# Flow of Value Creation

# Sumitomo Chemical's Approach to Creating New Value through **Innovative Technologies**

**Management Resources** 

**Strengths** (Core Competence)

**Challenges & Business Opportunities** 

## **Financial Capital**

Sound financial base

■ Total equity (fiscal 2018):

¥1,351.9 billion

## **Manufactured Capital**

**R&D** sites and production facilities around the world

As of April 1, 2019

Japan: 11 Overseas:

## **Intellectual Capital**

Technologies cultivated through a wide range of products development as a diversified chemical company

- R&D expenses (fiscal 2018): ¥163.5 billion
- Number of patents held (as of April 2019):

12,659

## **Human Capital**

**Employees with advanced technological** ability and know-how

As of March 31, 2019 Number of employees:

32,542

Number of research and development employees:

3,937

## **Social and Relationship Capital**

Long-established relationships of trust with customers and overseas networks

Overseas sales revenue ratio (fiscal 2018): 64.9%

## **Natural Capital**

Fiscal 2018

Water usage: 944 million tons Energy (fuel, heat, and electricity)\*: 1,690 thousand kl

Hydrocarbon compounds\*:

1,676 thousand tons

Metals (excluding minor metals)\*:

121 thousand tons Minor metals\*:

14 thousand tons

\* Sumitomo Chemical and Group Companies in Japan



Ability to develop innovative solutions by leveraging its technological expertise in diverse areas



Ability to reach global markets



Loyal employees

**Solve Issues Facing** Society

- Environment
- Food
- Resources and energy

**Improve** Quality of Life and **Build an Affluent** and Comfortable Society

- Comfortable life
- Health promotion

## Five Business Sectors Based on a Wide Range of Technologies Generate Synergies and Aim for Further Growth

## Petrochemicals & Plastics

**>** P44

- Polyethylene
- Polypropylene
- MMA, etc.

## **Energy & Functional Materials**

**P**48

- Materials for lithium-ion secondary batteries
- Super engineering plastics
- High-purity alumina, etc.

## **IT-related Chemicals**

**P**52

- Polarizing films
- Touchscreen panels
- Photoresist, etc.

## Health & Crop Sciences

**P**56

- Crop sciences products
- Environmental health products
- Feed additives
- Pharmaceutical chemicals, etc.

#### **Pharmaceuticals**

**P**60

- Sumitomo Dainippon Pharma Co., Ltd.
- Nihon Medi-Physics Co., Ltd.

# Aiming to Be a Company Seen as Having a Conglomerate Premium

Going forward, solutions to issues facing society will involve not just isolated businesses or products, but combinations of many different things.

That is an area where we can display our unique strengths as a diversified chemical manufacturer with five business sectors.

Taking advantage of a conglomerate company operating a wide variety of businesses, we aim to be a company that is valued at a premium rather than at a discount.

## **Impact on Capitals**

## **Financial Capital**

	FY2017	FY2018
Core operating income (billions of yen)	262.7	204.3
ROE (%)	15.4	12.3
D/E ratio (times)	0.7	0.6

## **Manufactured Capital**

- Expanded capacity of a manufacturing facility for film-type touchscreen panels in Korea
- Completed the new methionine plant
- Expanded the global R&D facilities for health and crop science products such as Chemistry Research Center and Biorational Research Center
- Tanaka Chemical Corp. decided to expand production facilities for cathode materials.

## Intellectual Capital

- Number of new patent applications in fiscal 2018 (Non-consolidated): 2,955
- Established a digital innovation department for training data scientists and data engineers

## **Human Capital**

	FY2017	FY2018
Lost-workday incident rate (%)	0.26	0.58
Enhancement of leadership and management capabilities training and career development training (attendees)*1	75	839*2
Percentage of paid vacation days used (%)*1	67.2	71.8

<sup>\*1</sup> Sumitomo Chemical (Non-consolidated)
\*2 Conducted multiple new training sessions

## Social and Relationship Capital

#### ■ Had constructive dialogue with stakeholders

With investors	FY2017	FY2018
Individual meetings (attendees)	340	356
Small meetings with the President (attendees)	32	57
Overseas investor visits (times)	44	35
Dialogues with local residents (times)	40	42

#### **Natural Capital**

 Compatibility between manufacturing and reduction of greenhouse gas (GHG) and waste emissions

	FY2017	FY2018
GHG emission volume (thousand tons-CO <sub>2</sub> e)	7,758	7,258
Landfill disposal amount* (thousand tons)	21	23

<sup>\*</sup> Sumitomo Chemical and Group Companies in Japan