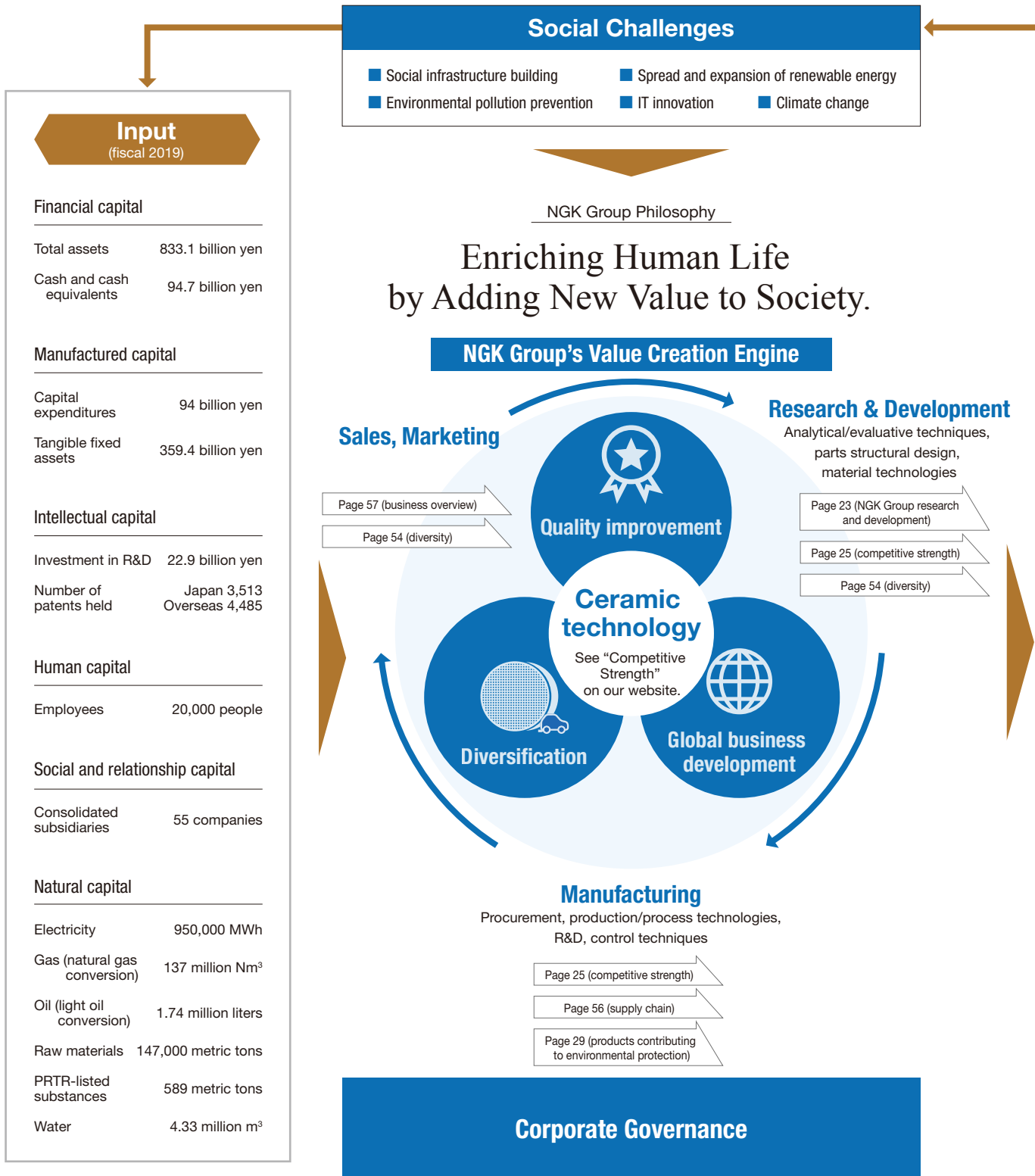


## Creating Value

# Using advanced ceramic technology to create value and address social challenges

The NGK Group uses its advanced ceramic technology to bring the world unique product lineups in the energy, ecology, and electronics sectors. By creating new value for customers, we help society solve its problems.



## Output

### Ceramic Products Business Group



Gasoline particulate filters (GPFs)

### Process Technology Business Group



Ceramics for semiconductor manufacturing equipment

### Electronics Business Group



EnerCera® lithium-ion rechargeable batteries

### Energy Infrastructure Business Group



NAS® batteries

## Results (fiscal 2019)

### Consolidated net sales

442 billion yen

### Net income attributable to owners of the parent

27.1 billion yen

### ROE

5.8%

### Total sales of products contributing to environmental protection

259.9 billion yen

### Social contribution spending

0.24 billion yen

### Avoided NOx emissions

4 million metric tons per year

Note: Assumes exhaust systems are equipped on new automobiles that do not have equivalent systems.

## Values Provided by the NGK Group

### Supporting Social Infrastructure



#### Ensure access to affordable, reliable, sustainable, and modern energy for all

- Insulators are indispensable to stable power supply
- NAS batteries allow stable supply of renewable energy



#### Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

- Ceramics used in electronics make ICT cheap and ubiquitous
- Ceramics used in semiconductor manufacturing equipment let the semiconductor industry be the foundation for modern daily life
- Metal-related products are widely used in mobile phones, automobiles, industrial equipment, and other devices that undergird modern life
- Lithium-ion rechargeable batteries contribute to the dissemination of next-generation products such as IoT devices and smart cards

### Protecting the Environment



#### Ensure access to affordable, reliable, sustainable, and modern energy for all

- Ceramics for purifying automobile exhaust make exhaust gas clean, thus enabling clean usage of fossil fuels



#### Take urgent action to combat climate change and its impacts

- NAS batteries aid in the fight against climate change by allowing stable supply of renewable energy



#### Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

- Ceramic membrane filters purify wastewater to prevent marine pollution

### Improving People's Lives



#### Ensure healthy lives and promote well-being for all at all ages

- Ceramics for purifying automobile exhaust make exhaust gas clean



#### Ensure availability and sustainable management of water and sanitation for all

- Ceramic membrane filters provide highly safe water
- Ceramic membrane filters purify wastewater



#### Make cities and human settlements inclusive, safe, resilient, and sustainable

- NAS batteries enable innovation in urban energy management for the creation of sustainable cities