### Tokai Carbon Acquisition of U.S. Carbon Black Manufacturer Sid Richardson Carbon, Ltd.

June 26, 2018

Tokai Carbon Co., Ltd. Hajime Nagasaka, President & CEO

### Introduction

The decision was made at today's meeting of the Board of Directors to acquire Sid Richardson Carbon, Ltd. and its two affiliated companies and we have signed an agreement for an interest transfer. We will go forward with contract procedures and will take the steps necessary for approval under competition laws by the appropriate regulatory authorities. Ultimately, we expect to complete the acquisition of all interests in the company (closing) by early September 2018.

This acquisition represents a strategic investment that is part of Tokai Carbon's growth strategy under the Mid-Term Management Plan T-2018. It is especially important for us to establish a global production and sales system by advancing into the carbon black business in non-Asian regions.

This presentation explains the background and our company's goals with respect to this acquisition, and we hope that it will be an aid to your understanding of its significance.

Data about economic conditions, trends in product demand, and other information contained in this presentation is based on information obtainable as of the date on which these materials are presented and may change significantly according to a variety of factors in the future.

### **Overview of the acquisition**

Company to be acquired	Carbon black manufacturer Sid Richardson Carbon, Ltd. (SRC) (headquarters in U.S.) and its two affiliated companies
Acquisition price	¥34.1 billion <sup>*</sup>
Financing	Bank loans (Planned)

\* Calculated at ¥110 to one U.S. dollar. The actual acquisition price will be the price adjusted at the time of acquisition of the interests as specified in the purchase agreement.

### Summary of today's presentation



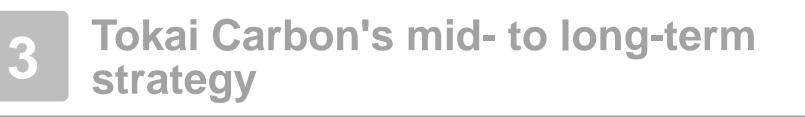
2 The carbon black business in North America

**3** Tokai Carbon's mid- to long-term strategy

4 The significance of this acquisition (summary)









### **Overview of Sid Richardson Carbon, Ltd. (SRC)**

Company name	Sid Richardson Carbon, Ltd. (SRC)						
Date of establishment	February 1993 (in business since 1947)						
Business units	Head office:Fort Worth(Texas)Manufacturing locations/Annual production capacity:Borger(Texas)170KTBig Spring(Texas)115KTAddis(Louisiana)155KTResearch laboratories:Fort Worth(Texas)Sales office:Akron(Ohio)						
Business results	Year ended December 2017 (actual): Sales \$311.9 million EBITDA \$37.6 million Year ending December 2018 (plan): Sales \$386.6 million EBITDA \$50.0 million						
Number of employees	Approximately 350						
Description of business	Furnace black manufacture, sales, research & development						

# **History of SRC**

1947	Founded for the purpose of developing the West Texas Keystone oilfield
1948	Channel black plant in Odessa, Texas acquired
1961	Big Spring Plant built in Texas
1970	Addis Plant built in Louisiana
1972	Research laboratories built in Fort Worth, Texas
1986	Borger Plant in Texas acquired from Phillips Petroleum

# Carbon black capacity in U.S.

- No.1 supplier in the U.S.
- SRC has 3 plants in North America centered around leading tire manufacturers

(thousand tons)

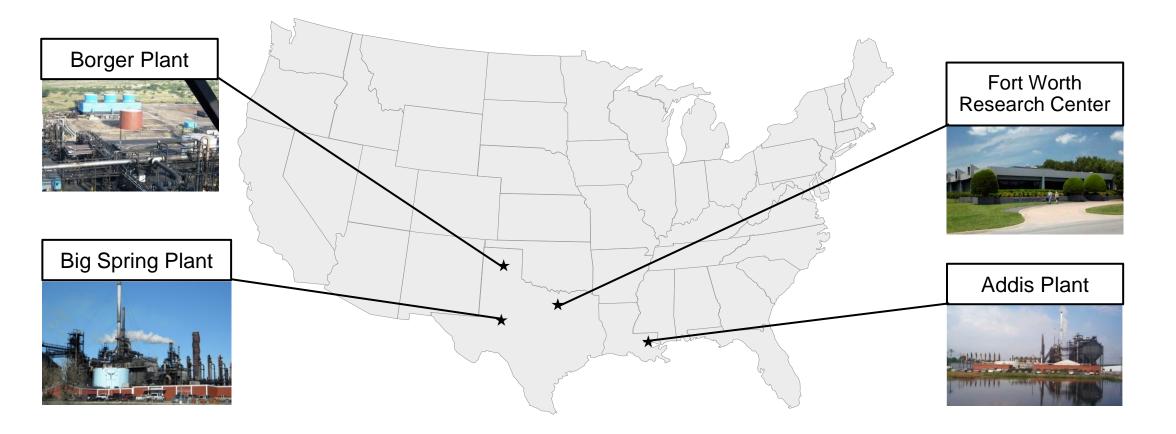
	Company name	U.S. Annual Production Capacity	U.S. No. of Plants
1	Sid Richardson Carbon (SRC)	440	3
2	Cabot	380	3
3	Orion Engineered Carbons	370	4
4	Continental Carbon (Group member of CSRC)	305	3
5	Columbian Chemicals (Group member of Birla Carbon)	230	2

\* Carbon Black Association data and Tokai Carbon estimates

\* Continental Carbon is a subsidiary of CSRC. Columbian Chemicals is a subsidiary of Birla Carbon

# **Features of SRC**

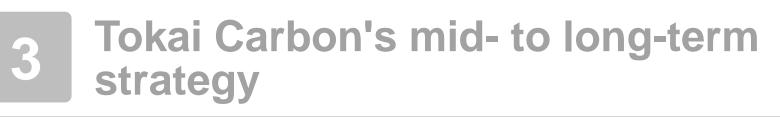
- Possesses 3 production sites and a Research Center in the important U.S. market
- SRC has an excellent customer base including leading tire makers Bridgestone, Michelin, Goodyear and Continental
- World-class efficient production system backed by state of the art facilities
- Cutting-edge technology of utilizing lighter feedstock oil





# About Sid Richardson Carbon

### 2 The carbon black business in North America

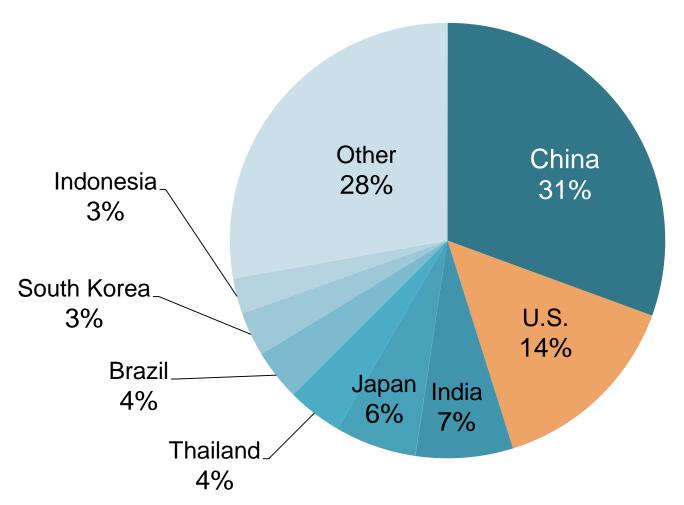




The significance of this acquisition (summary)

### U.S. is the second largest market in the world

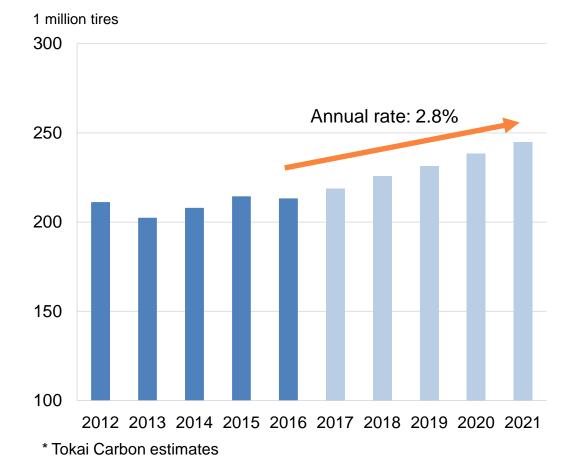




\* Tokai Carbon estimates

# Forecast for tire production in North America

- Many tire manufacturers have announced capital spending plans and the 5-year growth rate (forecast) is around 3% per year
- Forecast for tire production volume (North America)

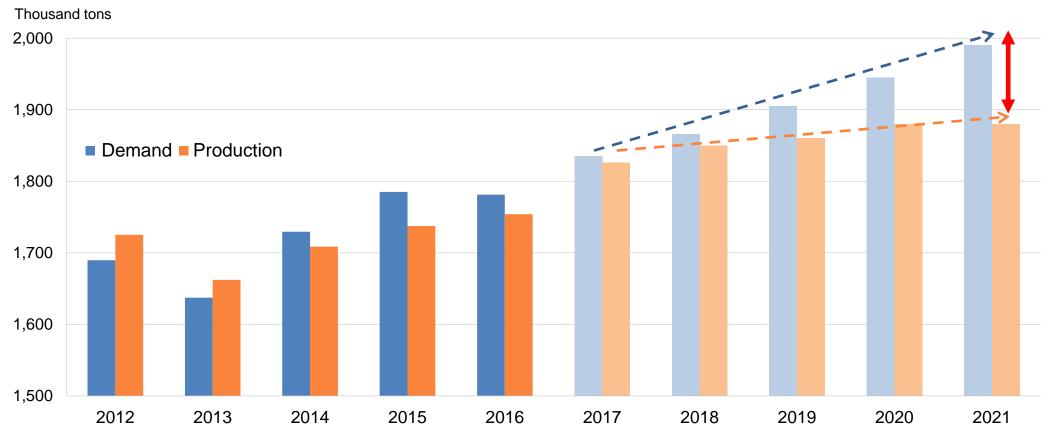


 Main capital spending plans of North American tire manufacturers

Company name	Head Office	Amount (1 million USD)	Period
Continental	Germany	1,400	2019-2022
Wanli Tire	China	1,000	2020-2025
Hankok Tire	Korea	800	2016-2018
Giti Tire Group	Singapore	560	2018-2019
Qingdao Sentury	China	530	2019-2023
Michelin	France	510	2018-2020
Continental	Germany	500	2014-2021
Bridgestone	Japan	344	2016-2026
Goodyear	U.S.	300	2018-2020

# **Demand forecast in North America**

- The gap between supply and demand in North America is expected to expand
  - While demand is expected to grow steadily, production capacity is expected to be maxed out
- North American carbon black supply and demand balance



\* Tokai Carbon estimates

# High barriers to enter into the North American carbon black market

#### Trend toward more stringent environmental regulations

- Based on the Clean Air Act in 2007, the EPA (United States Environmental Protection Agency) required that the five furnace black manufacturers with production operations in the U.S. make capital investments to meet environmental regulations (off-gas cleaning equipment, etc.)
- With Cabot in November 2013, Continental in March 2015, SRC, Orion and Columbian in December 2017, each reached agreements on standards for fines and capital investment
  - SRC fines: \$999,000 (2018)

Spending on environmental technology: Approximately \$490,000 (2018-2021) Additional capital spending: Approximately \$100 million (2018-2023)

(web link) https://www.epa.gov/enforcement/sid-richardson-carbon-and-energy-company-clean-air-act-settlement

In practice, it is difficult to build new carbon black plants in the U.S.



# About Sid Richardson Carbon

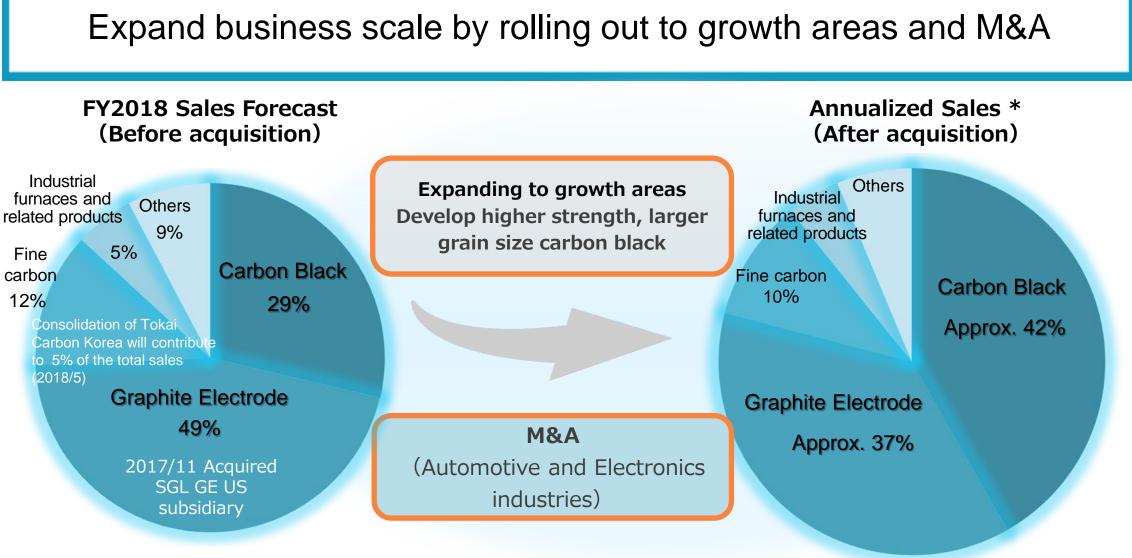
The carbon black business in North America

**3** Tokai Carbon's mid- to long-term strategy



The significance of this acquisition (summary)

### In the context of the Mid-Term Management Plan



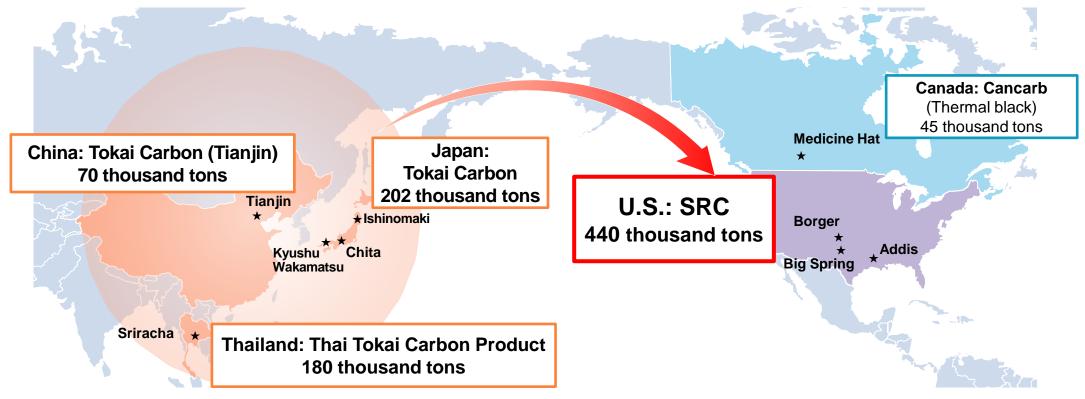
#### ¥204.0 billion

#### Approx. ¥250.0 billion

\*The sales contribution of the acquisition will be only for the term after closing of FY2018

# Expanding carbon black business domains

- Tokai Carbon has already established its position as a leading company in Asia
- Essential factor to expand the business domains was to expand to non-Asian markets (Carbon black is not suitable for export due to its low bulk density and higher freight cost)
- North America is a particularly important market with strong demand. Many Japanese tire manufacturers have also moved into this market for producing tires.
  - Tokai Carbon moved into North America in 2014 with the acquisition of Cancarb of Canada in the thermal black\* market.
- The global deployment of Tokai Carbon's carbon black business

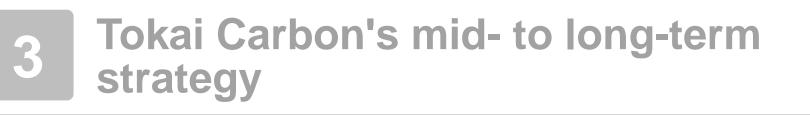


\* Thermal black: Produced from natural gas. Thermal black has a larger grain size than furnace black, and is used in the manufacture of rubber products for automobiles.



# About Sid Richardson Carbon





4 The significance of this acquisition (summary)

### Establishing a presence as a global player

As a result of this acquisition, Tokai Carbon will effectively become the fourth largest player in the global market (thousand tons)

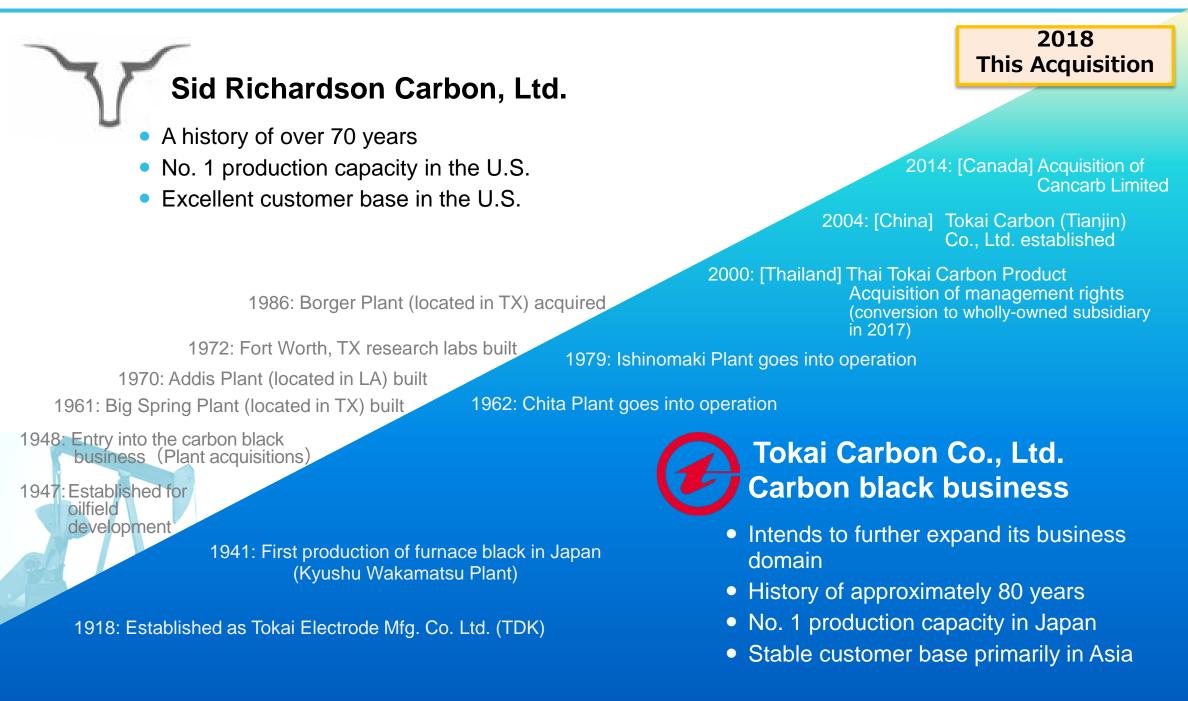
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	Company name	HQ	No. of Plants	Annual Production Capacity
1	Cabot	U.S.	19	2,130
2	Birla Carbon	India	17	2,010
3	Orion Engineered Carbons	Luxembourg	14	1,295
4	Black Cat	China	8	1,145
	Tokai Carbon & SRC	Japan & U.S.	9	937
5	China Synthetic Rubber Corp.	Taiwan	8	810
6	OMSK Carbon	Russia	3	500
7	Tokai Carbon	Japan	6	497
8	Longxing Chemical	China	3	495
9	Phillips Carbon Black	India	4	472
10	Sid Richardson Carbon (SRC)	U.S.	3	440

\* Carbon Black Association data and Tokai Carbon estimates.

\* Continental Carbon is a subsidiary of CSRC. Columbian Chemicals is a subsidiary of Birla Carbon

\* Black Cat produces only in China. The actual production capacity is not clear

### The joining of forces between two historic companies



# Goals of this acquisition

#### Expand carbon black business domains

- Advance into non-Asian markets (Mid-Term Management Plan Policy)
- Contribute to Group sales
- Expand Tokai Carbon's automotiverelated business, which is a growth sector

- Through this acquisition, Tokai Carbon will effectively become #4 worldwide
- Build a global supply system for tire & rubber product manufacturers

#### Strategic investment in growth

Stabilize revenue base and enhance corporate value through expanded business domains

#### Gaining market share in North America

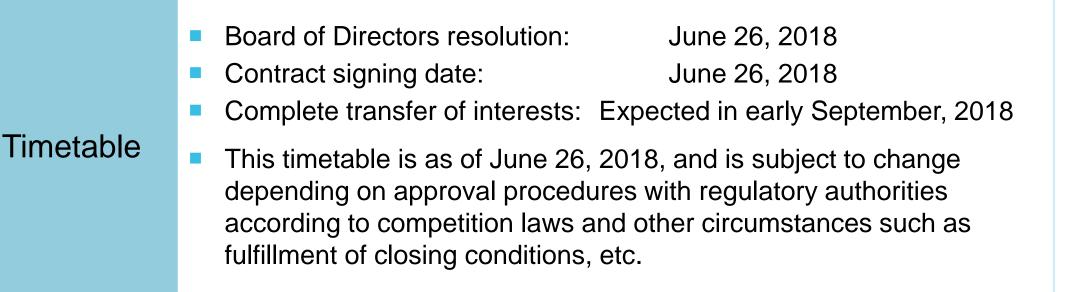
- Expand into the strong North American market
- Increase business opportunities with European and American leading tire manufacturers

- Enhance the supply of special grade carbon black to meet the various needs
- Share technology of efficient production backed by state-ofart facilities
- Share technology of utilizing lighter feedstock oil

#### Establish a presence as a global player

Technology synergies

### **Timetable / Impact on results**



	The impact on financial results for the year ending December 2018
Impact on	will be reviewed and will be promptly disclosed in the event of any
results	changes in performance forecasts or any other matters that needs
	to be disclosed.

### **Cautionary statement regarding future prospects**

The earnings forecasts and other forward-looking statements in this document are based on information obtainable at the time this document was published and assumptions as of the date of publication concerning elements of uncertainty that could affect future earnings.

Actual results may differ substantially, depending on various future factors. Factors that affect business performance include, but are not limited to, economic conditions, trends in product demand and market prices, and fluctuation in exchange rates.

For information about this acquisition: Corporate Planning Department Hajikano Tel.: +81-3-3746-5228

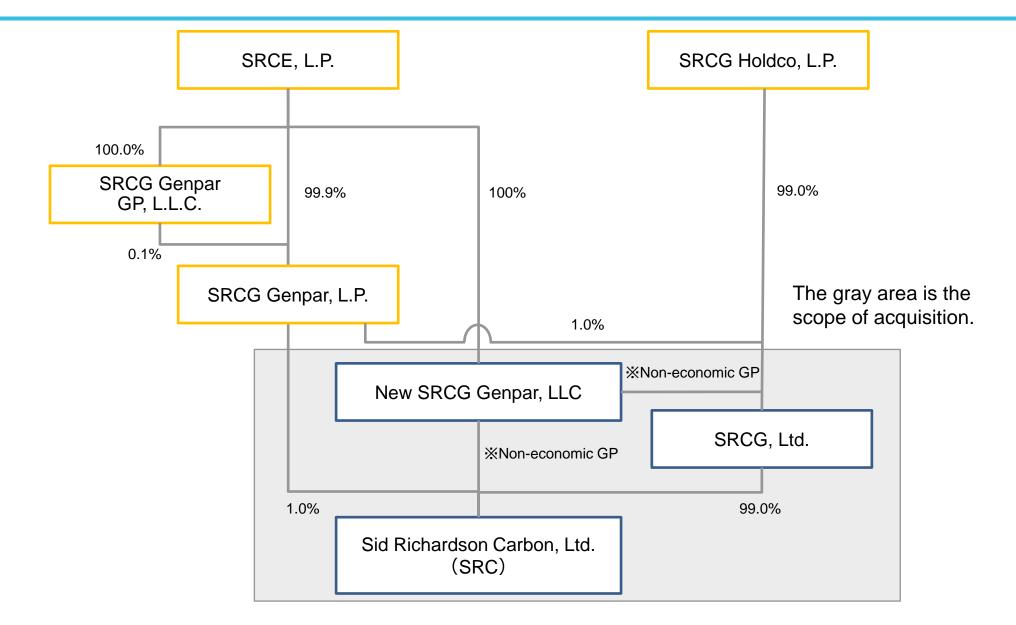
### **Reference Material** Establishing a presence as a global player

- As a result of this acquisition, Tokai Carbon will effectively become the fourth largest player in the global market
- Facilities and production capacities of the main furnace black players (after this acquisition)\*

		Production facility status			Production capacity			
Company name	HQ	China	Asia	North America	Europe	Other	No. of plants	Annual production capacity (KT)
Cabot	U.S.	0	0	0	0	0	19	2,130
Birla Carbon	India	0	0	0	0	0	17	2,010
Orion Engineered Carbons	Luxembourg	0	0	0	0	0	14	1,295
Tokai Carbon & SRC	Japan & U.S.	0	0	×→O	×	×	6→9	497→937
China Synthetic Rubber Corp.	Taiwan	0	0	0	×	×	8	810
Black Cat	China	0	×	×	×	×	8	1,145
OMSK	Russia	×	×	×	×	0	3	500
Longxing Chemical	China	0	×	×	×	×	3	495
Phillips Carbon Black	India	×	0	×	×	×	4	472

\* Production capacities and production facility status assume closing of this acquisition. Production capacities are based on Tokai Carbon assumptions and a total sum of existing production capacity. Birla Carbon includes its subsidiary, Columbian, and CSRC includes its subsidiary, Continental.

### Reference Material Acquisition structure



\*Non-economic GP is a person or entity that serves as a general partner for purposes of satisfying the State Partnership Law (including responsibility for general partner liabilities), but does not receive proportionate amount of the profits or losses of the partnership. Non-economic GP does not own any partnership interest of the partnership.