

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

1 Corporate Vision in 2030

“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)

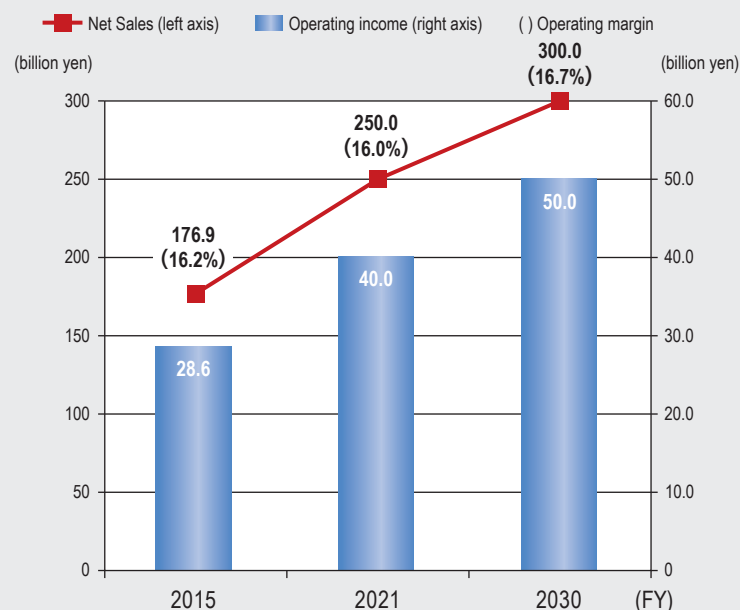
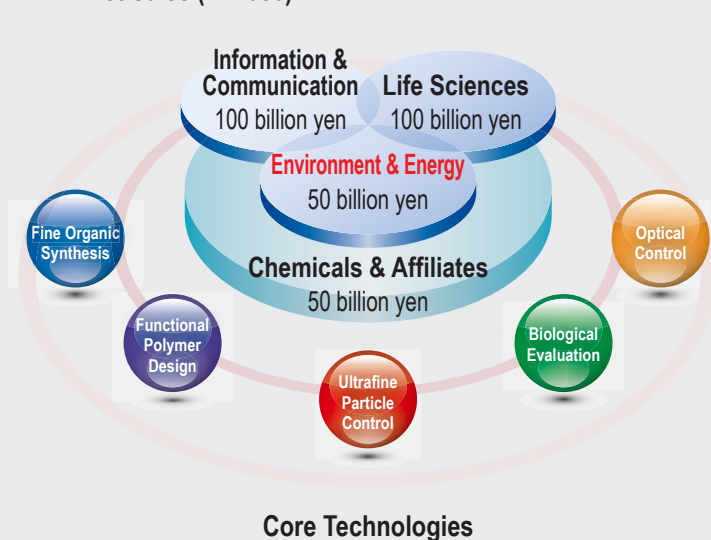
We will continue to carry out R&D in relation to TEPIC®-epoxy compound for LED sealants, solder resist, painting-and launch new high-performance compounds.

3 Business Domains / Business Size

“Information & Communication”, “Life Science”, “Environment & Energy”, and “Chemicals & Affiliates” based on five core technologies

Achievement of net sales of 300 billion yen and operating income of 50 billion yen

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.

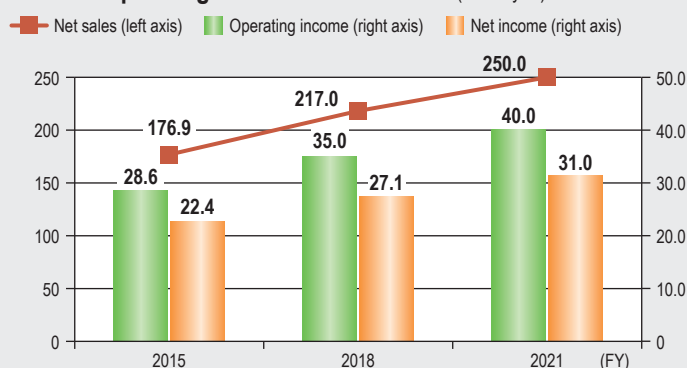
1 Ideal Situation of 2021

“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

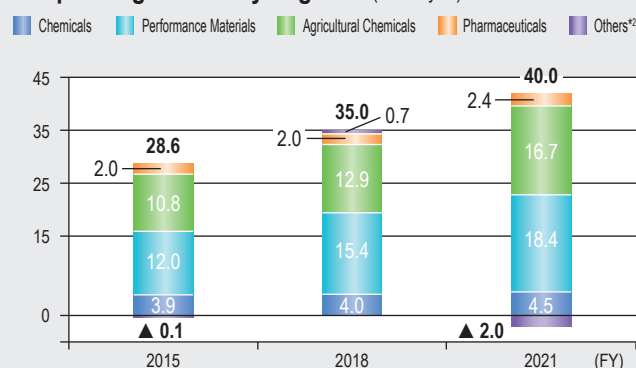
1. Sales / Operating income / Net income*¹ (billion yen)



*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 (billion yen)

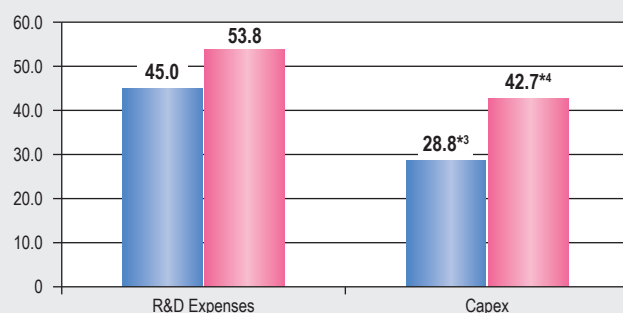


*2 Others: trading, others and adjustment

3 R&D Expenses, Capex

R&D Expenses, Capex (billion yen)

Legend: FY2013-2015 total (blue), FY2016-2018 total (pink)



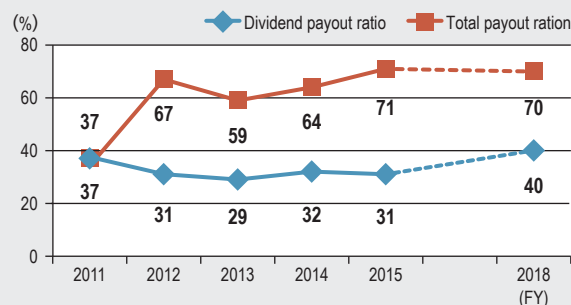
*3 Approval basis *4 Production commencement basis

4 Financial Indicators (FY2018 target)

Operating margin	Above 15%
ROE	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.
https://www.nissanchem.co.jp/eng/news_release/release/en2016_05_16.pdf

3. Outline of and Progress with “Vista2021 Stage I”

1 Basic Strategies

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|---|--|
| 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 |

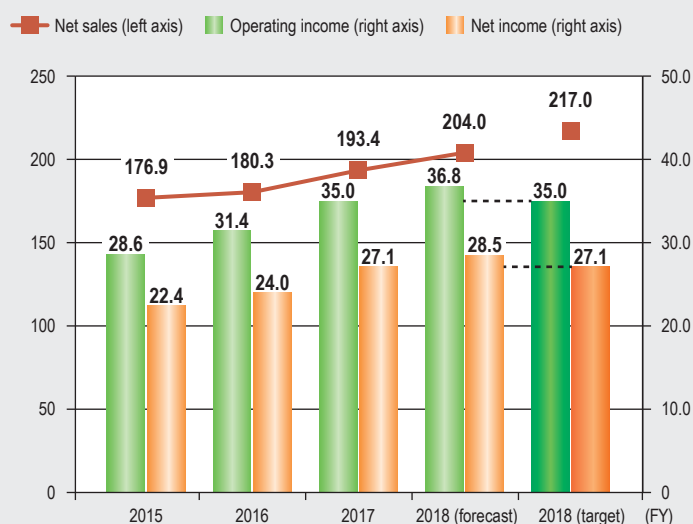
2 Sources of Growth

Increased sales**1 (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	3D packaging materials (TMAT), new lithography materials	ARC® (bottom anti-reflective coating) Multi-layer semiconductor process materials	
	Semiconductor Materials		Oilfield materials	
	Inorganic Materials			
Agricultural Chemicals	New Materials	OLED materials Sensor materials Light control film materials HYPERTECH®		
		New insecticides (in-house) New products (acquired)	ROUNDUP® ALTAIR®	Fluralaner Overseas
Pharmaceuticals		LIVALO® active ingredient (overseas) Finetech® New drugs / Expanded pipeline		

*1 Increased sales based on forecasts at the time of formulating our new mid-term business plan

3 Results for FY2017 and Forecast for FY2018

1) Sales / Operating income / Net income (billion yen)



2) Financial Indicators

	Results for FY2017	Forecast for FY2018
Operating margin	18.1%	18.0%
ROE	16.1%	15.8%
R&D expenses / sales	8.9%	9.1%

3) Shareholder Return

	Results for FY2017	Forecast for FY2018
Dividend payout ratio	37.7%	40.6%
Total payout ratio	70.7%	Maintain 70%

4 Progress with Basic Strategies

1) Maximizing the profit from existing products

- i. Increasing sales of Fluralaner (active ingredient for BRAVECTO®*2, veterinary pharmaceuticals)
In addition to chewable tablets (oral dosage forms) for dogs sold in over 85 countries, spot-on (transdermal absorbent) for dogs and cats was released in Europe and the United States. We launched EXZOLT®*2, which is red mite exterminator for chicken, in Europe, Brazil, and other countries and have enhanced the production capability because the demands for farm animal are expected to increase. *2 BRAVECTO® and EXZOLT® are registered trademarks of Intervet International B.V.
- ii. Launching of ROUNDUP® MAXLOAD AL III
We expanded the line-up of ROUNDUP® MAXLOAD AL series with AL III (fast acting + persistent type) for consumer use in March 2018.
- iii. Growth in SUNEVER® (LCD alignment coating)
We have increased the share of smartphones and other small-and medium-sized displays, and secured new customer for televisions.
- iv. Expansion of application for inorganic materials
We launched shale oil/gas field with NanoActiv® HRT as enhancing oil recovery that have been adopted by 30 companies in North America and have enhanced the production capability.



▲ BRAVECTO® spot-on for cats



▲ Shale oil mining site

2) Improving marketing power

- i. Establishing Nissan Agro Tech India PVT. LTD. (Opened for business in September 2017)
We have enhanced sales support and extended services by cooperation with local partners in India agrochemical market, which is expected to see significant growth. In addition, we are accelerating development of the products that meet market needs.
- ii. Establishing Nissan Chemical Materials Research (Suzhou) Co., Ltd. (Opened for business in July 2018)
We have enhanced technical support and customer services in the China display materials market and are developing the products that meet market needs.

3) Enhancing R&D capability

- i. Investment in PeptiStar Inc.
We have established novel synthetic method for constrained peptides. Through this technique, we are aiming to expand contracted manufacturing and process researching services of pharmaceuticals and to develop in-house drug discovery and regenerative medicine materials.

5 FY2018 Sales Outlook of Future Growth Engines

FY2018 Sales Outlook Level *3	Below 0.3 billion yen	0.3 to 0.6 billion yen	0.6 to 0.9 billion yen	Total
Chemicals	New TEPIC® (liquid type) (Fine Chemicals)			0.1 billion yen
Performance Materials	HYPERTECH®(high refractive) (Display, Others) Light control film materials (Display, Others) Hole injection layer materials for OLED (Display, Others) Repellent bank layer materials (Display, Others) Alignment materials for LC retarder (Display, Others) Organosol (Insulation CTE) (Inorganic, Organo/Monomer sol) New high refractive materials (IM layer film) (Inorganic, Others)	3D packaging process materials (Semis, Others) EUV under layer (Semis) CMOS image sensor materials (Semis, Others)	Oilfield materials (Inorganic)	2.6 billion yen
Agricultural Chemicals	NEXTER® (Agro, Licensed-in)	GRACIA® (Agro, in-house) TRANSFORM™/ EXCEED™*4 (Agro, Licensed-in)		0.9 billion yen
Pharmaceuticals	3D Cell culture medium New GE API product (Custom Chemicals)	Maxacalcitol (Custom Chemicals)		0.6 billion yen
Total 4.2 billion yen				

*3 Including R&D costs deduction due to the sample shipments *4 TRANSFORM™/ EXCEED™ are trademarks of The Dow Chemical Company or its affiliates.