



Advanced Materials Business

# Financial Story





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## CHAPTER 01

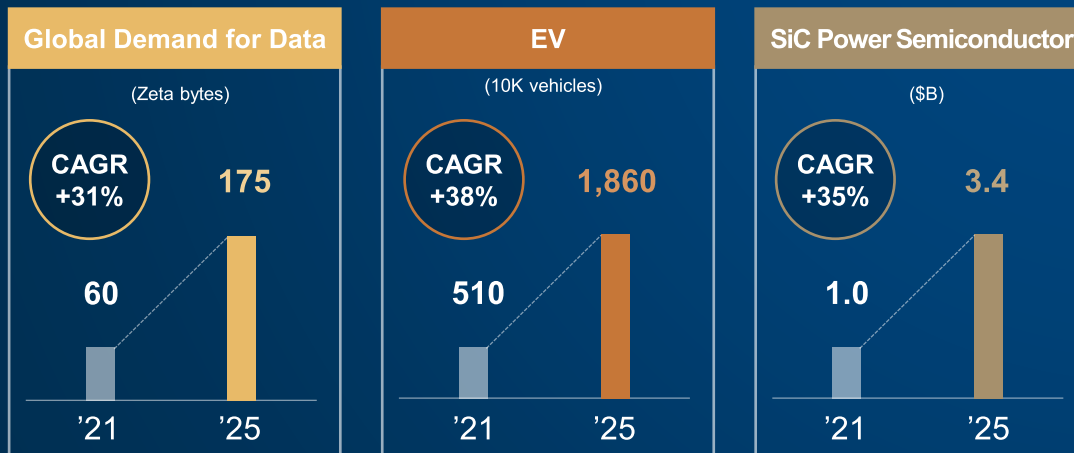
# Overview of SK Inc.'s Advanced Materials Business Portfolio

SK Inc. Advanced Materials Business  
Financial Story

# 1 • SK Inc.'s Advanced Materials : Scope of Business

## Global Mega Trends

- ✓ **Accelerated growth of data driven economy (e.g. AI)**
  - Number of IoT devices : 11.7B in '20 → 31B in '25 (+21%/yr)
- ✓ **Rapidly increasing demand for battery & power semiconductor, driven by wider EV adoption**
  - Penetration of EVs : 4% in '20 → 24% in '25
- ✓ **Emergence of new technologies and services, such as Autonomous-Driving, AR, VR and 5G**



## SK Inc. Advanced Materials Business Scope



In mid-to-long term, exponential growth is expected in Semiconductor, Battery Materials, and Power Semiconductor sectors, due to tailwind provided by Global Mega Trends



Uniquely positioned, SK Inc. Advanced Materials is the only player in the world that houses Semiconductor, Battery Materials, and Power Semiconductor in its business portfolio all under one roof



SK also plays a pivotal role in pioneering innovation and developing global supply chain as the market leader

※ IoT Analytics (IoT market trend, ~'25, IDC (Global data demand projection, ~'30), SNE Research (EV demand projection, ~'30), Yole (Power Semiconductor demand projection, ~'30)



## 2 • SK Inc.'s Advanced Materials Business : Portfolio Management

« SK Inc. will further expand to more promising advanced materials, and dominate the market by leveraging existing business and executing timely investments »

### Market Demand

High Performance Computing

Growing Importance of EV's Power Efficiency

Evolution of Vision Sensing

High-Capacity/ Efficiency Battery



### Semiconductor Materials



### Power/ Compound Semiconductors



### Battery Materials

### Existing Portfolio

- ✓ Silicon Wafer (300mm, 200mm)
- ✓ Specialty Gas (NF<sub>3</sub>, Etching, SiH<sub>4</sub>)
- ✓ Bulk Gas (N<sub>2</sub>, Ar, Kr, O<sub>2</sub>, CO<sub>2</sub>)
- ✓ Precursors

- ✓ 150mm SiC Wafer
- ✓ SiC Power Semiconductors

- ✓ Copper Foil

### Target Portfolio

- ✓ Color Materials for Image Sensor(CIS)
- ✓ EUV Photo Materials
- ✓ Advanced Packaging Materials
- ✓ OLED Materials

- ✓ 200mm SiC Wafer
- ✓ SiC Power Semiconductors for EVs
- ✓ Compound Semiconductors (GaN on SiC, VCSEL, etc)

- ✓ Next-generation Cathode Materials
- ✓ Next-generation Si Anode Materials

### 3 • SK Inc.'s Advanced Materials : Core Businesses & Targets

Core Business	Target ('21 → '25)	CAGR (~'25)
Si Wafer (300mm)	1.3M → ~1.6M/mo	+6%
Specialty Gas (NF3)	12.5K tons → ~18K tons/yr	+10%
SiC Wafer	30K → ~600K/yr	+110%
Power/Compound Semiconductors	2K → ~85K/yr	+150%
Copper Foil (Wason (CN))	50K tons → ~150K tons/yr	+32%
Next-Generation Anode/ Cathode	Anode : - → ~4K tons/yr Cathode : - → ~50K tons/yr	-

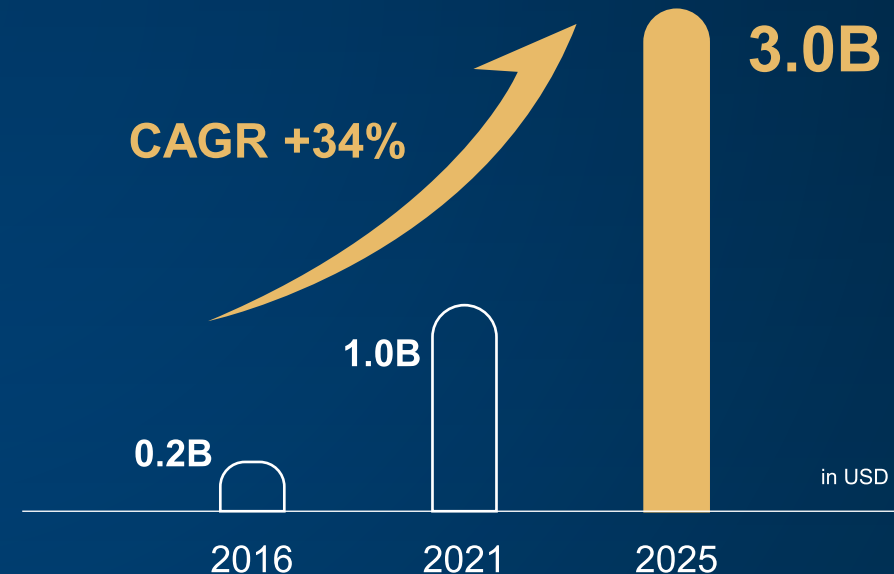
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※ More than 20 types of EUV PR/ CIS Materials/  
Advanced PKG. Materials

#### SK Inc. Advanced Materials

Growing to become Global #1 Advanced Materials Co.  
through timely investments (M&As) and  
global collaboration (JVs) in fastest growing sectors

#### EBITDA Target



## CHAPTER 02

# Business Roadmap



SK Inc. Advanced Materials Business

Financial Story

# 1 • SK Advanced Materials Business Mission

## IDENTITY

“A strategic investor with unparalleled expertise in investment into innovation ”

connecting 「 People – Technology – Customers 」

To achieve our mission, we draw on our insights in technology, market intelligence, and strengths in manufacturing

## Investment Principles

### Invest- Ment Criteria

- ✓ Areas with high growth and barrier to entry, aligned with promising tech trends
- ✓ Realizable synergy with existing product, technology, and customer
- ✓ Creation of sound ESG value for our stakeholders

### Invest- Ment Method

- ✓ Obtain enabling technologies through inorganic growth
- ✓ Capture potential synergy that optimizes manufacturing and sales
- ✓ Achieve market dominance through quick investment decision
- ✓ Optimize the business portfolio continuously

“Leveraging our insights in Technology, Global Network, and Synergy-generating capabilities, we will quickly expand to high-growth, high-return business segments”

Tech

+

Global Customer/  
Tech Network

+

Synergy

## Value Creation

- 1 Create high-growth, high-returns for shareholders
- 2 Ensure supply chain stability and resiliency for customers
- 3 Contribute to the growth of global semiconductor, display and EV industries



## 2 • SK Advanced Materials Business Competencies

《 SK Advanced Materials possesses outstanding competencies in investment, backed by Investment Resources, Technology, Global Network and Talent pool 》

### Investment Resources

- ✓ Total assets of SK Inc. : \$130B
- ✓ Established a subsidiary based in Japan for further investment and collaboration
- ✓ Global finance network

### Global Network

- ✓ Global top chip & battery customer base
- ✓ Strategic partnerships with renowned global tech companies
- ✓ SK's global network with deep local presence



### Technology

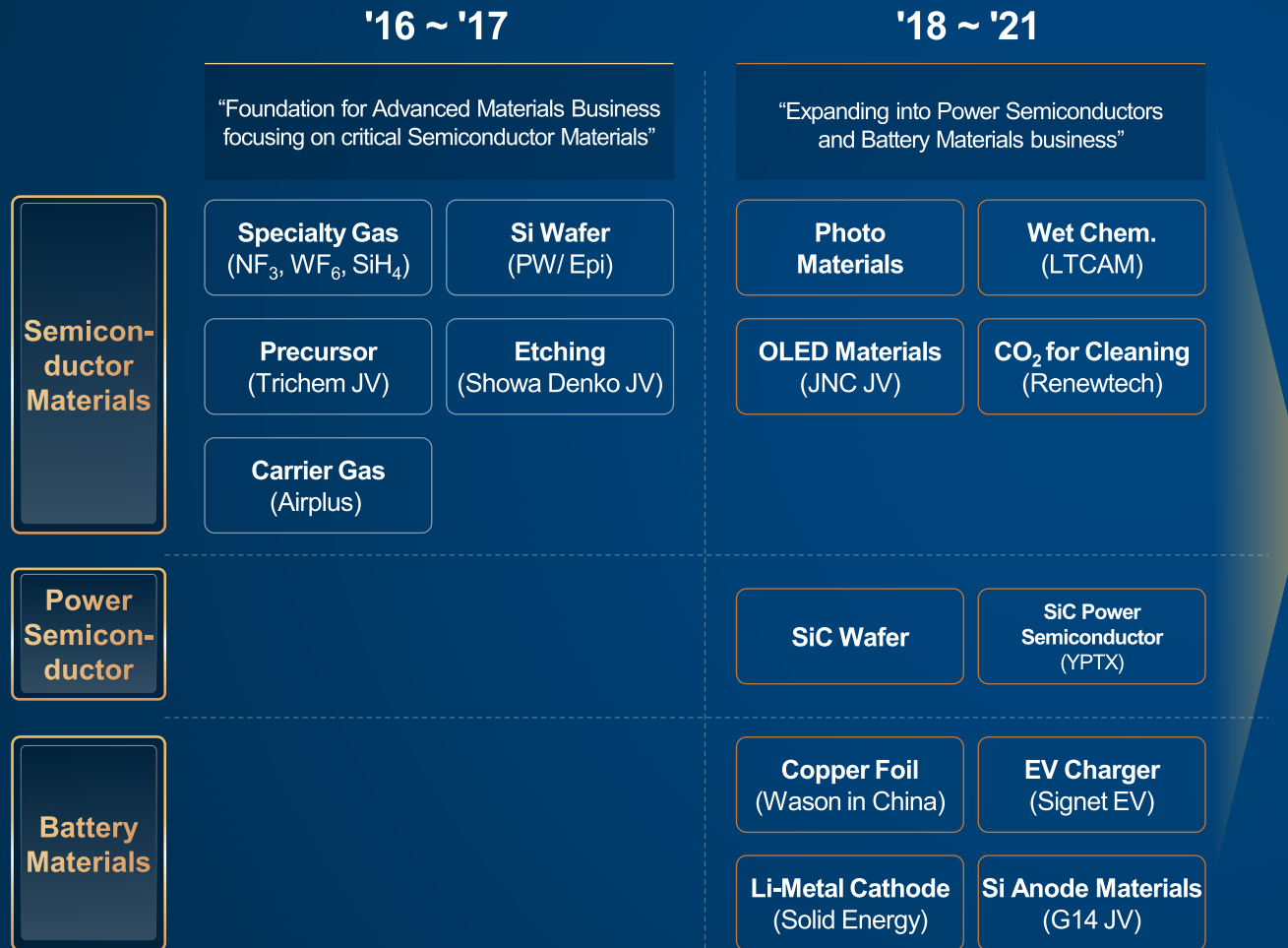
- ✓ Leading edge tech and products
  - 300mm Epi Wafer, 200mm SiC Wafer
  - Specialty Gas, EUV Photo, Copper Foil
- ✓ SK Group's insights of key industries
- ✓ SK Group's digital transformation and manufacturing competencies

### Talent Pool

- ✓ Experts in SK Inc.'s Advanced Materials Investment Center
  - Global experts in Tech and Finance
  - External Advisory Group for global tech (In operation)
- ✓ Deep management bench within SK with PMI, value-up competencies

### 3 • SK Inc. Advanced Materials Business Performance

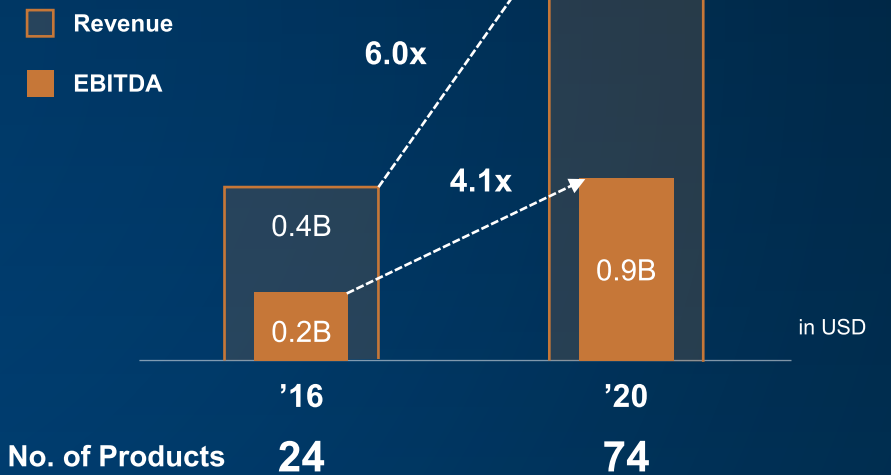
#### SK Inc. Advanced Materials - Remarkable Growth Story



#### SK Inc. Advanced Materials

**SK's Advanced Materials Business Outperforming Global Peers**  
 (Revenue growth rate: 57%, EBITDA growth rate: 43%)

#### Financial Performance



※ Consolidated basis (SK Siltron/SK Materials) + 30% stake in Wason included

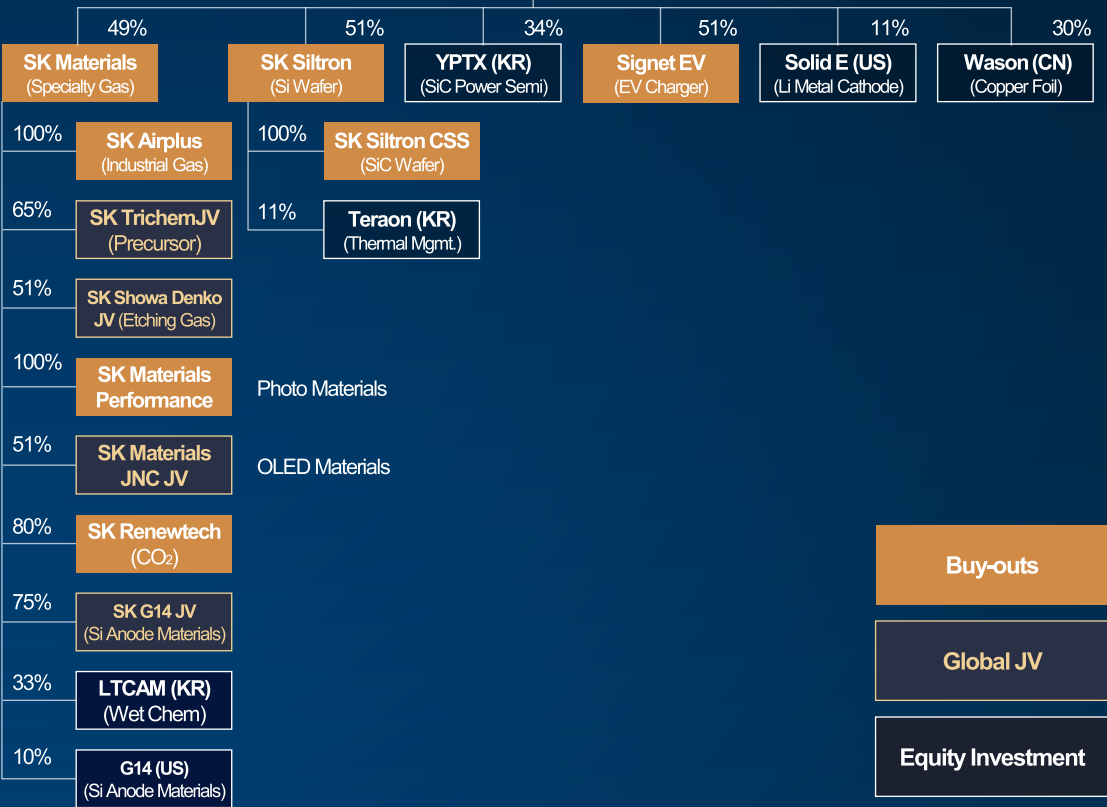
\* Global Electronic Materials Peer Group,  
 Revenue growth +12%, EBITDA growth +13% ('16~'20)

SK Inc. successfully built foundation for Semiconductor Materials, Battery Materials and Power Semiconductor business through 7 buy-outs, 4 global JVs, 6 equity investments since 2015

Track Record

- '15 • Acquired SK Materials (Specialty gas)
- '16 • Established SK Trichem JV (Precursor)  
• Acquired SK Materials Airplus (Carrier gas)
- '17 • Acquired SK Siltron (Si-Wafer)  
• Established SK Showa Denko JV (Etching gas)
- '18 • CB Investment in LTCAM (Wet Chem)  
• Equity Investment in Wason (Copper foil)  
• Equity Investment in Solid Energy (Li Metal Cathode)
- '19 • Acquired SK Renewtech (CO2, Dry Ice)
- '20 • Acquired SK Siltron CSS (Former DuPont's SiC wafer division)  
• Established SK JNC JV (OLED Materials)  
• Acquired SK Materials Performance (Former Division of Kumho Petro)
- '21 • Equity Investment in YPTX (SiC Power Semiconductors)  
• Acquired Signet EV (EV Charger)  
• Established SK G14 JV (Si Anode Materials)

SK Inc. Advanced Materials



## 4 • Investment Plan by Segment [ Market Trend and Opportunities ]

### Tech & Market Trend

### Key Areas of Opportunities



#### Semiconductor Materials

- ✓ Accelerated adoption of new processes & materials for fabrication of high computing chips
  - Materials for EUV/ Packaging process and 3D-structured device
- ✓ Surging demand for image sensing driven by wider adoption of autonomous vehicles and VR
  - Number of cameras per vehicle : 5 → 20 (~'25)

EUV  
Photo

CIS Color  
Materials

Advanced  
Packaging  
Materials

OLED  
Materials



#### Compound Semiconductors

- ✓ Expanded adoption of SiC power semiconductors for EVs
  - Adoption rate of SiC for EV : 30% in '21→ 60% in '25
- ✓ Rising demand for high-frequency and laser semiconductors driven by a wider adoption of 5G / Autonomous Driving/ AR

SiC Wafer

Power  
Compound  
Semiconductors



#### Battery Materials

- ✓ Exponential growth in demand for EV batteries (+35%/yr, ~'30)
- ✓ Growing demand of developing and adopting new materials for cost-effective battery production
  - Performance improvement (battery life, power output) & cost reduction
- ✓ Increasing demand for charging propelled by widespread adoption of EVs

Copper Foil

Next-generation  
Anode  
Materials

Next-generation  
Cathode  
Materials

Next-generation  
Charger



## 4 • Investment Plan by Segment [ ① Semiconductor Materials (1/2) ]

While increasing market share of our existing business, we will also invest in the promising technologies in the fastest-growing segments to maximize stakeholder value

### [ Existing Business ]

<b>Silicon Wafer</b>	<ul style="list-style-type: none"> <li>Timely expansion of capacity to capture the increased demand for wafer, resulting from chip maker's capacity expansion</li> <li>Equity investment in Solid Energy (Li Metal Cathode) <ul style="list-style-type: none"> <li>Wafer demand : 5.9 M pcs/mo in '20→ 80 M pcs/mo in '25 (+6%/yr)</li> <li>Consolidation of 5 to 4 Players (Pending Approval)</li> </ul> </li> </ul>
<b>Specialty Gas</b>	<ul style="list-style-type: none"> <li>NF<sub>3</sub> : Capa. expansion enabled by new process* * 15% cost reduction possible compared to peers</li> <li>Expansion of Silane/ Etching Gas with higher margin</li> </ul>
<b>Bulk Gas</b>	<ul style="list-style-type: none"> <li>Stable growth driven by secured pipeline of large projects</li> <li>Increasing the share of the CO<sub>2</sub> cleaning gas for semiconductor</li> </ul>
<b>Precursor</b>	<ul style="list-style-type: none"> <li>Diversifying products and customers based on synthesizing capabilities <ul style="list-style-type: none"> <li>Next-generation High K(CpHf), 3D-structured metallization with low resistance</li> </ul> </li> <li>Entering the next-generation precursor market by joint-development with market leaders providing best-in-class technology</li> </ul>

### [ Target Business ]

<b>Photo</b>	<ul style="list-style-type: none"> <li>Expediting domestic production of core materials <ul style="list-style-type: none"> <li>i Line/ KrF → ArFi/ EUV PR, SOC</li> </ul> </li> </ul>
<b>OLED/ Wet Chem</b>	<ul style="list-style-type: none"> <li>Extending Blue Dopant customer base / Developing 3rd-gen Tech. (TADF*) * Thermally Activated Delayed Fluorescence (Improved quantum efficiency)</li> <li>Expansion of Wet chem. portfolio <ul style="list-style-type: none"> <li>High value-added Etching and Cleaning Solutions</li> </ul> </li> </ul>
<b>CIS Color Materials</b>	<ul style="list-style-type: none"> <li>Investing in market leaders with acclaimed technology, and collaboration via JV <ul style="list-style-type: none"> <li>CIS Color Materials, OLEDoS Materials (CMY)</li> </ul> </li> </ul>
<b>Advanced PKG. Materials</b>	<ul style="list-style-type: none"> <li>Penetrating high-end PKG Materials sector through proactive investments and JVs with global tech companies <ul style="list-style-type: none"> <li>Heat management/ Dissipation, Power Semiconductor Substrate Materials</li> </ul> </li> </ul>



	'21		'25
Revenue / EBITDA	2.5 B / 1.0 B	→	3.5 B / 1.6 B

	'21		'25
Revenue / EBITDA	35 M / -	→	0.6 B / 0.3 B

(in USD)

4 • Investment Plan by Segment [ ① Semiconductor Materials (2/2) ]


◀ Seek to become the **Global no.1 Semiconductor Materials Player by Revenue and EBITDA in 2025** ▶

	Investment Size	Capacity/ Product
(in USD)	('21~'25)	('21→ '25)
<b>Silicon Wafer</b>	1.0 B	Capa 1,300K → ~1,620K pcs/mo
<b>Specialty Gas</b>	0.3 B	NF <sub>3</sub> 12.5K → ~18K tons /yr Silane 2K → ~4.5K tons/yr
<b>Bulk Gas</b>	0.6 B	N <sub>2</sub> 0.3M Nm <sup>3</sup> → ~0.45M Nm <sup>3</sup> /h CO <sub>2</sub> 0.1M tons → ~0.13M/yr
<b>Photo Materials</b>	0.1 B	Number of products 24 types → ~87 types
<b>Precursor</b>	0.1 B	Number of products 5 types → ~10 types
<b>+</b>		
<b>Next-gen Portfolio</b>	~0.3 B	20 types + α - Next-generation Precursor, EUV Photo, CIS Materials, Advanced Packaging Materials
<b>  </b>		
<b>Total Investments</b>	<b>~2.3 B</b>	

Financial Target

“Continue to build upon its successful track record via collaboration with global tech companies & M&As”

(in Billions of USD)	2021	2023	2025
<b>Revenue</b>	<b>3.0</b>	<b>3.9</b>	<b>4.7</b>
<b>EBITDA</b>	<b>1.1</b>	<b>1.6</b>	<b>2.1</b>
- Existing Biz	1.1	1.5	1.8
- New Biz	-	0.1	0.3



Portfolio

- 300mm Wafer
- Specialty Gas
- Precursor
- Carrier Gas
- Photo Materials

- EUV Photo
- CIS Materials
- OLED Materials
- Next-generation Precursor
- Wet Chem.

- Thermal Management Materials
- OLEDoS Materials
- Power Substrate Materials

※ SK Inc. consolidated financial figures

# 4 • Investment Plan by Segment [ ② Power / Compound Semiconductors (1/2) ]



Making preemptive expansion of SiC Wafer and Power Semiconductor, and localizing the Compound Semiconductor Chip and Materials business in order to develop the value chain of Wafer – Epi – Chip



## Product Portfolio Expansion Strategy

**SiC Wafer**  
(SK Siltron CSS)

- ✓ Expand preemptively, based on LTA with large customers
  - Global M/S: '21 5% (Global 4th) → '25 26% (2<sup>nd</sup>)
- ✓ Preoccupy the 200mm SiC Wafer market ahead of peers
  - World's 1st mass production of 200mm SiC Wafer by '23

**SiC Power Semi-conductor**  
(Partnership w/ YPTX )

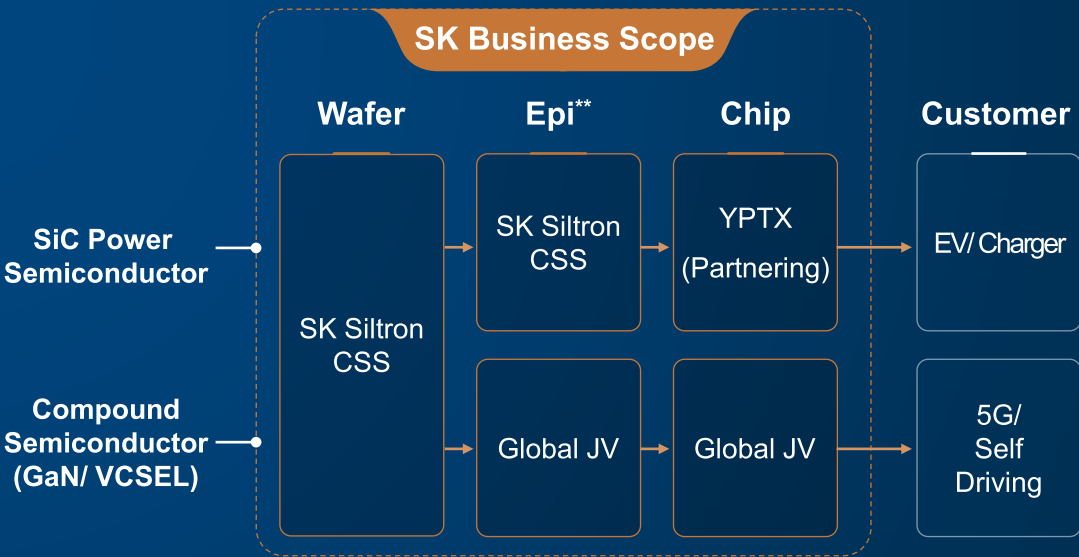
- ✓ Collaborate with global OEMs for business expansion
  - MOSFET SiC Chip for EV inverter, etc.
- ✓ Maximize synergy with SK's existing power semiconductor related business
  - Product development for Wafer-Chip-EV charger business

**Compound Semiconductor**

- ✓ Utilize competencies in SiC Wafer to establish JV with global top-tier players
  - Establish global/ domestic manufacturing sites for GaN on SiC / VCSEL \*

## Business Model

Localize core materials and products for EV/ Self-driving, utilizing SK's strengths in SiC Wafer



\*\* A chip-manufacturing process where high-quality thin film (SiC, GaN, GaAs) is deposited onto the surface of a wafer for improved chip performance / defect control

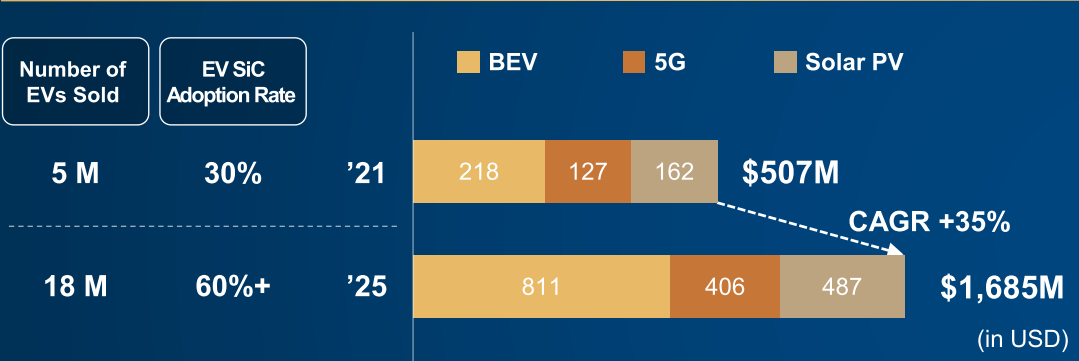
\* GaN on SiC (High-frequency semiconductors for 5G), VCSEL (Laser Semiconductor for self driving / AR)



**Ascend to Global No.2 Player in '25** by preemptive expansion based on customer LTA and achievements of global top-tier level productivity/ quality, under tailwinds of tight supply in SiC wafer market



SiC Wafer Market Outlook



**Extended Application for EV SiC**

- ✓ More mileage range and improved quality of vehicle, compared to Si
  - Power loss -77%, Weight/Volume -40%
- ✓ Increasing adoption by EV due to improvements in quality and cost competitiveness
  - Cost of SiC EV inverter module: 95% of Si

**Expected Imbalance of SiC Wafer**

- ✓ Only a few players can manufacture SiC wafer because of high technology barrier
  - Supply and demand imbalance expected to continue
  - Only four companies in the world can supply 150 mm wafer

Expansion Strategy of SiC Wafer Business

**Global Top Manufacturing Capacity**

- ✓ Achieve global top level of productivity and quality, leveraging Siltron's competencies in wafer mass production
  - Defect Rate: Improved -70% compared to '19 (Industry top level)
  - Productivity: Improved +140% compared to '19

**Timely Capacity Expansion**

- ✓ Build a new fab ahead of peers to preoccupy the market
  - '21~'25 Total investment value \$0.6B
  - Production Capacity : '21 30k →'25 600k/yr
  - ※ On-going discussions with major customers for large scale LTAs

**200mm Market Pioneer**

- ✓ Expedite the development and mass production of 200mm, collaborating with semiconductor customers
  - '21 Development of Prototype → '23 Start high volume manufacturing

	2021	2025
Revenue / EBITDA (M/S)	USD 26 M / - (5%)	USD 0.43 B / 0.17 B (26%)

(in USD)



4 • Investment Plan by Segment [ ② Power/Compound Semiconductors (2/2) ]

Soar to Global Top Compound Semiconductor Player, based on SiC wafer technology and group-wide competencies in Semiconductor/ EV Battery Area

	Investment Size	Capacity
	(in USD)	
	('21~'25)	('21→ '25)
SiC Wafer	0.60 B	30K/yr → 600K/yr Global Expansion (M/S, 5% → 26%)
Power/Compound Semiconductor	0.3 B	2K/yr → ~85K/yr Supplying Global OEM, Global Epi-Chip JV
Total Investments	~0.9 B	

Financial Target

“ The only player with integrated domestic value-chain of semiconductor for EV “

(in Billions of USD)	2021	2023	2025
Revenue	0.03	0.27	0.87
EBITDA	-	0.10	0.35
- SiC Wafer	-	0.07	0.2
- Power/Compound Semiconductors	-	0.03	0.2



Portfolio

- SiC Wafer
- SiC Chip
- GaN on SiC
- VCSEL
- 200mm SiC Wafer
- Ultra high power semiconductors

※ Consolidated financial figures of SK Siltron/ Global JV, and stake in YPTX (34%) included

## 4 • Investment Plan by Segment [ ③ Battery Materials (1/2) ]

« **Develop next-generation Battery Materials business that seamlessly integrates value chain of battery materials** »

### [ Existing Business ]

<b>Copper Foil</b> (Wason)	<input checked="" type="checkbox"/> Expanding capacity ahead of peers, using the strong market position in China (M/S ~30%) and cost-competitiveness <ul style="list-style-type: none"> <li>• #1 in cost competitiveness (-15% compared to competitors)</li> <li>• Production Capa. : 50K tons/yr in '21 → ~150K tons/yr in '25</li> </ul>
<b>Next-generation Li Battery</b> (Solid Energy)	<input checked="" type="checkbox"/> Fostering next-generation Materials Tech via timely investments <ul style="list-style-type: none"> <li>• A next generation battery maker with Li-Metal technology (1.6 times higher energy density vs. conventional battery)</li> <li>• Signed JDA with and received investment (\$200M+) from global OEMs (e.g. HMC/GM/BMW)</li> </ul> <p>※ Preparing for SPAC IPO in the US (~ 4Q, '21. Current Expected Valuation \$3.3B) → SK Inc.'s total investments of \$61M (Equity ownership of 11%)</p>
<b>Copper Foil</b> (SKNX)	<input checked="" type="checkbox"/> Expanding global footprint and improving product quality <ul style="list-style-type: none"> <li>• Maintaining tech leadership in ultra thin/ wide copper foil</li> </ul>

### [ Target Business ]

<b>Next-generation Anode Materials</b> (G14 JV)	<input checked="" type="checkbox"/> Establish JV that manufactures Si Anode Materials <ul style="list-style-type: none"> <li>• World's first to mass-produce porous Si-C anode materials ('23)</li> </ul>
<b>Next-generation Cathode Materials</b> (Global JV)	<input checked="" type="checkbox"/> Establish JV that manufactures High-Ni Single Crystalline Cathode Materials <ul style="list-style-type: none"> <li>• Joint Venture with a market leader that has breakthrough technologies</li> </ul>
<b>Future Materials</b>	<input checked="" type="checkbox"/> Develop and cultivate next-generation battery materials technology <ul style="list-style-type: none"> <li>• e.g.) Tech JV (e.g. CNT)</li> </ul>
<b>EV Charger</b> (Signet EV)	<input checked="" type="checkbox"/> Dominate the EV-Infra market by acquiring the market leader <ul style="list-style-type: none"> <li>• Potential synergy with existing SK business (e.g. Fueling stations, T Map, car rental co.)</li> </ul> <input checked="" type="checkbox"/> Develop a new type of charger (combining ESS and/ or robot charging) <ul style="list-style-type: none"> <li>• Utilize Power Semiconductor and Battery business assets to maximize synergy</li> </ul>



	'21		'25
Revenue / EBITDA	0.17 B / 0.04B	→	0.61 B / 0.17 B

	'21		'25
Revenue / EBITDA	0.09 B / 0.01 B	→	2.09 B / 0.61 B

※ Includes Wason, SES' financial performance (excluding SKNX)

(in USD)

Anode Materials

Tech Trend

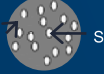


- ✓ Robust demand for Si Anode Material is expected, due to increasing demand for higher energy density
  - Si anode materials market : \$0.1B('20) → \$5.3B('30), CAGR +43%

○ Anode Materials Comparison ○

	Graphite	Si
Capacity (mAh/g)	360~365	1,300~2,000
Price (\$/kg)	7~10	50~100
Advantage	Low price	High capacity

Partner's Capabilities (G14 (US))

- ✓ Products with higher energy density and longer life cycle compared to competitors', due to G14's best-in-class technology
  - Drop-In Porous Si-C composite materials that enable lower particle expansion, higher mix of Si, longer life, and higher capacity

	SiOx	Carbon Coated Si	Porous Si-C
Structure	SiO2  Si	Carbon coated  Si	Free volume space  Porous carbon Silicon filling
Capacity	-	+25%	+40% + α
Si Mixture Portion	~10%	~15%	~30% + α

Commercialization Biz Model

- ✓ SK-G14 JV was established ('21), which will become world's first to mass produce porous Si-C Anode material
  - Construction complete in '22, Mass production expected to start in '23



Cathode Materials

Tech Trend

- ✓ To increase energy density, more nickel and less cobalt are being used
  - However, it is difficult to maintain battery's molecular structure, and likely for Cathode Material Crystalline to collapse during production → This can lead to decreased life and stability of the product

- ✓ Single-crystal Cathode Materials can solve the life span/ stability issues
  - Single-crystal Cathode Material market : \$1.4B('22) → \$29.5B('30), CAGR +46%

○ Polycrystalline vs. Monocrystalline ○

	Polycrystalline	Monocrystalline
Capacity	Low	High (apprx. 30% higher than polycrystalline)
Stability	Poor (High gas emissions)	Good (Low gas emissions)
Life span	Poor	Good
Shape		

Strong Partner

- ✓ Capabilities regarding High-Ni Single-Crystalline Cathode Material and mass-production have been validated
  - A market leader of NCM type products, which has large battery customers

Commercialization Biz Model

- ✓ Establish manufacturing JV in Korea to supply Single-Crystalline Cathode Materials to customers in KR, US, and EU
  - JV agreement to be finalized and construction starting in Q4 of '21
  - Mass production expected to start in '23

4 • Investment Plan by Segment [ ③ Battery Materials (2/2) ]

<<
 Growing to become Global Top Battery Materials Player
 with fully integrated value chain of next-generation battery materials
 >>

	Investment Size	Capacity
(in USD)	('21~'25)	('21→ '25)
Wason	1.0 B*	50K tons → ~150K tons/yr - Capa. Expansion in China with focus on Chinese major customers
Si Anode Materials (G14 JV)	0.5 B	- → ~4K tons/yr - Construction completion('22) / World's first mass production ('23)
Next-gen Li Battery (Solid Energy)	-	Mass Production Targeted in '25 - Cell performance ('23)/ Mass-production ('25)
Next-gen Cathode Materials	0.6 B	- → ~50K tons/yr - Domestic production facility & Global expansion
Signet EV (Fast Charging)	0.3 B	3.5K → ~35K/yr - Improving productivity/ Building of global sites
<div> <div></div> <div>Total Investments</div> </div>	~2.4 B	

\* Investment made by Wason

Financial Target

“Creating winning solutions in critical Battery Materials sector  
 based on collaboration with market leaders

(in Billions of USD)	2021	2023	2025
Revenue	0.26	1.48	2.70
EBITDA	0.05	0.26	0.78
- Copper Foil (Wason)	0.04	0.09	0.17
- Anode/Cathode Materials JV	-	0.09	0.43
- Charger Business	0.01	0.09	0.17

Copper Foil High-speed Battery Charger

+

Si Anode Materials Next-gen Cathode Materials Next-generation Charger

+

Li Materials, Conductive Additive

※ Consolidated financial figures of SK Signet/Global JV + and share stake in Wason (30%) included  
 (excluding SKNX)



# 5 • Expected Benefits of SK Inc. - SK Materials Merger (On-going)

## Background



Global Competitive Landscape

- Value of Semiconductor and Battery Materials technology has been rising, due to increasing difficulty in tech migration
  - EBITDA multiple of Global Materials and Equipment manufacturers : 7X ('10)→ 17X ('20)
- Materials industry consolidation is gathering pace
  - Merck-Versum, ShowaDenko- Hitachi ('20)
  - GlobalWafers' acquisition of Siltronic (in progress, '21)



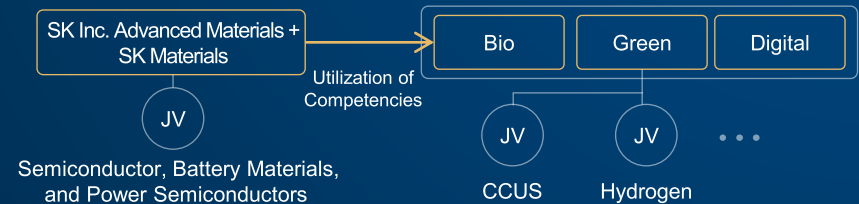
Consolidated capabilities of SK Inc. & SK Materials

- More investment resource and capabilities
  - Size of assets : SK Inc.: USD 130B vs. SK Materials: USD 1B
- Integrated investment and business expertise
  - (SK Inc.) Global investment – (SK Materials) Manufacturing/ Synthesizing / Analyzing



Spill over of Manufacturing Competencies into SK Inc.




- SK Inc. to realize its new growth options, utilizing SK Materials' strengths in manufacturing



## Expected Benefits

SK Inc. will grow to Global Top Semiconductor and Battery Materials player via execution of bold and proactive investments based on business acumen and leveraging our integrated investment competencies

### Portfolio Roadmap

	2021	2025
 Semiconductor Materials	Si Wafer	Specialty Gas
	Bulk Gas	Precursor
	Etching Gas	
 Power/Compound Semiconductors	SiC Wafer (150mm)	Power Semiconductors
		SiC Wafer (200mm)
		GaN on SiC
 Battery Materials	Copper Foil	
		Next-gen Anode Materials
		EV Charger
		Advanced Packaging Materials
		OLED Materials
		Next-gen Precursor
		Power Semiconductors (EV)
		VCSEL
		Next-gen Cathode Materials
		Conductive Additive (CNT)

## 6 • Long Term Goals: Aspiration for Growth

« Growing to become Global #1 Advanced Materials company with total investment value of USD 22B by 2025 by developing a highly attractive Business Portfolio including Semiconductor, Battery Materials, and Power Semiconductor »

### SK Inc. Advanced Materials Growth Drivers



Capabilities of executing cross-border, bulge bracket investments and of connecting the dots among existing businesses



Robust product portfolio and technology in the areas of rapidly growing Semiconductor, Battery, and Power Semiconductors



Business Portfolio Readiness with a healthy number of investment and collaboration targets in the pipeline

### SK Inc. Advanced Materials Financial Target

Global Expansion



Accelerating Inorganic Growth



Proactive Investment In Next-gen Technology

Total Investment Value\*

7 B



14 B



22 B

EBITDA

Battery Materials Power Semiconductors Semiconductor Materials

in billions of USD

2.96 B

0.78 B

0.35 B

1.83 B

0.96 B

0.09 B

0.96 B

1.74 B

0.26 B

0.96 B

1.39 B

'21

'23

'25

※ SK Inc.'s Total Investments (~'25) : 5.1 B (Consolidated-basis)

\* SK Inc. Total Investment Value : Net Asset Value that reflects all of the shares directly held by SK Inc.  
- EV/EBITDA('25E) : Semiconductor Materials 10X/ Power Semiconductors 15X/ Battery Materials 15X