COMPANY UPDATE

2026. 4. 22

EV/Mobility Team

**JungHoon Chang**
Senior Analyst
jhooni.chang@samsung.com

Scan to go to
**Research Center report database**

# Lotte Energy Materials (020150)

## Cautious battery foil outlook

- We forecast Lotte Energy Materials to report consensus-beating 1Q earnings.
- Although we still anticipate AI-use circuit foil shipment to grow two-fold y-y in 2026, we revise our elecfoil shipment forecast down.
- We raise our target price to KRW48,000, but maintain our HOLD rating.

### WHAT'S THE STORY?

**1Q preview–To beat consensus:** We forecast Lotte Energy Materials to report 1Q sales of KRW172.5b and an operating loss of KRW19b, the latter surpassing consensus of an operating loss of KRW27.4b. The consensus-beating should be driven by q-q hikes in the KRW/USD rate, copper prices, and shipments from its Malaysia facility.

**Cutting our 2026 copper foil shipment forecasts:** We lower our full-year 2026 copper foil shipment forecasts from 31,600 tonnes to 28,153 tonnes. While AI-use circuit foil shipment is still expected to grow two-fold y-y to 5,000 tonnes, led by rising demand for hyper very low profile (HVLP) applications, elecfoil shipment is now forecast to hit 23,153 tonnes (vs 26,600 tonnes, previously), still up 18% y-y from 2025's 19,500 tonnes, despite growing demand for BBU and ESS from core customers, due to weaker-than-expected demand from key clients. We project 2026 sales of KRW910.2b and an operating loss of KRW49.8b.

*(Continued on the next page)*

### AT A GLANCE

**HOLD**

| | | |
|---|---|---|
| Target price | KRW48,000 | -15.3% |
| Current price | KRW56,700 | |
| Market cap | KRW3.0t/USD2.0b | |
| Shares (float) | 52,365,463 (53.0%) | |
| 52-week high/low | KRW56,700/KRW19,730 | |
| Avg daily trading value (60-day) | KRW19.7b/ USD13.4m | |

### ONE-YEAR PERFORMANCE

| | 1M | 6M | 12M |
|---|---|---|---|
| Lotte Energy Materials (%) | 39.8 | 111.2 | 156.6 |
| Vs Kospi (%pts) | 26.5 | 26.4 | -0.1 |

### KEY CHANGES

| (KRW) | New | Old | Diff |
|---|---|---|---|
| Recommend. | HOLD | HOLD | |
| Target price | 48,000 | 40,000 | 20.0% |
| 2026E EPS | -748 | -855 | nm |
| 2027E EPS | 461 | 585 | -21.2% |

### SAMSUNG vs THE STREET

| | |
|---|---|
| No of estimates | 10 |
| Target price | 54,650 |
| Recommendation | 3.9 |

※ Rating: 4 < → BUY, 3 = HOLD, 2 > → SELL

### SUMMARY FINANCIAL DATA

| | 2025 | 2026E | 2027E | 2028E |
|---|---|---|---|---|
| Revenue (KRWb) | 678 | 910 | 1,148 | 1,330 |
| Operating profit (KRWb) | -145 | -50 | 35 | 60 |
| Net profit (adj) (KRWb) | -167 | -42 | 27 | 47 |
| EPS (adj) (KRW) | -3,065 | -748 | 461 | 800 |
| EPS (adj) growth (% y-y) | nm | nm | nm | 73.4 |
| EBITDA margin (%) | -7.7 | 4.9 | 11.9 | 11.5 |
| ROE (%) | -10.5 | -2.4 | 1.5 | 2.5 |
| P/E (adj) (x) | n/a | n/a | 123.0 | 70.9 |
| P/B (x) | 1.0 | 1.8 | 1.8 | 1.8 |
| EV/EBITDA (x) | n/a | 66.3 | 21.6 | 19.2 |
| Dividend yield (%) | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Company data, Samsung Securities estimates

**Raising target price to KRW48,000; maintaining HOLD:** We raise our target price for the stock from KRW41,950 to KRW48,000, primarily due to an upward revision in our BPS estimate from KRW21,491 to KRW30,670 to reflect an expansion in controlling shareholders' equity from KRW112.5b to KRW160.6b. This resulted from last year's transaction in which STIC Special Situation Win Limited (a financial investor) exchanged its stake in Lotte EM Global (a subsidiary of Lotte Energy Materials) for 6.25m newly issued common shares of Lotte Energy Materials (instead of cash), thus converting the subsidiary into a 100%-owned subsidiary. This lowered non-controlling interest by KRW423b, while increasing controlling shareholders' equity. Despite strong growth expectations for AI-use circuit foil, we maintain HOLD due to persistent uncertainty around elecfoil demand.

**1Q preview**

| (KRWb) | 1Q26E | 1Q25 | 4Q25 | Chg | |
|---|---|---|---|---|---|
| | | | | (% y-y) | (% q-q) |
| Sales | 172.5 | 158.0 | 170.9 | 9.2 | 1.0 |
| Operating profit | -19.0 | -46.0 | -33.8 | To remain neg | To remain neg |
| Pre-tax profit | -19.5 | -64.9 | -31.6 | To remain neg | To remain neg |
| Net profit | -15.5 | -54.8 | -36.4 | To turn neg | To remain neg |
| **Margins (%)** | | | | | |
| Operating profit | -11.0 | -29.1 | -19.8 | | |
| Pre-tax profit | -11.3 | -41.1 | -18.5 | | |
| Net profit | -9.0 | -34.7 | -21.3 | | |

Source: Company data, Samsung Securities estimates

**Revisions to full-year forecasts**

| (KRWb) | 2026E | | | 2027E | | |
|---|---|---|---|---|---|---|
| | Old | New | Diff (%) | Old | New | Diff (%) |
| Sales | 977.8 | 910.2 | -6.9 | 1,063.3 | 1,147.8 | 7.9 |
| Operating profit | -53.4 | -49.8 | nm | 43.7 | 35.3 | -19.3 |
| Pre-tax profit | -57.4 | -50.1 | nm | 40.1 | 29.8 | -25.6 |
| Net profit | -47.6 | -41.6 | nm | 34.0 | 26.8 | -21.2 |

Source: Samsung Securities estimates

**Results and forecasts**

| (KRWb) | 1Q24 | 2Q24 | 3Q24 | 4Q24 | 1Q25 | 2Q25 | 3Q25 | 4Q25E | 1Q26E | 2Q26E | 3Q26E | 4Q26E | 2024 | 2025E | 2026E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 158.0 | 204.9 | 143.7 | 170.9 | 172.5 | 210.6 | 259.3 | 267.7 | 234.2 | 278.3 | 321.5 | 313.7 | 677.5 | 910.2 | 1,147.8 |
| Operating profit | -46.0 | -31.1 | -34.3 | -33.8 | -19.0 | -23.2 | -10.4 | 2.7 | 4.7 | 8.3 | 12.9 | 9.4 | -145.2 | -49.8 | 35.3 |
| Operating margin (%) | -29.1 | -15.2 | -23.9 | -19.8 | -11.0 | -11.0 | -4.0 | 1.0 | 2.0 | 3.0 | 4.0 | 3.0 | -21.4 | -5.5 | 3.1 |

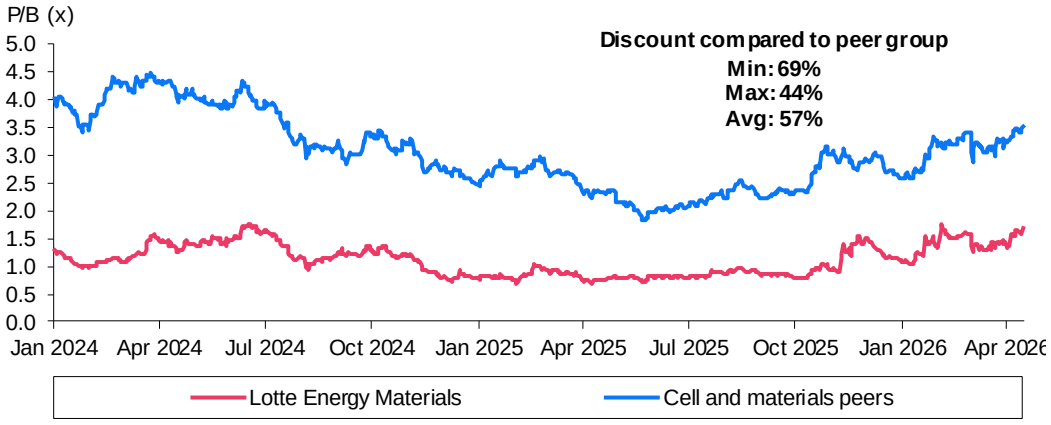
Source: Company data, Samsung Securities estimates

### Target-price calculation

| (KRW) | | |
|---|---|---|
| BVPS | 30,670 | 2026E BVPS estimate |
| Target P/B (x) | 1.6 | 56.6% discount to average of peer group (cell & materials companies)<br>(56.6% is the stock's average discount over Oct 16, 2025 – Apr 15, 2026) |
| Fair value per share | 48,457 | |
| **Target price** | **48,000** | |
| Current price | 52,900 | As of Apr 17 close |
| Upside (%) | -9.3% | |

Source: Bloomberg, Samsung Securities estimates

### P/B ratio: Lotte Energy Materials vs peer group




Source: Bloomberg, Samsung Securities

## Income statement

| Year-end Dec 31 (KRWb) | 2024 | 2025 | 2026E | 2027E | 2028E |
|---|---|---|---|---|---|
| **Sales** | **902** | **678** | **910** | **1,148** | **1,330** |
| Cost of goods sold | 891 | 744 | 855 | 980 | 1,116 |
| **Gross profit** | **11** | **-67** | **56** | **168** | **213** |
| Gross margin (%) | 1.3 | -9.9 | 6.1 | 14.7 | 16.1 |
| SG&A expenses | 76 | 78 | 105 | 133 | 154 |
| **Operating profit** | **-64** | **-145** | **-50** | **35** | **60** |
| Operating margin (%) | -7.1 | -21.4 | -5.5 | 3.1 | 4.5 |
| **Non-operating gains (losses)** | **48** | **-50** | **-0** | **-5** | **-8** |
| Financial profit | 83 | 23 | 12 | 15 | 18 |
| Financial costs | 38 | 74 | 13 | 20 | 25 |
| Equity-method gains (losses) | 0 | 0 | 0 | 0 | 0 |
| Other | 3 | 1 | 0 | 0 | -0 |
| **Pre-tax profit** | **-16** | **-195** | **-50** | **30** | **52** |
| Taxes | -45 | -28 | -9 | 3 | 5 |
| Effective tax rate (%) | 278.4 | 14.3 | 17.0 | 10.0 | 10.0 |
| Profit from continuing operations | 29 | -167 | -42 | 27 | 47 |
| Profit from discontinued operations | 0 | 0 | 0 | 0 | 0 |
| **Net profit** | **29** | **-167** | **-42** | **27** | **47** |
| Net margin (%) | 3.2 | -24.7 | -4.6 | 2.3 | 3.5 |
| Net profit (controlling interests) | 6 | -158 | -39 | 24 | 42 |
| Net profit (non-controlling interests) | 22 | -10 | -2 | 3 | 5 |
| EBITDA | 22 | -52 | 44 | 137 | 153 |
| EBITDA margin (%) | 2.4 | -7.7 | 4.9 | 11.9 | 11.5 |
| EPS (parent-based) (KRW) | 137 | -3,065 | -748 | 461 | 800 |
| EPS (consolidated) (KRW) | 625 | -3,252 | -794 | 512 | 888 |
| Adjusted EPS (KRW)* | 137 | -3,065 | -748 | 461 | 800 |

## Balance sheet

| Year-end Dec 31 (KRWb) | 2024 | 2025 | 2026E | 2027E | 2028E |
|---|---|---|---|---|---|
| **Current assets** | **1,031** | **959** | **1,221** | **1,524** | **1,772** |
| Cash & equivalents | 419 | 105 | 11 | 12 | 20 |
| Accounts receivable | 164 | 105 | 181 | 228 | 264 |
| Inventories | 333 | 299 | 425 | 522 | 604 |
| Other current assets | 115 | 450 | 604 | 762 | 883 |
| **Fixed assets** | **1,251** | **1,250** | **1,208** | **1,159** | **1,117** |
| Investment assets | 24 | 26 | 28 | 30 | 32 |
| Tangible assets | 1,128 | 1,081 | 1,042 | 995 | 955 |
| Intangible assets | 29 | 38 | 33 | 29 | 25 |
| Other long-term assets | 70 | 105 | 105 | 105 | 105 |
| **Total assets** | **2,282** | **2,209** | **2,429** | **2,683** | **2,889** |
| **Current liabilities** | **118** | **202** | **277** | **305** | **427** |
| Accounts payable | 16 | 22 | 25 | 32 | 37 |
| Short-term debt | 18 | 19 | 169 | 169 | 269 |
| Other current liabilities | 84 | 162 | 84 | 105 | 122 |
| **Long-term liabilities** | **262** | **213** | **411** | **610** | **647** |
| Bonds & long-term debt | 107 | 63 | 213 | 363 | 363 |
| Other long-term liabilities | 156 | 150 | 198 | 247 | 284 |
| **Total liabilities** | **380** | **415** | **688** | **915** | **1,074** |
| **Owners of parent equity** | **1,334** | **1,656** | **1,606** | **1,630** | **1,672** |
| Capital stock | 23 | 26 | 26 | 26 | 26 |
| Capital surplus | 929 | 1,198 | 1,198 | 1,198 | 1,198 |
| Retained earnings | 237 | 84 | 44 | 69 | 111 |
| Other | 144 | 348 | 338 | 338 | 338 |
| **Non-controlling interests' equity** | **568** | **138** | **135** | **138** | **142** |
| **Total equity** | **1,902** | **1,793** | **1,741** | **1,768** | **1,815** |
| Net debt | -346 | -318 | -164 | -157 | -173 |

## Cash flow statement

| Year-end Dec 31 (KRWb) | 2024 | 2025 | 2026E | 2027E | 2028E |
|---|---|---|---|---|---|
| **Cash flow from operations** | **87** | **-11** | **-92** | **45** | **68** |
| Net profit | 29 | -167 | -42 | 27 | 47 |
| Non-cash profit and expenses | 34 | 101 | 86 | 110 | 106 |
| Depreciation | 85 | 88 | 89 | 97 | 90 |
| Amortization | 1 | 6 | 5 | 4 | 4 |
| Other | -53 | 8 | -8 | 8 | 13 |
| Changes in A/L from operating activities | 29 | 71 | -144 | -83 | -72 |
| **Cash flow from investments** | **97** | **-374** | **-194** | **-196** | **-162** |
| Change in tangible assets | -87 | -63 | -50 | -50 | -50 |
| Change in financial assets | 10 | -336 | -144 | -146 | -112 |
| Other | 174 | 25 | 0 | 0 | 0 |
| **Cash flow from financing** | **-345** | **48** | **202** | **152** | **102** |
| Change in debt | -78 | 49 | 202 | 152 | 102 |
| Change in equity | -209 | 272 | 0 | 0 | 0 |
| Dividends | -9 | 0 | 0 | 0 | 0 |
| Other | -49 | -273 | 0 | 0 | 0 |
| Change in cash | -133 | -314 | -94 | 1 | 8 |
| Cash at beginning of year | 552 | 419 | 105 | 11 | 12 |
| Cash at end of year | 419 | 105 | 11 | 12 | 20 |
| **Gross cash flow** | **62** | **-66** | **44** | **137** | **153** |
| **Free cash flow** | **-9** | **-74** | **-142** | **-5** | **18** |

## Financial ratios

| Year-end Dec 31 | 2024 | 2025 | 2026E | 2027E | 2028E |
|---|---|---|---|---|---|
| **Growth (%)** | | | | | |
| Sales | 11.5 | -24.9 | 34.3 | 26.1 | 15.8 |
| Operating profit | nm | nm | nm | nm | 68.6 |
| Net profit | nm | nm | nm | nm | 73.4 |
| Adjusted EPS** | nm | nm | nm | nm | 73.4 |
| **Per-share data (KRW)** | | | | | |
| EPS (parent-based) | 137 | -3,065 | -748 | 461 | 800 |
| EPS (consolidated) | 625 | -3,252 | -794 | 512 | 888 |
| Adjusted EPS** | 137 | -3,065 | -748 | 461 | 800 |
| BVPS | 28,922 | 31,623 | 30,670 | 31,131 | 31,931 |
| DPS (common) | 0 | 0 | 0 | 0 | 0 |
| **Valuations (x)** | | | | | |
| P/E*** | 172.8 | n/a | n/a | 123.0 | 70.9 |
| P/B*** | 0.8 | 1.0 | 1.8 | 1.8 | 1.8 |
| EV/EBITDA | 60.5 | n/a | 66.3 | 21.6 | 19.2 |
| **Ratios (%)** | | | | | |
| ROE | 0.5 | -10.5 | -2.4 | 1.5 | 2.5 |
| ROA | 1.2 | -7.4 | -1.8 | 1.0 | 1.7 |
| ROIC | 7.4 | -8.0 | -2.6 | 1.9 | 3.0 |
| Payout ratio | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dividend yield (common) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net debt to equity | -18.2 | -17.7 | -9.4 | -8.9 | -9.5 |
| Interest coverage (x) | -4.9 | -19.9 | -4.0 | 1.8 | 2.3 |

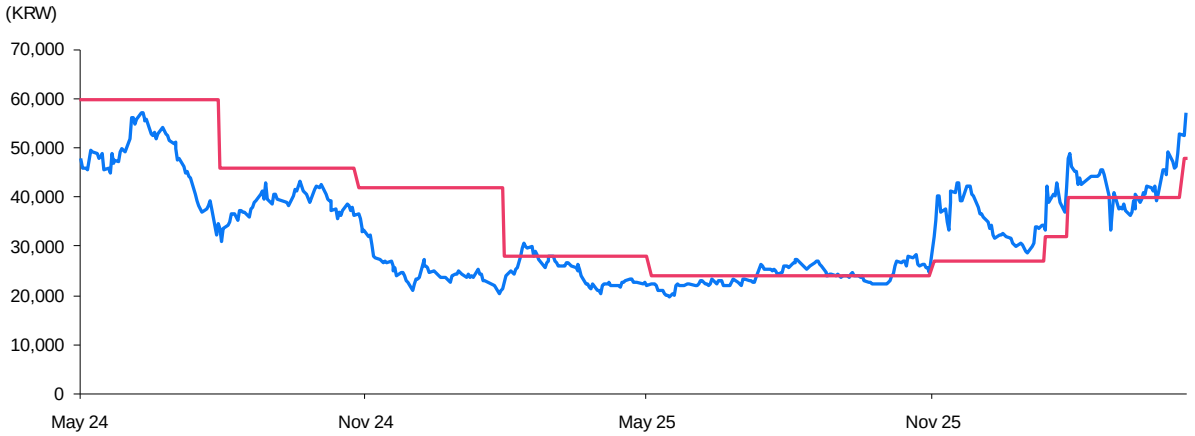
Note: *Excluding one-off items
**Fully diluted, excluding one-off items
***From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

## Compliance notice

- As of 4/21 2026, the covering analyst(s) did not own any shares, or debt instruments convertible into shares, of any company covered in this report.
- As of 4/21 2026, Samsung Securities' holdings of shares and debt instruments convertible into shares of each company covered in this report would not, if such debt instruments were converted, exceed 1% of each company's outstanding shares.
- This report has been prepared without any undue external influence or interference, and accurately reflects the views of the analyst(s) covering the company or companies herein.
- All material presented in this report, unless specifically indicated otherwise, is under copyright to Samsung Securities.
- Neither the material nor its content (including copies) may be altered in any form, or by any means transmitted, copied, or distributed to another party, without prior express written permission from Samsung Securities.
- This memorandum is based upon information available to the public. While we have taken all reasonable care to ensure its reliability, we do not guarantee its accuracy or completeness. This memorandum is not intended to be an offer, or a solicitation of any offer, to buy or sell the securities mentioned herein. Samsung Securities shall not be liable whatsoever for any loss, direct or consequential, arising from the use of this memorandum or its contents. Statements made regarding affiliates of Samsung Securities are also based upon publicly available information and do not necessarily represent the views of management at such affiliates.
- This material has not been distributed to institutional investors or other third parties prior to its publication.

## Target price changes in past two years




## Rating changes over past two years (adjusted share prices)

| Date | 2024/4/1 | 8/7 | 11/4 | 2025/2/6 | 5/12 | 11/10 | 2026/1/21 | 2/4 | 4/20 |
|---|---|---|---|---|---|---|---|---|---|
| Recommendation | BUY | BUY | BUY | BUY | HOLD | HOLD | HOLD | HOLD | HOLD |
| Target price (KRW) | 60000 | 46000 | 42000 | 28000 | 24000 | 27000 | 32000 | 40000 | 48000 |
| Gap* (average) | -21.48 | -15.99 | -39.51 | -11.41 | 0.15 | 31.34 | 26.27 | 6.08 | |
| (max or min)** | -4.50 | -6.09 | -14.88 | 8.93 | 17.50 | 6.48 | 15.00 | -16.88 | |

Note: * [(average, maximum, or minimum share price over duration of target price minus target price) / target price] x 100%
** Maximum/minimum share price if new target is higher/lower than market close on the business day prior to target price change

### Samsung Securities uses the following investment ratings*

**Company**

| | |
|---|---|
| **BUY** | Expected to increase in value by 15% or more within 12 months and is highly attractive within sector |
| **HOLD** | Expected to increase/decrease in value by less than 15% within 12 months |
| **SELL** | Expected to decrease in value by 15% or more within 12 months |

**Industry**

| | |
|---|---|
| **OVERWEIGHT** | Expected to outperform market by 5% or more within 12 months |
| **NEUTRAL** | Expected to outperform/underperform market by less than 5% within 12 months |
| **UNDERWEIGHT** | Expected to underperform market by 5% or more within 12 months |

* Note: Effective Jul 27, 2023, BUY, HOLD, and SELL criteria are based on expectations of share-price moves of 15% or more within 12 months

**Percentage of ratings in 12 months prior to 2026.03.31**

BUY(85.2%)·HOLD(14.8%)·SELL(0%)

# Global Disclosures & Disclaimers

### General

This research report is for information purposes only. It is not and should not be construed as an offer or solicitation of an offer to purchase or sell any securities or other financial instruments or to participate in any trading strategy. This report does not provide individually tailored investment advice. This report does not take into account individual client circumstances, objectives, or needs and is not intended as recommendations of particular securities, financial instruments or strategies to any particular client. The securities and other financial instruments discussed in this report may not be suitable for all investors. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein and investors should seek the advice of a financial adviser.

This report may not be altered, reproduced, distributed, transmitted or published in whole or in part for any purpose. References to "Samsung Securities" are references to any company in the Samsung Securities, Co., Ltd. group of companies.

Samsung Securities and/or other affiliated companies, its and their directors, officers, representatives, or employees may have long or short positions in any of the securities or other financial instruments mentioned in this report or of issuers described herein and may purchase and/or sell, or offer to purchase and/or sell, at any time, such securities or other financial instruments in the open market or otherwise, as either a principal or agent. Any pricing of securities or other financial instrument contained herein is as of the close of market for such day, unless otherwise stated. Opinions and estimates contained herein constitute our judgment as of the date of this report and are subject to change without notice.

The information provided in this report is provided "AS IS". Although the information contained herein has been obtained from sources believed to be reliable, no representation or warranty, either expressed or implied, is provided by Samsung Securities in relation to the accuracy, completeness or reliability of such information or that such information was provided for any particular purpose and Samsung Securities expressly disclaims any warranties of merchantability or fitness for a particular purpose. Furthermore, this report is not intended to be a complete statement or summary of the securities, markets or developments referred to herein.

Samsung Securities does not undertake that investors will obtain any profits, nor will it share with investors any investment profits. Samsung Securities, its affiliates, or any of its and their affiliates, directors, officers, employees or agents disclaim any and all responsibility or liability whatsoever for any loss (direct or consequential) or damage arising out of the use of all or any part of this report or its contents or otherwise arising in connection therewith. Information and opinions contained herein are subject to change without notice. Past performance is not indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative. Any opinions expressed in this report are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of Samsung Securities. Any analysis contained herein is based on numerous assumptions. Different assumptions may result in materially different results. Samsung Securities is under no obligation to update or keep current the information contained herein. Samsung Securities relies on information barriers to control the flow of information contained in one or more areas or groups within Samsung Securities into other areas or groups of Samsung Securities. Any prices stated in this report are for information purposes only and do not represent valuations for individual securities or other financial instruments. Samsung Securities makes no representation that any transaction can or could have been effected at those prices and any prices contained herein may not reflect Samsung Securities' internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by Samsung Securities or any other source may yield substantially different results. Additional information is available upon request.

### For reports to be distributed to US:

Securities research is prepared, issued and exclusively distributed by Samsung Securities Co., Ltd., an organization licensed with the Financial Supervisory Service of South Korea. This research may be distributed in the United States only to major institutional investors as defined in Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended, and may not be circulated to any other person otherwise. All transactions by U.S. investors involving securities discussed in this report must be effected through Samsung Securities (America) Inc., a broker-dealer registered with the U.S. Securities & Exchange Commission and a member of the Financial Industry Regulatory Authority/SIPC, and not through any non-U.S. affiliate thereof. The analysts listed [on the front of this report] are employees of Samsung Securities Co., Ltd., or a non-U.S. affiliate thereof, and are not registered/qualified as research analysts under applicable U.S. rules and regulations and may not be subject to U.S. restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

### For reports to be distributed to UK:

This report is not an invitation nor is it intended to be an inducement to engage in investment activity for the purpose of section 21 of the Financial Services and Markets Act 2000 of the United Kingdom ("FSMA"). To the extent that this report does constitute such an invitation or inducement, it is directed only at (i) persons who are investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (as amended) of the United Kingdom (the "Financial Promotion Order"); (ii) persons who fall within Articles 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order; and (iii) any other persons to whom this report can, for the purposes of section 21 of FSMA, otherwise lawfully be made (all such persons together being referred to as "relevant persons").

Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons. Persons who are not relevant persons must not act or rely on this report.

### For reports to be distributed to Korea:

This report is for private circulation only, not for sale, and is issued and distributed only to persons permitted under the laws and regulations of Korea.

### For reports to be distributed to Singapore:

This report is provided pursuant to the financial advisory licensing exemption under Regulation 27(1)(e) of the Financial Advisers Regulation of Singapore and accordingly may only be provided to persons in Singapore who are "institutional investors" as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This report is intended only for the person to whom Samsung Securities has provided this report and such person may not send, forward or transmit in any way this report or any copy of this report to any other person.

### Analyst certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of such analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research report. The analyst(s) principally responsible for the preparation of this research report receives compensation based on determination by research management and senior management (not including investment banking), based on the overall revenues, including investment banking revenues of Samsung Securities Co., Ltd. and its related entities and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

Copyright © 2010 Samsung Securities Co., Ltd.. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the prior written consent of Samsung Securities America Inc

Samsung Securities


**SAMSUNG SECURITIES**

Samsung Electronics Bldg., 11, 74-gil,
Seochodae-ro, Seocho-gu, Seoul, Korea 06620
Tel: 02 2020 8000 / www.samsungpop.com

**Family Center:** 1588 2323

**Voice Of Customer:** 080 911 0900


---

**For more information,**
**please call our sales representatives:**


## LONDON

**Samsung Securities Europe Limited**
1st Floor, 30 Gresham Street, London EC2V 7PG UK
Tel. 44-207-776-4311
Fax. 44-203-837-9219

## NEW YORK

**Samsung Securities America Limited**
1330 Avenue of the Americas. 10th Floor. New York,
NY 10019
Tel: 1-212-972-2454
Fax: 1-212-972-2704

## HONG KONG

**Samsung Securities (Asia) Limited**
Suite 4511, Two International Finance Center,
8 Finance Street, Central, Hong Kong
Tel: 852-3411-3608
Fax: 852-2114-0290

## BEIJING

**Samsung Securities Beijing Representative Office**
Rm. 910, The Exchange Building No 118 JianGuo Lu, Chao Yang District, Beijing, China
Tel: 86-10-6522-1855 (extension 7891)
Fax: 86-10-6522-1855 (extension 7889)

## TOKYO

**Samsung Securities Tokyo Representative Office**
#106-8532 19F, Roppongi T-Cube 3-1-1,
Roppongi Minato-ku Tokyo, Japan
Tel: 81-3-6333-2952
Fax: 81-3-6333-2953


---


Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA