



# Putailai

## Equity Research Report

CUIRS China Equity Team  
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## Putailai New Energy Technology | China

# Leader in Li-ion battery negative electrode integration, Initiate OW

Stock rating

Over-weight

Target Price

CNY 338.00

### Key Positive Thesis

#### Advanced tech to ensure industry leadership while reducing costs

Putailai has a huge investment in research. Its R&D expenditure has been boosted from CNY 94,613,300 in 2017 to CNY 178,834,500 in 2021, peaking at CNY 210,863,500 at one point in 2019. Over the five-year period, **the R&D expenditure ratio has been above 4.2%, higher than the average of 3.7% of its main competitors** (Zhongke Electric/ Beiterui/ Shanshan, etc.).

In December 2012, the team of Feng Suning, a leading figure in artificial graphite in the United Nations, established Jiangxi Zichen under Putailai. He is deeply involved in the field of negative electrode and invented the star product of artificial graphite which is popular in the market and named as "FSN series" after him. In addition, Putailai is gradually using the box furnace process to reduce the cost of negative electrodes. The company's subsidiaries, Shandong Xingfeng and Inner Mongolia Xingfeng, have carried out technological transformation. The production cycle of anode graphite has now been reduced from 28 days to within 21 days, with a 50% increase in production capacity. **Over the past three years, Putailai's cost ratio has also been controlled at around 16%, which is lower than the industry average of 17.5%.** As a negative electrode company for high and mid-end products, such cost control is rare and valuable.

#### Capacity expansion with more focus on mid-range markets

Putailai vigorously expand production and actively layout anode production capacity. Putailai laid out a new industrial chain in Qionglai, Sichuan Province. A centralized groundbreaking ceremony for major industrial industrialization projects in the first quarter of 2022 was held in the functional area of semiconductor materials industry in Tianfu New Area. Fifteen industrialization and functional supporting projects with a total investment of CNY 18.885 billion, including the Putailai battery anode material and graphite integration project, were started centrally. **This initiative is expected to increase the annual production capacity of Putailai's negative electrode by 23%.** Since 2021, Putailai has received a series of grants from the Shanghai government for high-tech industries totaling CNY 281,723,407,33. The company has also been invited to shift its focus to the lower end of the market one after another.

#### Strong industry position and quality customer resources

In 2020, the average unit price was CNY 58,000 per ton, much higher than other manufacturers in the same industry in the field of high-end anode products. Products include G49, AG4T and GT, which are designed for 3C batteries and EV batteries and feature high capacity, high solid density, high first discharge efficiency, low expansion and long cycle. The company's customer structure is dominated by power battery From 2021 to 2023. Its anode material production capacity is expected to reach 10/15/250,000 tons, with an orderly expansion plan and a steady pace. With the release of two new customers in the next two years, the company's market share is expected to further increase.

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### Putailai (603659. SH)

Stock Rating	Over-weight
Share Price (18/4/22)	CNY 129.60
TP Up/downside (%)	60.8%
52-Week Range	CNY 73.64-200.37
Shares Out. (mn)	692.11
Mkt Cap (CNY bn)	CNY 86.69
EV (CNY bn)	CNY 10.95
Free Float (%)	40.12%
50 Days Mov AVG	CNY 137.74
200 Days Mov AVG	CNY 141.72

### Fiscal year (12/31)

(CNY in mn)	2021A	2022E	2023E
Revenue	8,174.8	16,057.0	22,031.0
YoY (%)	55%	96%	37%
Gross Profit	3,562.2	6,390.4	9,388.4
GPM	37%	32%	29%
EBIT	2,525.3	4,353.7	6,594.0
OPM (%)	31%	27%	30%
Pre-Tax Income	2,029.3	3,196.2	6,596.2
Net Income	1,748.7	2,662.3	5,879.5
NPM	21%	17%	27%
Basic EPS	2.5	3.8	8.5

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## Appendix

## Putailai Financial Summary (2019A-2025E)

## Income Statement (CNY in mn)

	2019A	2020A	2021A	2022E	2023E	2024E	2025E
Revenue	4,798.5	5,280.7	8,174.8	16,057.2	22,031.1	29,098.4	36,754.2
COGS	(3,383.7)	(3,612.9)	(4,612.5)	(9,666.8)	(12,642.8)	(16,233.2)	(20,085.7)
<b>Gross Profit</b>	<b>1,414.80</b>	<b>1,667.80</b>	<b>3,562.2</b>	<b>6,390.4</b>	<b>9,388.4</b>	<b>12,865.2</b>	<b>16,668.5</b>
Other Operating Income	51.0	67.0	103.7	203.7	279.5	369.2	466.3
SG&A	-325.60	-309.60	(479.3)	(941.4)	(1,291.7)	(1,706.0)	(2,154.8)
R&D	(211.9)	(264.1)	(408.8)	(803.1)	(1,101.8)	(1,455.3)	(1,838.2)
D&A	(13.7)	(17.9)	(27.7)	(54.4)	(74.7)	(98.6)	(124.6)
Prov For Doubtful Accts	(22.6)	(80.1)	(124.0)	(243.6)	(334.2)	(441.4)	(557.5)
Other OPEX	(34.4)	(65.1)	(100.8)	(198.0)	(271.6)	(358.7)	(453.1)
<b>Operating Income</b>	<b>857.7</b>	<b>998.1</b>	<b>2,525.3</b>	<b>4,353.7</b>	<b>6,594.0</b>	<b>9,174.4</b>	<b>12,006.6</b>
Non-Operating P&L	(87.9)	(160.0)	(286.1)	(160.6)	-	145.5	367.5
<b>Pretax Income (Loss)</b>	<b>769.8</b>	<b>838.1</b>	<b>2,099.30</b>	<b>3,196.20</b>	<b>6,594.0</b>	<b>9,319.8</b>	<b>12,374.1</b>
Abnormal P&L	(1.0)	(22.6)	0.8	1.6	2.2	2.9	3.7
<b>Pretax Income (Loss), GAAP</b>	<b>768.8</b>	<b>815.5</b>	<b>2,029.30</b>	<b>3,196.20</b>	<b>6,596.2</b>	<b>9,322.8</b>	<b>12,377.8</b>
Tax Expense	(89.7)	(88.6)	(220.5)	(347.3)	(716.6)	(1,012.9)	(1,344.8)
Minority Interest	(28.0)	(59.3)	-	-	-	-	-
<b>Net Income, GAAP</b>	<b>651.1</b>	<b>667.6</b>	<b>1,748.70</b>	<b>2,662.30</b>	<b>5,879.5</b>	<b>8,309.9</b>	<b>11,033.0</b>
<b>Basic Wtavg Shares</b>	<b>605.9</b>	<b>614.9</b>	<b>693.1</b>	<b>693.1</b>	<b>693.1</b>	<b>693.1</b>	<b>693.1</b>
<b>Basic EPS, GAAP</b>	<b>1.07</b>	<b>1.09</b>	<b>2.52</b>	<b>3.84</b>	<b>8.48</b>	<b>11.99</b>	<b>15.92</b>

## Growth &amp; Margins

	2019A	2020A	2021A	2022E	2023E	2024E	2025E
Total Revenue YoY	45%	10%	55%	96%	37%	32%	26%
EBITDA Growth	25%	18%	51%	35%	46%	51%	56%
EPS Growth	9%	2%	131%	52%	121%	41%	33%
<b>Gross Margin</b>	<b>29%</b>	<b>32%</b>	<b>44%</b>	<b>40%</b>	<b>43%</b>	<b>44%</b>	<b>45%</b>
<b>EBIT Margin</b>	<b>18%</b>	<b>19%</b>	<b>31%</b>	<b>27%</b>	<b>30%</b>	<b>32%</b>	<b>33%</b>
<b>Net Margin</b>	<b>14%</b>	<b>13%</b>	<b>21%</b>	<b>17%</b>	<b>27%</b>	<b>29%</b>	<b>30%</b>

## Financial Data of Comparative Companies

Metrics	Sales YoY			Gross Margin			EBITDA Margin			EBIT Margin			Net Margin			
	Forecast Year	21A	22E	23E	21A	22E	23E	21A	22E	23E	21A	22E	23E	21A	22E	23E
SHANGHAI PUTAI-A	603659 CH	70%	56%	42%	36%	36%	36%	27%	27%	26%	22%	23%	23%	19%	19%	19%
CONTEMPORARY-A	300750 CH	141%	86%	41%	27%	27%	27%	19%	18%	18%	14%	14%	14%	11%	11%	11%
GANFENG LITHI-A	002460 CH	103%	184%	18%	40%	40%	40%	35%	38%	39%	52%	41%	42%	47%	31%	31%
YUNNAN ENERGY-A	002812 CH	91%	62%	42%	48%	48%	48%	51%	52%	53%	39%	42%	43%	32%	35%	36%
GOTION HIGH-A	002074 CH	46%	55%	42%	21%	21%	21%	12%	12%	14%	5%	6%	6%	3%	4%	5%
<b>AVG</b>			<b>90%</b>	<b>89%</b>	<b>37%</b>	<b>34%</b>	<b>34%</b>	<b>34%</b>	<b>29%</b>	<b>29%</b>	<b>30%</b>	<b>26%</b>	<b>25%</b>	<b>26%</b>	<b>23%</b>	<b>20%</b>

## Multiplies of Comparative Companies

Metrics	P/S			EV/S			EV/EBITDA			EV/EBIT			P/E			
	Forecast Year	21E	22E	23E	21E	22E	23E	21E	22E	23E	21E	22E	23E	21E	22E	23E
SHANGHAI PUTAI-A	603659 CH	10.8	6.9	4.9	10.7	6.9	4.8	39.3	25.8	18.2	47.6	30.2	21.3	55.4	36.7	26.2
CONTEMPORARY-A	300750 CH	9.8	5.2	3.7	9.9	5.3	3.8	52.0	30.2	21.4	68.4	37.4	26.2	87.1	49.1	34.3
GANFENG LITHI-A	002460 CH	15.4	5.4	4.6	15.9	5.6	4.8	46.0	14.8	12.1	30.6	13.6	11.3	32.8	17.6	14.6
YUNNAN ENERGY-A	002812 CH	23.6	14.6	10.3	24.4	15.1	10.6	47.8	28.9	20.0	63.0	35.7	24.7	73.1	41.8	28.7
GOTION HIGH-A	002074 CH	5.8	3.7	2.6	7.0	4.5	3.2	56.1	36.3	22.8	153.4	81.1	54.6	215.1	92.5	51.4
<b>AVG</b>		<b>13.1</b>	<b>7.2</b>	<b>5.2</b>	<b>13.6</b>	<b>7.5</b>	<b>5.4</b>	<b>48.2</b>	<b>27.2</b>	<b>18.9</b>	<b>72.6</b>	<b>39.6</b>	<b>27.6</b>	<b>92.7</b>	<b>47.5</b>	<b>31.0</b>

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