

## 1. Outline of “Progress2030” Long-Term Business Plan

### 1 The Corporate’s 2030 Vision

“A corporate group which provides new values for helping to enrich people’s lives by integrating internal and external knowledge with facing globally-changing society”

“A group of first-class pioneers who blaze a way to the future with enthusiasm by trusts they have built and skills they have cultivated”

### 2 Basic Strategies

“Entering new fields by evolving, deepening and expanding unique technologies”

#### 1) Information & Communication (display, semiconductor, inorganic, optical and sensor materials)

For display, semiconductor and inorganic materials, we will provide products based on technological innovations in the market.

We will also create sensor materials by using our existing technologies and optical materials by establishing optical control technologies.

#### 2) Life Sciences (agrochemicals, veterinary pharmaceuticals, pharmaceuticals and biomedical materials)

We will strengthen the pipeline for agrochemicals and pharmaceuticals, also develop new veterinary pharmaceuticals.

In addition, we will create biomedical materials that contribute to advanced medical care using accumulated technologies for biological evaluation and material design.

#### 3) Environment & Energy (batteries, energy harvesting and thermal control materials)

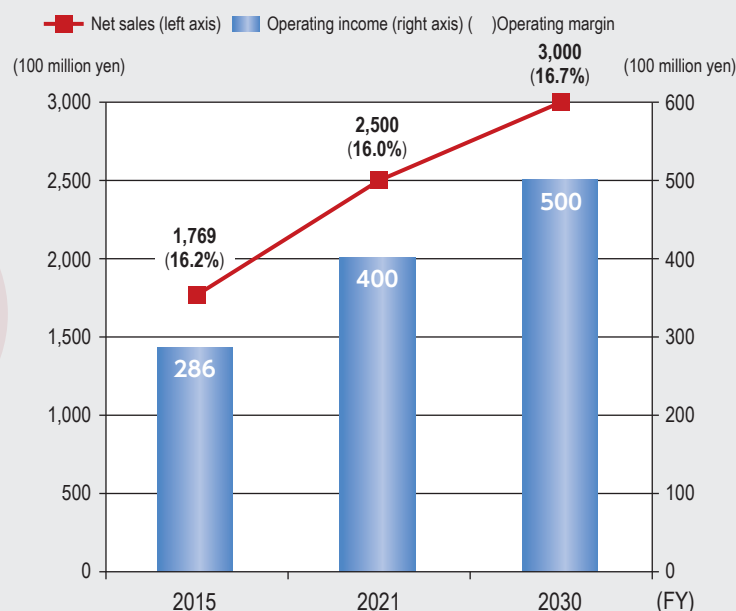
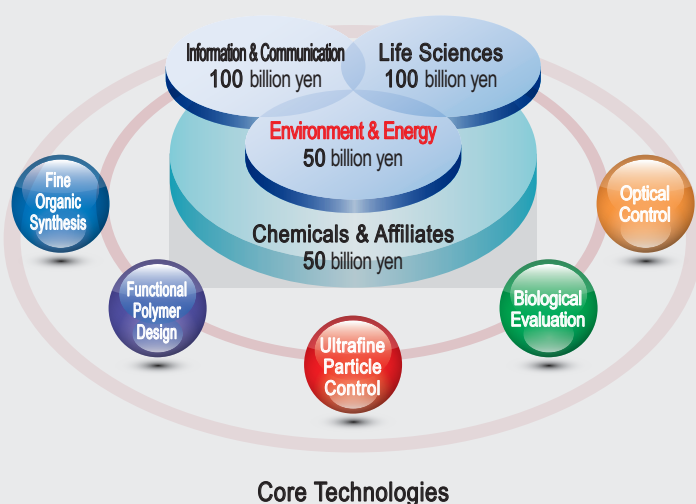
We will establish a device evaluation technology then supply battery materials and materials that contribute to efficient use of energy.

#### 4) Chemicals & Affiliates (basic chemicals, fine chemicals and affiliates)

We will continue to carry out R&D in relation to TEPIC®-epoxy compound for LED sealants, solder resist, painting- and launch new high-performance compounds.

### 3 Business Domains / Business Size

Net sales (FY2030)



## 2. Outline of “Vista2021” Mid-Term Business Plan —A six-year plan starting in FY2016—

The plan is divided into the first three years (FY2016 to 2018) as Stage I and the second three years (FY2019 to 2021) as Stage II.

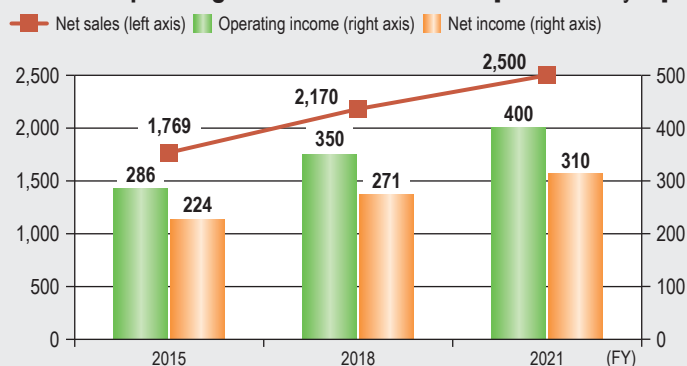
### 1 Ideal Situation of 2021

“Information & Communication and Life Sciences are the driving force for growth while Chemicals & Affiliates achieve a stable profit.”

“Establish the foundation of Environment & Energy business and a position as a promising chemical manufacturer that keeps moving forward with a strong presence.”

### 2 Financial Target

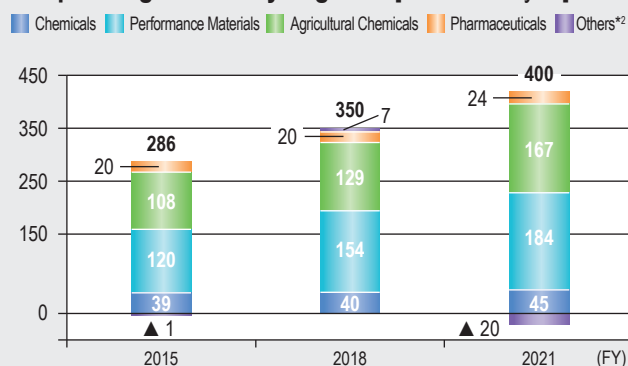
#### 1. Sales / Operating income / Net income\*1 [100 million yen]



\*1 Net income attributable to owners of parent

Naphtha (¥/kL): FY2015 42,800 FY2016 35,400 FY2017 and onward 51,100 FX rate (¥/\$): FY2015 1H 122 2H 118 FY2016 and onward 115

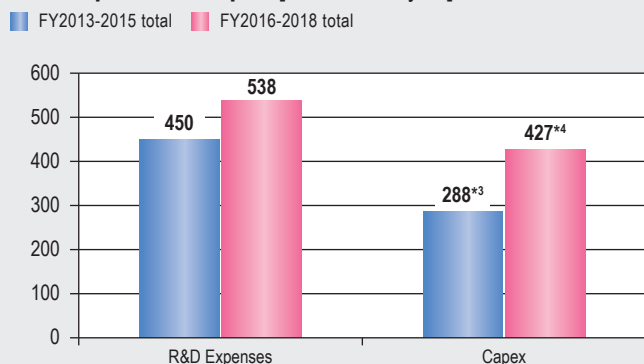
#### 2. Operating income by segment [100 million yen]



\*2 Others: trading, others and adjustment

### 3 R&D Expenses, Capex

#### R&D Expenses / Capex [100 million yen]



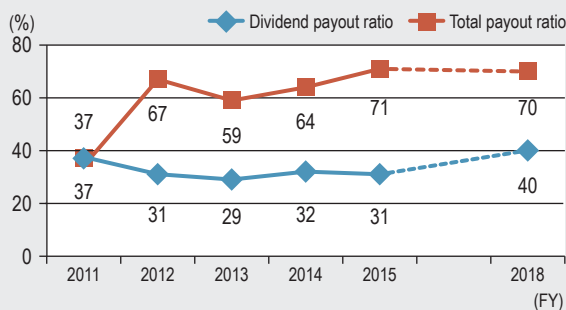
\*3 Approval basis \*4 Production commencement basis

### 4 Financial Indicators (FY2018 target)

Operating margin	Maintain above 15%
ROE	Maintain above 14%
R&D expenses/sales	Above 8%

### 5 Shareholder Return

Dividend payout ratio	Gradually increase to 40% in FY2018
Total payout ratio	Maintain 70%



Full details of “Progress2030” and “Vista2021” are available online.  
[http://www.nissanchem.co.jp/eng/news\\_release/release/en2016\\_05\\_16.pdf](http://www.nissanchem.co.jp/eng/news_release/release/en2016_05_16.pdf)

## 3-1. Outline of “Vista2021 Stage I”

### 1 Basic strategies

- 1) **Maximizing the profit from existing products** Boosting the market shares of products for growing fields, driving overseas business expansion, and reducing costs
- 2) **Improving marketing power** Identifying market needs by moving closer to customers and obtaining information about advanced materials
- 3) **Enhancing R&D capability** Improving existing technologies, establishing new technologies, and accelerating the development of new products

### 2 Sources of Growth

Increased sales (FY2018 vs. FY2015)		Less than one billion yen	One to three billion yen	Over three billion yen
Performance Materials	Chemicals	AdBlue® High purity ammonia	TEPIC® VA	Photo-alignment IPS
	Display Materials			
	Semiconductor Materials	3D packaging materials (TMAT), new lithography materials	ARC® (bottom anti-reflective coating) Multi-layer semiconductor process materials	
	Inorganic Materials		Oilfield materials	
	New Materials	OLED materials Light control film materials Sensor materials HYPERTECH®		
	Agricultural Chemicals	New insecticides (in-house) New products (acquired)	ROUNDUP® ALTAIR®	Fluralaner Overseas
	Pharmaceuticals	LIVALO® active ingredients (overseas) New drugs / Expanded pipeline Finetech®		

\* Increased sales based on forecasts at the time of formulating our new mid-term business plan  
 ARC® is a registered trademark of Brewer Science, Inc.  
 AdBlue® is a registered trademark of Verband der Automobilindustrie.

### 3 Initiatives for Stage II and Onward

#### 1) Information & Communication

- i. Developing heat-resistant lenses, light control film and optical interconnect materials
- ii. Creating next-generation display and semiconductor materials

#### 2) Life Sciences

- i. Developing NC-515 (insecticide), new fungicides and herbicides for paddy rice
- ii. Jointly developing NIP-022 (thrombocytopenia treatment agent) and promoting the research collaboration of antifungal drugs
- iii. Achieving global standardization of cell culture materials

#### 3) Environment & Energy

- i. Developing materials for secondary batteries and fuel cells
- ii. Creating energy harvesting materials

#### 4) R&D

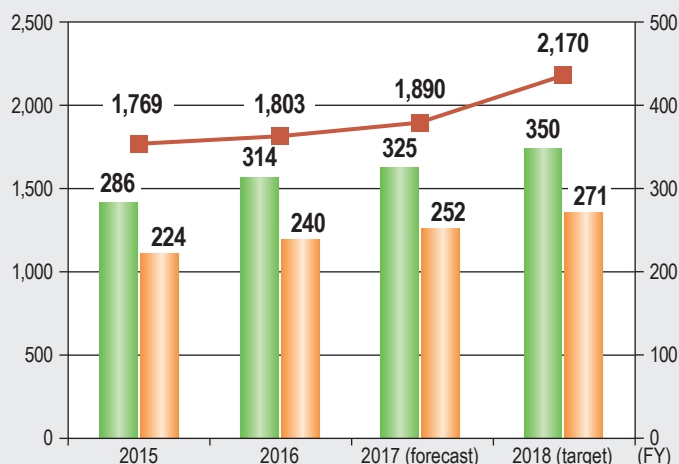
- i. Acquiring seeds in the field of biomedical materials
- ii. Introducing cutting-edge technologies through open innovations
- iii. Developing new business fields by strengthening and fusion of core technologies

## 3-2. Progress with “Vista2021 Stage I”

### 1 Results for FY2016 and Forecast for FY2017

#### 1. Sales / Operating income / Net income [100 million yen]

— Net sales (left axis) — Operating income (right axis) — Net income (right axis)



#### 2. Financial Indicators

	Results for FY2016	Forecast for FY2017
Operating margin	17.4%	17.2%
ROE	15.1%	15.0%
R&D expenses / sales	8.9%	9.1%

#### 3. Shareholder Return

	Results for FY2016	Forecast for FY2017
Dividend payout ratio	33.1%	35.8%
Total payout ratio	70.4%	Maintained at 70%

### 2 Progress with Basic Strategies

#### 1) Maximizing the profit from existing products

##### i. Increasing sales of Fluralaner (active ingredient for BRAVECTO® veterinary pharmaceuticals)

In addition to chewable tablets (oral) for dogs, which are already on sale in over 80 different countries, last year we also launched spot on products (transdermal) for cats in Europe and the U.S. We are planning to launch a spot on product for dogs in Europe and the U.S. in the future too.

\* BRAVECTO® is a registered trademark of Intervet International B.V.



▲ BRAVECTO® spot on products

##### ii. Launching ROUNDUP® MAXLOAD AL II

We launched a fast acting product in the ROUNDUP® MAXLOAD AL series for general household use in June of last year. Sales have been strong since then.

##### iii. Growth in SUNEVER® (LCD alignment coating)

We have increased our share among existing customers and secured new orders for small and medium-sized products, including smartphones. There is genuine demand for television screens too.

#### 2) Improving marketing power

##### i. Opening the Nissan Chemical America Santa Clara Office (April 2016)

We are aiming to “secure new technologies and materials”, and “develop human resources with a discerning eye, as the key to launching new businesses and creating new products.”

##### ii. Establishing Nissan Chemical Do Brasil (June 2016)

We are aiming to “identify needs and strengthen sales capabilities in the world’s largest agrochemicals market, and to improve technical services.”

#### 3) Enhancing R&D capabilities

##### i. Completing plans to improve Biological Research Laboratories (March 2017)

We are accelerating research in the interests of creating new products, as a life science research facility handling operations such as evaluating the efficacy and safety of agrochemicals, pharmaceuticals and medical materials.

##### ii. “Collaborating on creating biomedical materials”

As part of our comprehensive collaboration with Kyushu University, we have started research into materials for regenerative medicine and transdermal DDS materials.



▲ Laboratory at Kyushu University