



Materials for the Future



Since its founding 96 years ago, Shin-Etsu Chemical has long contributed to the development of society by continually providing high-quality materials and products to meet the needs of the times. With issues in society becoming increasingly diversified, we believe there to be missions that only the Shin-Etsu Group can fulfil as a company in the industrial upstream sector.

A new material for wearable devices that we brought to market in 2021 harnesses the special characteristics of silicone, thereby eliminating any wearer discomfort and stably collecting electrocardiogram (ECG) signals. By addressing rising demand for home-based medical care, we are helping to bring about a longevity society.

We provide society with materials for the future. By continuing to deliver products of high added value to the world, we seek to contribute to the realization of a sustainable society.



Continuously creating new value in response to societal demand and changing requirements

Since its establishment in 1926 as Shin-Etsu Nitrogen Fertilizer Co., Ltd., the Shin-Etsu Group has continually transformed its business with an eye to the future, and today holds the top share of the global market for many products, including PVC and semiconductor silicon. The Shin-Etsu Group will therefore continue to create new value in response to societal demand and changing requirements aiming to become a leading global company in products that are fundamental to industry and daily life.



1950s-1960s

Formation of business foundation



Silicone products when production first started

- Launched PVC production
- Began production of silicon wafers
- Started production of silicones
- Launched production of cellulose derivatives

- Development of domestic social infrastructure and increased demand for construction
- Spread of home appliances associated with high economic growth

1970s-1980s

Enhancement of existing businesses and global expansion



Shintech's newly opened PVC plant

- Started production of PVC in Texas, USA
- Overseas expansion of semiconductor silicon business
- Overseas expansion of silicones business
- Began production of rare earth magnets
- Launched production of optical fiber preform

- Development of global social infrastructure and economy
- Development of integrated circuits for semiconductor devices and diffusion of personal computers
- Spread of communication networks toward an information-oriented society

1990s-2000s

New challenges/Corporate structure reform/ Enhancement of international competitiveness



300mm wafer building (Shin-Etsu Handotai's Shirakawa Plant)

- Acquired PVC and cellulose businesses in Europe
- Built two PVC plants in Louisiana, USA
- Started mass production of 300mm silicon wafers
- Began production of silicone monomers and polymers in Thailand
- Commercialized photoresists and photomask blanks businesses

- Increase in infrastructure demand in Europe, the Middle East, and Africa
- Diffusion of cell phones
- Spread of the Internet
- Growth in global awareness of the need to reduce environmental impact

2010s-2020s

New growth strategy development



Shintech's new plant in Louisiana

- Started production of ethylene in the US (ensured stable and flexible product supply by establishing an integrated production system for PVC from raw materials)
- Began integrated production of rare earth magnets in Vietnam
- Started mass production of low-dielectric resins (5G-related products)

- Growth in US housing demand
- Global EV shift
- Development of next-generation high-speed communication technologies (AI, IoT, 5G)

Initiatives of the Shin-Etsu Group

Societal issues and needs

Promptly responding to changes in economic conditions and the business environment and forging unrivaled strengths

Cementing a dominant position through manufacturing excellence within the triangular link of sales, development, and production.

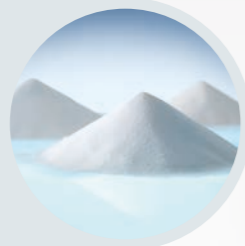
Strength

1 Leading Market Share

We hold the leading market share of key materials essential to society, including PVC and semiconductor silicon.

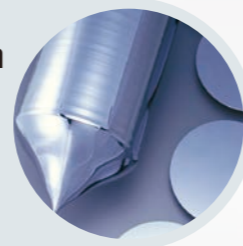
Polyvinyl chloride (PVC) resins

No. 1 globally



Semiconductor silicon (silicon wafers)

No. 1 globally



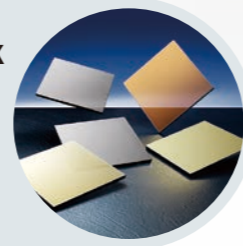
Synthetic quartz (for photomask substrates for LCD)

No. 1 globally



Advanced photomask blanks

No. 2 globally



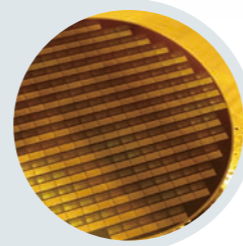
Synthetic pheromones

No. 1 globally



Photoresists

No. 2 globally



Methylcellulose

No. 2 globally



Silicones

**No. 1 in Japan
No. 4 globally**



(Based on Shin-Etsu Chemical research)

Strength

2 Earnings Power

Our high level of profitability is driven by tireless efforts aimed at enhancing productivity and our lineup of competitive products.

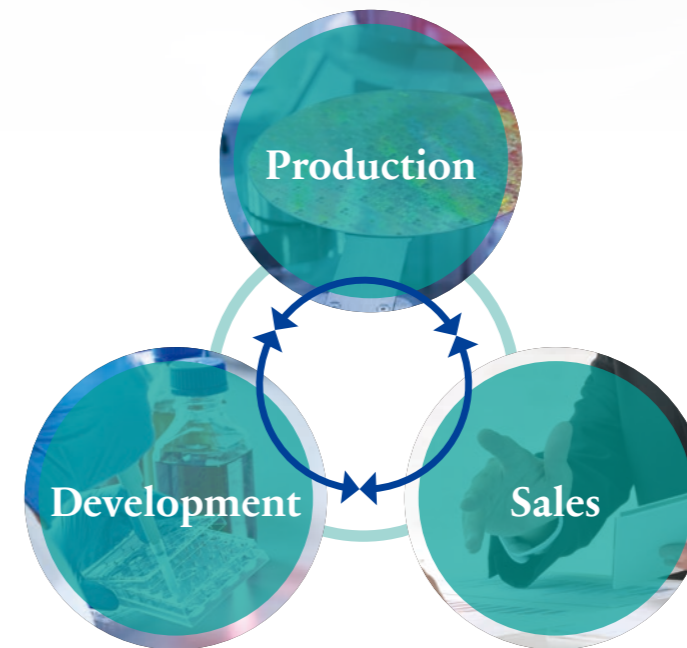
(Fiscal year ended March 31, 2022)

	Operating income to net sales ratio	ROIC	ROE
Shin-Etsu Chemical (consolidated)	32.6%	27.2%	16.3%

Strength

3 Triangular Link Manufacturing

The manufacturing of products at Shin-Etsu Chemical is pursued in close concert with customers. This is underpinned by a triangular link between sales, development, and production.



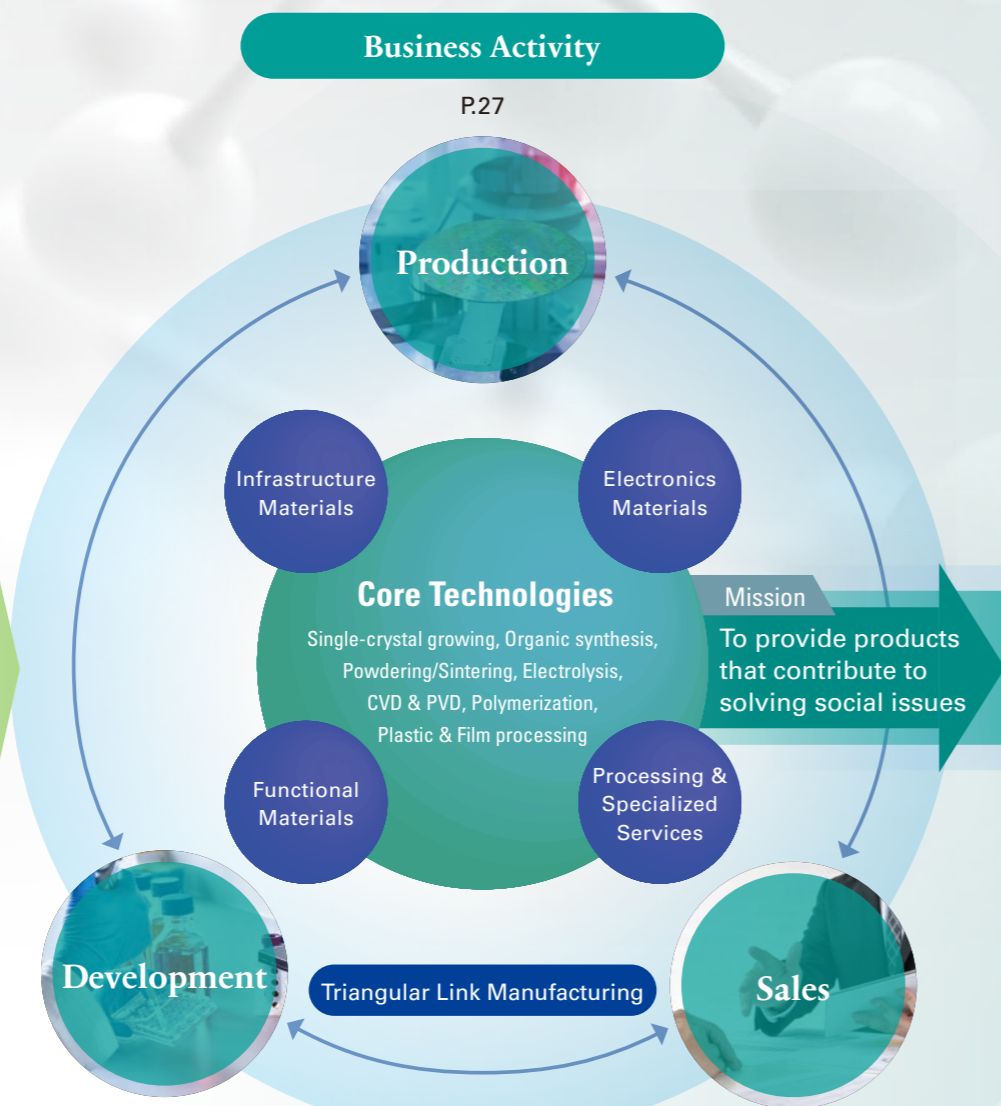
Our research divisions are informed of market needs garnered through sales activities, which ultimately leads to the establishment of research topics. Our development divisions pursue the development of products in line with these topics, while at the same time, they work closely with production divisions to make use of plant facilities and undertake practical development and trial production with a view to the stabilization of quality and volume production. So that this process can be carried out efficiently, all of our R&D centers are located within our plants.

A value creation process unique to the Shin-Etsu Group

By harnessing its strengths in the triangular link manufacturing of sales, development, and production, the Shin-Etsu Group helps solve societal issues by creating unrivaled value with materials indispensable to industry and people's lives.

Sources of Our Competitiveness

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Management Foundation

Corporate Governance

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Sustainability

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- Health and safety of employees and contractors
- Energy-saving, resource-saving, and reduction of environmental impacts
- Product quality improvements and product safety control
- Promoting CSR procurement and the diversification of supply sources
- Respect for human rights, the development of human resources, and the promotion of diversity
- Respect for and protection of intellectual property
- Contribution to industry and social initiatives
- Accurate and timely information disclosure and communication with stakeholders

Value Created

As of March 31, 2022

Operating income **¥676.3 billion**

Net income **¥500.1 billion**

ROIC **27.2%**

ROE **16.3%**

Cash dividend per share **¥400**

Total shareholder return over the past five years **207% (TOPIX144%)**

Market capitalization
 March 31, 2012 **¥2,065.5 billion**
 ↓
 March 31, 2022 **¥7,829.1 billion**

Ratings Moody's Long-term Ratings **Aa3**

Sales composition ratio of environmental products*1 **approx. 70%**

Greenhouse gas emission intensity (compared with FY1990) **47.1% reduction**

Composition ratio of overseas sales **77.5%**

Intangible asset value ratio*2 **56.2%**

*1 Products that contribute to the 14 areas identified by the Japanese government in 2021 as being essential to achieving the goal of carbon neutrality
 *2 An indicator for measuring the value of intangible assets in capital markets
 Intangible asset value ratio = (intangible fixed assets [book value] + market capitalization - net assets [book value]) ÷ market capitalization

Vision

Contribution to the Earth's future

Connectivity

AI, IoT, 5G, metaverse

Semiconductor silicon, silicones, optical fiber preforms, low-dielectric resins, etc.



Smart infrastructure

Infrastructure developments

PVC, cellulose derivatives, silicones



Productivity enhancement

Robots, industrial motors

Semiconductor silicon, rare earth magnets, silicones, etc.



Health enhancement

Pharmaceutical materials, materials for medical apparatus and equipment

Cellulose derivatives, POVAL, silicones, rare earth magnets



Food, sanitation

Synthetic pheromones, cellulose derivatives, photocatalysts



Energy/Resource efficiency

Electric vehicles

Rare earth magnets, anode materials for lithium-ion batteries, silicones, etc.

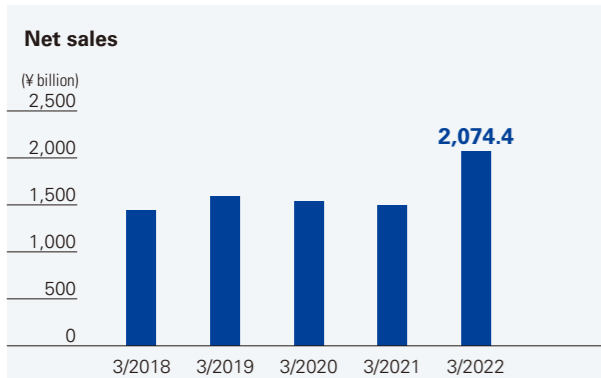


Energy-efficient home appliances, renewable energy

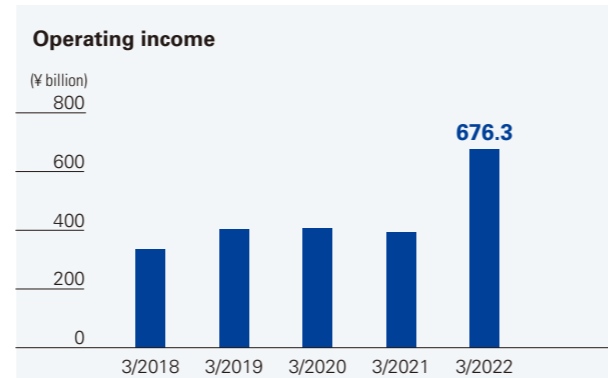
Rare earth magnets, semiconductor silicon, silicones, LED packaging materials, etc.



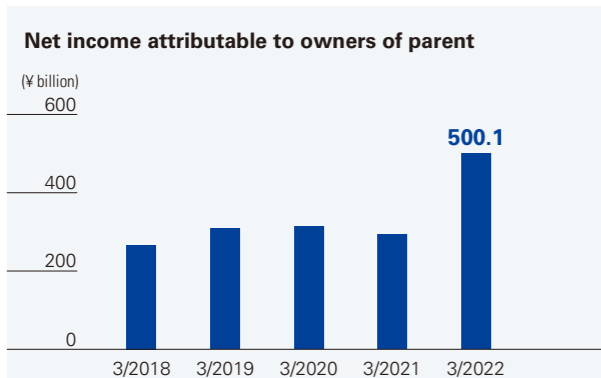
Financial Highlights



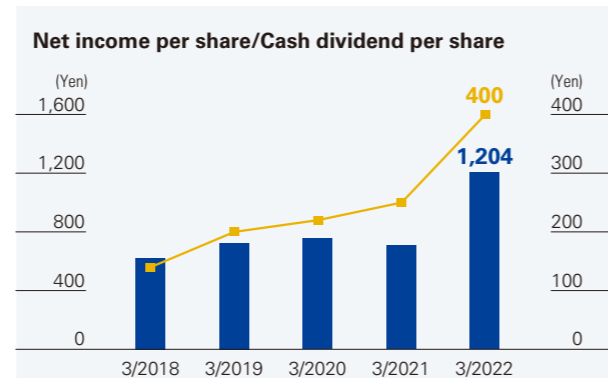
FY2021 consolidated net sales rose 38.6% year on year and exceeded ¥2.0 trillion for the first time owing to strong demand for mainly PVC resins, as well as the impact of price hikes reflecting the higher cost of raw materials.



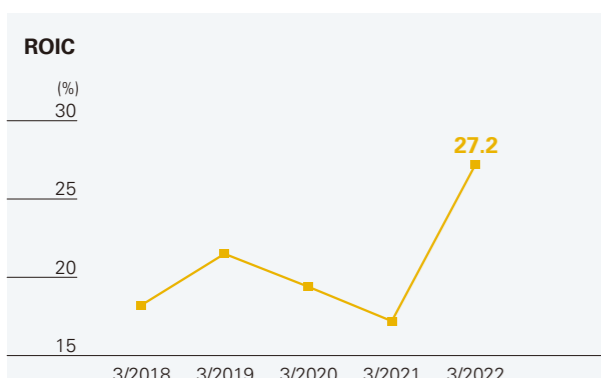
FY2021 consolidated operating income increased 72.4% year on year to a new record high on the back of profit growth in all business segments and notably a sharp increase in profit in the Infrastructure Materials business (3.2 times compared to the previous fiscal year).



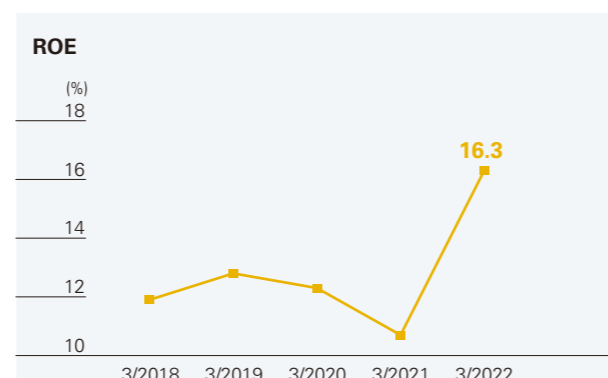
FY2021 net income attributable to owners of parent grew 70.3% year on year to an all-time high, reflecting sharp growth in operating income along with higher equity in earnings of affiliates and foreign exchange gains.



In FY2021, in response to record-high net income per share, we raised our annual dividend by ¥150 from the last fiscal year, marking seven consecutive years of dividend hikes (33.2% payout ratio).

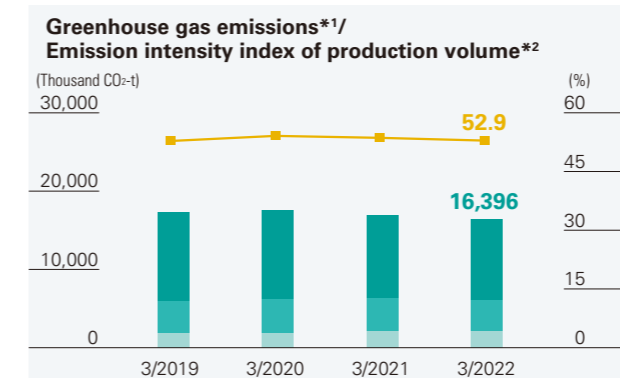


FY2021 ROIC increased 10.0 percentage points year on year on the back of sharp growth in operating income after taxes.



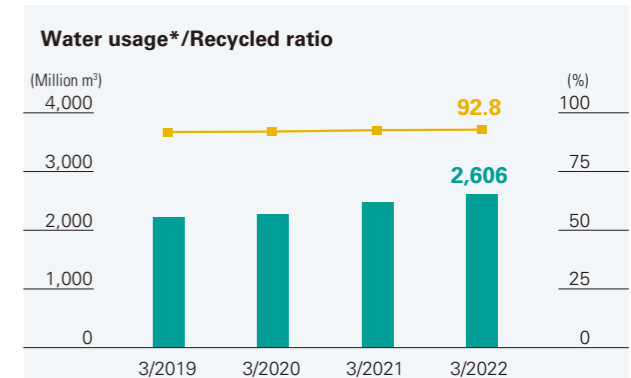
FY2021 ROE rose 5.6 percentage points as a result of sharp growth in net income attributable to owners of parent, despite an 18.3% year-on-year increase in shareholders' equity.

Non-Financial Highlights



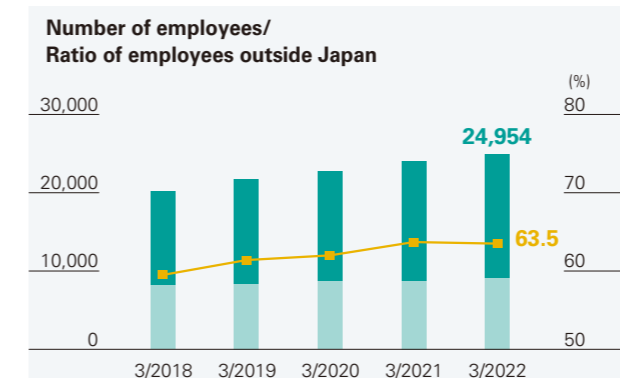
We are using natural gas-fueled cogeneration systems with the aim of achieving our goal of reducing greenhouse gas emission intensity to 45% of our 1990 level by 2025.

*1 Greenhouse gas emissions were corrected retroactively from previous fiscal years after revision of emission factors, etc.
*2 Emission intensity index of production volume reflects Scope 1 and Scope 2.

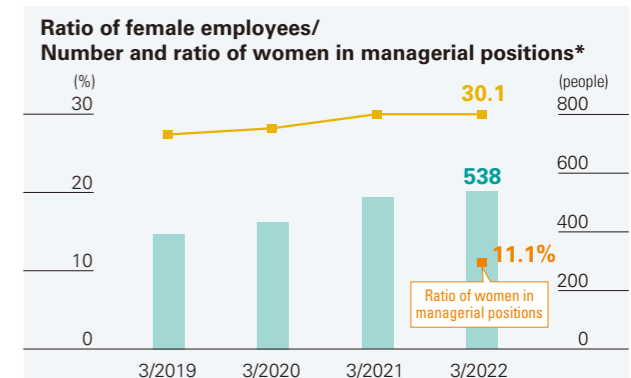


Since manufacturing products requires a large amount of water, we have set a target of "reducing water withdrawal intensity by an annual average of 1%," and are thoroughly promoting the recycling of water and making effective use of rainwater, etc.

*Total quantity of water withdrawal and recycled water

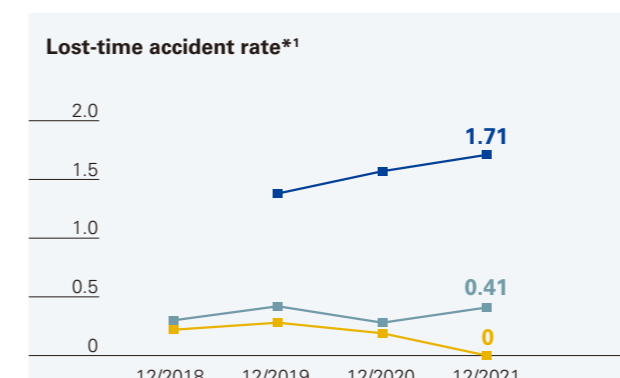


In accordance with international labor standards, each year we survey our consolidated subsidiaries to ensure compliance with laws and regulations, making sure that we respect human rights and properly manage labor and employment in accordance with the laws and regulations of each country and region.



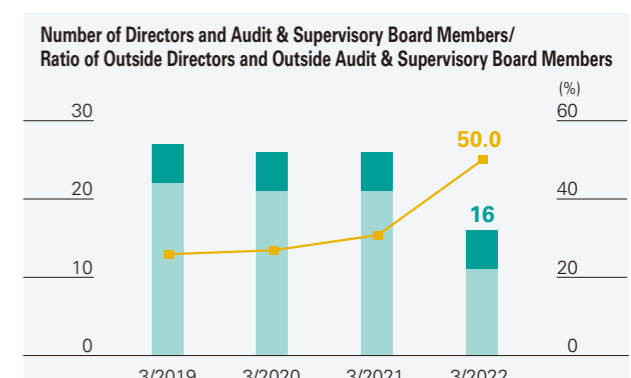
To promote the advancement of women, we have set goals to "increase the hiring ratio of women in administrative positions to 40% and in engineering positions to 10%" and "quadruple the number of women in managerial positions, including junior managers, compared to FY2014."

*Figures for ratio of women in managerial positions calculated starting from FY2021



Although we had no serious accidents in FY2021, there were 93 lost-time accidents at overseas Group companies, and we promptly implemented countermeasures after analyzing the causes of each of them.

*1 The lost-time accident rate is calculated per calendar year.
*2 Averages for the chemical industry in Japan as compiled by the Japan Chemical Industry Association (JCIA).



In FY2021, we substantially downsized the Board of Directors and raised the ratio of Outside Directors and Outside Audit & Supervisory Board Members to improve our ability to promptly respond to changes in the business environment and strengthen our monitoring functions.