

Mid-term Management Plan



Current Status

**ZEON**  
**ZEON CORPORATION**

Kimiaki Tanaka  
President

October 31, 2019

## **1. Overall Progress of Phase III**

## **2. Business Topics**

**Corporate Philosophy**

**Zeon CSR Policy**

## Enterprise Blueprint for 2020

**Zeon makes the Future Today through the Power of Chemistry.**

Zeon will continue to contribute to the realization of customer dreams and a prosperous society through employees' individual growth.

**Vision**

### Key Sense of Value

Speed

Dialogue

Social  
contribution

### Treasured Zeon Characteristics

Mutual trust and Confidence  
among Zeon Members

**SZ-20  
(2011-13)**

**Phase II  
(2014-16)**

**Phase III  
(2017-20)**

## Corporate Philosophy

Zeon is contributing to the preservation of the Earth and the prosperity of the human race.

Zeon, with its name from the words signifying the Earth (geo) and eternity (eon), is committed to responsible stewardship of the global environment as the foundation for human prosperity through the development and application of unique, world-leading technologies.

## Zeon CSR Policy

- **We will ensure compliance and meet society's needs for safety and security**
- **We will contribute to sustainably developing society and protecting the global environment through our corporate activities**
- **We will ensure that each and every Zeon person is aware of CSR and acts accordingly**

## Enterprise Blueprint for 2020

**Zeon makes the Future Today  
through the Power of Chemistry.**

Zeon will continue to contribute to the realization of customer dreams and a prosperous society through employees' individual growth.

**Targeting consolidated net sales of  
over 500 billion yen in FY2020**

## SZ-20 Phase III: Groupwide Strategy

### Growth

1. **Reinforce** the combined strengths of the Zeon Group. **Explore** ways of going beyond boundaries and collaborating with external players to provide **solutions** globally as a contribution to society
2. **Accelerate the pace of new business creation and product development** in key development areas: global environment, smart devices, and health and living.

### Culture

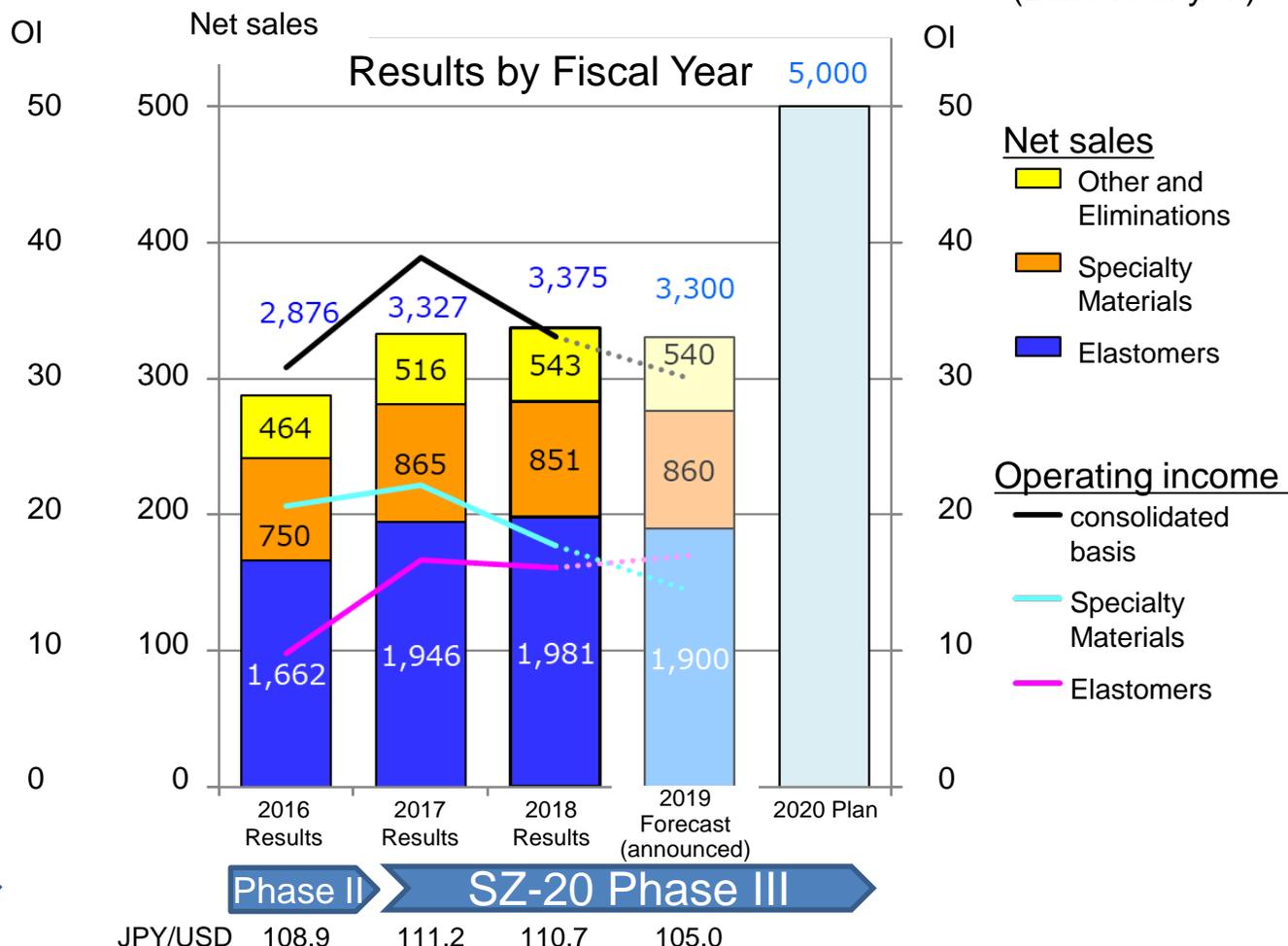
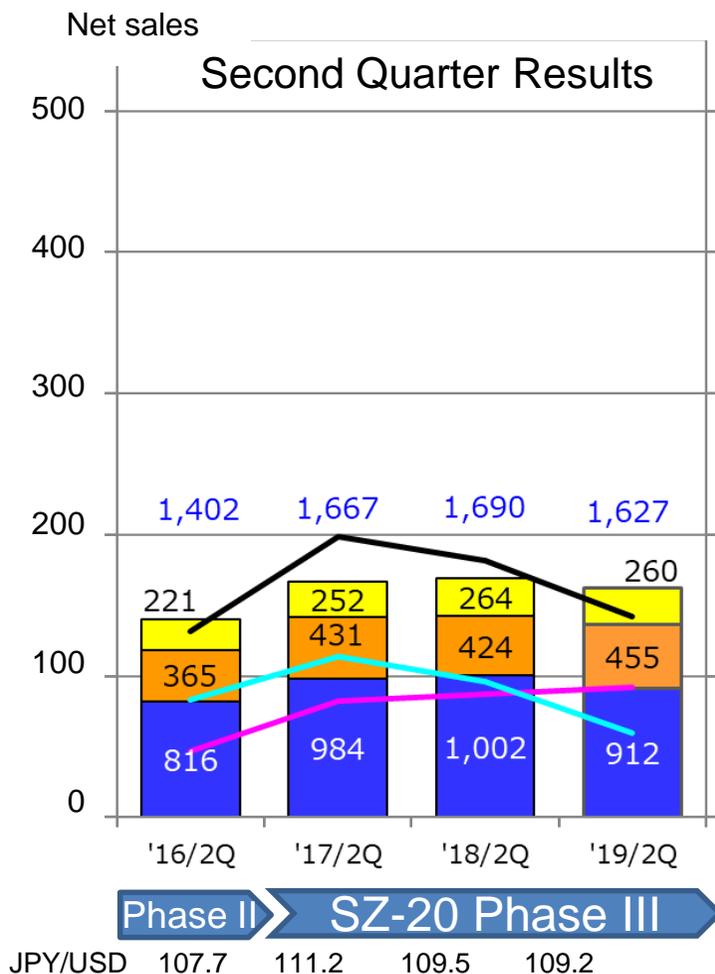
3. **Cultivate a corporate culture that places value on taking proactive action by harnessing diverse ideas and trying them.**

# Zeon Group Financial Results

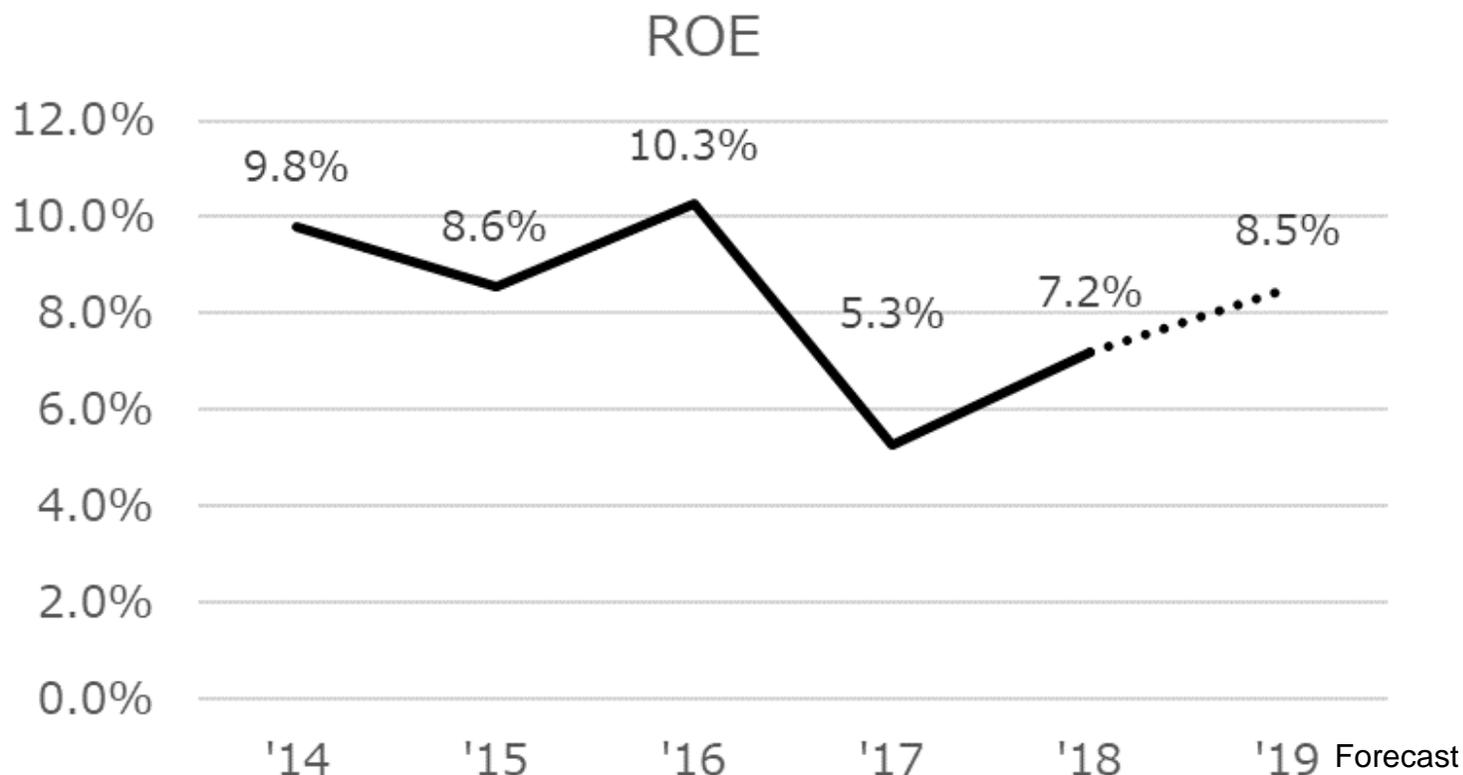
Due to the global economic slowdown, sales was flat and operating income (OI) was lowering in 2Q.

- Elastomers: Decline in sales and OI due to slowdown in automotive and industrial use
- Specialty Materials: Record sales and OI due to robust sales in COP, optical film, and battery materials

(Billions of yen)



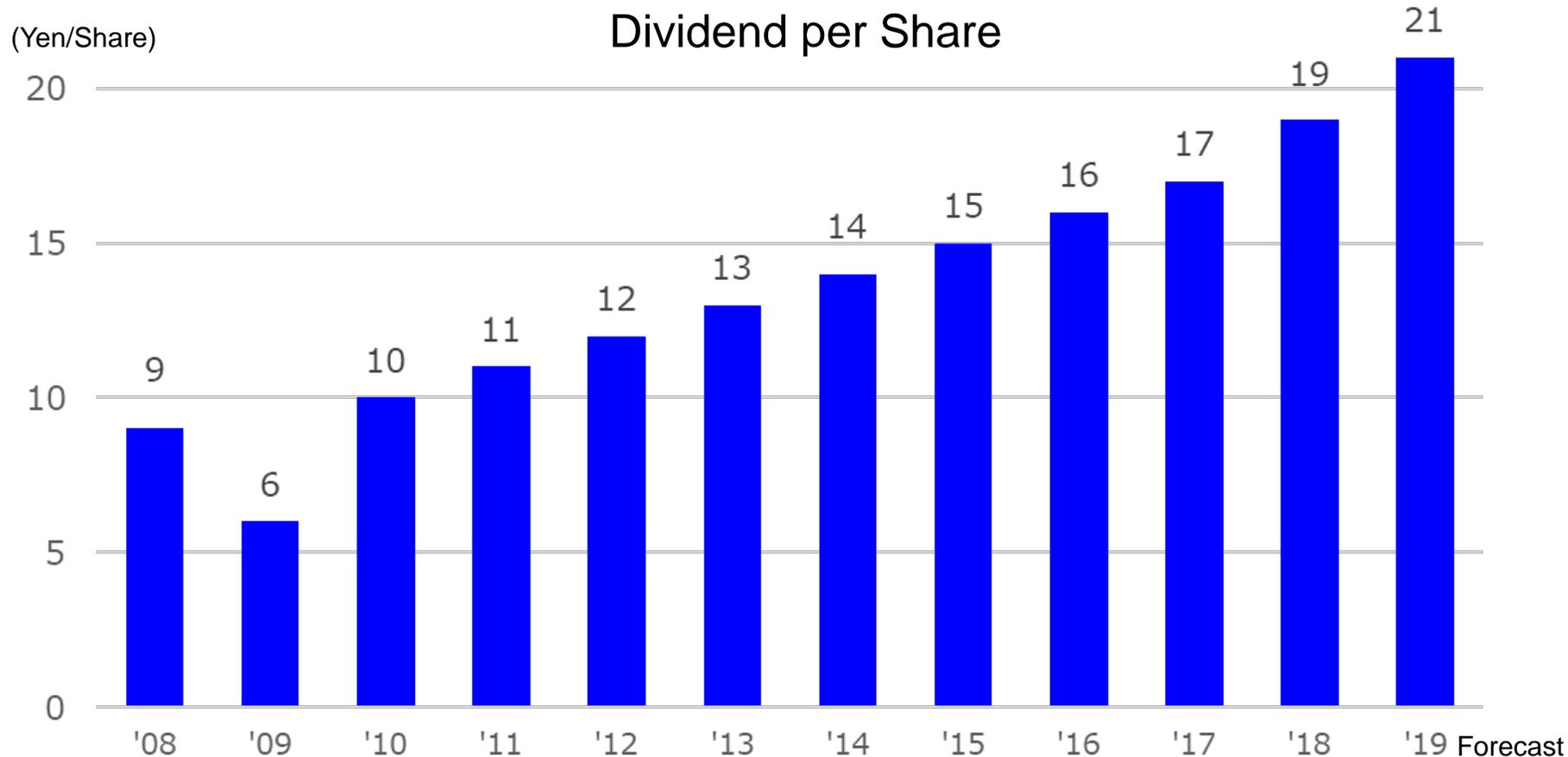
No more impairment losses at the Singapore subsidiary. Expect ROE to recover to 8% or higher in FY2019. Aiming to recover to SZ-20 Phase II levels.



SZ-20 Phase II

SZ-20 Phase III

Offering stable and consistent dividend payments to shareholders;  
dividends increase for tenth consecutive fiscal year



SZ-20

SZ-20 Phase II

SZ-20 Phase III

## 1. Overall Progress of Phase III

## 2. Business Topics

### ① Elastomer Business

- ◆ Investments
- ◆ Topics: Specialty rubbers, S-SBR

### ② Specialty Materials Business

- ◆ Investments
- ◆ Topics: COP, energy materials, electronic materials, Medical devices

### ③ Others

- ◆ CSR

## Strategy by Business Segment

### Elastomer Business

- Reinforce competitive businesses by responding globally to growth markets and raising cost effectiveness.
- Explore new opportunities and achieve growth based on the Zeon's reputation in the market and relationships with customers

### Specialty Materials Business

- Expand business in step with the speed of market growth and technological progress through focused investment of resources and stronger collaboration with outside players.

- ◆ Investments
  - ◆ Specialty rubbers (HNBR, acrylic rubber)
- ◆ Topics
  - ◆ Specialty rubbers
  - ◆ S-SBR

## Strategy of Elastomer Business

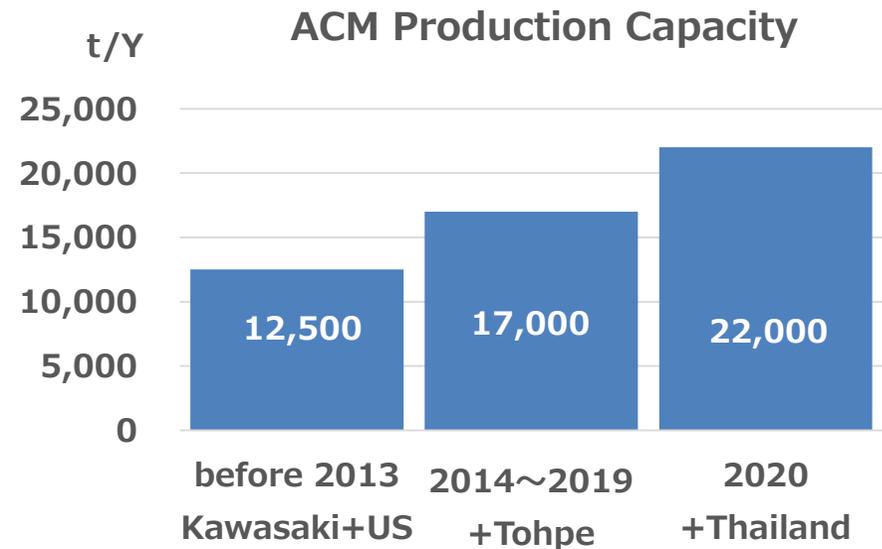
- Reinforce competitive businesses by responding globally to growth markets and raising cost effectiveness.
- Explore new opportunities and achieve growth based on the Zeon's reputation in the market and relationships with customers



	Capacity	Completion
Drying facility for Zetpol® specialty cross-linked type at Kawasaki plant (Apr. 2018 press released)	x1.5 of dry products	Sept. 2019
Acrylic rubber (ACM) manufacturing plant in Thailand (Aug. 2018 press released)	5,000t/Y	Spring 2020



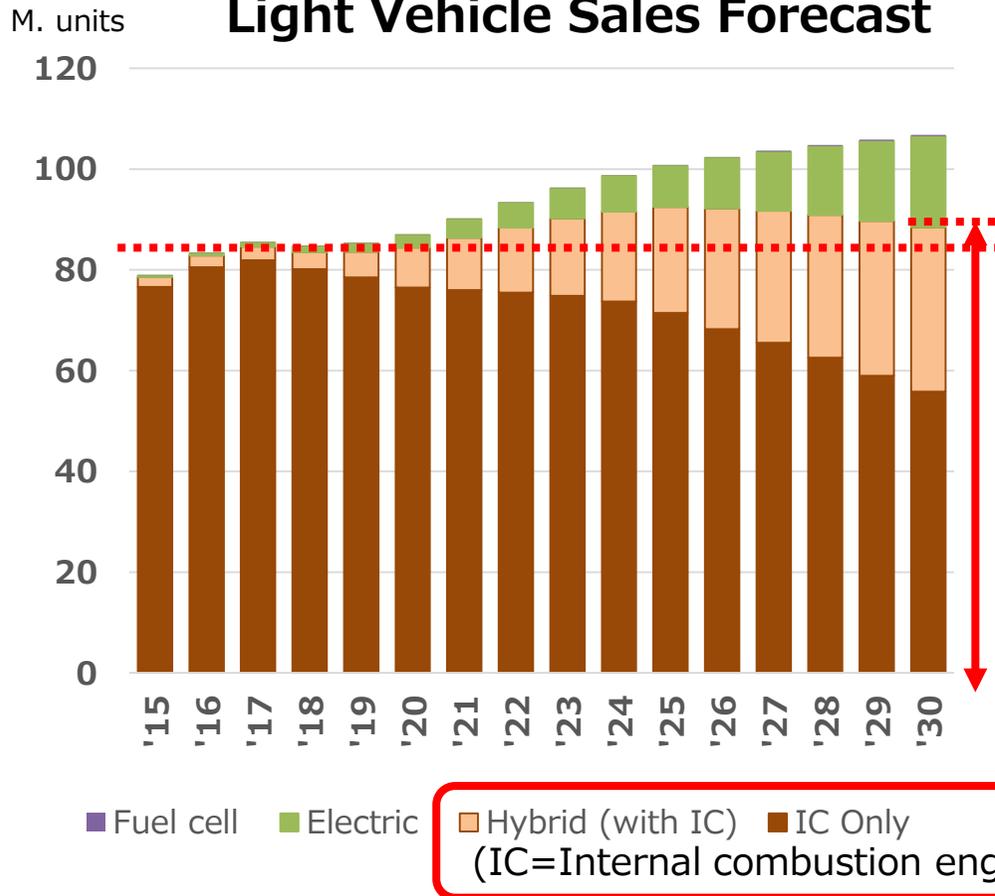
Construction of ACM plant in Thailand



Unit sales of internal combustion engine vehicles to remain constant in the near future

⇒ We support the industry with a stable supply of specialty rubber

## Light Vehicle Sales Forecast



## Zetpol®

- Steady growth in specialty cross-linked type

## Acrylic Rubber

- Currently producing 17,000 tons/year at 3 bases in Japan and the US
- Spring 2020: a new plant in Thailand (5,000 tons/year) to be completed

## Asia Technical Support Lab.

(started in 2017)

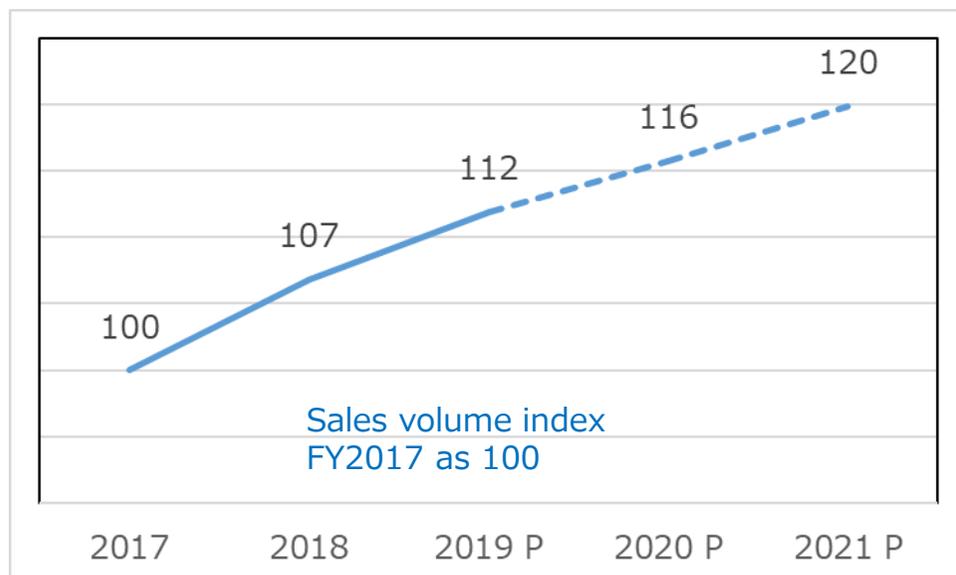
- Actively engaged in customer support and related sales of Zeon's rubbers

"Source : LMC Automotive's quarterly Global Hybrid and EV Forecast (published in December 2018)"

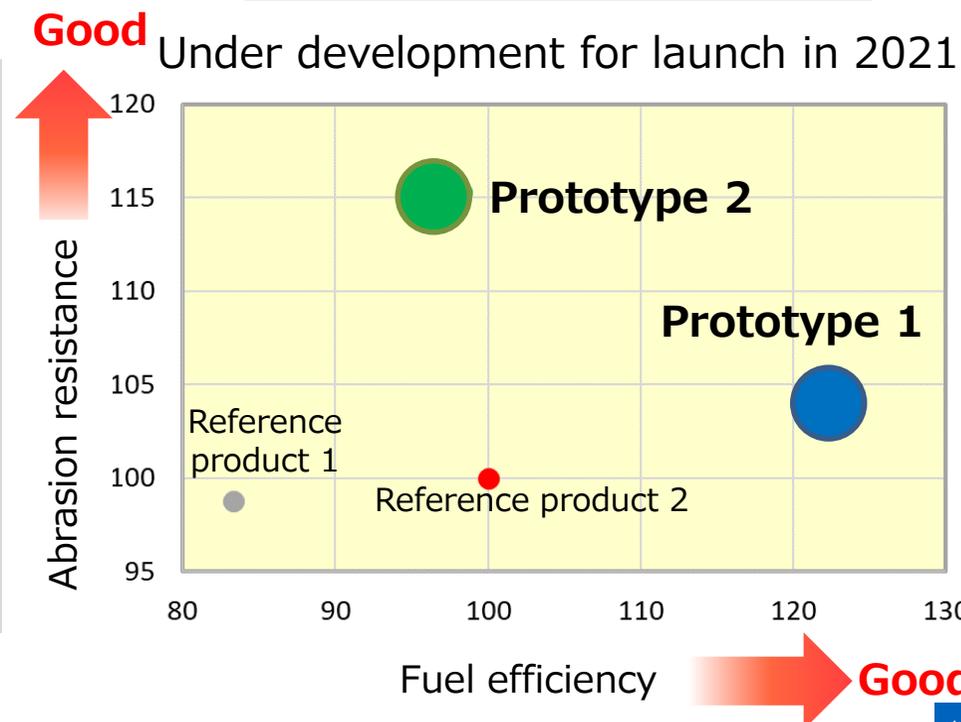
## Leveraging synergistic effects in technology and production to become the global leader

By combining the polymer modification and production technologies of Zeon and Sumitomo Chemical, we will enhance the fuel efficiency and abrasion resistance of tires.

### S-SBR Sales



### Synergy Polymer



## ◆ Investments

- ◆ Specialty plastics (COP, Optical films)

## ◆ Topics

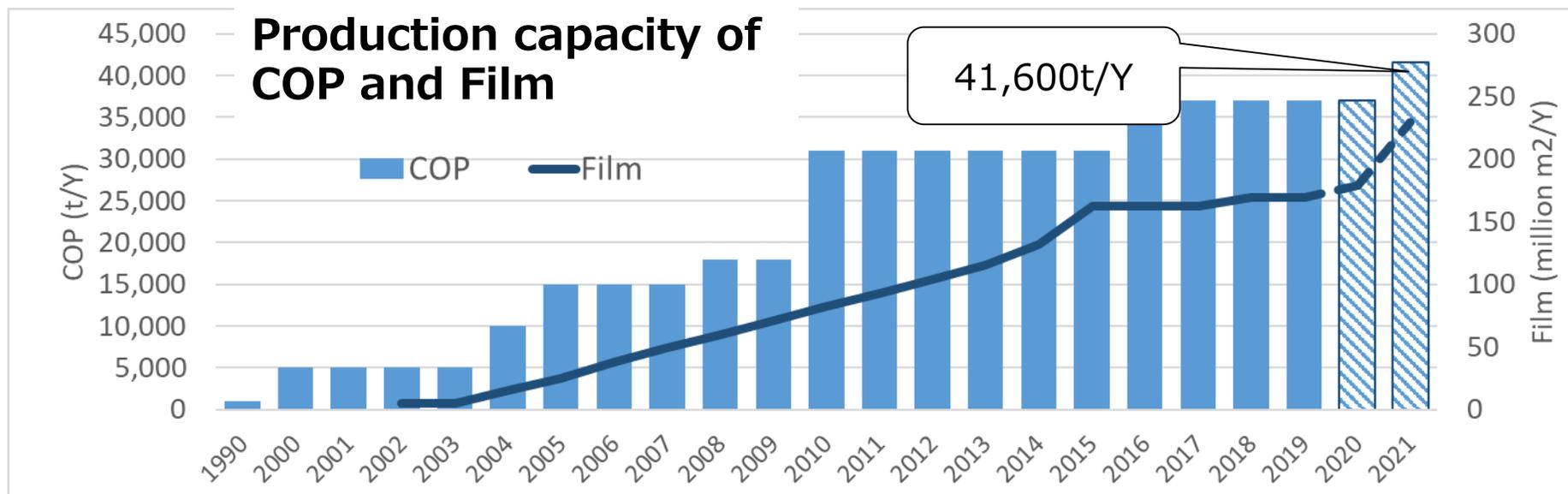
- ◆ Specialty plastics
- ◆ Energy materials
- ◆ Electronic materials
- ◆ Medical devices

### Strategy of Specialty Materials Biz.

- Expand business in step with the speed of market growth and technological progress through focused investment of resources and stronger collaboration with outside players.



	Capacity	Completion
Expand production capacity for extruded film in Takaoka (Oct.2018 press released)	-	Spring 2020 (plan) operation starts
New manufacturing line of retardation films for large-screen TVs in Tsuruga (Oct.2018 press released)	50 million m <sup>2</sup> /Y	Apr. 2020 (plan) operation starts
Expand COP production capacity in Mizushima (Sep.2019 press released)	4,600t/Y	Jul. 2021



## Raw Materials

- Dicyclopentadiene produced by Zeon's own GPI Process

## Polymer itself

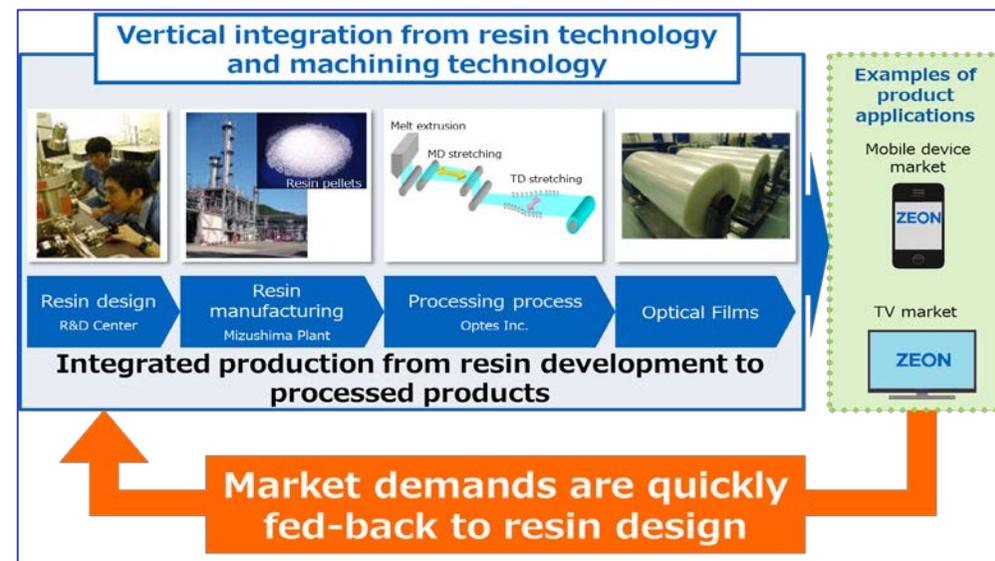
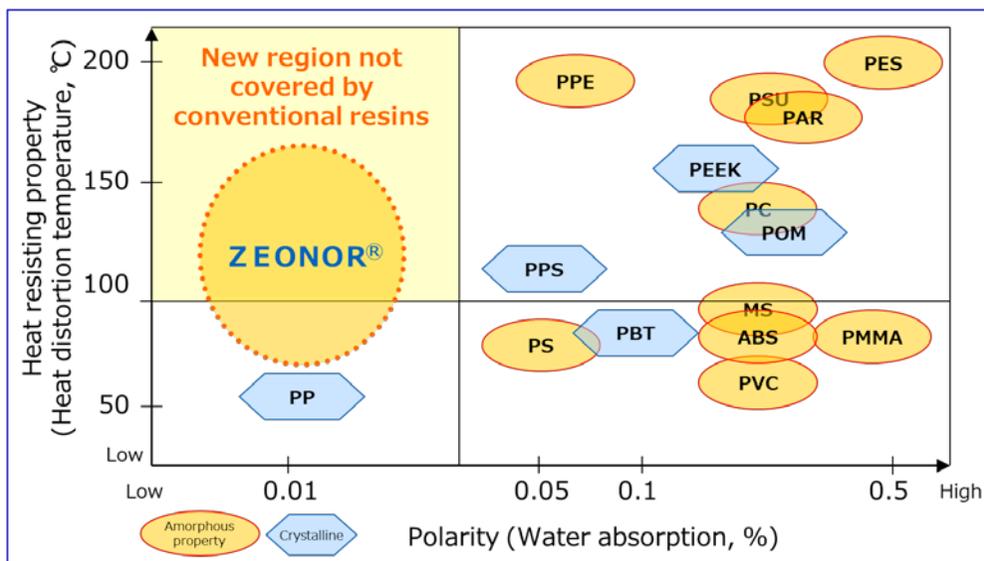
- Resistant to heat and moisture
- Easy to process

## Processing Technology

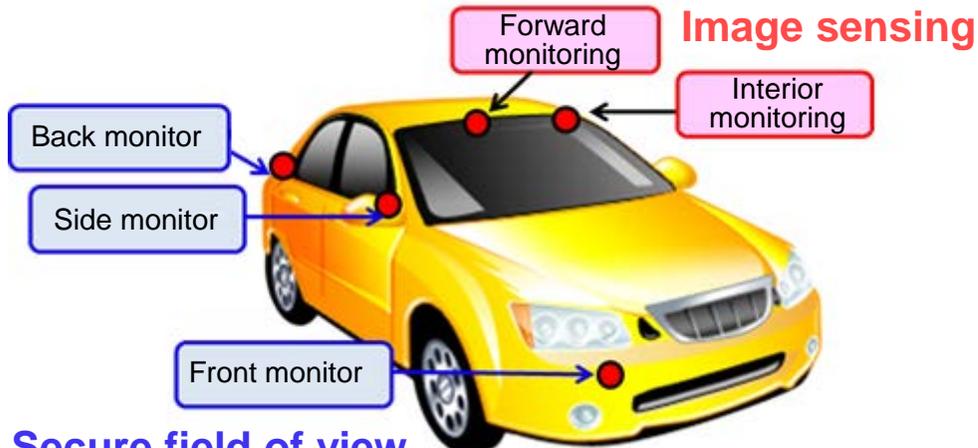
- Melt extrusion and film stretching

## Integrated Production

- Integrated production of polymer design, film manufacturing and processing  
→ Market needs are reflected in polymer design



## 1. T62R selected for use in automotive sensing cameras



- T62R is a new grade featuring low deformation and color change under high temperatures
- Selected for use in automotive sensing cameras

### Secure field of view

ZEONEX® has a proven track record

## 2. Presented the advantages of using the COP for medical and pharmaceutical applications (pre-filled syringes)

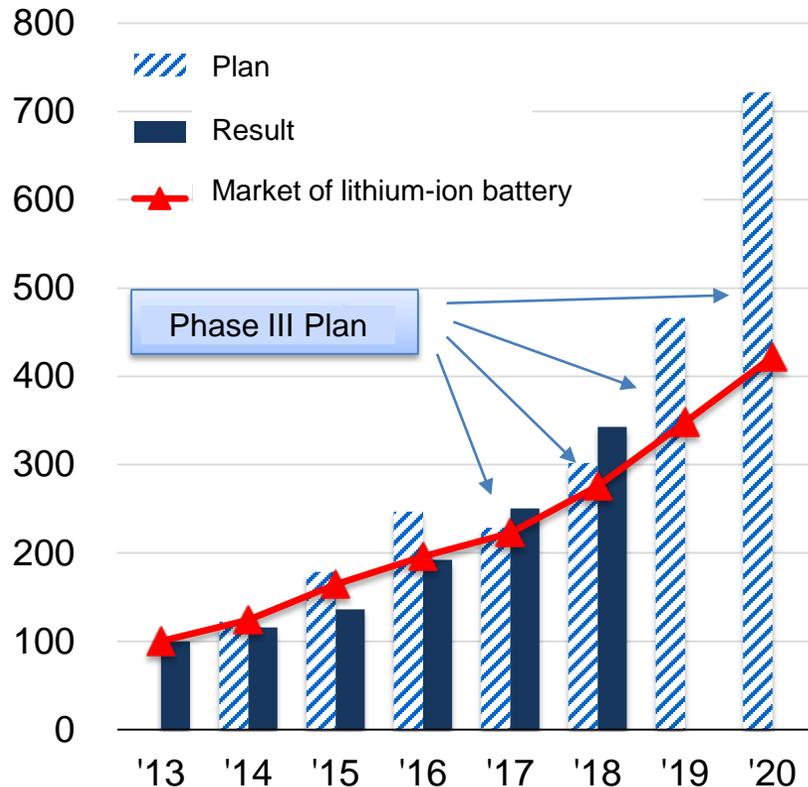
- Presented the characteristic of COP as plastic for pre-filled syringes to the U.S. FDA (May 2019)
- Delivered a presentation at PDA (an academic conference on pre-filled syringes) (Sweden, October 2019)
  - Transparency, high purity, low water absorption, and chemical stability equivalent to glass
  - Higher mechanical strength and extremely low protein adsorption and aggregation compared to glass



Pre-filled syringe

## Continues to grow beyond the market growth

### Sales Forecast for Battery Materials



Index: FY2013 = 100

Source of market data: B3, Inc. report

### Characteristics of Zeon Products

#### Anode binder

Reducing electrode swelling during charge/discharge cycle.  
 → **Durability and safety**

#### Functional layer binder

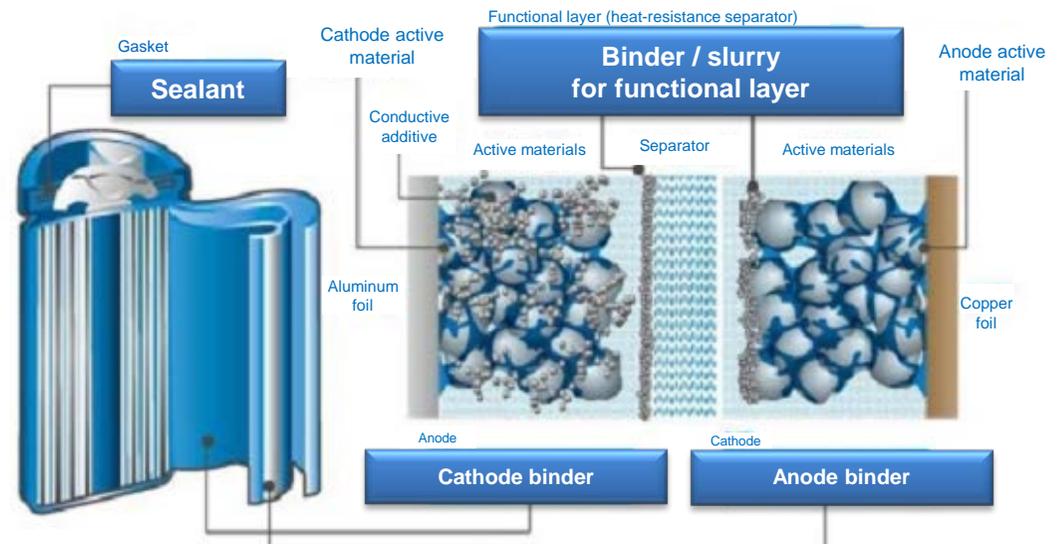
The demand is growing esp. in EV market since the launch in 2015.  
 → **Safety**

#### Cathode water-based binder

Preventing side reaction inside batteries by covering active materials  
 → **Durability**

#### Sealant

Preventing electrolyte leaks  
 → **Durability**

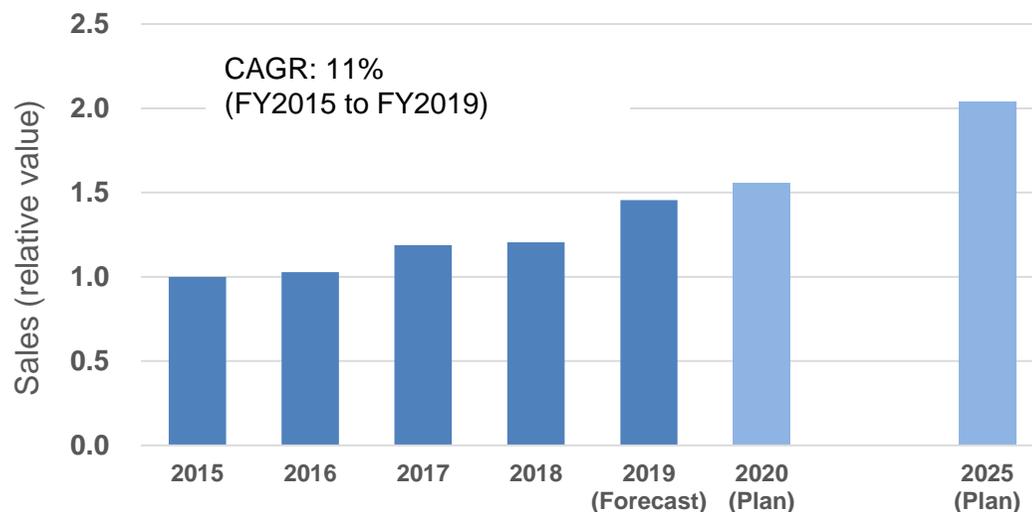


## Launched a positive electron beam photoresist for next-generation electronic components

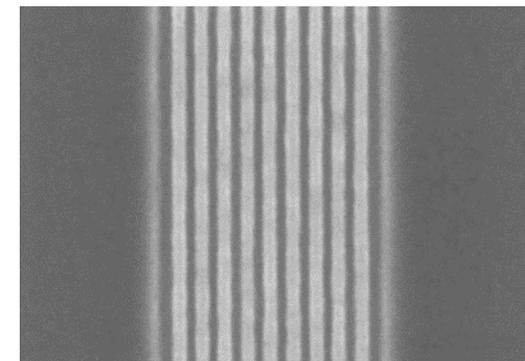
### Characteristics of ZEP530A

- Suitable for compound semiconductors (high-frequency, high-voltage applications)
- Main chain scission-type positive photoresist
- Ultra-fine resolution (hp 17 nm L/S)
- Superior dry etch resistance and wide processing margin

### Sales of E-Beam Resists



\*Value relative to FY2015 sales



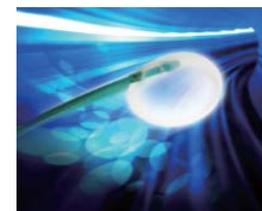
Top-view scanning electron microscopic image

Applications in compound semiconductor processing

- 5G semiconductors (high-frequency application)
- Power semiconductors (high-voltage application)

## Expanding business by new products launch

- **Cardiovascular Business:** FFR devices with optical fiber sensors (launched in 2016)
- **Endoscopic Business:**
  - Balloon catheter for extracting biliary stones, Biliary stents (launched in 2018)
  - Hemostatic forceps, Clips (plan to launch 4Q-2019)



Balloon catheter for extracting biliary stones



Biliary stents

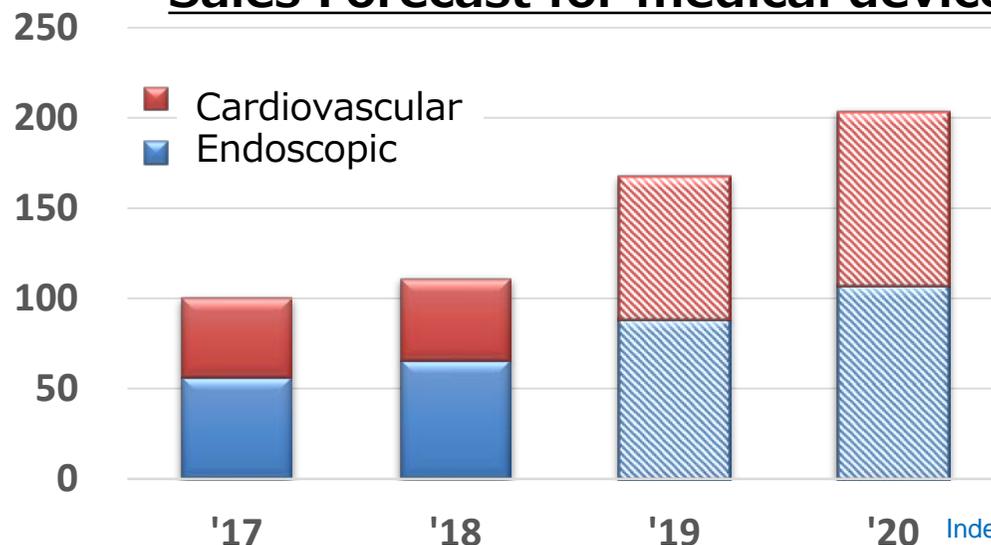


Hemostatic forceps



Clips

### Sales Forecast for medical devices



## Signing the UN Global Compact



Zeon supports the 10 Principles of the UN Global Compact and respects global standards in promoting corporate activities to realize a sustainable society.

## Mizushima Plant dormitory in Okayama constructed with the CLT method



The equivalent of 4.9 million m<sup>2</sup> of thinned wood from Okayama Prefecture was used.



## Continuing voluntary activities in the Tohoku region



In the seven years since October 2012, Zeon has organized 66 activities in which a total of 520 employees have participated. The focus has recently turned to supporting agriculture and fisheries.



## LNES card-type solar lamp

- Used crowdfunding
- Held an event to coincide with the Winter Illumination, held from November 1 to 14 at Tokyo Tower



**Speed**

**Dialogue**

**Social  
Contribution**

**Mutual trust and confidence among Zeon members**

# ZEON

Zeon's plans, forecasts, and other data appearing in this presentation were calculated based on information which was currently available and therefore includes risks and uncertainties. Actual results may differ depending on various factors.

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