

# LG Energy Solution

Q1 2022 Earnings Conference Call





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# Disclaimer

The information regarding business performance of LG Energy Solution is provided for the convenience of investors of the Company prior to the audit by external auditors.

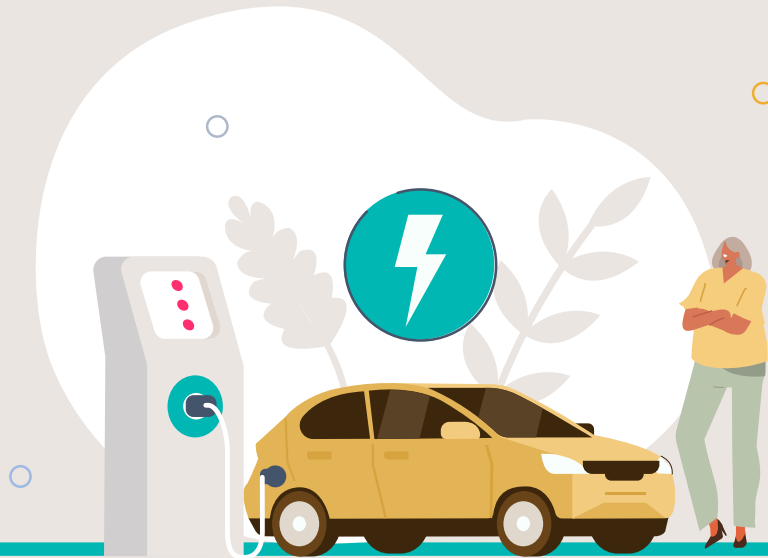
Please note that some of the information contained herein may change in the course of the final audit by external auditors.

The financial information contained in this document has been prepared on a consolidated basis in accordance with K-IFRS or Korean International Financial Reporting Standards.

Some of the statements as contained herein can be forward-looking considering the current business environment and the Company's business strategies. Therefore, in accordance with uncertainties inclusive of changes in future business environment and corporate strategies, actual results may differ materially from those expressed in the afore-mentioned statements.

1Q 2022

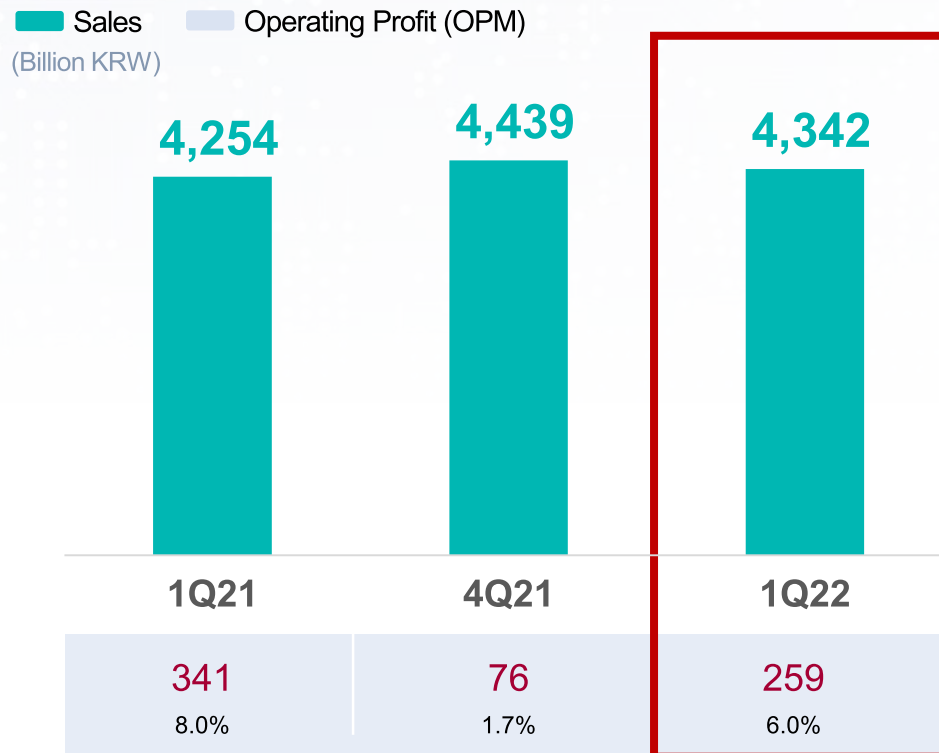
# Business Performance



# 1Q 2022 Business Performance



## Sales and Operating Profit Trend



## Performance Analysis

- ▶ Sales were down slightly QoQ and up slightly YoY amid growing external uncertainties - prolonged automotive chip shortage, supply chain issues caused by the Ukraine/Russian conflict, impact from COVID19 lockdown and the production of the recalled batteries for GM and HMC.
- ▶ Operating profit improved QoQ on the back of solid sales of cylindrical cells, expansion of the cost pass-through scheme and price adjustment in response to soaring metal prices, and productivity improvement through manufacturing automation. OP deteriorated slightly on a YoY basis.

# 1Q 2022 Financial Results



## Financial Position

(Billion KRW)

|                                  | 1Q21          | 4Q21          | 1Q22          |
|----------------------------------|---------------|---------------|---------------|
| <b>Assets</b>                    | <b>20,800</b> | <b>23,764</b> | <b>34,976</b> |
| Cash and Cash Equivalents, etc.* | 2,602         | 1,284         | 10,162        |
| <b>Liabilities</b>               | <b>12,582</b> | <b>15,022</b> | <b>15,536</b> |
| Debt                             | 6,214         | 6,969         | 7,299         |
| <b>Equity</b>                    | <b>8,218</b>  | <b>8,742</b>  | <b>19,440</b> |

\* Deposits held by financial institutions included



## Leverage Ratios

(%)

|                              | 1Q21        | 4Q21        | 1Q22        |
|------------------------------|-------------|-------------|-------------|
| <b>Liabilities to Equity</b> | <b>153%</b> | <b>172%</b> | <b>80%</b>  |
| <b>Debt to Equity</b>        | <b>76%</b>  | <b>80%</b>  | <b>38%</b>  |
| <b>Net Debt to Equity</b>    | <b>44%</b>  | <b>65%</b>  | <b>-15%</b> |
| <b>Debt to EBITDA</b>        | <b>4.4x</b> | <b>3.1x</b> | <b>3.3x</b> |

# 1Q 2022 Cash Flow



## Cash Flow

(Billion KRW)

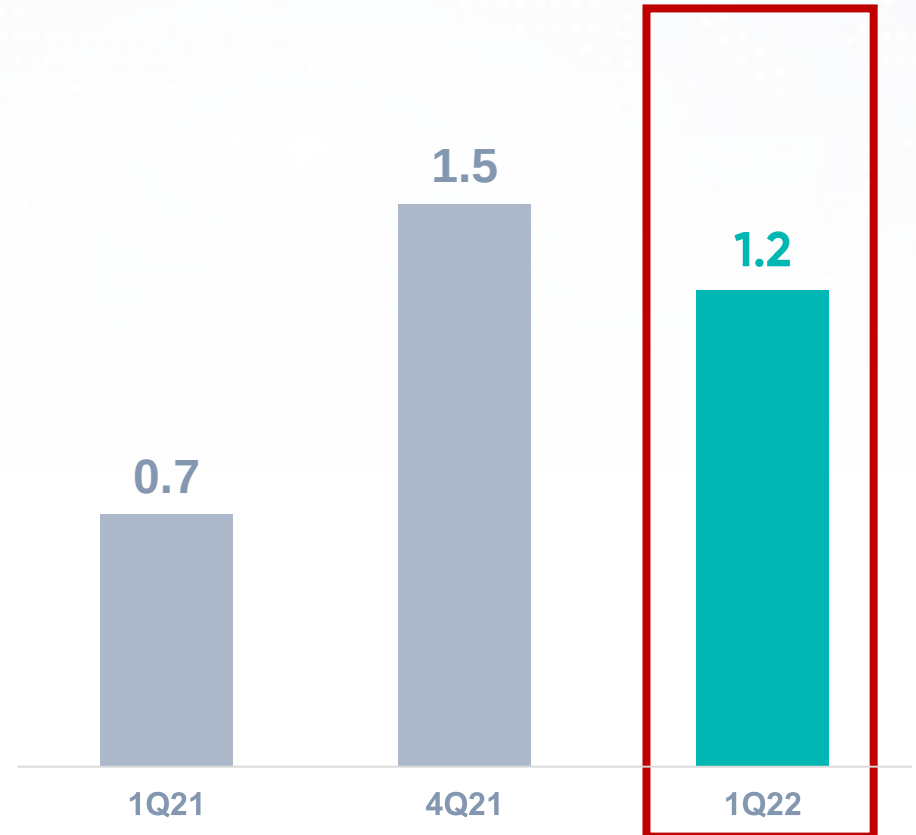
|                                        | 2021         |              | 2022          |
|----------------------------------------|--------------|--------------|---------------|
|                                        | 1Q           | 4Q           | 1Q            |
| <b>Cash*<br/>(Beginning of Period)</b> | <b>2,093</b> | <b>1,532</b> | <b>1,284</b>  |
| Cash Flows from Operating Activities   | 424          | 770          | 396           |
| Working Capital                        | 75           | -107         | 73            |
| Cash Flows from Investing Activities   | -48          | -926         | -1,527        |
| Capex                                  | -659         | -1,470       | -1,246        |
| Cash Flows from Financing Activities   | 89           | -97          | 9,960         |
| <b>Cash*<br/>(End of Period)</b>       | <b>2,602</b> | <b>1,284</b> | <b>10,162</b> |
| <b>Net Changes in Cash</b>             | <b>508</b>   | <b>-248</b>  | <b>8,878</b>  |

\* Deposits held by financial institutions included



## Capex Trend

(Trillion KRW)

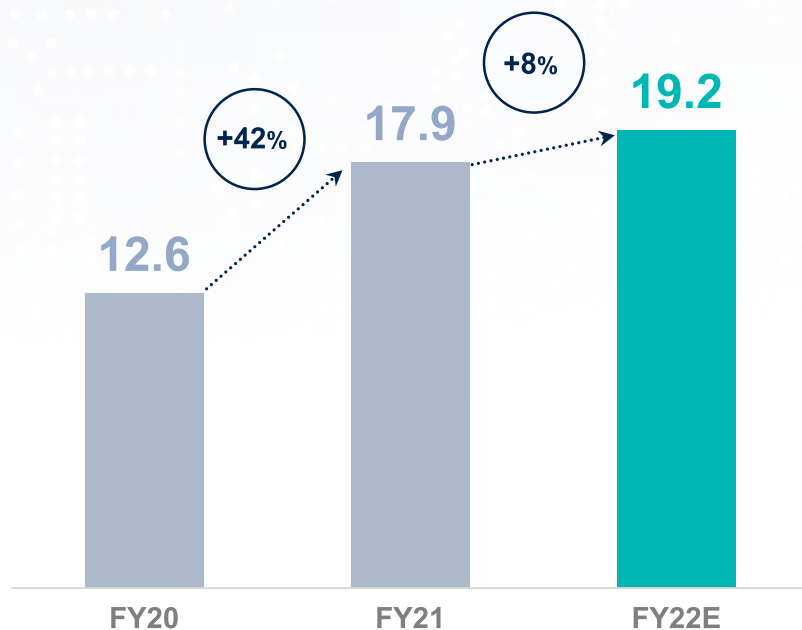


# 2022 Business Outlook



## Sales Outlook

(Trillion KRW)

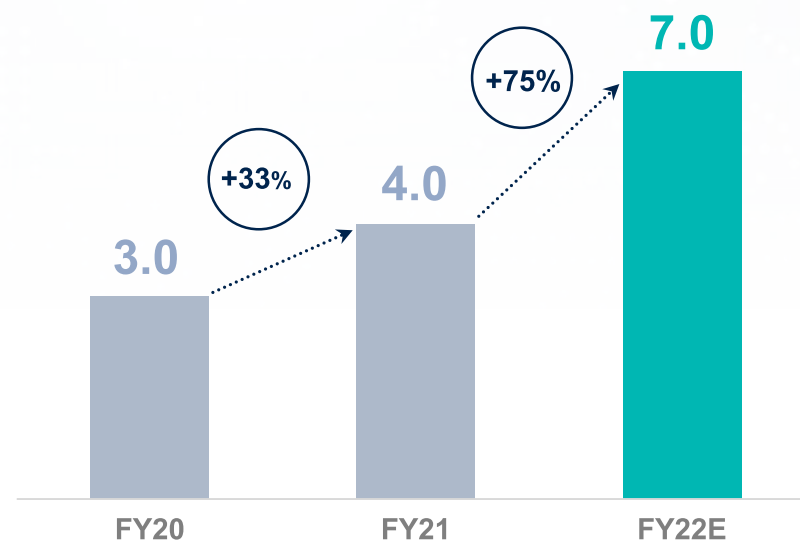


Despite uncertainty persisting due to continuous production disruption caused by automotive chip shortage, Ukraine/Russian conflict, and COVID lockdown, we expect to meet the business plan through increased sales to strategic OEMs.



## Capex Outlook

(Trillion KRW)



For the JV plants and stand-alone capacity in North America, capacity addition for cylindrical cells in China, and new expansion projects, we plan to invest a significantly higher capex compared to the previous year, amounting to about 7 trillion won.



# 2022 Business Outlook \_ Production Capacity by Region

## Europe

## Asia

## North America



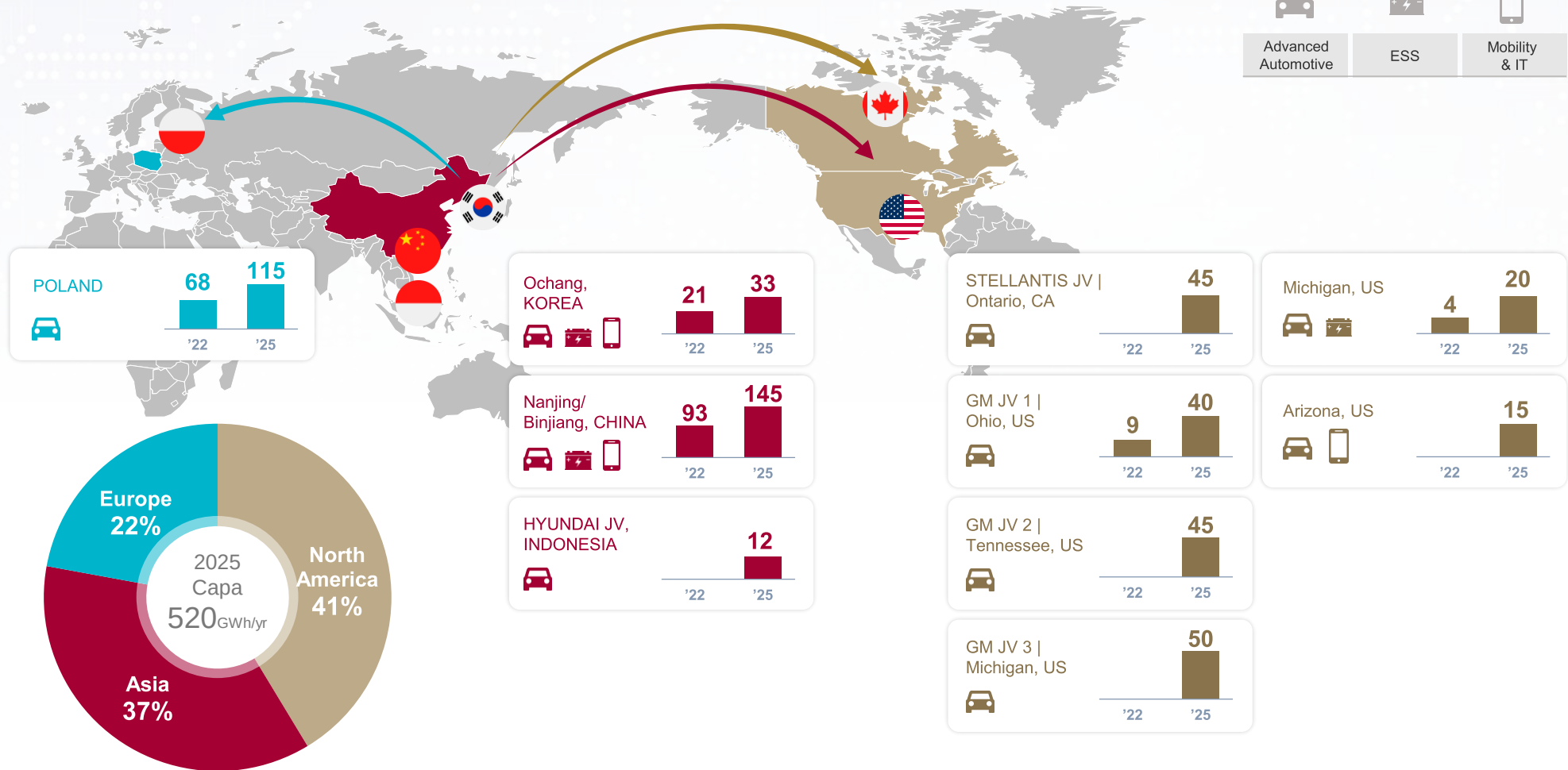
Advanced  
Automotive



ESS



Mobility  
& IT



2022

# Key Initiatives



# Improving Profitability ① Countermeasures to Tight Metal Supply and Greenflation

## Stable Metal Sourcing

Current status of metal sourcing partnerships

Long-Term Agreement

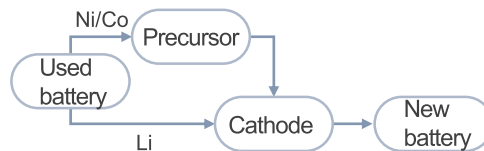


Strategic Equity Investment



Battery Recycling

**Li-Cycle®**  
&  
**Other Partnerships**

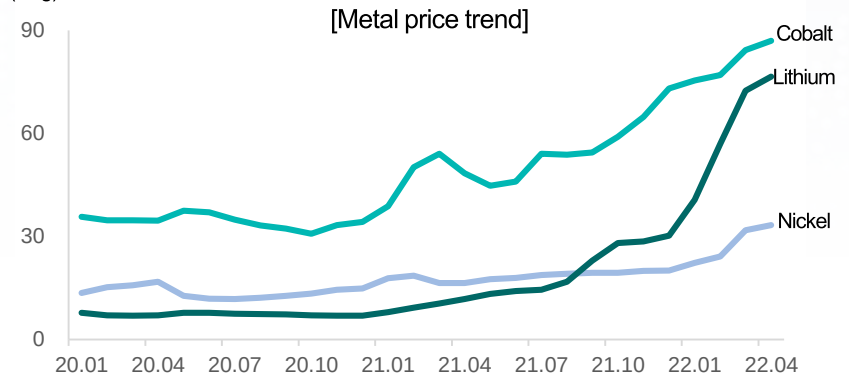


## Raw Material Price Hike Hedging

### Expand the coverage of the cost pass-through schemes

: Pass through the rising costs of Cu, Al, and Mn in addition to the existing pass-through metals - Li, Ni, and Co

(\$/kg)



### Share the inflationary pressure of other raw materials with partner companies



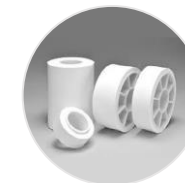
Anode



Electrolyte



Binder



Separator



# Improving Profitability ② Deployment of Smart Factory



## Effects of Smart Factory Deployment

Reinforce  
manufacturing  
competitiveness

Reduce  
manufacturing  
cost

&



## How to Enable Smart Factory

✓ **Reinforce the Smart Factory organization with the newly appointed Chief Digital Officer**

✓ **Secure the Digital Twin capability**

: Deploy Digital Twin simulation to stabilize new processes and enhance production quality



✓ **Build an advanced remote support system for overseas sites**

: Establish the Factory Monitoring Control Center to identify and analyze manufacturing issues in real time and enable pre-emptive monitoring



# Securing Product Competitiveness



**Pouch**



**Safety**



**Cost**



**Cylindrical**



**Performance**

- Secure battery pack solutions capable of delaying thermal propagation
- Develop Co-free batteries
  - : LFP batteries for ESS applications
  - : New cathode materials for EVs
- Develop the high-capacity new form factor

# Enhancing Quality Capability



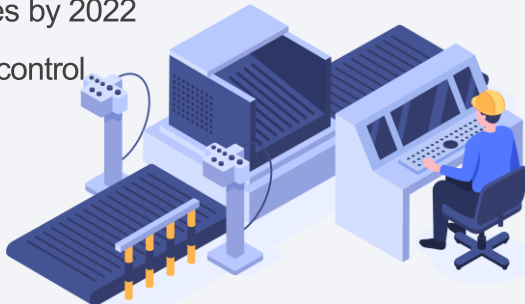
## Current Status

### ✓ 8 Key Initiatives for Quality Improvement

- Execute quality improvement tasks to tackle torn anode tab, folded separator, and other quality issues
- Implement robust product design and process optimization to keep defects at a minimum level and not to release any defect from the production site

### ✓ Full In-line inspection

- Target to apply the fully automated in-line inspection to all manufacturing processes by 2022
- Carry out outgoing quality control for safety



## Future Plan

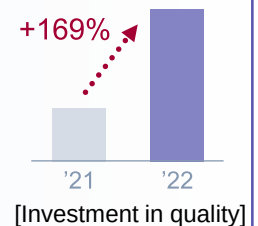
### ✓ Strengthen Org Capability for Quality

- Established the CQO and the Safety Solution Center designed to take part in the end to end process from identification of fire risks to customer response
- Set up a Center for Analytical Science to take immediate actions for quality problems globally



### ✓ Prioritize Quality for Infra Investment

- Ensure the best quality with fully automated inspection and minimize recall range via data tracking
- Prioritize quality in terms of investment



# Appendix





# Appendix : Income Statement

(Billion KRW)

|                                | 2021         |              |              |              |               | 2022         |
|--------------------------------|--------------|--------------|--------------|--------------|---------------|--------------|
|                                | 1Q           | 2Q           | 3Q           | 4Q           | FY            | 1Q           |
| <b>Sales</b>                   | <b>4,254</b> | <b>5,131</b> | <b>4,027</b> | <b>4,439</b> | <b>17,852</b> | <b>4,342</b> |
| Cost of Goods Sold             | 3,477        | 3,412        | 3,271        | 3,794        | 13,953        | 3,567        |
| <b>Gross profit</b>            | <b>777</b>   | <b>1,719</b> | <b>757</b>   | <b>646</b>   | <b>3,899</b>  | <b>775</b>   |
| Selling and Admin Expense      | 436          | 995          | 1,129        | 570          | 3,130         | 516          |
| <b>Operating Profit (Loss)</b> | <b>341</b>   | <b>724</b>   | <b>-373</b>  | <b>76</b>    | <b>768</b>    | <b>259</b>   |
| (%)                            | 8.0%         | 14.1%        | -9.3%        | 1.7%         | 4.3%          | 6.0%         |
| <b>EBITDA</b>                  | <b>659</b>   | <b>1,073</b> | <b>6</b>     | <b>482</b>   | <b>2,220</b>  | <b>676</b>   |
| (%)                            | 15.5%        | 20.9%        | 0.1%         | 10.9%        | 12.4%         | 15.6%        |
| <b>Net Income before Tax</b>   | <b>301</b>   | <b>838</b>   | <b>-463</b>  | <b>102</b>   | <b>777</b>    | <b>260</b>   |
| (%)                            | 7.1%         | 16.3%        | -11.5%       | 2.3%         | 4.4%          | 6.0%         |
| <b>Net Income (Loss)</b>       | <b>434</b>   | <b>630</b>   | <b>-206</b>  | <b>72</b>    | <b>930</b>    | <b>227</b>   |
| (%)                            | 10.2%        | 12.3%        | -5.1%        | 1.6%         | 5.2%          | 5.2%         |

1. The performance of the 2<sup>nd</sup> quarter of 2021 includes a one-off license revenue from SKI and a one-off recall expense.

2. The performance of the 3<sup>rd</sup> quarter of 2021 includes a one-off expense for GM recall.

# Appendix : Financial Position

(Billion KRW)

|                                  | 2021          |               |               |               | 2022          |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|
|                                  | 1Q            | 2Q            | 3Q            | 4Q            | 1Q            |
| <b>Assets</b>                    | <b>20,800</b> | <b>22,178</b> | <b>23,612</b> | <b>23,764</b> | <b>34,976</b> |
| Cash and Cash Equivalents, etc.* | 2,602         | 2,045         | 1,532         | 1,284         | 10,162        |
| Account Receivables              | 2,788         | 2,698         | 2,665         | 2,915         | 2,907         |
| Inventory                        | 3,177         | 3,677         | 4,327         | 3,896         | 4,813         |
| Property, Plant and Equipment    | 8,919         | 9,523         | 10,255        | 11,051        | 11,986        |
| <b>Liabilities</b>               | <b>12,582</b> | <b>13,099</b> | <b>14,390</b> | <b>15,022</b> | <b>15,536</b> |
| Account Payables                 | 2,657         | 2,627         | 2,467         | 2,178         | 3,161         |
| Debt                             | 6,214         | 6,252         | 7,107         | 6,969         | 7,299         |
| <b>Equity</b>                    | <b>8,218</b>  | <b>9,079</b>  | <b>9,222</b>  | <b>8,742</b>  | <b>19,440</b> |
| Share Capital                    | 100           | 100           | 100           | 100           | 117           |

| Key Leverage Ratios       |      |      |      |      |      |
|---------------------------|------|------|------|------|------|
| Liabilities to Equity (%) | 153% | 144% | 156% | 172% | 80%  |
| Debt to Equity (%)        | 76%  | 69%  | 77%  | 80%  | 38%  |
| Net Debt to Equity (%)    | 44%  | 46%  | 60%  | 65%  | -15% |

\* Deposits held by financial institutions included

# Appendix : Cash Flow

(Billion KRW)

|                                             | 2021         |              |               |              | 2022          |
|---------------------------------------------|--------------|--------------|---------------|--------------|---------------|
|                                             | 1Q           | 2Q           | 3Q            | 4Q           | 1Q            |
| <b>Cash (Beginning of Period)</b>           | <b>2,093</b> | <b>2,602</b> | <b>2,045</b>  | <b>1,532</b> | <b>1,284</b>  |
| <b>Cash Flows from Operating Activities</b> | <b>424</b>   | <b>35</b>    | <b>-250</b>   | <b>770</b>   | <b>396</b>    |
| Operating Profit/Loss                       | 341          | 724          | -373          | 76           | 259           |
| Depreciation                                | 318          | 349          | 378           | 407          | 417           |
| Working Capital                             | 75           | Δ440         | -778          | -107         | 73            |
| <b>Cash Flows from Investing Activities</b> | <b>-48</b>   | <b>-717</b>  | <b>-1,086</b> | <b>-926</b>  | <b>-1,527</b> |
| Capex                                       | -659         | -731         | -1,172        | -1,470       | -1,246        |
| <b>Cash Flow from Financing Activities</b>  | <b>89</b>    | <b>122</b>   | <b>770</b>    | <b>-97</b>   | <b>9,960</b>  |
| Borrowing/Repayment                         | 54           | 38           | 856           | -138         | 330           |
| <b>Cash (End of Period)</b>                 | <b>2,602</b> | <b>2,045</b> | <b>1,532</b>  | <b>1,284</b> | <b>10,162</b> |
| <b>Net Changes in Cash</b>                  | <b>508</b>   | <b>-557</b>  | <b>-513</b>   | <b>-248</b>  | <b>8,878</b>  |

1. The financial information stated herein has been prepared in the manner different from the standard applied to the cash flow statement of the auditor's report.

2. Deposits held by financial institutions included



# THANK YOU