

# Business Overview

## Business Strategy

We are strengthening the competitiveness of our existing businesses and expanding the areas of business. We will continue to create future-oriented values as well as increase our financial soundness and profitability.



**Rational Investment**  
Focus on new growth engines such as the development of solar power plants while strengthening our existing businesses.

**Active Alliances with Our Partners**  
Seek opportunities for strategic alliances and partnerships to create a better and more competitive platform.

**Operation Scale Optimization**  
Achieve the best operating scenario based on demand and market conditions, the seasonal impact on manufacturing costs, and efficient management of working capital.

**Financial Structure Improvement and Ensuring Stable Demand**  
Carry out efficient management activities in the difficult business environment

### Installation of an ESS at the Gunsan Plant

We are installing an industrial ESS (Energy Storage System) at our Gunsan Plant for the cost efficiency in polysilicon production. The peak shaving ESS is a system that stores energy generated at night to use during peak times. In 2018, we plan to install 30MWh of ESS in conjunction with solar PV plants in Korea.

### Commercialization of the Hyundai OCI Carbon Black Plant

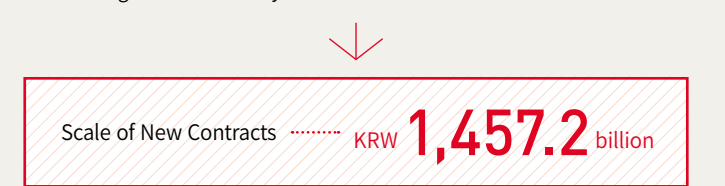
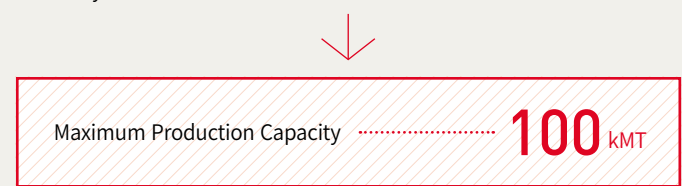
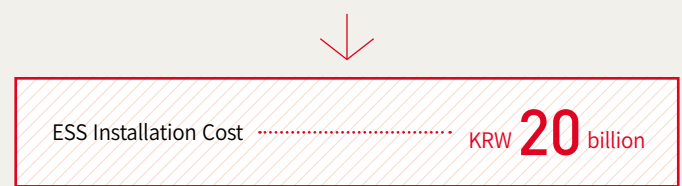
The Carbon Black Plant of Hyundai OCI in Daesan which is a joint venture of OCI and Hyundai Oil Bank was completed in October 2017. It is gaining competitive advantages based on Hyundai Oil Bank's ability to supply slurry oil and coal tar and OCI's carbon black production expertise. The carbon black plant has an annual production capacity of 100,000 tons and is expected to increase it to 150,000 tons by adding 50,000 tons of facilities within 2 years.

### Increase Polysilicon Production Scale

We acquired OCIM Sdn. Bhd. (formerly known as Tokuyama Malaysia Sdn. Bhd.) in May 2017. As a result, we have secured a strategic global production base and an effective annual polysilicon production capacity of 65,800 MT. We are working on the technology application and operation efficiency in Malaysia and its production will be optimized in the third quarter of 2018.

### Maintain financial stability and Sign Long-term Polysilicon Supply Contracts

OCI improved its financial structure by actively redeeming borrowings through improved earnings and monetizing assets. Recognized for our superior technology and supply capability of polysilicon for monocrystalline wafers, we signed polysilicon contracts with Longi and Jinko Solar in China worth KRW 1,457.2 billion, resulting in the stable demands for polysilicon produced. We will continue to promote efficient management activities, maintaining financial stability.



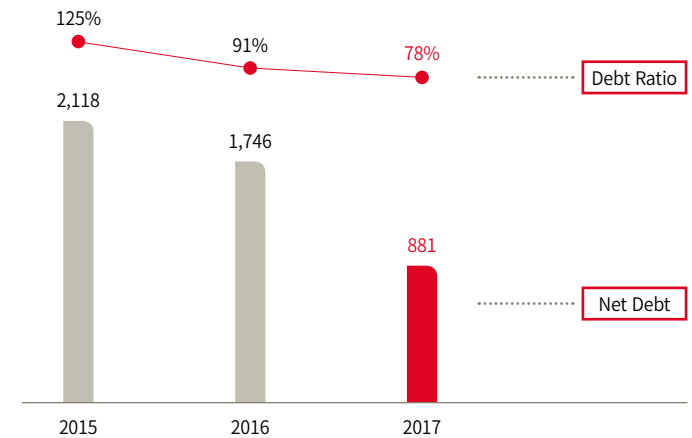
## Business Performance and Goals

We reached KRW 3,631.6 billion in sales revenue and KRW 284.4 billion in operating income in 2017 and improved our earnings due to favorable market conditions in carbon chemicals along with the acquisition of a polysilicon plant in Malaysia. In the solar PV business, we completed major overseas projects and resumed projects in Korea, leading to stable financial structure.

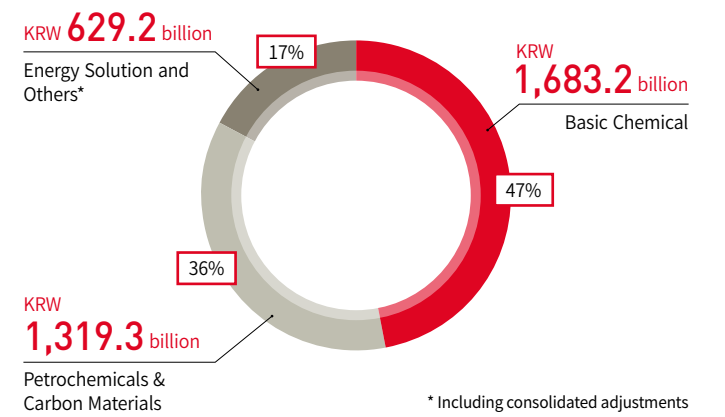
|                                    | 2017 Key Performances  | 2018 Goals   |
|------------------------------------|--|--|
| <b>Improve Financial Structure</b> | <ul style="list-style-type: none"> <li>Monetize the Alamo project (6, 6+)</li> <li>Create FCF (Free Cash Flow)</li> <li>Improve credit rating (A0 stable → A0 positive)</li> </ul>   | <ul style="list-style-type: none"> <li>Credit rating of A0 or higher</li> <li>Repay additional loans</li> </ul>  |
| <b>Growth of Core Businesses</b>   | <ul style="list-style-type: none"> <li>Acquisition of a polysilicon plant in Malaysia</li> <li>Operate MS OCI and OJCB at full capacity</li> <li>Launch a one-stop service for the solar PV business in Korea</li> </ul>   | <ul style="list-style-type: none"> <li>Effective production capacity of polysilicon by more than 69,000 tons</li> <li>Expand the carbon black business</li> <li>Solar PV EPC projects(50MW) in Korea</li> </ul>                                  |
| <b>Improve Profit</b>              | <ul style="list-style-type: none"> <li>Continue to cut the production cost of polysilicon</li> <li>Increased profitability in the petrochemicals &amp; carbon materials business</li> <li>Optimized operation of OCI SE through flexible fuel mix and REC sales</li> </ul> | <ul style="list-style-type: none"> <li>Cost reduction of polysilicon by improving the process and increasing the production(sales)</li> <li>Increase production capacity from 48MW to 200MW by re-operating the idle MSE module plant</li> </ul> |

## Key Financial Performance

### Improved Status of the Financial Structure (Unit : KRW billion)



### Sales by Business Division



# Business Overview



## Proportion of Sales Revenue of Basic Chemical Business Division

**47%**

\* Major subsidiaries: OCI Co., Ltd., OCI Specialty Co., Ltd., OCI Alabama LLC

## Sales Revenue and Operating Income in the Basic Chemical Business Division

(Unit: KRW billion)

| Year             | 2015  | 2016  | 2017  |
|------------------|-------|-------|-------|
| Sales revenue    | 1,509 | 1,565 | 1,683 |
| Operating income | -57   | 40    | 109   |

## Basic Chemical Business Division

*Create Elements for a Better World*

The basic chemical sector produces inorganic chemical materials for a wide range of industries including photovoltaic-related materials such as polysilicon and hydrogen peroxide. We are committed to producing high-quality products and leading the global basic chemical market.

### Industrial and Market Status

The polysilicon market is built on economies of scale, making cost reduction one of the most important competitive factors in product competitiveness. The price of polysilicon has increased as solar PV companies in China have expanded their high-efficiency solar wafer facilities and due to inevitable halts of competitors. However, as we anticipate the increase in the electricity charges of domestic industrial light load hours which may cause an increase in manufacturing cost as of 2018, we are responding by installing an ESS.

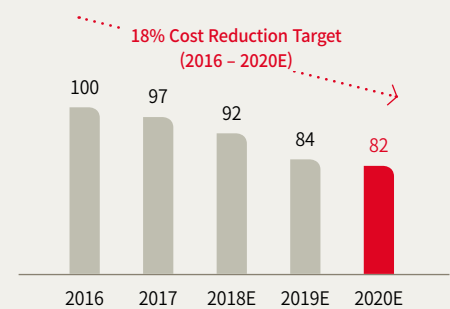
### Profit Status

Sales revenue increased by 8% to KRW 1,683.2 billion with an operating profit of KRW 109.3 billion in 2017, which takes the highest sales in our business sectors. Polysilicon, which is the core product in the division, posted profit increase through early stabilization and synergy of the newly acquired Malaysia plant.

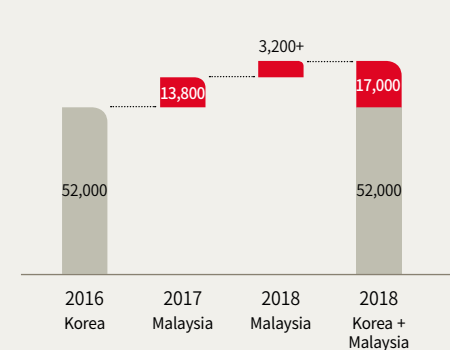
### Future Strategies & Plans

We are working on reducing the unit cost of raw materials and energy consumption in the Malaysian plant in line with our polysilicon cost reduction roadmap. In addition, the installation of an ESS at the Gunsan Plant is expected to reduce electricity cost by approximately KRW 7 billion annually until 2020. We are planning to increase the polysilicon supply to 60% to monocrystalline wafer producers in 2018 as the solar industry is moving to monocrystalline silicon solar cells (Mono Si Cell). At the same time, we will continue to expand our presence in the global market by maintaining production capability of high-purity polysilicon.

### Polysilicon Manufacturing Cost Reduction Roadmap (Unit: %)



### Consolidated Polysilicon Production Capacity (Unit: MT)



### Polysilicon

This raw material is the primary material used to manufacture solar PV cells as well as semiconductor wafers. OCI is supplying polysilicon for both solar and semiconductor industries.



**65.8kMT**

Production Capacity (effective)

### Hydrogen Peroxide

This chemical is used as a fabric and paper bleaching agent, semiconductor and TFT-LCD wafer cleanser, packaging materials and preservatives as well as for the recovery of wastewater and soil in the environmental area.



**85kMT**

Production Capacity

### Fumed Silica

This powder is a basic functional material for buildings, automobiles and semiconductors. In addition to being used for reinforcement, it can also be used as an anti-settling agent and abrasive by enhancing the properties as required for optimizing the function of the original product.



**15kMT**

Production Capacity

### High-Purity Phosphoric Acid

This chemical is used to etch semiconductor wafers or LCDs. It is also used as a food additive or metal surface treatment agent.



**12kMT**

Production Capacity

# Business Overview



### Proportion of Sales Revenue of Petrochemicals & Carbon Materials Business Division

**36%**

\* Major Affiliates: OCI Co., Ltd., Shandong OCI Co., Ltd., Ma Steel OCI Chemical Co., Ltd.

### Sales Revenue and Operating Income in Petrochemicals & Carbon Materials Business Division

(Unit: KRW billion)

| Year             | 2015 | 2016 | 2017  |
|------------------|------|------|-------|
| Sales revenue    | 903  | 879  | 1,319 |
| Operating income | -12  | 96   | 208   |

## Petrochemicals & Carbon Materials Business Division

*Provide Solutions for a Better World*

We produce various chemical products from coal and petroleum. Our main products include carbon black, BTX, pitch and TDI that are used as basic materials for other industries. We are advancing our capability in manufacturing high value-added products as well as expanding our presence in the global market.

### Industrial and Market Status

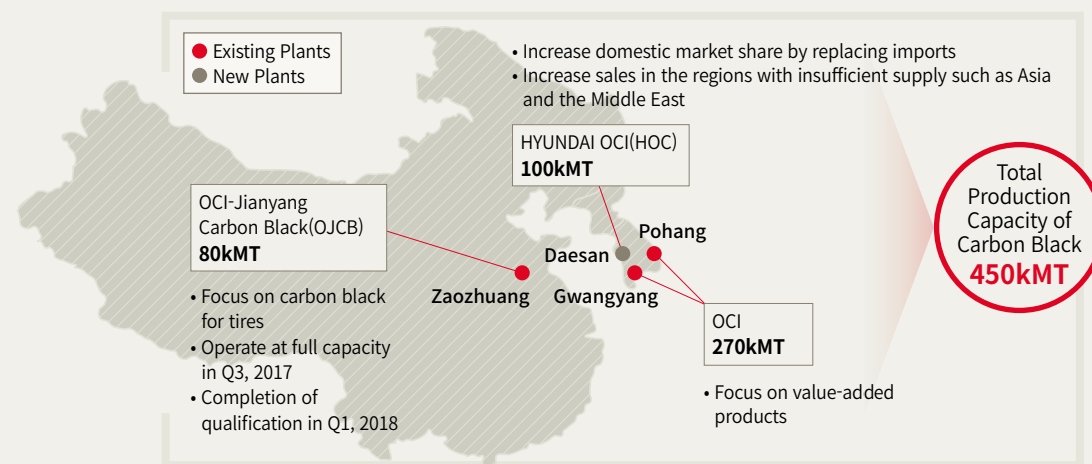
Due to the nature of petroleum-based products, we are subject to the risk of oil price fluctuations. In recent years, the price increase of TDI and pitch are mainly due to the interrupted production of major competitors and environmental restrictions by the Chinese government rather than increased demand. A favorable market environment has been created in the wake of the global economic boost. However, this trend may not be sustained if any unexpected circumstances arise.

### Profit Status

Sales climbed 50% to KRW 1,319.3 billion with an operating profit of KRW 207.7 billion in 2017 due to the additional production of Shandong OCI-Jiayang Carbon Black Co., Ltd. (OJCB) and economic recovery in related industries including aluminum. We will maintain a balanced business portfolio to create a sustainable revenue stream and respond to the risk of price fluctuation.

### Future Strategies & Plans

Our production capacity for carbon black reached 450kMT with the completion of the Hyundai OCI(HOC) carbon black plant in late 2017 and its successful commercial production in January 2018. We plan to expand our global market share by further increasing our production capacity of OJCB and HOC. Additionally, we will maintain consistent quality through continuous quality control of products such as pitch and BTX and respond actively to the needs of our customers.



\* Carbon black production capacity (incl. joint venture companies)

### Carbon Black

This material is basic reinforcing filler in tires, shoes and other rubber products as well as a color pigment in inks, paints and plastics. The major customers are tire manufacturers.



**450kMT**

Production Capacity (incl. joint venture companies)

### TDI

This chemical is used to produce polyurethane used in packing and insulating materials for construction, automobiles and furniture as well as in paints and resins.



**50kMT**

Production Capacity

### Pitch

This material is used as a binding agent in graphite electrode, as high-quality anodes for aluminum smelting, and in paint and waterproof materials. It is mostly sold to aluminum smelters.



**1,180kMT**

Tar Distillation Capacity

### BTX (Benzene, Toluene, Xylene)

These three chemicals form the main compound of aromatic hydrocarbons. Benzene is used as an intermediate material in the production of plastics and electronics. Toluene is used as a solvent for various chemical products and as a raw material for DNT. Xylene is used as a solvent.



**260kMT**

Production Capacity

# Business Overview



## Proportion of Sales Revenue of Energy Solution Business Division

17%

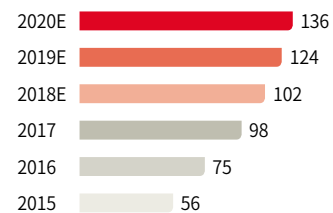
\* Major Affiliates: OCI SE Co., Ltd., OCI Power Co., Ltd., OCI Solar Power LLC

## Sales Revenue and Operating Income in the Energy Solution Business Division

(Unit : KRW billion)

| Year             | 2015 | 2016 | 2017 |
|------------------|------|------|------|
| Sales revenue    | 52   | 431  | 811  |
| Operating income | -42  | 19   | 8    |

## Solar PV Market Forecast\* (Unit : GW)



\* The solar PV installation forecast (2018-2020E) is based on the BNEF data dated February 20, 2018.

## Energy Solution Business Division

*Bring Light for a Better World*

The energy solution business is divided into the production of ingots, wafers and solar cells using polysilicon and the project developments and operations. We provide a one-stop service for the PV business in Korea while building high-quality PV plants in the solar energy markets including the US and China as part of our global business.

### Industrial and Market Status

The global solar market is expected to grow 17% annually by 2020, driven by continuous demands in China, Europe, and India as well as growing demands in various regions including Central and South America and the Middle East. Korea is also expected to see growth with installations expected to be 2GW as the market responds to the government's anti-nuclear and renewable energy policy. However, the uncertainty in the external business environment rises due to stricter global regulations, such as the US safeguards and China's anti-dumping duties on polysilicon.

### Profit Status

Sales soared 88% to KRW 810.7 billion with an operating profit of KRW 8.4 billion in 2017. We re-entered the Korean solar PV development market after 5 years and started to make substantial progress. In the US, Mission Solar Energy (MSE) successfully entered the distributed solar PV market and expects to see improved profitability through reoperation of the idle module plant.

### Future Strategies & Plans

We carefully examine the policy of major countries such as Section 201, a safeguard measure of the US for its import on solar cells and modules, and foreign exchange risks when making investment decisions. We will continue to improve our efforts to create sustainable business models and to expand our presence in the global market as we explore opportunities in new markets.

## Cogeneration Power Plant Business

### Saemangeum Cogeneration Power Plant

We completed the construction of a 303MW cogeneration power plant in Saemangeum and it is in full operation. The plant uses wood pellets as fuel and sells REC(Renewable Energy Certificate) issued by the Korean government on the market, incrementally increasing revenues. Fueled by government's favorable renewable energy policy, we look forward to creating stable profit.

## Domestic Solar PV Business

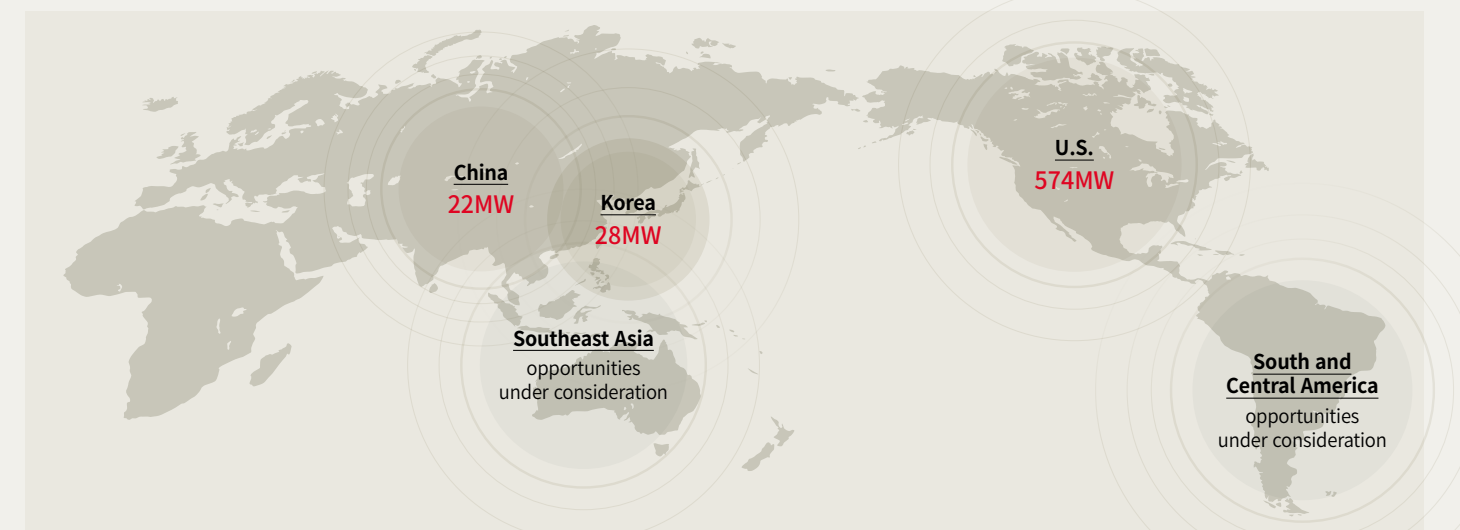
### Finance and Solar PV Solution Combined Business

OCI's KRW 130 billion solar PV fund was created with Samsung Asset Management with the goal of strengthening the domestic solar power business. We provide a one-stop service as a total service provider that specializes in all areas of the business including project development, construction, financing, management and operation. We optimize solutions as an EPC provider and guarantee the construction of high-quality PV systems while providing assurance to financiers as a project manager and developer. We closed 2017 with multiple projects totaling 8MW, completed in Goseong in Gangwon-do, Namhae in Gyeongsangnam-do, and Sangju in Gyeongsangbuk-do. The Namhae Solar PV plant, in particular, is the first one built with the solar PV fund and started its commercial operation with an annual electricity output of 5,200MWh in November 2017. Our goal is to build 50MW of PV plants in Korea in 2018 based on the extensive knowledge we gained while working on overseas projects in the US and China.

### Electric Vehicle Charging Utilizing Renewable Energy

In July 2017, we signed an MOU (Memorandum of Understanding) with the Seoul Energy Corporation and Seongdong District Office to start an electric vehicle charging business utilizing renewable energy in Seongdong-gu. The solar station business is to supply energy generated by solar PV and wind power plants and stored in the ESS for electric vehicle chargers, and this project is expected to expand into 25 districts. Based on our superior solar PV and ESS technological expertise, we will be in charge of the technological aspect of the project including system designing, test operation, the development and supply of EMS (Energy Management System) and ESS Cube for the validation of business models.

## Global Solar PV Business



### Solar PV Projects in China

We established OCI Solar(China) Co., Ltd. in 2015 and entered the Chinese PV market, beginning with distributed PV plant with a total output of 2.6MW in Jiaxing. China is the country with the largest solar PV energy demand, and we have built solar PV plants with a cumulative total output of 22MW as of 2017 introducing our advanced solar PV technology.

### Wrap up the Alamo Project in the U.S.

The Alamo Project has the second largest scale for a single project, and is dedicated to supplying electricity to more than 70,000 houses in San Antonio, Texas over the next 25 years. Solar TRE Holdings LLC was completed followed by its monetization in August 2017. We improved our financial structure by successfully wrapping up large-scale projects, and will continue to solidify our leadership position in the solar PV market.