

# PI Advanced Materials

(178920 KS)

## Better positioned for the next up-cycle

**Buy**  
(Maintain)

TP: W42,000  
Upside: 27.3%

Mirae Asset Securities Co., Ltd.

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### Maintain TP of W42,000

### Reiterate Buy

- We maintain our Buy rating and target price of W42,000 (25x 2024F EPS) for PI Advanced Materials (PIAM). We expect earnings to gradually recover in the coming quarters.
- While sluggish end-market demand is still weighing on quarterly earnings, PIAM is continuing to expand capacity (unlike global competitors) and diversify end-market applications. We expect utilization to rise sharply once the next up-cycle begins in 2024.

### The worst is over

### Likely to swing to operating profit in 2Q23

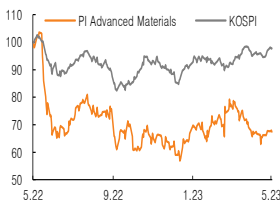
- For 1Q23, PIAM reported revenue of W42.6bn (-19% QoQ) and an operating loss of W11.7bn (turning to loss QoQ). Revenue from heat-resistant sheet PI slumped 60% QoQ to W7.4bn, due to the ongoing weakness of China's smartphone market. Meanwhile, FPCB PI revenue increased 14% QoQ to W21.8bn, as new applications led to stronger volume QoQ.
- Looking to 2Q23, we foresee revenue of W57.3bn (+35% QoQ) and operating profit of W2.6bn (turning to profit QoQ). Chinese set/device makers' sell-in volume should begin to grow, though it remains to be seen whether sell-through will recover.
- In 2H23, we see spreads widening on seasonal demand for iPhones and a decline in major raw material prices. We expect revenue and margins to meaningfully improve in 2H23.

### 2024 could be a rerun of 2017

### Still no. 1 globally; accumulate shares from a medium/long-term perspective

- During the 2015-16 down-cycle, PIAM ramped up capacity and pursued application/product diversification (e.g., heat-resistant sheet PI), marking a sharp contrast to global peers. As a result, the company widened its lead over global competitors during the subsequent industry up-cycle in 2017.
- PIAM is following the same playbook amid the current down-cycle. The company has been steadily diversifying its applications to include rechargeable batteries, foldables, 5G, and chip-on-film (COF), while expanding PI film capacity (PI #8 in 2H22 and PI #9 in 2H23). The company is also considering increasing capacity for electric vehicle-use PI varnish.
- As such, we expect the company to see bigger market share gains and stronger earnings growth than global competitors once the OLED up-cycle begins in 2024.

### Key data



Current price (5/26/23, W)	33,000	Market cap (Wbn)	969
OP (23F, Wbn)	19	Shares outstanding (mn)	29
Consensus OP (23F, Wbn)	26	Free float (%)	45.6
EPS growth (23F, %)	-75.4	Foreign ownership (%)	5.4
P/E (23F, x)	86.1	Beta (12M)	1.61
Market P/E (23F, x)	15.2	52-week low (W)	27,850
KOSPI	2,558.81	52-week high (W)	50,700

### Share performance

(%)	1M	6M	12M
Absolute	2.6	3.6	-31.3
Relative	-0.3	-1.3	-29.8

### Earnings and valuation metrics

(Dec.)	2020	2021	2022	2023F	2024F
Revenue (Wbn)	262	302	276	250	329
OP (Wbn)	60	76	52	19	64
OP margin (%)	22.9	25.2	18.8	7.6	19.5
NP (Wbn)	42	64	46	11	50
EPS (W)	1,421	2,179	1,557	383	1,694
ROE (%)	15.6	21.0	13.7	3.4	14.1
P/E (x)	26.0	25.3	18.6	86.1	19.5
P/B (x)	3.8	5.0	2.5	2.9	2.6
Div. yield (%)	1.9	2.0	2.7	0.6	2.6

Notes: Under individual K-IFRS; NP is attributable to owners of the parent

Source: Company data, Mirae Asset Securities Research estimates

**Table 1. Valuation table**

(Wbn, %)

Notes		
2024F EPS (W)	1,694	
Target P/E (x)	25	Unchanged
TP (W)	42,000	
CP (W)	33,000	
Upside (%)	27	

Source: Company data, Mirae Asset Securities Research

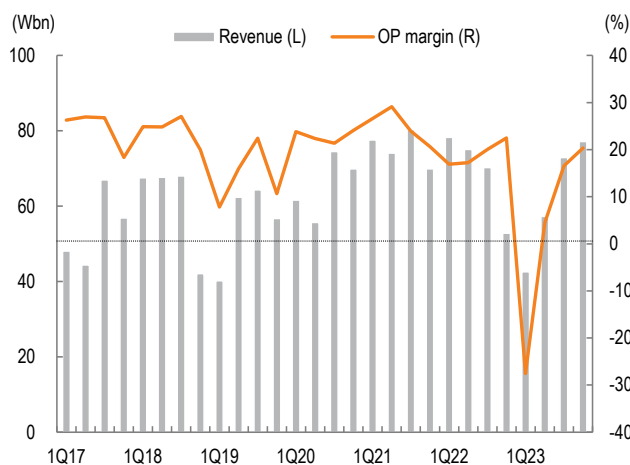
**Table 2. Quarterly and annual earnings**

(Wbn, %)

	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23F	3Q23F	4Q23F	2021	2022	2023F
Revenue	78.3	75.1	70.3	52.8	42.6	57.3	72.9	77.2	301.9	276.4	249.9
FPCB PI	35.5	31.3	24.4	19.1	21.8	22.0	27.5	28.0	121.1	110.3	99.3
Heat-resistant sheet PI	24.6	25.5	31.3	18.5	7.4	20.3	25.4	24.1	106.3	99.9	77.3
Industrial PI	18.2	18.2	14.6	15.2	13.4	15.0	20.0	25.0	74.5	66.2	73.4
% of revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FPCB PI	45.3	41.7	34.7	36.2	51.2	38.4	37.7	36.3	40.1	39.9	39.7
Heat-resistant sheet PI	31.4	34.0	44.5	35.0	17.4	35.5	34.9	31.3	35.2	36.1	30.9
Industrial PI	23.2	24.3	20.8	28.8	31.5	26.2	27.4	32.4	24.7	24.0	29.4
OP	13.2	13.0	14.1	11.9	-11.7	2.6	12.1	15.7	75.9	52.1	18.6
OP margin	16.9	17.3	20.0	22.5	-27.6	4.5	16.6	20.3	25.1	18.9	7.5
<b>Growth (QoQ/YoY)</b>											
Revenue	12.0	-4.1	-6.4	-24.9	-19.3	34.5	27.2	5.9	15.3	-8.4	-9.6
FPCB PI	28.7	-11.8	-22.0	-21.8	14.1	0.8	25.0	2.0	9.5	-8.9	-10.0
Heat-resistant sheet PI	-3.7	3.8	22.5	-40.8	-60.0	174.6	25.0	-5.0	13.5	-6.0	-22.7
Industrial PI	8.3	0.2	-19.9	4.1	-11.8	11.9	33.3	25.0	29.6	-11.2	10.8
OP	-8.2	-2.2	8.7	-15.8	TTR	TTB	363.3	30.1	26.6	-31.3	-64.3

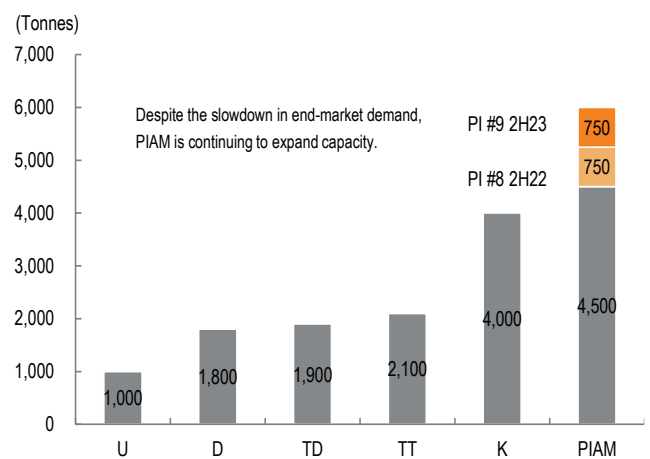
Source: Company data, Mirae Asset Securities Research

**Figure 1. Quarterly revenue and OP margin**



Source: Company data, Mirae Asset Securities Research

**Figure 2. PIAM to widen lead over global competitors during the next up-cycle**



Source: Company data, Mirae Asset Securities Research

## PI Advanced Materials (178920 KS)

## Income statement (summarized)

(Wbn)	2022	2023F	2024F
<b>Revenue</b>	<b>276</b>	<b>250</b>	<b>329</b>
<b>Cost of revenue</b>	<b>197</b>	<b>202</b>	<b>236</b>
<b>GP</b>	<b>79</b>	<b>48</b>	<b>93</b>
<b>SG&amp;A expenses</b>	<b>27</b>	<b>29</b>	<b>30</b>
<b>OP (adj.)</b>	<b>52</b>	<b>19</b>	<b>64</b>
<b>OP</b>	<b>52</b>	<b>19</b>	<b>64</b>
<b>Non-operating profit</b>	<b>2</b>	<b>-5</b>	<b>-1</b>
Net financial income	0	-3	-1
Net income from associates	0	0	0
Pretax profit	54	14	63
Income tax	8	3	13
Profit from continuing operations	46	11	50
Profit from discontinued operations	0	0	0
<b>NP</b>	<b>46</b>	<b>11</b>	<b>50</b>
Attributable to owners	46	11	50
Attributable to minority interests	0	0	0
<b>Total comprehensive income</b>	<b>48</b>	<b>11</b>	<b>50</b>
Attributable to owners	48	11	50
Attributable to minority interests	0	0	0
EBITDA	78	48	93
FCF	-90	9	74
EBITDA margin (%)	28.3	19.2	28.3
OP margin (%)	18.8	7.6	19.5
Net margin (%)	16.7	4.4	15.2

## Cash flow statement (summarized)

(Wbn)	2022	2023F	2024F
<b>Operating cash flow</b>	<b>17</b>	<b>21</b>	<b>74</b>
NP	46	11	50
Non-cash income/expenses	38	39	43
Depreciation	23	27	27
Amortization	2	2	2
Other	13	10	14
Chg. in working capital	-46	-19	-5
Chg. in AR & other receivables	13	-28	-5
Chg. in inventory	-42	10	-6
Chg. in AP & other payables	-17	-8	0
Income tax	-20	-7	-13
<b>Cash flow from investing activities</b>	<b>-98</b>	<b>-12</b>	<b>0</b>
Chg. in PP&E	-108	-12	0
Chg. in intangible assets	-5	0	0
Chg. in financial assets	15	0	0
Other	0	0	0
<b>Cash flow from financing activities</b>	<b>5</b>	<b>22</b>	<b>-5</b>
Chg. in financial liabilities	38	23	0
Chg. in equity	0	0	0
Dividends	-32	0	-6
Other	-1	-1	1
<b>Chg. in cash</b>	<b>-74</b>	<b>31</b>	<b>69</b>
Beginning balance	90	16	47
Ending balance	16	47	116

Source: Company data, Mirae Asset Securities Research estimates

## Balance sheet (summarized)

(Wbn)	2022	2023F	2024F
<b>Current assets</b>	<b>132</b>	<b>178</b>	<b>257</b>
Cash & equivalents	16	47	116
AR & other receivables	30	58	63
Inventory	84	70	76
Other current assets	2	3	2
<b>Non-current assets</b>	<b>367</b>	<b>345</b>	<b>316</b>
Investments in associates	0	0	0
PP&E	343	323	296
Intangible assets	14	12	10
<b>Total assets</b>	<b>499</b>	<b>523</b>	<b>572</b>
<b>Current liabilities</b>	<b>65</b>	<b>92</b>	<b>95</b>
AP & other payables	29	28	31
Short-term financial liabilities	25	48	49
Other current liabilities	11	16	15
<b>Non-current liabilities</b>	<b>93</b>	<b>101</b>	<b>103</b>
Long-term financial liabilities	76	76	76
Other non-current liabilities	17	25	27
<b>Total liabilities</b>	<b>158</b>	<b>193</b>	<b>198</b>
<b>Equity attributable to owners</b>	<b>341</b>	<b>330</b>	<b>374</b>
Capital stock	15	15	15
Capital surplus	188	188	188
Retained earnings	217	206	250
<b>Minority interests</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Shareholders' equity</b>	<b>341</b>	<b>330</b>	<b>374</b>

## Key valuation metrics/ratios

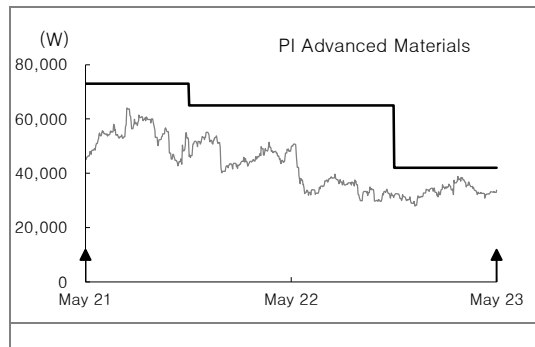
	2022	2023F	2024F
P/E (x)	18.6	86.1	19.5
P/CF (x)	10.1	19.4	10.4
P/B (x)	2.5	2.9	2.6
EV/EBITDA (x)	12.0	21.6	10.5
EPS (W)	1,557	383	1,694
CFPS (W)	2,848	1,699	3,165
BPS (W)	11,627	11,232	12,734
DPS (W)	779	192	848
Dividend payout ratio (%)	50.0	50.0	50.0
Dividend yield (%)	2.7	0.6	2.6
Revenue growth (%)	-8.4	-9.6	31.8
EBITDA growth (%)	-21.7	-38.0	92.4
OP growth (%)	-31.3	-64.3	241.8
EPS growth (%)	-28.6	-75.4	342.0
AR turnover (x)	7.4	5.7	5.5
Inventory turnover (x)	4.4	3.2	4.5
AP turnover (x)	10.8	21.5	40.6
ROA (%)	9.4	2.2	9.1
ROE (%)	13.7	3.4	14.1
ROIC (%)	11.9	5.1	12.4
Debt-to-equity ratio (%)	46.1	58.4	53.1
Current ratio (%)	204.0	194.0	269.5
Net debt-to-equity ratio (%)	24.8	23.2	2.2
Interest coverage ratio (x)	74.0	5.5	18.4

# Appendix 1

## Important disclosures and disclaimers

### Two-year rating and TP history

Company	Date	Rating	TP (₩)
PI Advanced Materials (178920)	11/29/22	Buy	42,000
	11/30/21	Buy	65,000
	04/26/21	Buy	73,000



### Stock ratings

Buy	Expected 12-month performance: +20% or greater
Trading Buy	Expected 12-month performance: +10% to +20%
Hold	Expected 12-month performance: -10% to +10%
Sell	Expected 12-month performance: -10% or worse

### Sector ratings

Overweight	Expected to outperform the market over 12 months
Neutral	Expected to perform in line with the market over 12 months
Underweight	Expected to underperform the market over 12 months

Rating and TP history: Share price (—), TP (—), Not Rated (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆)

\* Our investment rating is a guide to the expected return of the stock over the next 12 months.

\* Outside of the official ratings of Mirae Asset Securities Co., Ltd., analysts may call trading opportunities should technical or short-term material developments arise.

\* The TP was determined by the research analyst through valuation methods discussed in this report, in part based on estimates of future earnings.

\* TP achievement may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

### Ratings distribution and investment banking services

	Buy	Trading Buy	Hold	Sell
Ratings distribution	85.7%	10.7%	2.9%	0.7%
Investment banking services	87.5%	12.5%	0%	0%

\* Based on recommendations in the last 12-months (as of March 31, 2023)

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