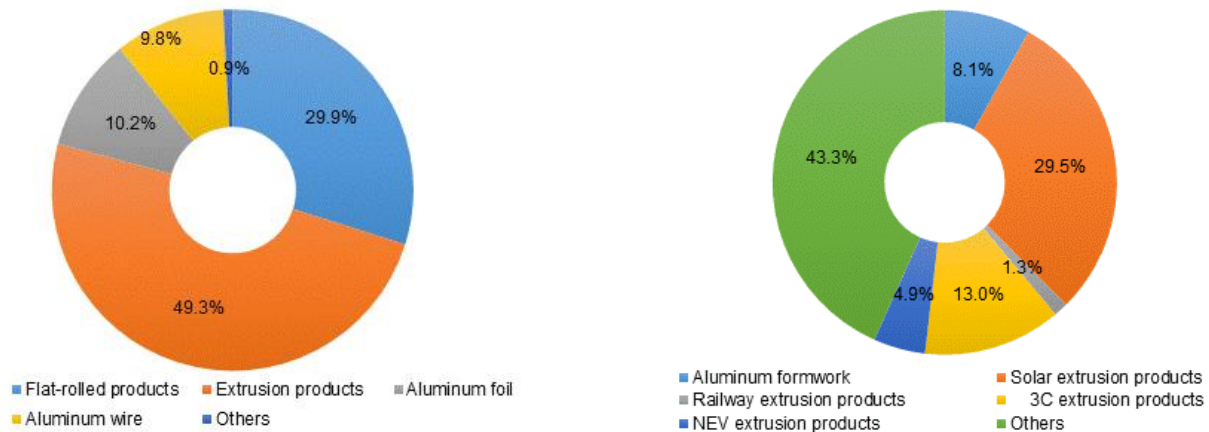


Source: China Nonferrous Metals Fabricating Industry, Guotai Junan International. Source: China Nonferrous Metals Fabricating Industry.

**Xingfa Aluminium is one of the largest manufacturers in China's aluminum fabrication industry.** Aluminum fabrication products mainly consist of aluminum extrusion products, aluminum flat-rolled products, aluminum wire, aluminum casting products, etc. China's aluminum fabrication industry is a very large industry, but the leading companies are usually relatively small. China consumed 40.55 million tons of primary aluminum in 2021 and the output of aluminum fabrication products was 44.70 million tons. However, the production scale of aluminum fabrication companies is usually small. According to a report published in China's non-ferrous metals academic journal, China had more than 2,000 companies producing aluminum fabrication products in 2018 and the average output of each aluminum fabrication company was less than 20,000 tons. Generally speaking, production scale of China's top aluminum fabrication companies in each segment is less than 1 million tons each year, and the concentration rate of the 5 largest aluminum fabrication companies is less than 10%. Nanshan Aluminum is the largest aluminum fabrication company in China, which produced 1.29 million tons of aluminum extrusion products and flat-rolled products in 2021. Mingtai Aluminum is the second-largest aluminum fabrication company, which produced 0.96 million tons of flat-rolled products in 2021. Xingfa Aluminium ranked 4<sup>th</sup> and produced 0.69 million tons of aluminum extrusion products in 2021.

**Xingfa Aluminium is the largest producer of construction extrusion products in China.** In 2021, Xingfa Aluminium produced 0.53 million tons of construction aluminum extrusion products and 0.14 million tons of industrial aluminum extrusion products. Xingfa Aluminium is the largest producer of construction aluminum extrusion products and was awarded "Individual Champion Demonstration Enterprise in Manufacturing Industry" by the government. Total sales of construction aluminum products of Xingfa Aluminium maintained a 5-year CAGR of 14.4%, which increased from 0.29 million tons in 2016 to 0.57 million tons in 2021. Total sales of industrial aluminum products of Xingfa Aluminium maintained a 5-year CAGR of 8.1%, which increased from 0.102 million tons in 2016 to 0.151 million tons in 2021.

**Figure-7: Product Structure of China's Aluminum Fabrication Industry 2021**      **Figure-8: Product Structure of Industrial Aluminum Extrusion Products 2021**



Source: China Nonferrous Metals Fabricating Industry, Guotai Junan International. Source: China Nonferrous Metals Fabricating Industry.

**4.2 Xingfa Aluminium has significant profitability advantages.**

**Table-6: Average Processing Fees of Major Aluminum Fabrication Companies**

	2017	2018	2019	2020	2021
Xingfa Aluminium	5,345	5,950	5,637	6,060	5,757
China Hongqiao	n.a.	n.a.	2,377	2,110	2,367
China Zhongwang	11,004	13,642	14,147	17,138	n.a.
Nanshan Aluminium	3,124	4,078	3,356	3,971	2,460
Mingtai Aluminium	3,241	3,622	3,068	3,362	3,375
Yatai Aluminium	9,765	10,574	10,821	11,651	9,470

Source: the Company, Guotai Junan International.

**The average processing fees of Xingfa Aluminium is relatively high in the aluminum fabrication industry.** The average processing fees of Xingfa Aluminium maintained at the level of RMB5,300/ton in the past 5 years. Xingfa Aluminium's processing fees are higher than most aluminum fabricating companies, and was only lower than that of China Zhongwang, which produces high-end industrial extrusion products and Yatai Technology, which produces aluminum tubes. Xingfa Aluminium was able to maintain its processing fees in an industry with fierce competition, which reflects its product advantages and cost control ability. Construction aluminum extrusion products is the main product of the Company, but it is a mature market with fierce competition. Xingfa Aluminium outperformed in the industry and has maintained fast growth over the past 5 years. The Company focuses on the high-end market which reflects the research ability of the Company, and maintains profitability which reflects its cost control ability.

**Table-7: Gross Margin of Major Aluminum Fabrication Companies**

	2017	2018	2019	2020	2021	2021 Output
Xingfa Aluminium	14.0%	13.6%	13.2%	13.7%	11.7%	685,006
China Hongqiao	16.7%	17.1%	19.6%	22.5%	26.6%	657,000
China Zhongwang	32.6%	32.7%	30.1%	29.1%	n.a.	767,392
Nanshan Aluminium	22.6%	17.4%	21.5%	23.7%	24.6%	1,289,800
Mingtai Aluminium	8.6%	9.0%	9.5%	12.2%	11.8%	962,200
Yatai Aluminium	20.5%	20.7%	19.8%	16.5%	14.5%	229,272

Source: the Company, Guotai Junan International.

4.3 Xingfa Aluminium has a complete chain for developing new products.

Figure-9: National Enterprise Technology Center



Source: the Company.

Figure-10: Physics and Chemical Testing Center



Source: the Company.

**Xingfa Aluminium has tremendous strength in research.** Xingfa Aluminium’s professional and quality products stem from its R&D ability. Xingfa has one state-accredited laboratory, one post-doctoral reach station and a Photoelectric Research Development Center. The Company puts great emphasis on scientific research and development and has produced 587 patented projects. The Company also participates in formulating the national standards in China, which reflects its research ability. In addition, the company has established a key engineering technology R&D center in Guangdong Province and has achieved a series of breakthroughs in technologies in high-temperature extrusion, mold simulation analysis, and green pre-treatment with no chrome. Up to present, Xingfa Aluminium has been awarded one national Scientific Progress Prize, won 5 China nonferrous metal industry awards for science and technology, four Guangdong Scientific Technology Prizes and two Foshan Scientific Technology Prizes.

Figure-11: Extrusion Mold Processing Center



Source: the Company.

Figure-12: Aluminum Rod Homogeneity Furnace



Source: the Company.

**Xingfa Aluminium has a complete chain from alloy material research, module development, product development, production and processing.** After nearly 20 years of development, Xingfa Aluminium has established a complete chain for developing new aluminum extrusion products, which starts from aluminum alloy development, aluminum extrusion product design, extrusion mold design, aluminum extrusion product production and processing. Materials and shapes are key to producing aluminum extrusion products. The Company has great research strength in aluminum alloy materials and mold research capability, which enables the Company to develop aluminum alloy to meet customer standards. Xingfa Aluminium is also equipped with advanced equipment for producing aluminum extrusion products, such as high pressure extrusion machines, aluminum rod homogeneity furnaces, ingot casting equipment, heat treatment equipment, etc. With strong research strength and

advanced equipment, Xingfa Aluminium is able to develop new aluminum extrusion products which meet customer standards.

**4.4 Xingfa Aluminium has great competitive advantages.**

**Figure-13: Xingfa Aluminium’s Product for Vehicle**



Source: the Company, Guotai Junan Internal.

**Figure-14: Xingfa Aluminium’s Product for Vehicle**



Source: the Company, Guotai Junan Internal..

**Xingfa Aluminium has great advantages in the development and supply of aluminum extrusion products for new energy vehicles.** The development and supply of aluminum extrusion products for new energy vehicles is not an easy business, which mainly include product development and product supply. It starts from design cooperation with automobile factories. Aluminum extrusion companies design specific parts to be installed in new vehicles. Aluminum extrusion products for new energy vehicles not only have to satisfy certain shape and strength requirements, but also electric signal penetration requirement as new energy vehicles have more intelligent software and have more sensors. If the development of new vehicles is successful and is brought to the market, aluminum extrusion companies will supply aluminum extrusion products according to demand. Xingfa Aluminium has a complete industrial chain for product development and has successfully designed several aluminum extrusion products for new energy vehicles. Currently the Company is developing aluminum extrusion products with automobile factories for new motorcycle types and is expected to enter into the supply stage in the coming years. Xingfa Aluminium has great advantages in the development and supply of aluminum extrusion products for new energy vehicles and we expect Xingfa Aluminium to be a leading supplier in the new energy vehicle industry in the future.

## 5. Company Analysis

**Xingfa Aluminium is one of the leading aluminum extrusion product manufacturers in the PRC.** Xingfa Aluminium insists on the strategy of "construction products + industrial products" dual-engine development to expand sources of revenue for the Company. As a major supplier of construction aluminum extrusion products, Xingfa is likely to earn stable revenue from the construction materials industry. Meanwhile, the Company will leverage its technology and experience and apply to the industrial materials industry and manufacture electronic consumer products and lightweight transport products. With the commencement of the precision manufacturing base situated at Sanshui Industrial Park, the Company is able to develop more industrial aluminum products in the future. It will facilitate the Company to better seize market opportunities in the construction and industrial materials industry.

### 5.1 Production Facility of the Company

**Figure-15: Guangdong Precision Manufacturing Base**



广东兴发精密制造有限公司

**Figure-16: Zhejiang New Material Company**



兴发新材（浙江）有限公司

Source: the Company.

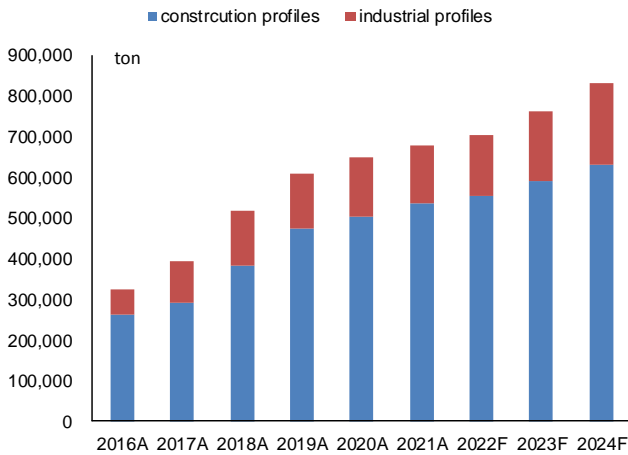
Source: the Company.

**Xingfa Aluminium has 7 production bases and has a total production capacity of about 0.7 million tons.** Currently, Xingfa Aluminium has 7 production bases which are located in Guangdong Province, Zhejiang Province, Jiangxi Province and Henan Province. Most of the production bases are designed for the production of construction products, but is also able to produce industrial products. The Company's newly constructed Foshan precision manufacturing base and Xingfa New Material Company in Zhejiang will have more advanced equipment for the production of industrial products. Xingfa Aluminium insists on its "construction products + industrial products" dual-engine development strategy and will maintain its advantages in the market of aluminum construction products and leverage its technology and experience in the development of industrial extrusion products for the high-end market.

### 5.2 Sales and Revenue

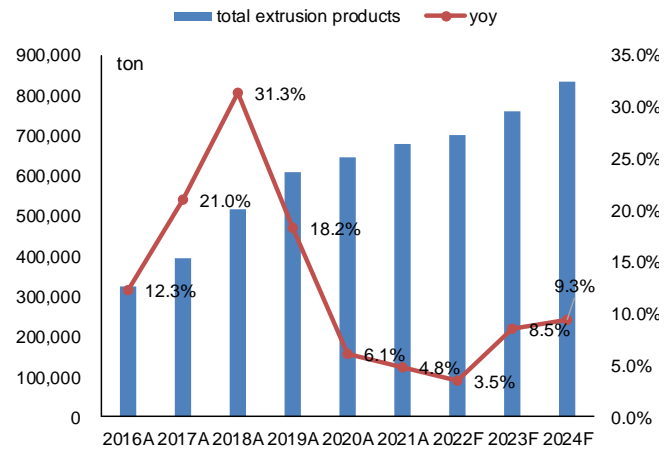
**We forecast total sales of aluminum products of Xingfa Aluminium to grow at a CAGR of 5.2% in 2022-2024.** We expect the sales of construction products to be negatively impacted by the difficulties in China's property market in 2022, but gradually resumed to normal growth rate in 2023-2024. We expect rapid growth in sales of industrial products from 2023 due to more sales of industrial products for new energy vehicles. We forecast total sales of construction products to grow at a CAGR of 5.2% in 2022-2024 and reach 0.62 million tons in 2024. We forecast total sales of industrial products to grow at a CAGR of 11.9% in 2022-2024 and reach 0.20 million tons in 2024. We forecast total sales of aluminum products of the Company to grow at a CAGR of 6.7% in 2022-2024 and to be 0.70 million tons, 0.76 million tons and 0.82 million tons in 2022-2024, respectively. We forecast the average processing fees of construction products to remain stable in 2022-2024, but the average processing fees of industrial products to grow largely as the ratio of energy vehicles in the industry increases.

Figure-17: Xingfa's Sales of Aluminum Products



Source: the Company, Guotai Junan International.

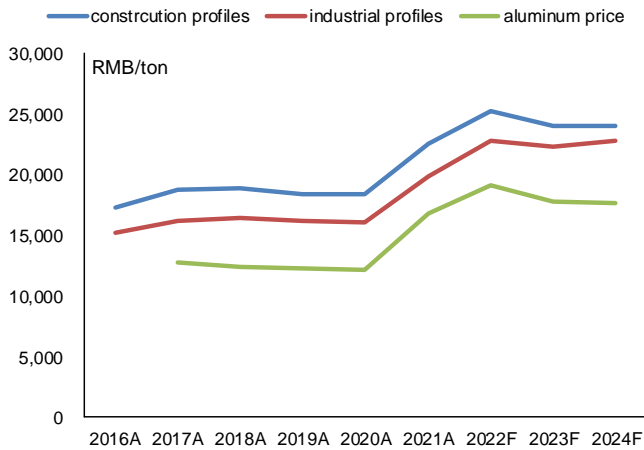
Figure-18: Xingfa's Sales of Aluminum Products



Source: the Company, Guotai Junan International.

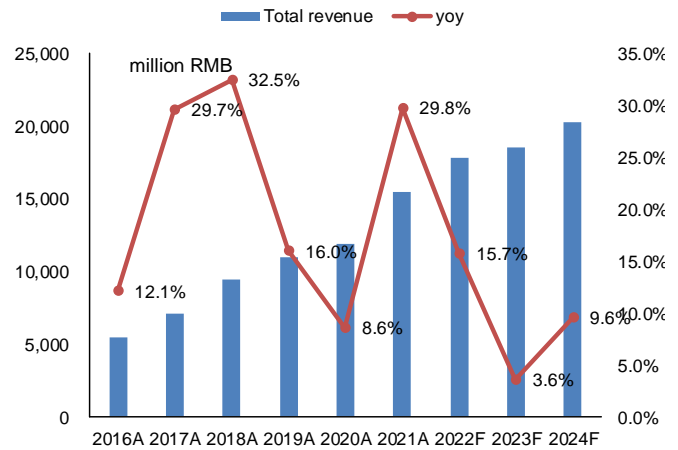
We forecast total revenue of Xingfa Aluminium to grow at a CAGR of 9.1% in 2022-2024. We expect the sales of construction products to grow steadily in 2023-2024, and the sales of industrial products to grow fast driven by fast growth of industrial products for new energy vehicle. We forecast aluminum price to decline moderately in 2023-2024 as aluminum market fundamentals return to normal. As a result, we forecast revenue from construction products to grow at a CAGR of 7.2% in 2022-2024. We forecast revenue from industrial products to grow at a CAGR of 17.1% in 2022-2024. We forecast total revenue of the Company to grow at a CAGR of 9.1% in 2022-2024 and to be RMB17,862.9 million, RMB18,376.7 million and RMB20,063.2 million in 2022-2024, respectively.

Figure-19: ASP of Xingfa's Aluminum Products



Source: the Company, Guotai Junan International.

Figure-20: Total Revenue of Xingfa Aluminium

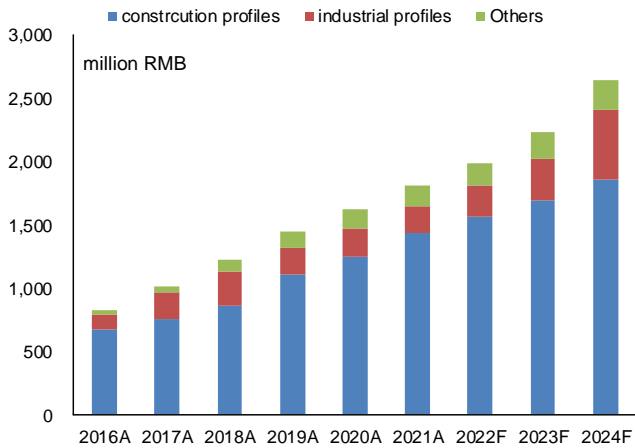


Source: the Company, Guotai Junan International.

### 5.3 Gross Profit and Net Profit

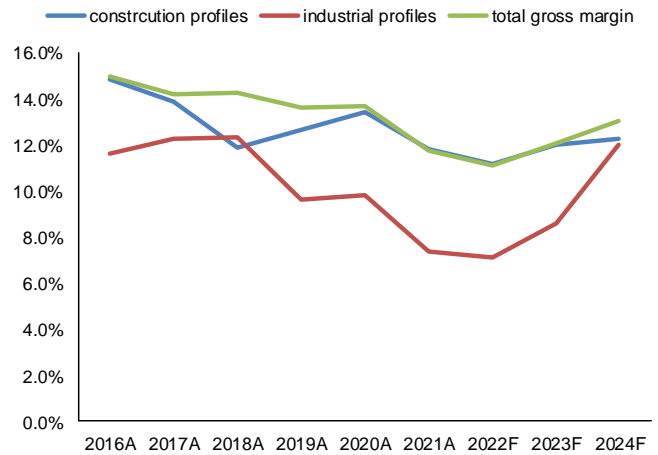
We forecast total gross profit of Xingfa Aluminium to grow at a CAGR of 13.0% in 2022-2024. We expect the average processing fees of construction products to remain stable in 2023-2024, and the average processing fees of industrial products to grow fast due to more sales of industrial products for new energy vehicles. As a result, we forecast gross profit from construction products to grow at a CAGR of 8.6% in 2022-2024. We forecast gross profit from industrial products to grow at a CAGR of 37.7% in 2022-2024. We forecast total gross profit of the Company to grow at a CAGR of 13.0% in 2022-2024 and to be RMB1,985.8 million, RMB2,220.8 million and RMB 2,616.1 million in 2022-2024, respectively.

**Figure-21: Gross Profit of Xingfa Aluminium**



Source: the Company, Guotai Junan International.

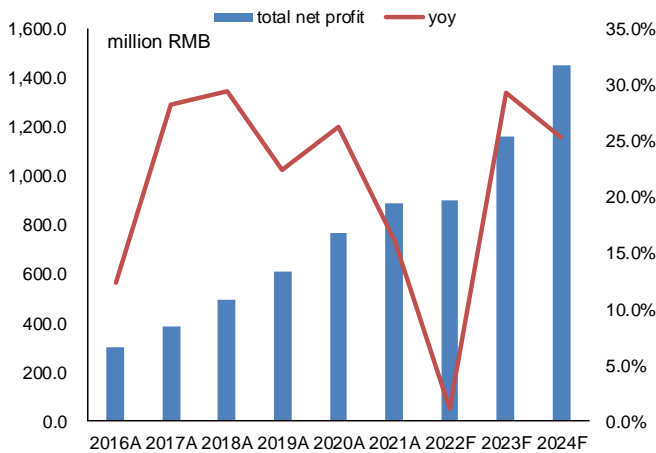
**Figure-22: Gross Margin of Xingfa Aluminium**



Source: the Company, Guotai Junan International.

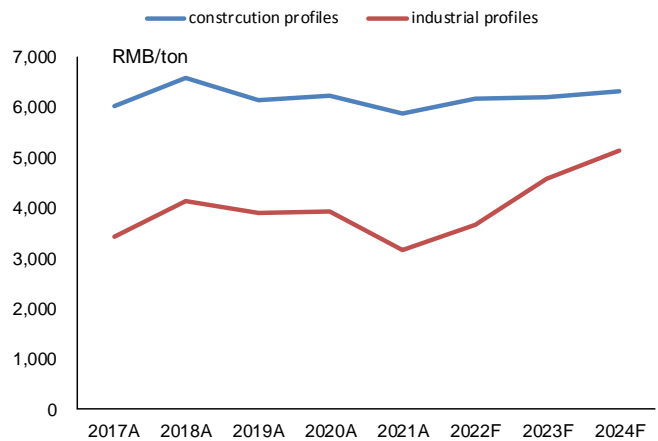
We forecast total net profit of Xingfa Aluminium to grow at a CAGR of 17.9% in 2022-2024 and to be RMB897.0 million, RMB1,159.4 million and RMB1,453.3 million in 2022-2024, respectively. We expect total net profit of Xingfa Aluminium to grow at a CAGR of 17.9% in 2022-2024. Fast growth in net profit was mainly attributable to more sales of aluminum products and higher average processing fees.

**Figure-23: Net Profit of Xingfa Aluminium**



Source: the Company, Guotai Junan International.

**Figure-24: Average Processing Fees**



Source: the Company, Guotai Junan International.



**Risk factors**

**1. Development of aluminum extrusion products for vehicles may miss expectations.** Sales of industrial aluminum products will be the main growth source of the Company in the next 3 years; if the development of aluminum extrusion products for new energy vehicles misses expectation, it will significantly impact net profit growth of the Company.

**2. Fierce competition from other aluminum extrusion producers.** The Company faces fierce competition in sales of aluminum extrusion products; fierce competition may reduce profitability of the Company.

**3. Ongoing negative impact from the domestic property market.** Sales of construction aluminum products contributed more than 80% of total revenue. If the domestic property market remains weak, sales of construction aluminum products may be negatively impacted. Besides, impairment loss from trade receivables may increase if the domestic market deteriorates.

**Financial Statements and Ratios**

Income Statement					
Year end 31 Dec (RMB m)	2020A	2021A	2022F	2023F	2024F
Total Revenue	11,887	15,433	17,863	18,377	20,063
COGS	(10,257)	(13,621)	(15,877)	(16,156)	(17,447)
Gross profit	1,629	1,812	1,986	2,221	2,616
Other income	146	133	157	144	149
Distribution costs	(360)	(315)	(357)	(349)	(381)
Administrative Expenses	(396)	(401)	(464)	(459)	(502)
Impairment loss	(53)	(79)	(167)	(100)	(86)
Operating Profit	967	1,150	1,154	1,456	1,796
Other gains and losses	8	7	3	4	2
Finance costs	(102)	(101)	(97)	(89)	(80)
Profit Before Tax	873	1,055	1,061	1,371	1,718
Income Tax	(112)	(168)	(159)	(206)	(258)
profit After Tax	761	887	902	1,165	1,461
Non-controlling Interest	4	1	(5)	(6)	(7)
Shareholders' Profit / Loss	765	888	897	1,159	1,453
Basic EPS	1.831	2.119	2.141	2.767	3.469

Cash Flow Statement					
Year end 31 Dec (RMB m)	2020A	2021A	2022F	2023F	2024F
Profit before tax	873	1,055	1,061	1,371	1,718
Adjust for depre.&amort.	463	464	547	531	571
Change in WC	(244)	(79)	(339)	(64)	(83)
Income tax paid	(136)	(132)	(135)	(175)	(219)
Others	16	24	3	3	(9)
Cash from Operating Activities	973	1,333	1,136	1,666	1,978
Capital expenditure	(439)	(687)	(720)	(792)	(919)
Interest income received	54	78	31	29	30
Others	175	4	(215)	(12)	(137)
Cash from Investing Activities	(210)	(605)	(904)	(775)	(1,026)
Share issue	0	6	0	0	0
Interest paid	(106)	(95)	(87)	(80)	(72)
Dividend paid	(107)	(124)	(377)	(419)	(503)
Net cash from borrowing	(569)	621	(66)	9	(38)
Others	0	0	86	(321)	(179)
Cash from Financing Activities	(781)	409	(445)	(811)	(792)
Net Changes in Cash	(18)	1,137	(213)	80	161
Cash at Beg of Year	528	510	1,643	1,429	1,507
Foreign exchange rate changes	(0)	(4)	(1)	(2)	(2)
Cash at End of Year	510	1,643	1,429	1,507	1,665

Balance Sheet					
Year end 31 Dec (RMB m)	2020A	2021A	2022F	2023F	2024F
Investment property	73	169	180	190	202
PPE	2,271	2,534	2,874	3,235	3,668
Right-of-use assets	336	330	337	344	351
Intangible assets	4	3	0	0	0
Deferred tax assets	53	68	73	77	82
others	6	20	23	25	26
Total non-current assets	2,744	3,126	3,487	3,871	4,329
Inventory and other contract assets	1,253	1,482	1,697	1,709	1,846
Trade and other payables	3,546	4,668	5,180	5,237	5,537
Prepayments	199	199	203	207	212
Pledged deposits	171	209	219	230	242
Cash & cash equivalents	510	1,643	1,429	1,507	1,665
Others	14	15	0	0	0
Total Current Assets	5,692	8,216	8,729	8,891	9,502
Total Assets	8,436	11,342	12,216	12,762	13,831
Trade and other payables	3,322	4,725	5,109	5,109	5,457
Contract liabilities	198	228	237	247	257
Loans and borrowings	811	493	345	407	652
Others	56	97	94	98	103
Total Current Liabilities	4,387	5,543	5,785	5,861	6,469
Loans and borrowings	319	1,259	1,340	1,286	1,003
Deferred income	15	26	27	29	30
Deferred tax liabilities	11	30	31	33	35
Others	7	5	0	0	0
Total Non-current Liabilities	351	1,320	1,398	1,348	1,068
Total Liabilities	4,738	6,863	7,183	7,209	7,538
Total Shareholders' Equity	3,697	4,479	5,032	5,552	6,292
Minority Interest	1	0	1	1	1
Total Equity	3,698	4,479	5,033	5,553	6,293

Financial Ratios					
	2020A	2021A	2022F	2023F	2024F
Margin:					
Gross margin	13.7%	11.7%	11.1%	12.1%	13.0%
Net margin	6.4%	5.8%	5.0%	6.3%	7.2%
ROE	22.7%	21.7%	18.9%	21.9%	24.5%
ROA	9.4%	9.0%	7.7%	9.3%	11.0%
Free CF	534	646	416	874	1,060
Net gearing	18.4%	2.6%	5.4%	3.5%	-0.2%

**Company Rating Definition**

The Benchmark: Hong Kong Hang Seng Index  
 Time Horizon: 6 to 18 months

Rating		Definition
Buy	买入	Relative Performance > 15%; or the fundamental outlook of the company or sector is favorable.
Accumulate	收集	Relative Performance is 5% to 15%; or the fundamental outlook of the company or sector is favorable.
Neutral	中性	Relative Performance is -5% to 5%; or the fundamental outlook of the company or sector is neutral.
Reduce	减持	Relative Performance is -5% to -15%; or the fundamental outlook of the company or sector is unfavorable.
Sell	卖出	Relative Performance < -15%; or the fundamental outlook of the company or sector is unfavorable.

**Sector Rating Definition**

The Benchmark: Hong Kong Hang Seng Index  
 Time Horizon: 6 to 18 months

Rating		Definition
Outperform	跑赢大市	Relative Performance > 5%; or the fundamental outlook of the sector is favorable.
Neutral	中性	Relative Performance is -5% to 5%; or the fundamental outlook of the sector is neutral.
Underperform	跑输大市	Relative Performance < -5%; Or the fundamental outlook of the sector is unfavorable.

**DISCLOSURE OF INTERESTS**

- (1) The Analysts and their associates do not serve as an officer of the issuer mentioned in this Research Report.
- (2) The Analysts and their associates do not have any financial interests in relation to the issuer mentioned in this Research Report.
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