



**2021. 4Q Earnings Briefing  
- Advanced Material Business**

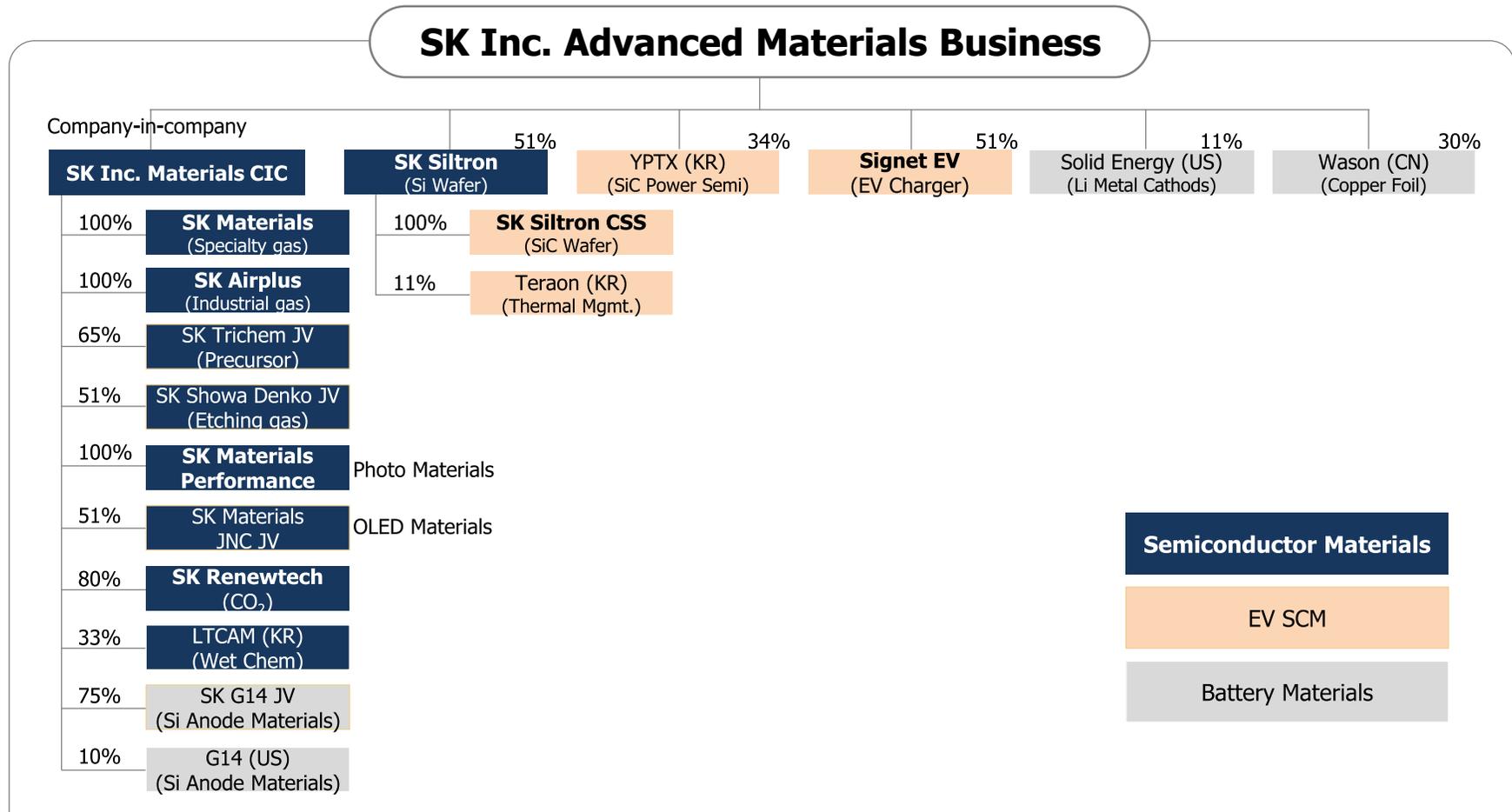
March 2022

# DISCLAIMER

This presentation includes the recent earnings results and business performance of the advanced materials business and was prepared by combining the consolidated results of SK materials CIC and SK Siltron. It has been prepared to serve shareholder and investor information purposes only and is unaudited.

The financial information presented herein is based on K-IFRS. As the forward-looking statements herein reflect the current business environment and the Company's business strategies, actual developments may differ from those in the statements due to changes in the business environment and the Company's strategies, as well as other uncertainties.

**SK Inc.'s Advanced Materials Business focuses on semiconductor materials, battery materials and EV SCM – areas of high mid-to-long term growth**



# Financial Highlights



## Strong market demand and sales of new products led to strong results in FY21

(KRW bn)	2021	2020	YoY	4Q21	3Q21	QoQ
<b>Revenue</b>	<b>3,039</b>	2,656	+14%	<b>852</b>	783	+9%
- Materials CIC	1,189	955	+25%	340	307	+11%
- SK Siltron	1,850	1,701	+9%	512	476	+8%
<b>Operating Profit</b>	<b>573</b>	483	+19%	<b>163</b>	160	+2%
- Materials CIC	<b>291</b>	234	+24%	<b>78</b>	83	-6%
- SK Siltron	<b>282</b>	249	+13%	<b>85</b>	77	+10%
<b>EBITDA</b>	<b>1,053</b>	918	+15%	<b>289</b>	280	+3%
- Materials CIC	<b>427</b>	359	+19%	<b>113</b>	117	-3%
- SK Siltron	626	559	+12%	176	163	+8%
<b>Income Before Tax</b>	<b>567</b>	416	+36%	<b>142</b>	148	-4%

※ Total revenue/operating profit/EBITDA/income before tax is the sum of Materials CIC and SK Siltron results

# Materials CIC : 4Q21 Business Results

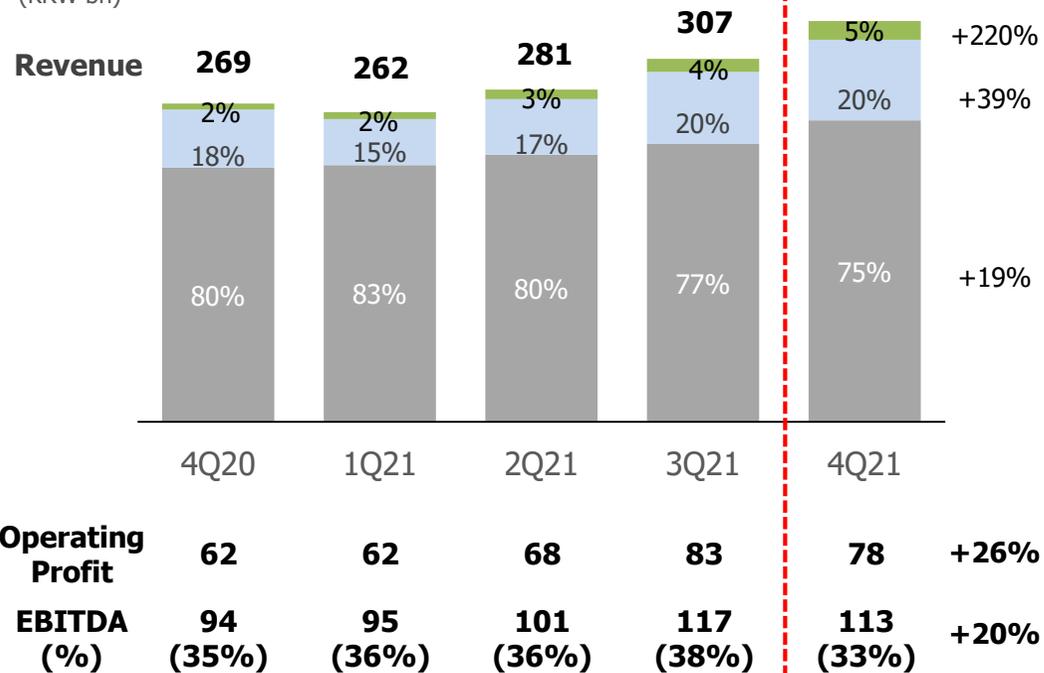


## Achieved record-high quarterly revenue from strong sales in specialty gas and other high value-added products

### Materials CIC Results

■ Specialty/Industrial/CO2 ■ Precursor/Etching gas ■ PR/OLED

(KRW bn)



### Customer's ramp-up of new fab and expansion of value-added products led to significant increase in 4Q revenue

- Specialty gas / Industrial gas : shipment growth led by strong demand in NF3 and full operation of customer's new fab
- Precursor / Etching gas : Rapid shipment growth in next-gen precursor (CpHf) & etching gas (CH3F) from semiconductor technology migration
- PR : Shipment increase in KrF/I-line for Korean and Chinese customers led to turnaround in profits

### Expecting up to 30% revenue growth in FY22, boosted by improved supply & demand as well as new product performance

- Specialty gas / Industrial gas : Top/bottom-line growth to continue with capacity expansion and NF3 ASP increase
  - \* CAPA (FY21→FY22) : NF3 13k → 15K ton/yr, CH3F 35 → 70 ton/yr
- Higher sales of value-added products such as PR (SoC, EUV PR) and next-gen precursor (CpHf)
- (Battery) Expanding product portfolio, including Next-gen Si Anode/Cathode

# SK Siltron : 4Q21 Business Results

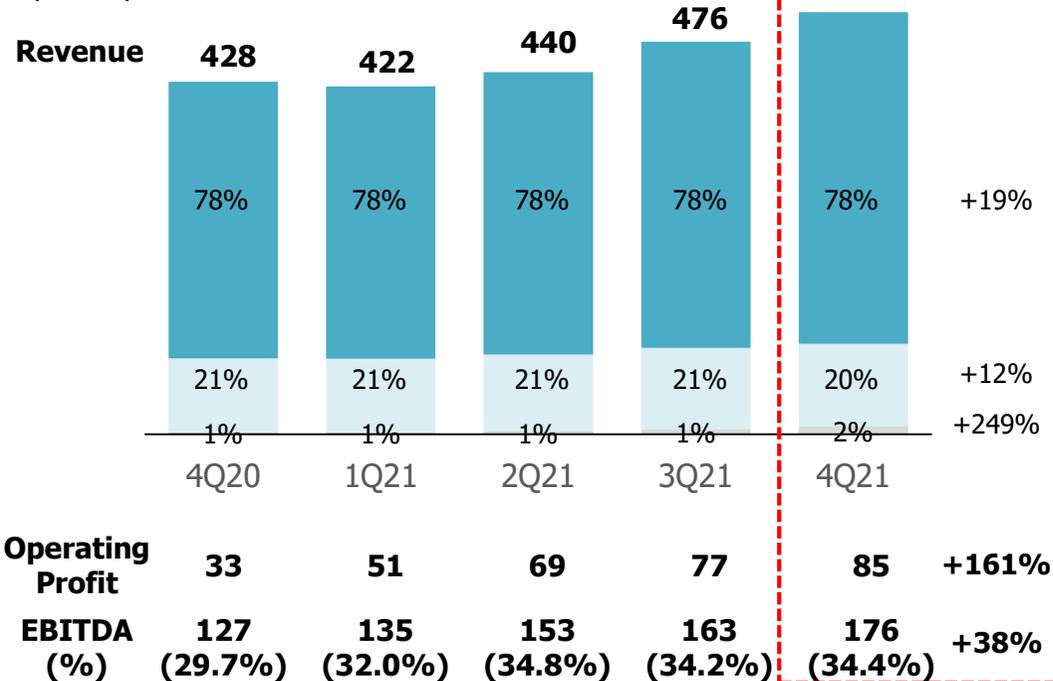


Quarterly revenue continues to surpass previous levels as both shipment and ASP increase

## SK Siltron Results

■ SiC ■ 200mm ■ 300mm

(KRW bn)



- 4Q21 revenue increased from higher ASP of Si-wafer and shipment growth in Epi-wafer**
  - Shipments of 300mm Si-Wafer increased by 9.2% YoY
- Revenue to increase up to 20% in FY22, boosted by ① ASP rise from tight supply, ② debottlenecking at domestic fab, ③ sales growth in Epi-wafer**
  - Production of 300mm Si-Wafer to increase by 7 to 8% YoY
- SiC Wafer(SK Siltron CSS) expected to grow rapidly from passing the MSFET product qualification of a large client**
  - Shipments of 150mm SiC Wafer increased +440% YoY in 4Q21
  - Production of 150mm SiC Wafer to grow +190% YoY in FY22

# Investment Highlights (1/2)

## Driving timely expansion of 300 Si-wafer capacity and preemptive expansion of SiC wafer capacity

### 300mm Si Wafer Capacity expansion

- Wafer undersupply to be prolonged, as demand grows from hike in semiconductor industry capex while supply continues to be limited

[300mm Si-Wafer Oversupply]

(%)	'21	'22E	'23E	'24E
PW	2%	△4%	△13%	△14%
Epi	△3%	△2%	△ 2%	5%

\* Source: Company Data

- Undergoing new fab construction to meet demand

- Site : 13,000m<sup>2</sup> @Gumi 3 Industrial Complex (KR)
- Capex : KRW 1.05tn (~'24)
  - Flexible expansion based on LTA with customers
- Production : 1H'24 (target)

**[300mm Si-Wafer Capacity]**

**Expected to increase by 28% from '21 to '24**

### SiC Wafer Capacity Expansion

- SiC WF (high-power/high-efficiency) demand to grow as SiC chip adoption in EV Inverter/Charger increases

[150mm SiC Wafer Demand Forecast]

(K sls/yr)	'21*	'22E	'23E	'24E	'25E	CAGR (~25)
Demand	700	1,140	1,510	1,950	2,480	+37%

\* '21 SiC Wafer demand : 507M\$

\* Source: Company Data

- Preemptive capacity expansion via quality/productivity improvement in plans to meet mid-to-long term wafer demand caused by supply constraint triggered by high barrier of entry\*

- Site : 10,000m<sup>2</sup> @ Michigan, US
- Capex : USD 640M ('21~'25)
- Production : 2H'22 (150mm)
- Preparing 200mm wafer production by 1H'23

\* 4 EV 150mm wafer suppliers (Wolfspeed/II-VI/Rohm/SK siltron)

**[150mm SiC Wafer Capacity]**

**Expected to increase by 17x during '21- '24**

- '25 Capacity : 500K/yr (global M/S 25% target)

# Investment Highlights (2/2)

## Delivering successful investment outcomes in advanced tech. companies through IPOs

### Solid Energy System (Next Gen. Li-Metal Battery)

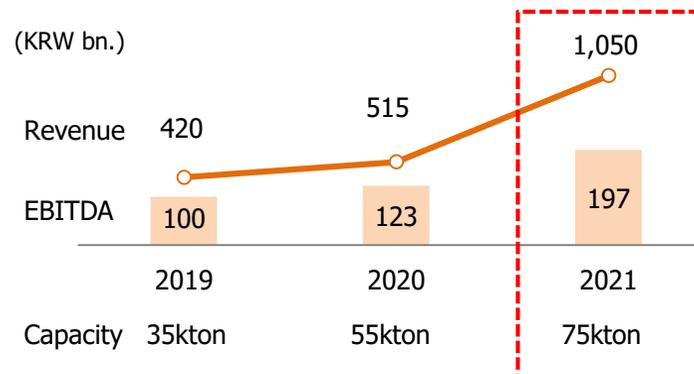
- **Made NYSE debut in Feb. '22 via SPAC merger, resulting in a capital gain over 4x**
  - **SK Inc's equity ownership 11.4% (2<sup>nd</sup> largest shareholder)**
  - **MoIC 4.7x (\$61M → \$286M)**
    - Current share price \$7.2/share (3/18 Mkt. cap \$2.5B)
- **On track to meet tech-development milestones**
  - Completed production of the world's 1<sup>st</sup> 100Ah Cell for EV

[IPO Progress]



### Wason (Copper Foil)

- **Posted rapid growth and profitability via 1) rising demand in China, 2) preemptive capacity expansion, and 3) LTA with global battery makers**
- **FY21 Revenue +104%, EBITDA +60% YoY**



\* based on 1RMB = 170KRW

- **Timely expansion to capture increasing demand in China**
  - Production capacity : 70k tons/yr ('21) → 150k tons/yr ('24)
- ※ **Expecting increase in equity value via IPO**
  - SK Inc's ownership 30% (cum. Investment KRW 380 bn.)

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