

# CHINA STEEL CHEMICAL CORPORATION (1723)

**Investor Conference** 

March 2023





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- This presentation may contains forward-looking statements. All statements other than historical and current fact, without limitation, including business outlook, predictions, estimates, are forward-looking statements.
- Such statements are based upon management's current beliefs and expectations and are subject to various risks, uncertainties and other factors that could cause actual outcomes and results to differ materially.
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#### Recap of Recent Major Events

- CSCC Board of directors approved the investment in a second line of graphitization furnaces at the Pingnan Carbon Materials Plant.(2022/05/05),estimated completion date is second quarter 2024.
- CSCC Board of directors approved the setup of the halogen purification furnace to facilitate development of highly pure carbon materials. (2022/08/03), estimated completion date is second quarter 2023.
- CSCC Board of directors approved to suspend capital injection to Formosa Ha Tinh Steel Corporation (FHS).(2022/08/03)
- CSCC Board of directors approved to cancel joint venture collaboration agreement with Formosa Ha Tinh Steel Corporation (FHS).(2022/12/28)
- CSCC Board of directors approved the investment in a second line of carbonization furnaces at the Pingnan Carbon Materials
   Plant.(2021/05/06), the project has been completed and accepted.





## **Agenda**

Profile 2 Operating Performance 3 Sustainable Development 4 Performance Development













## 1 · Profile





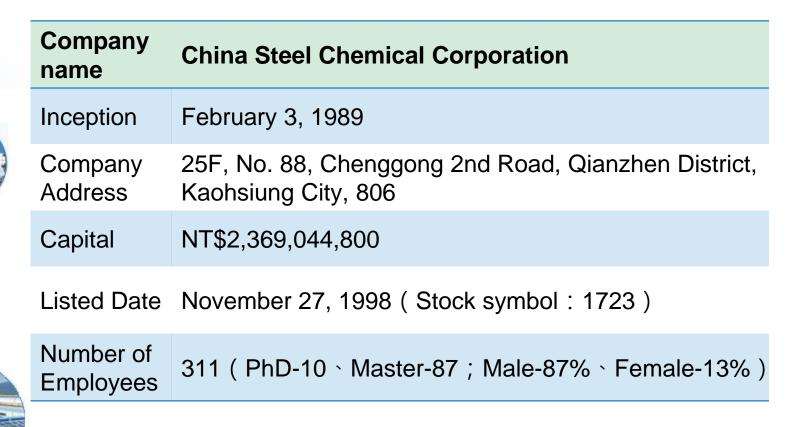








## **Basic information**



the only coal chemical company with Graphitization Furnace in Taiwan





#### The structure of shareholder

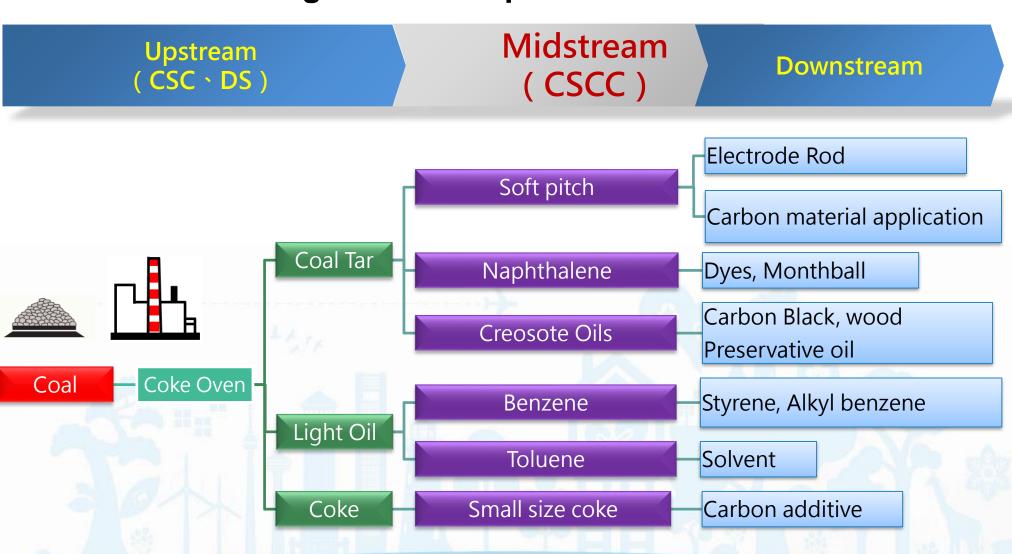
Major shareholder	Percentages
China Steel Corp.	29.04%
Fubon Life Insurance Co., Ltd.	5.31%
International CSRC Investment Holdings Co., Ltd.	4.96%
Ever Wealthy International Corp.	2.01%
Chi Cheng Teh Invstment Co., Ltd.	1.46%

**As of**: July 11,2022



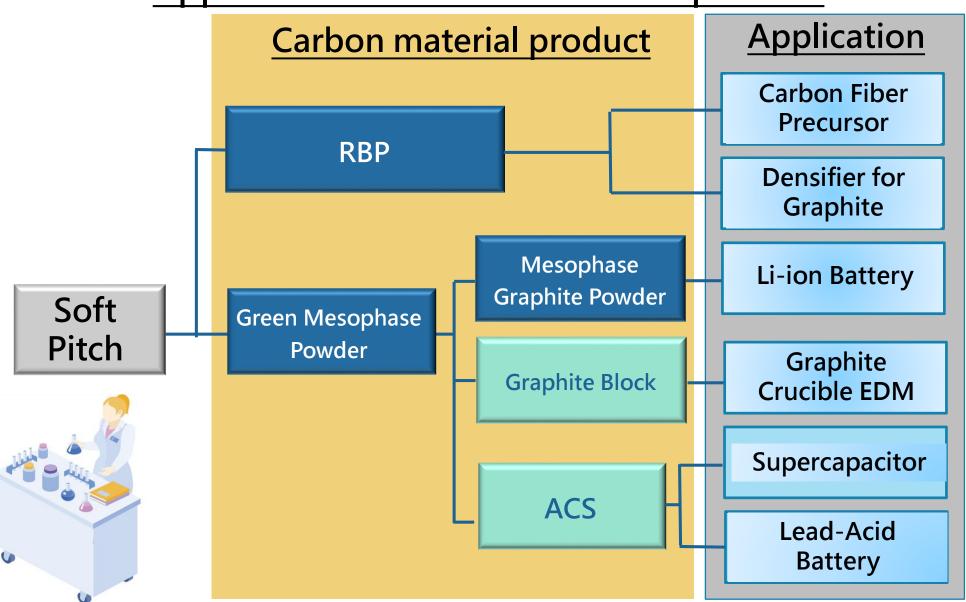


#### The Relating Product Map of Coal Chemical Industries





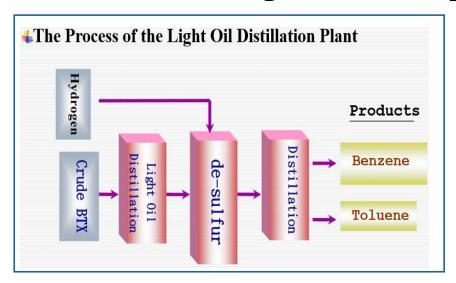
#### **Applications of Carbon material product**

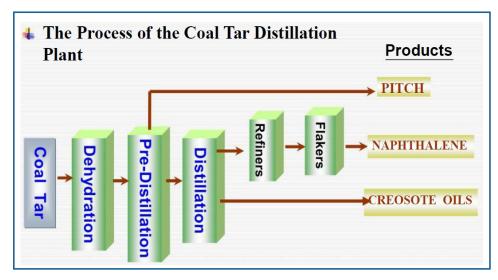


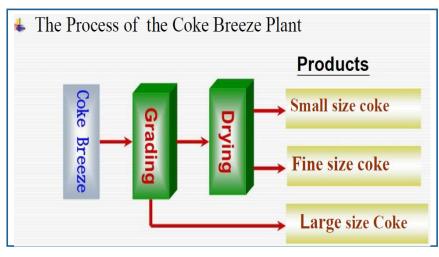


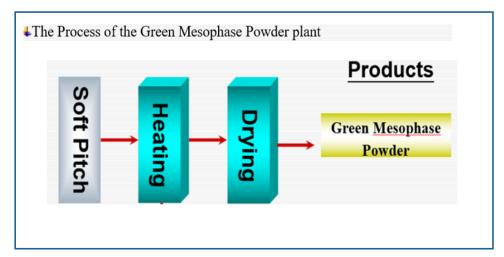


#### The Relating Product Map of Coal Chemical Industries





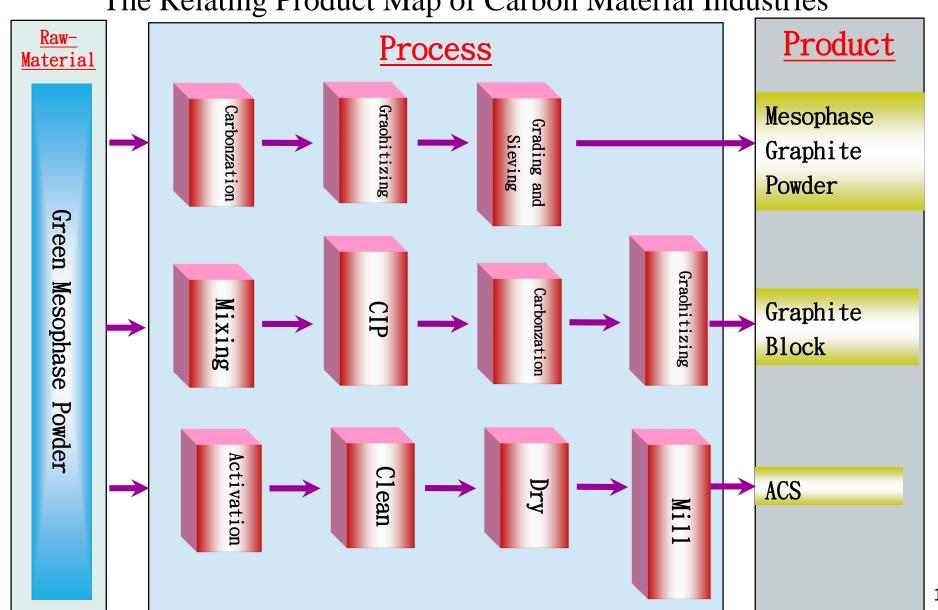








The Relating Product Map of Carbon Material Industries







# 2 · Operating Performance







## Raw material inputs

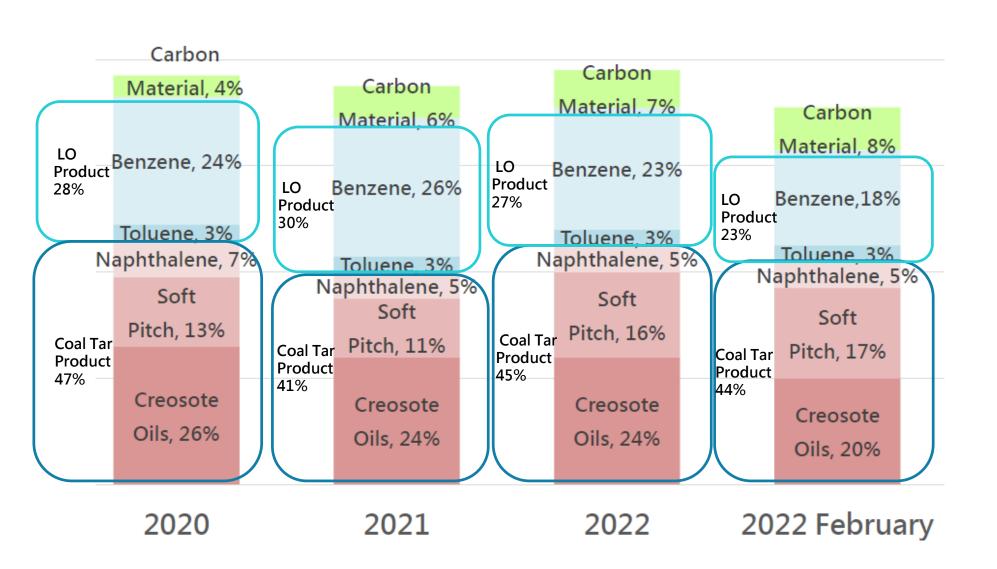
Unit: ten thousand metric tons

Light Oil	Light Oil	Light Oil	
11.6	10.9	10.62	
Coal Tar	Coal Tar	Coal Tar	Light Oil
26	25.2	24.47	Coal Tar 3.7
2020	2021	2022	





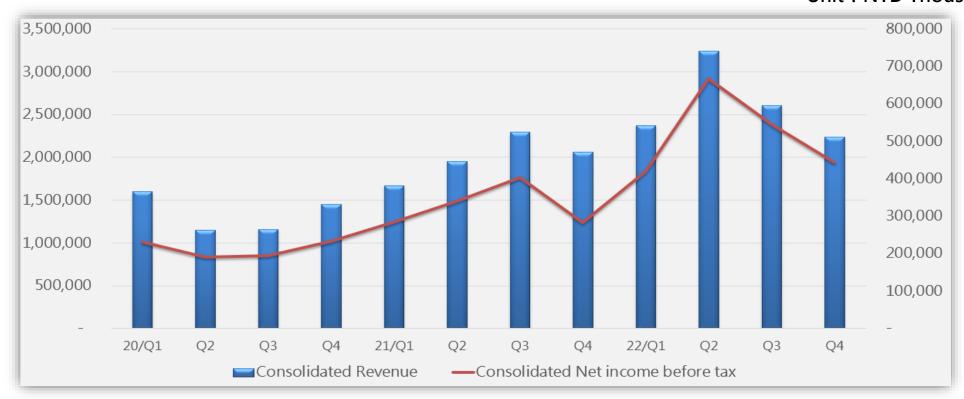
#### Revenue breakdown by products in the past three years







# Consolidated Revenue and Net income before tax in the past three years Unit: NTD Thousand



	2023	2023
	January	February
Consolidated Revenue	672,027	839,791
Consolidated Net income before tax	71,886	208,988

<u>2022</u>

Revenue: 10,459,797; Net income before tax: 2,078,103

**2023 January to February** 

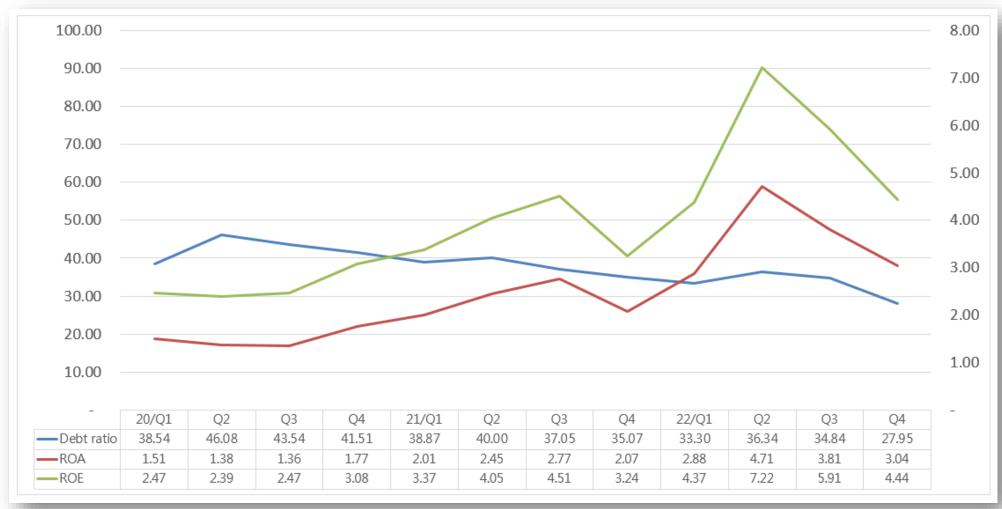
Revenue: 1,511,818; Net income before tax: 280,874





## Major financial indicator

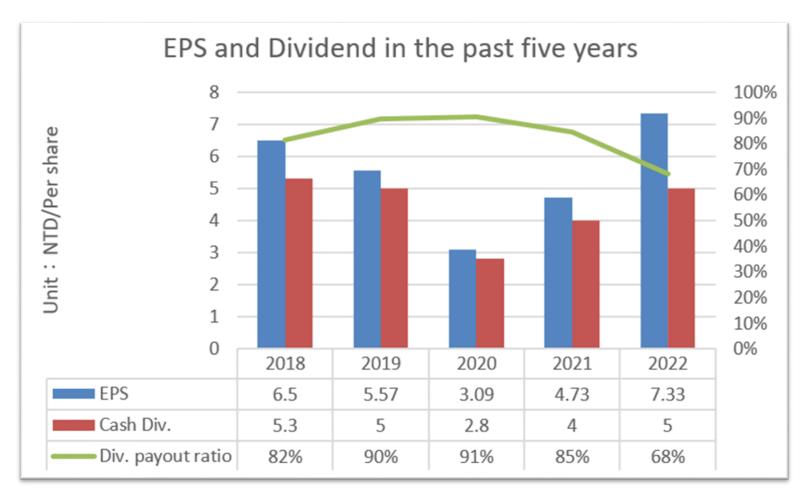








#### **Dividend Policy**



<sup>\*</sup>The appropriations of earnings for 2022 are subject to the resolution in the shareholders' meeting to be held in June 2023.





# 3 · Sustainable Development





## **Energy saving and carbon reduction**

**Energy management** 

Water resources management Air pollution reduction

**Carbon Neutrality** 









<b>Cumulative average</b>
electricity saving
rate

Water/Waste water use intensity

Air pollution reduction

Greenhouse gas reduction

Short-term
goals
(2023)

2015~2022>1% Red

Reduce by 1% on average

Reduce sulfur oxide (SOx) emissions to less than 5 tons per year Reduce greenhouse gas emissions (Scope 1 and 2) by 2% with 2021 as the base year

Medium-term goals (2024-2027)

2015~2027>1.05%

Reduce by 1.5% on average

Reduce SOx emissions to less than 3 tons per year Reduce NOx emissions to less than 20 tons per year Reduce greenhouse gas emissions (Scope 1 and 2) by 2% with 2021 as the base year

Long-term goals (2028~)

2015~2032>1.1%

Reduce by 2% on average

Reduce nitrogen oxide (NOx) emissions to less than 15 tons per year

Reduce greenhouse gas emissions (Scope 1 and 2) by 5% with 2021 as the base year





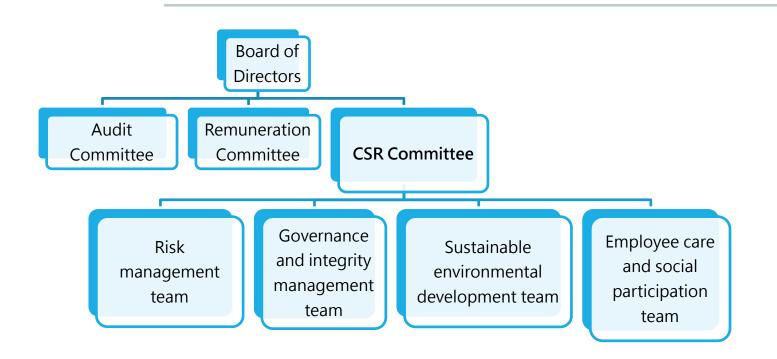
#### **Coporate governance Evaluation**

#### Governance

According to corporate governance evaluation results, CSCC was in the top ten percent(10 billions market value).

CSCC was involved TWSE Corporate Governance 100 index.

To establish Sustainable Development Committee.









# **ESG** Awards

SGS-2019 Elite Award TCSA - 2019

Taiwan Corporate
Sustainability Award

Gold Award from TCSA (2019~2022)

Annual Enterprises Protection Award-2022



Awarded TIPS Level A Patent and certification



Commence the introduction of the Task Force on Climate related Financial Disclosures( disclose guide for financial information in CSR report.

Awarded Badge of Accredited Healthy Workplace

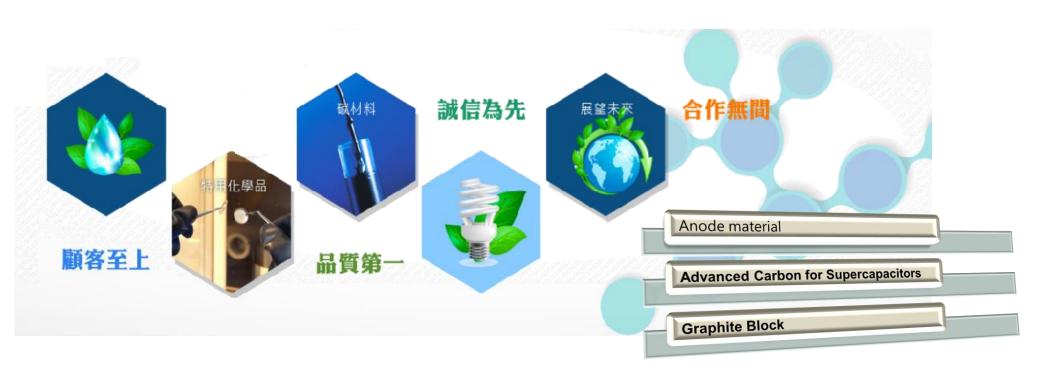
Sustainability Linked Loan

Top 100 Carbon materials competitiveness on Business Weekly





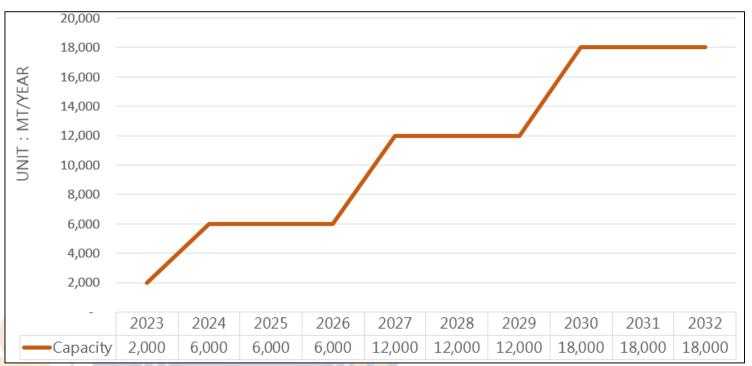
## 4 · Future Development





## Carbonization Furnaces Expansion

(Estimated) Schedule	Now	2024	2027	2030
(Estimated)Capacity	2,000 MT Per	4,000 MT Per	6,000 MT Per	6,000 MT
	Year	Year	Year	Per Year





#### CSCC's Meso-Graphite

Application: High Energy & Power density in LIB

Feature: High first columbic efficiency, high energy density, high discharge capability and long cycle life.

Energy Density(Wh/Kg):Low High

Power Density(W/Kg):Strong Low

MG10 MG11 MG08 FMGP

GP MG12

**MG13** 

PT/HEV

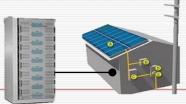
EV/ESS

Tablets/3C





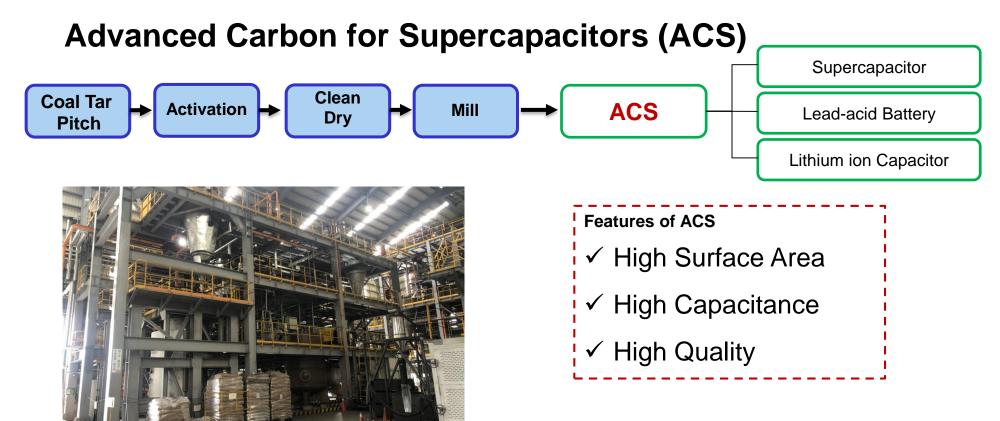












ACS annual production capacity is 90MT/year

#### Applications of Supercapacitors

- Supercapacitors have high efficient charge and discharge characteristics. Cycle life is more than twenty thousand times.
- High power discharge application

#### **Light Rail Transit**

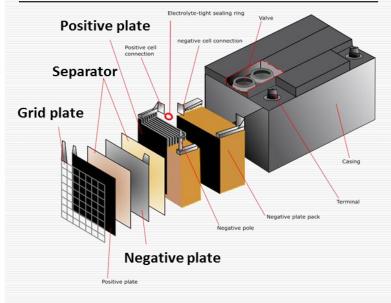


#### Wind turbine



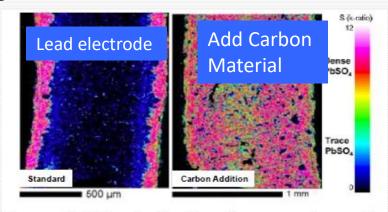
#### Introduction of Advanced Lead-Acid Battery

#### **Structure of Lead-Acid Battery**



Advantages of addition activated carbon into LAB

- 1. Increasing conductivity
- 2. Improving the uniformity of Pb/PbSO<sub>4</sub>
- 3. Capacitance effect
- 4. Low amount of maintenance
- 5. Extending the life of LAB



Elimination of hard sulfation by carbon additions, allowing more complete usage of the battery (both images are from cells at end of life). Fernandez et al., 2010.

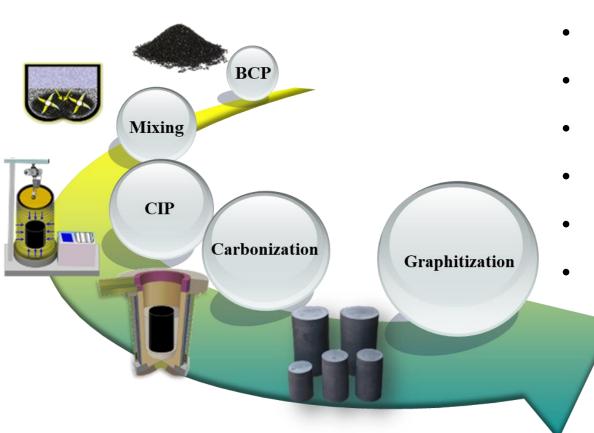
Source: Pavlov D., Lead-acid Batteries: Science and Technology. Elsevier, 2011.







## **Graphite Block**



- Thermal and Chemical Resistance
- High Thermal Conductivity
- High Purity
- High Density
- Fine Structure
- Homogeneous





#### **Graphite Block Application**





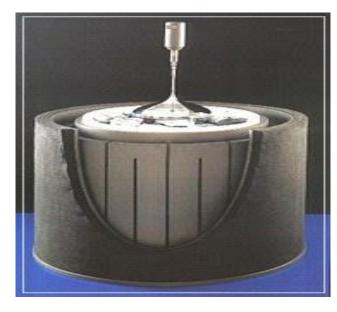


**Continuous Casting** 

Graphite Block for large Size (>30cm) EDM continuously study high-end product.

**EDM** 

3D Glass Mold
Being verified by
customers.



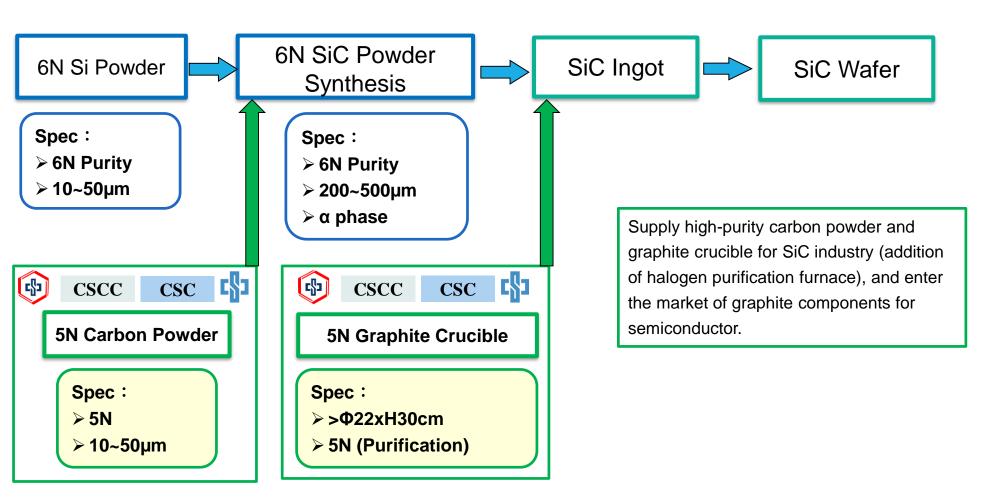
#### **Crucibles**

Graphite crucible for SiC industry are being verified by customers.





#### Carbon Material for Compound Semiconductor (SiC)







# Our Vision









