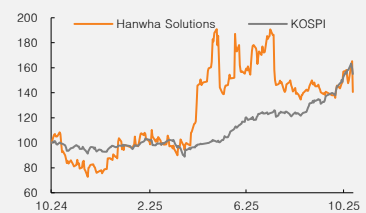


|                         |                  |
|-------------------------|------------------|
| (Maintain)              | <b>Buy</b>       |
| Target price            | ▼ <b>W35,000</b> |
| Current price (11/5/25) | W28,750          |
| Upside                  | 21.7%            |

|                            |          |
|----------------------------|----------|
| OP (25F, Wbn)              | -23      |
| Consensus OP (25F, Wbn)    | 63       |
| EPS growth (25F, %)        | RR       |
| Market EPS growth (25F, %) | -        |
| P/E (25F, x)               | -        |
| Market P/E (25F, x)        | 14.6     |
| KOSPI                      | 4,004.42 |

|                       |        |
|-----------------------|--------|
| Market cap (Wbn)      | 4,942  |
| Shares (mn)           | 172    |
| Free float (%)        | 61.2   |
| Foreign ownership (%) | 12.5   |
| Beta (12M)            | 1.14   |
| 52-week low (W)       | 14,860 |
| 52-week high (W)      | 39,050 |

| (%)      | 1M    | 6M    | 12M   |
|----------|-------|-------|-------|
| Absolute | -0.2  | -5.1  | 31.3  |
| Relative | -11.5 | -39.3 | -15.5 |



Mirae Asset Securities Co., Ltd.

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# Hanwha Solutions

## Guidance lowered amid a wave of setbacks

### Lower TP to W35,000; maintain Buy

We maintain our Buy rating on Hanwha Solutions but lower our target price to W35,000 (from W38,000), reflecting: 1) a weak 4Q25 earnings outlook due to stricter US customs inspections; and 2) delays in the ramp-up of US cell production. Amid import bottlenecks for cells (intermediate goods), the key question now is how quickly the company can normalize utilization at its US module operations. However, we expect this issue to be resolved before prohibited foreign entity (PFE) rules go into effect in 2026.

A series of negative developments prompted the company to revise down its earnings guidance for the second consecutive quarter, leading to a sharp decline in its share price. However, we believe most negatives are now priced in and expect earnings to recover gradually starting in 1Q26. Ultimately, an upturn in module prices is likely to serve as the key catalyst for a rebound.

### 3Q25 review: Better than guidance

For 3Q25, Hanwha Solutions reported an operating loss of W7.4bn, significantly better than the consensus (-W155.7bn). The main driver was resilient profitability in the renewable energy division; while the company had previously guided an operating loss of over W100bn in the division, it actually achieved an operating profit of W7.9bn, aided by higher module ASP and solid residential energy earnings. We believe these factors helped offset the negative impact of low US utilization—reflected in AMPC recognition of only W68.2bn (roughly half of the W120bn guidance)—caused by US customs bottlenecks and continued quality issues in cell production.

### 4Q25 preview: Guidance revised down sharply on tighter US customs controls

Hanwha Solutions sharply cut its 2025 guidance for both AMPC recognition (from W700bn to the high-W400bn range) and sales volume (from 7.5GW to 6GW) due to stricter US customs procedures. It also reduced its asset sales and EPC revenue guidance from W4tr to W2.6-3tr (due to delayed asset sale timelines) and postponed the start of mass production at its US cell plant from 4Q25 to 2026, citing equipment issues at utility-scale facilities.

For 4Q25, we expect the company to post an operating loss of W148.1bn, worsening sharply QoQ. Based on the AMPC guidance of W40bn, we estimate US plant utilization at only around 20%. We expect low utilization to lead to higher fixed-cost pressures and increased expenses from supply chain diversification efforts. Meanwhile, we forecast the residential energy business to post an operating loss of around W45bn, as the firm has narrowed its project pipeline to focus on higher-margin projects.

| (Dec.)             | 2023   | 2024   | 2025F  | 2026F  | 2027F  |
|--------------------|--------|--------|--------|--------|--------|
| Revenue (Wbn)      | 13,079 | 12,394 | 13,013 | 16,144 | 17,544 |
| OP (Wbn)           | 579    | -300   | -23    | 789    | 1,399  |
| OP margin (%)      | 4.4    | -2.4   | -0.2   | 4.9    | 8.0    |
| NP (Wbn)           | -141   | -1,404 | -483   | 267    | 812    |
| EPS (W)            | -795   | -8,050 | -2,770 | 1,533  | 4,653  |
| ROE (%)            | -1.7   | -16.0  | -5.3   | 3.1    | 8.8    |
| P/E (x)            | -      | -      | -      | 18.8   | 6.2    |
| P/B (x)            | 0.8    | 0.3    | 0.6    | 0.6    | 0.5    |
| Dividend yield (%) | 0.8    | 1.9    | 1.0    | 1.0    | 1.0    |

Notes: Under consolidated K-IFRS; NP is attributable to owners of the parent  
Source: Company data, Mirae Asset Securities Research estimates

**Table 1. Hanwha Solutions: Quarterly and annual earnings**

(Wbn)

|               |                    | 1Q24           | 2Q24           | 3Q24           | 4Q24           | 1Q25           | 2Q25           | 3Q25P          | 4Q25F          | 2024            | 2025F           | 2026F           |
|---------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|
| Revenue       | <b>Total</b>       | <b>2,353.4</b> | <b>2,651.8</b> | <b>2,745.9</b> | <b>4,642.9</b> | <b>3,094.5</b> | <b>3,117.2</b> | <b>3,364.4</b> | <b>3,437.1</b> | <b>12,394.0</b> | <b>13,013.2</b> | <b>16,143.6</b> |
|               | Renewable energy   | 764.1          | 980.2          | 1,152.5        | 2,869.0        | 1,599.2        | 1,446.4        | 1,751.5        | 1,842.4        | 5,765.8         | 6,639.5         | 9,717.0         |
|               | Chemicals          | 1,222.3        | 1,222.4        | 1,188.6        | 1,183.9        | 1,073.6        | 1,239.0        | 1,160.3        | 1,177.2        | 4,817.2         | 4,650.1         | 4,719.5         |
|               | Advanced materials | 249.6          | 265.9          | 254.6          | 267.5          | 273.8          | 307.9          | 257.9          | 267.5          | 1,037.6         | 1,107.1         | 1,107.1         |
|               | Other              | 117.4          | 183.3          | 150.2          | 322.5          | 147.9          | 123.9          | 194.7          | 150.0          | 773.4           | 616.5           | 600.0           |
| OP            | <b>Total</b>       | <b>-214.8</b>  | <b>-112.3</b>  | <b>-80.3</b>   | <b>107.0</b>   | <b>30.3</b>    | <b>102.1</b>   | <b>-7.4</b>    | <b>-148.1</b>  | <b>-300.4</b>   | <b>-23.1</b>    | <b>789.2</b>    |
|               | Renewable energy   | -185.3         | -91.8          | -41.0          | 60.6           | 136.2          | 156.2          | 7.9            | -78.1          | -257.5          | 222.2           | 912.0           |
|               | Chemicals          | -18.9          | -17.4          | -31.0          | -54.2          | -91.2          | -46.8          | -9.0           | -49.7          | -121.5          | -196.7          | -74.3           |
|               | Advanced materials | 10.6           | 9.0            | 6.1            | -2.2           | -1.8           | 9.8            | 3.6            | -5.4           | 23.5            | 6.3             | 11.4            |
|               | Other              | -21.2          | -12.1          | -14.4          | 102.8          | -12.9          | -17.1          | -9.9           | -15.0          | 55.1            | -54.9           | -60.0           |
| Pretax profit |                    | -517.5         | -172.9         | -370.4         | -363.0         | -68.1          | -148.4         | -48.6          | -276.3         | -1,423.7        | -541.5          | 303.4           |
| NP            |                    | -459.1         | -366.7         | -400.5         | -178.1         | -44.5          | -201.6         | 6.2            | -243.5         | -1,404.4        | -483.4          | 267.4           |

Source: FnGuide, company data, Mirae Asset Securities Research

**Table 2. Hanwha Solutions: Valuation (SOTP)**

(Wbn, mn shares, W)

|                                  | 12MF EBITDA | Target EV/EBITDA (x) | Value    |   |
|----------------------------------|-------------|----------------------|----------|---|
| Renewable energy                 | 1,860.7     | 7.5                  | 13,955.2 | 12MF EV/EBITDA of First Solar; 20% discount   |
| Chemicals                        | 363.6       | 6.5                  | 2,363.5  | Avg. 12MF EV/EBITDA of domestic peers (LG Chem, Lotte Chemical, etc.)                     |
| Advanced materials               | 84.4        | 7.0                  | 591.0    | Avg. 12MF EV/EBITDA of global/domestic peers (Hyosung Advanced Materials, Sumitomo, etc.) |
| Affiliated companies             |             |                      | 110.3    | Unlisted firms (30% discount to book value)   |
| Subtotal                         |             |                      | 17,019.9 |   |
| Net debt                         |             |                      | 11,000.0 | 4Q26F   |
| Market value of preferred shares |             |                      | 66.3     |   |
| EV                               |             |                      | 5,953.6  |   |
| No. of shares                    |             |                      | 171.9    |   |
| Fair value per share             |             |                      | 34,635   | TP: W35,000   |

Source: Mirae Asset Securities Research

**Table 3. Hanwha Solutions: Earnings forecast revisions**

(Wbn, %)

|         | Previous |        | Revised |        | Chg.  |       |
|---------|----------|--------|---------|--------|-------|-------|
|         | 2025F    | 2026F  | 2025F   | 2026F  | 2025F | 2026F |
| Revenue | 14,669   | 17,053 | 12,969  | 16,144 | -11.6 | -5.3  |
| OP      | 141      | 1,193  | -23     | 789    | TTR   | -33.9 |
| NP      | -579     | 768    | -483    | 268    | RR    | -65.1 |

Source: Mirae Asset Securities Research

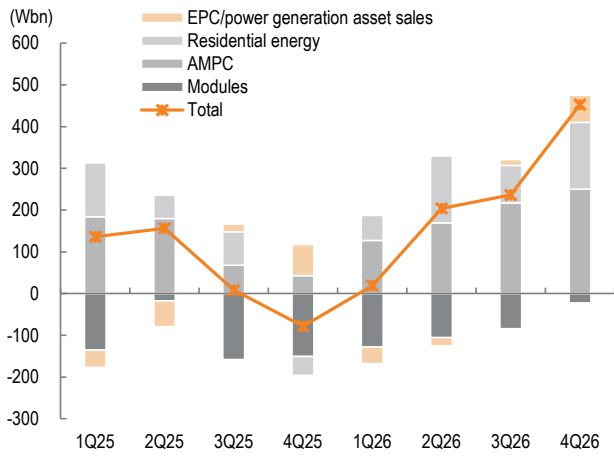
**Table 4. Renewable energy OP breakdown**

(Wbn)

|                                  | 1Q25       | 2Q25       | 3Q25     | 4Q25F      |
|----------------------------------|------------|------------|----------|------------|
| Modules                          | -135       | -18        | -158     | -151       |
| AMPC                             | 184        | 180        | 68       | 43         |
| Residential energy business      | 129        | 55         | 80       | -45        |
| EPC/power generation asset sales | -42        | -61        | 19       | 75         |
| <b>Total</b>                     | <b>136</b> | <b>156</b> | <b>8</b> | <b>-78</b> |

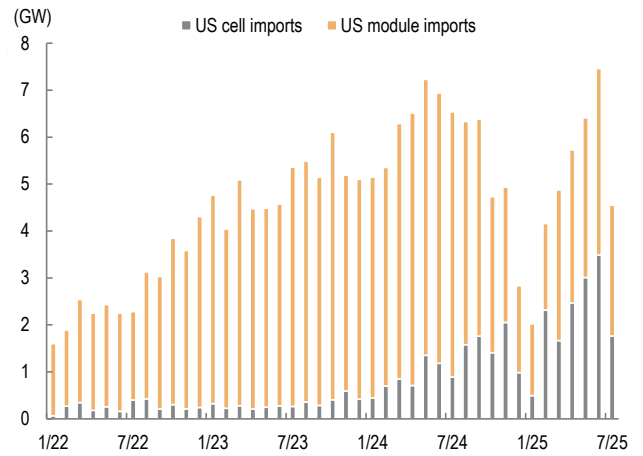
Source: Mirae Asset Securities Research

**Figure 1. Hanwha Solutions: Renewable energy OP outlook breakdown**



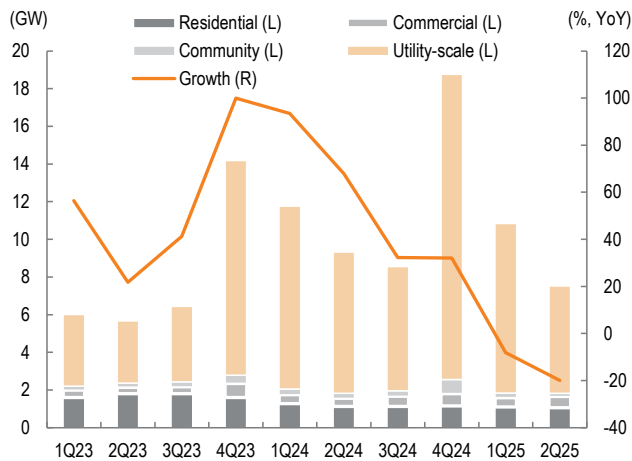
Source: Company data, Mirae Asset Securities Research

**Figure 2. US cell and module import trends**



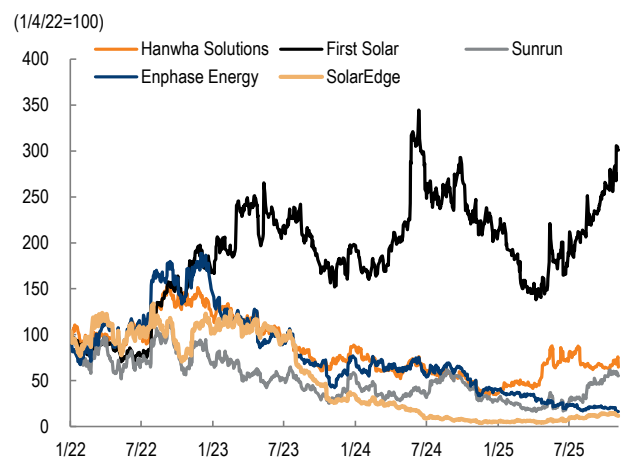
Source: USITC, Mirae Asset Securities Research

**Figure 3. US solar installations by segment**



Source: SEIA, Mirae Asset Securities Research

**Figure 4. Hanwha Solutions: Share performance relative to US solar PV peers**



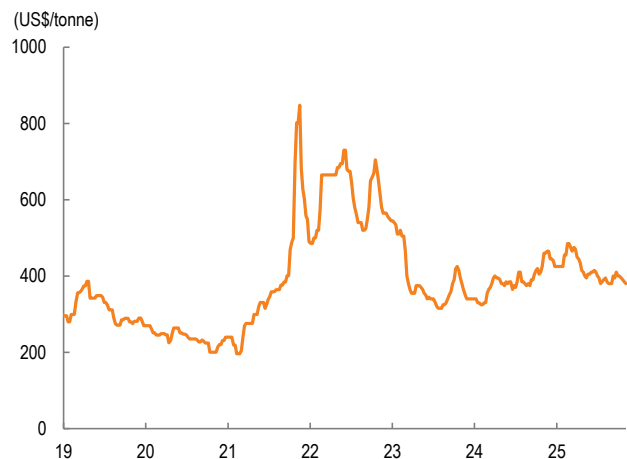
Source: FactSet, Mirae Asset Securities Research

**Figure 5. PVC spread trend**



Source: Ciscem, Mirae Asset Securities Research

**Figure 6. Caustic soda price trend**



Source: Ciscem, Mirae Asset Securities Research

## Hanwha Solutions (009830 KS)

## Income statement (summarized)

| (Wbn)                               | 2024          | 2025F         | 2026F         | 2027F         |
|-------------------------------------|---------------|---------------|---------------|---------------|
| <b>Revenue</b>                      | <b>12,394</b> | <b>13,013</b> | <b>16,144</b> | <b>17,544</b> |
| <b>Cost of revenue</b>              | <b>11,008</b> | <b>11,284</b> | <b>13,514</b> | <b>14,305</b> |
| <b>GP</b>                           | <b>1,386</b>  | <b>1,729</b>  | <b>2,630</b>  | <b>3,239</b>  |
| <b>SG&amp;A expenses</b>            | <b>1,686</b>  | <b>1,752</b>  | <b>1,840</b>  | <b>1,840</b>  |
| <b>OP (adj.)</b>                    | <b>-300</b>   | <b>-23</b>    | <b>789</b>    | <b>1,399</b>  |
| <b>OP</b>                           | <b>-300</b>   | <b>-23</b>    | <b>789</b>    | <b>1,399</b>  |
| <b>Non-operating profit</b>         | <b>-1,124</b> | <b>-518</b>   | <b>-486</b>   | <b>-478</b>   |
| Net financial income                | -445          | -227          | -457          | -442          |
| Net income from associates          | -327          | 222           | -24           | -30           |
| Pretax profit                       | -1,424        | -541          | 303           | 921           |
| Income tax                          | -316          | -125          | 67            | 203           |
| Profit from continuing operations   | -1,109        | -416          | 237           | 719           |
| Profit from discontinued operations | -260          | -2            | 0             | 0             |
| <b>NP</b>                           | <b>-1,369</b> | <b>-419</b>   | <b>237</b>    | <b>719</b>    |
| Attributable to owners              | -1,404        | -483          | 267           | 812           |
| Attributable to minority interests  | 35            | 65            | -31           | -93           |
| <b>Total comprehensive income</b>   | <b>757</b>    | <b>-842</b>   | <b>237</b>    | <b>719</b>    |
| Attributable to owners              | 648           | -854          | 235           | 713           |
| Attributable to minority interests  | 109           | 11            | 2             | 5             |
| EBITDA                              | 415           | 759           | 1,586         | 2,172         |
| FCF                                 | -2,759        | -31           | 2,225         | 1,188         |
| EBITDA margin (%)                   | 3.3           | 5.8           | 9.8           | 12.4          |
| OP margin (%)                       | -2.4          | -0.2          | 4.9           | 8.0           |
| Net margin (%)                      | -11.3         | -3.7          | 1.7           | 4.6           |

## Cash flow statement (summarized)

| (Wbn)                                      | 2024          | 2025F         | 2026F        | 2027F         |
|--|---------------|---------------|--------------|---------------|
| <b>Operating cash flow</b>                 | <b>638</b>    | <b>1,876</b>  | <b>2,825</b> | <b>1,788</b>  |
| NP   | -1,369        | -419          | 237          | 719           |
| Non-cash income/expenses                   | 1,953         | 1,319         | 1,335        | 1,440         |
| Depreciation                               | 649           | 719           | 740          | 723           |
| Amortization                               | 66            | 63            | 57           | 51            |
| Other                                      | 1,238         | 537           | 538          | 666           |
| Chg. in working capital                    | 84            | 908           | 1,343        | -145          |
| Chg. in AR & other receivables             | -274          | 315           | -174         | -81           |
| Chg. in inventory                          | -474          | 935           | -321         | -353          |
| Chg. in AP & other payables                | 688           | 345           | 1,049        | 165           |
| Income tax                                 | -72           | 83            | -67          | -203          |
| <b>Cash flow from investing activities</b> | <b>-3,287</b> | <b>-2,017</b> | <b>-617</b>  | <b>-537</b>   |
| Chg. in PP&E                               | -3,344        | -1,874        | -600         | -600          |
| Chg. in intangible assets                  | -21           | 5             | 0            | 0             |
| Chg. in financial assets                   | -107          | 157           | -101         | -25           |
| Other                                      | 185           | -305          | 84           | 88            |
| <b>Cash flow from financing activities</b> | <b>2,676</b>  | <b>753</b>    | <b>-526</b>  | <b>-1,044</b> |
| Chg. in financial liabilities              | 3,485         | 97            | 35           | -494          |
| Chg. in equity                             | 66            | 180           | 0            | 0             |
| Dividends                                  | -138          | -112          | -52          | -52           |
| Other                                      | -737          | 588           | -509         | -498          |
| <b>Chg. in cash</b>                        | <b>226</b>    | <b>1,710</b>  | <b>285</b>   | <b>-40</b>    |
| Beginning balance                          | 1,958         | 2,184         | 3,894        | 4,179         |
| Ending balance                             | 2,184         | 3,894         | 4,179        | 4,140         |

Source: Company data, Mirae Asset Securities Research estimates

## Balance sheet (summarized)

| (Wbn)                                | 2024          | 2025F         | 2026F         | 2027F         |
|--------------------------------------|---------------|---------------|---------------|---------------|
| <b>Current assets</b>                | <b>10,883</b> | <b>10,778</b> | <b>11,702</b> | <b>12,128</b> |
| Cash & equivalents                   | 2,184         | 3,894         | 4,179         | 4,140         |
| AR & other receivables               | 2,722         | 2,050         | 2,340         | 2,439         |
| Inventory                            | 4,258         | 3,207         | 3,528         | 3,881         |
| Other current assets                 | 1,719         | 1,627         | 1,655         | 1,668         |
| <b>Non-current assets</b>            | <b>19,154</b> | <b>18,766</b> | <b>20,017</b> | <b>20,071</b> |
| Investments in associates            | 4,930         | 3,714         | 5,088         | 5,304         |
| PP&E                                 | 10,727        | 11,490        | 11,351        | 11,228        |
| Intangible assets                    | 1,756         | 1,757         | 1,700         | 1,650         |
| <b>Total assets</b>                  | <b>30,037</b> | <b>29,545</b> | <b>31,719</b> | <b>32,198</b> |
| <b>Current liabilities</b>           | <b>11,708</b> | <b>10,426</b> | <b>12,167</b> | <b>11,941</b> |
| AP & other payables                  | 2,923         | 3,148         | 4,196         | 4,361         |
| Short-term financial liabilities     | 6,425         | 5,501         | 5,536         | 5,042         |
| Other current liabilities            | 2,360         | 1,777         | 2,435         | 2,538         |
| <b>Non-current liabilities</b>       | <b>7,722</b>  | <b>8,525</b>  | <b>8,772</b>  | <b>8,811</b>  |
| Long-term financial liabilities      | 6,833         | 7,855         | 7,855         | 7,855         |
| Other non-current liabilities        | 889           | 670           | 917           | 956           |
| <b>Total liabilities</b>             | <b>19,430</b> | <b>18,950</b> | <b>20,939</b> | <b>20,752</b> |
| <b>Equity attributable to owners</b> | <b>9,450</b>  | <b>8,632</b>  | <b>8,848</b>  | <b>9,608</b>  |
| Capital stock                        | 889           | 889           | 889           | 889           |
| Capital surplus                      | 1,562         | 1,743         | 1,743         | 1,743         |
| Retained earnings                    | 4,132         | 3,563         | 3,778         | 4,539         |
| <b>Minority interests</b>            | <b>1,157</b>  | <b>1,962</b>  | <b>1,931</b>  | <b>1,838</b>  |
| <b>Shareholders' equity</b>          | <b>10,607</b> | <b>10,594</b> | <b>10,779</b> | <b>11,446</b> |

## Key valuation metrics/ratios

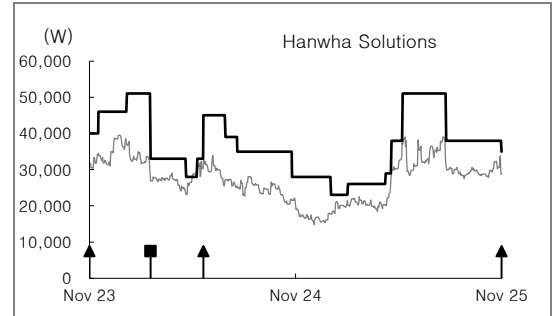
|                              | 2024   | 2025F  | 2026F  | 2027F  |
|------------------------------|--------|--------|--------|--------|
| P/E (x)                      | -      | -      | 18.8   | 6.2    |
| P/CF (x)                     | 4.8    | 5.6    | 3.2    | 2.3    |
| P/B (x)                      | 0.3    | 0.6    | 0.6    | 0.5    |
| EV/EBITDA (x)                | 35.3   | 21.3   | 10.0   | 7.0    |
| EPS (W)                      | -8,050 | -2,770 | 1,533  | 4,653  |
| CFPS (W)                     | 3,346  | 5,160  | 9,008  | 12,371 |
| BPS (W)                      | 54,793 | 50,109 | 51,345 | 55,702 |
| DPS (W)                      | 300    | 300    | 300    | 300    |
| Dividend payout ratio (%)    | -3.7   | -12.1  | 21.5   | 7.1    |
| Dividend yield (%)           | 1.9    | 1.1    | 1.1    | 1.1    |
| Revenue growth (%)           | -5.2   | 5.0    | 24.1   | 8.7    |
| EBITDA growth (%)            | -66.9  | 82.8   | 108.9  | 37.0   |
| OP growth (%)                | TTR    | RR     | TTB    | 77.3   |
| EPS growth (%)               | RR     | RR     | TTB    | 203.6  |
| AR turnover (x)              | 5.7    | 6.4    | 8.9    | 9.0    |
| Inventory turnover (x)       | 3.2    | 3.5    | 4.8    | 4.7    |
| AP turnover (x)              | 5.0    | 4.1    | 4.0    | 3.6    |
| ROA (%)                      | -5.0   | -1.4   | 0.8    | 2.2    |
| ROE (%)                      | -16.0  | -5.3   | 3.1    | 8.8    |
| ROIC (%)                     | -1.6   | -0.9   | 4.6    | 7.7    |
| Debt-to-equity ratio (%)     | 183.2  | 178.9  | 194.3  | 181.3  |
| Current ratio (%)            | 93.0   | 103.4  | 96.2   | 101.6  |
| Net debt-to-equity ratio (%) | 100.9  | 86.7   | 82.6   | 73.7   |
| Interest coverage ratio (x)  | -0.5   | -0.1   | 1.5    | 2.7    |

# Appendix 1

## Important disclosures and disclaimers

### Two-year rating and TP history

| Company                   | Date     | Rating      | TP (₩) |
|---------------------------|----------|-------------|--------|
| Hanwha Solutions (009830) | 11/06/25 | Buy         | 35,000 |
|                           | 07/31/25 | Buy         | 38,000 |
|                           | 05/15/25 | Buy         | 51,000 |
|                           | 04/25/25 | Buy         | 38,000 |
|                           | 04/15/25 | Buy         | 29,000 |
|                           | 02/07/25 | Buy         | 26,000 |
|                           | 01/08/25 | Buy         | 23,000 |
|                           | 10/31/24 | Buy         | 28,000 |
|                           | 07/26/24 | Buy         | 35,000 |
|                           | 07/05/24 | Buy         | 39,000 |
|                           | 05/27/24 | Buy         | 45,000 |
|                           | 05/16/24 | Trading Buy | 33,000 |
|                           | 04/26/24 | Trading Buy | 28,000 |
|                           | 02/23/24 | Trading Buy | 33,000 |
|                           | 01/12/24 | Buy         | 51,000 |
|                           | 11/23/23 | Buy         | 46,000 |
|                           | 11/01/23 | Buy         | 40,000 |



### Stock ratings

|      |  |
|------|--|
| Buy  | Expected 12-month return: +20% or greater                      |
| Hold | Expected 12-month return: Greater than -10% and less than +10% |
| Sell | Expected 12-month return: -10% or less                         |

### 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         |

As of May 12, 2025, the Trading Buy rating category has been removed from our investment rating system.

Stocks expected to deliver a 12-month return between +10% and less than +20% may be rated either Buy or Hold at the discretion of the research analyst.

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        | 78.61% | 1.73%       | 19.08% | 0.58% |
| Investment banking services | 84.62% | 0%          | 15.38% | 0%    |

\* Based on recommendations in the last 12-months (as of September 30, 2025)

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