

Company Profile

Company Name	石原産業株式会社 ISHIHARA SANGYO KAISHA, LTD.
Head Office	1-3-15 Edobori, Nishi-ku, Osaka, 550-0002
Founded	September 10, 1920
Capital	¥43 billion (As of March 31, 2019)
Employees	Consolidated: 1,642 (As of March 31, 2019)
Overseas Locations (including subsidiaries)	Singapore, China, South Korea, Taiwan, Thailand, Philippines, India, Belgium, United States, Brazil, Argentina

Business

Inorganic Chemicals Business

Titanium Dioxide pigments, high purity Titanium Dioxide, electro-conductive materials, ultra fine particle size Titanium Dioxide

Organic Chemical Business

Herbicides, Insecticides, Fungicides, Active Pharmaceutical Ingredients

Other Business

Biotic pesticides, Animal health products

Basic Philosophy

- Contribute to social development, protection of life and environmental preservation
- Respect shareholders, customers, suppliers, local communities and employees
- Abide by laws and regulations; maintain transparency in business activities

Message from the President

Deepening Our CSR



Kenichi Tanaka

President, Ishihara Sangyo Kaisha, Ltd.

In April last year, we launched our 7th Medium-Term Business Plan with the target year of 2020, our 100th anniversary year. In the new plan, we are working to protect and strengthen our existing businesses, while promoting aggressive initiatives toward new growth. Our basic policy is to become a chemical company that is attractive to all stakeholders.

Needless to say, the prerequisite to becoming an attractive chemical company is to form robust profit foundations that will enable the sustainable growth of our various businesses. On the other hand, companies are members of society, so must contribute to society as corporate citizens and be trusted by

society. In this regard, I believe that it is more important for us to hear carefully our stakeholders and to communicate actively about not only our business, but our other activities as well.

In particular, recently, corporate activity is drawing more attention from the perspectives of ESG (Environment, Society, and Governance) and the Sustainable Development Goals (SDGs). These concepts have much in common with CSR. We are not only being called on to contribute to society through our main business, namely, providing valuable products that are of benefit to society, but also respond to society's demands through corporate activities that are mindful of various social needs, including the environment. Going forward, incorporating ESG and SDG perspectives into our activities, we will make a company-wide effort to create new value to help build a sustainable society.

Companies are also members of their local communities. We will aim to become a company that is trusted by residents of the communities where businesses are located. At the same time, we will work together with those local communities to help in whatever way we can to solve problems that they are addressing.

CSR is a never-ending theme, that we must approach with flexibility in line with the changes in the times and society.

We appreciate your understanding of our activities through this report.

Medium-Term Business Plan

7th Medium-Term Business Plan (FY2018 to FY2020: April 2018 to March 2021)

The ISK group will mark the centenary of its foundation in 2020. As we aimed to achieve that milestone, in 2009, we established a vision for the group to become “a strong and responsible chemical company with excellent brand power” by 2020. Since then, we had strived to realize this vision through past three Medium-Term Business Plans.

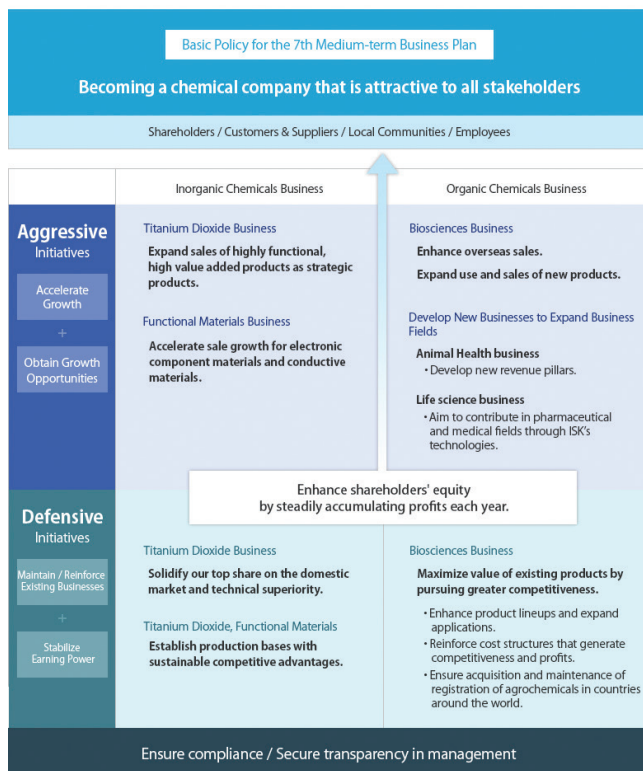
In the 7th Medium-Term Business Plan (FY2018 to FY2020), we are working hard under the basic policy of

becoming “a chemical company that is attractive to all stakeholders.” We made a good start in the first fiscal year of the plan (FY2018), with business results that were well above the plan’s projections, and we were able to resume payment of dividends. In the second year and beyond, we will continue to reinforce aggressive approach to further growth, while continuing to solidify our footholds in our existing businesses.

Actions in FY2019 (April 2019 to March 2020)

ISK Ideal model for the Group to achieve

A strong and responsible chemical company
with excellent brand power



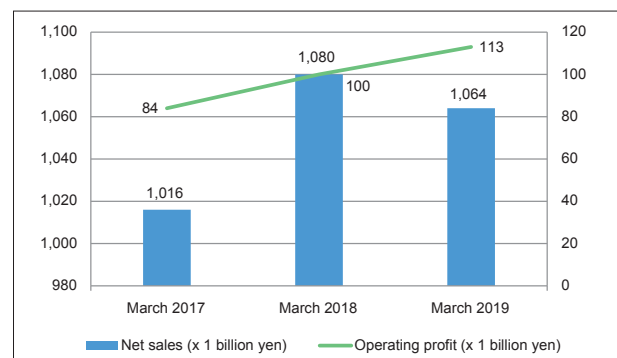
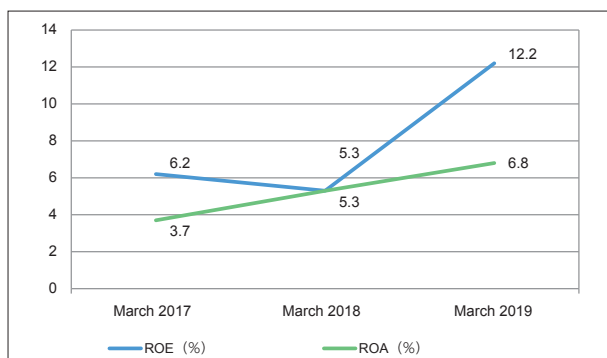
Inorganic Chemicals Business

We will further accelerate our initiatives that shift our focus from common products to the development and sale of highly functional and high value-added products. For Titanium Dioxide, we will further expand sales of pigment for extremely higher weather resistance, which are growing steadily, and pigments for ink. We will also focus on increasing sales of pigment for matte finishes, which is attractive to users. For functional materials, demand is increasing for high-purity Titanium Dioxide and Barium Titanate for electronic elements, as well as for electro-conductive materials with anti-static electricity. We will steadily establish development, production, and sale structures that will enable us to firmly capture the growing demand for these products.

Organic Chemicals Business

For agrochemicals, we will further enhance collaboration with new business sites that we have established in recent years to expand our overseas sales and with sales subsidiaries in major markets. We will also develop sales strategies that are tailored to the needs of each region. With these approaches, we will focus on strengthening the sales and marketing of our own products. On the production front, we will continue working to reduce production costs and improve quality to secure a competitive cost advantage. In the animal

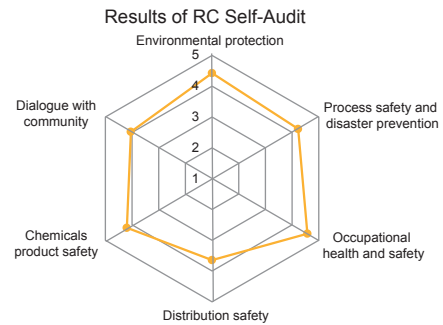
health business, while promoting penetration of the world's first anti-pancreatitis drug for dogs in the Japanese market, we will accelerate development of this drug so it can be marketed in the core markets of the United States and Europe. We will also steadily proceed with the Phase II clinical trial of the anti-cancer drug HVJ-E, which we are developing with Osaka University. We also work to establish business partnerships with external parties at an early stage.



Responsible Care Activities

What is Responsible Care (RC)?

Responsible Care refers to the respective activities undertaken by companies that handle chemical substances. It includes voluntarily approaches to securing “environment, safety, and health,” in all processes, from the development of chemical substances to their manufacture, distribution, use, final consumption, and on to their disposal and recycling. Companies provide stakeholders with their performance of these activities and make an effective communication with their stakeholder. The chart at right shows the results of our RC initiatives evaluated by self-audit.



Disaster drill aimed at improving capabilities of process safety and disaster prevention (Central Research Institute)

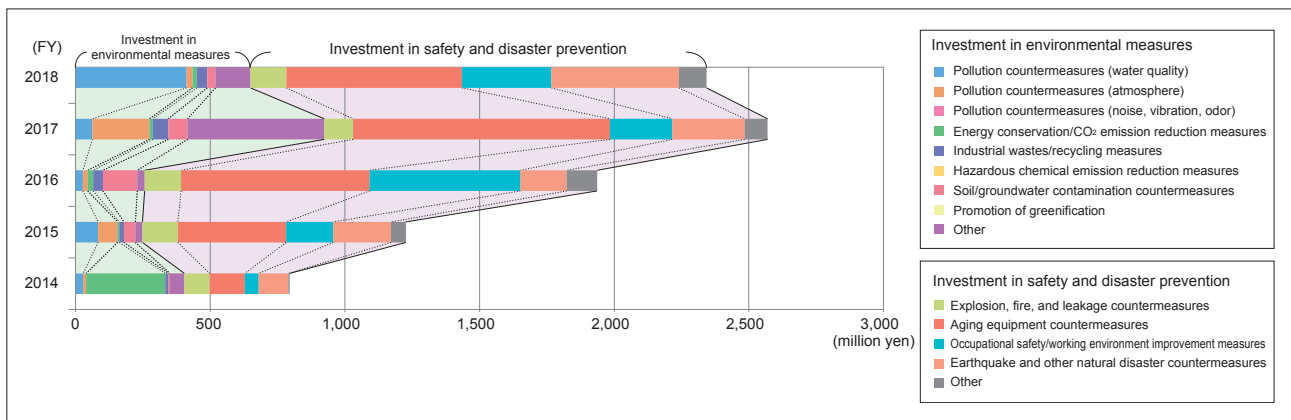


Equipment for removing ammonia from wastewater (Yokkaichi Plant)

Trends of investment in environmental measures and safety and disaster prevention measures

Most investment is allocated to the Yokkaichi Plant. The graph below shows the trends of investment in environmental measures and investment in safety and disaster prevention. In FY2018, we invested intensively

in pollution countermeasures (water quality), measures to replace aging equipment, and measures to prepare for earthquakes and other natural disasters.

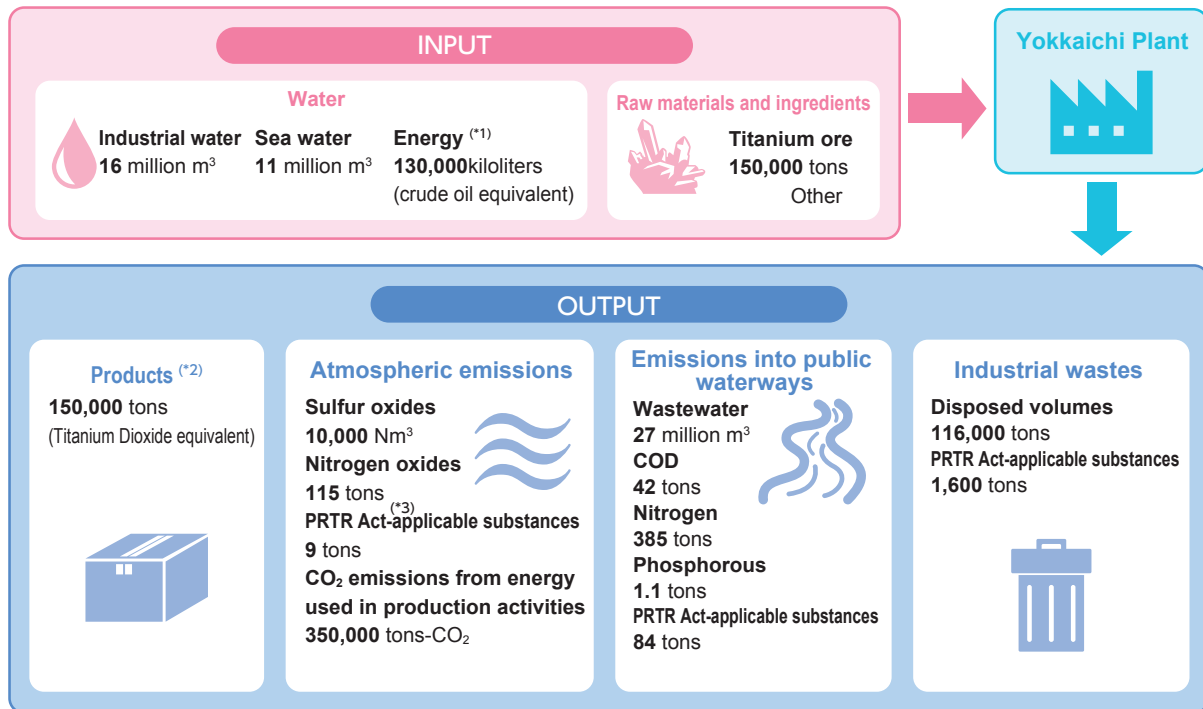


Environmental Protection

Yokkaichi Plant

Material balance in FY2018 business activities at Yokkaichi Plant

The material balance in the business activities of Yokkaichi Plant, in FY2018 was as follows.



Note 1: Energy used includes heavy oil, LNG, steam, and electricity, but their usage volumes are all expressed as crude oil equivalent figures under the Energy Saving Act.

Note 2: We produce inorganic products and organic products but these are all expressed as Titanium Dioxide equivalent production figures, using energy consumption intensity under the Energy Saving Act.

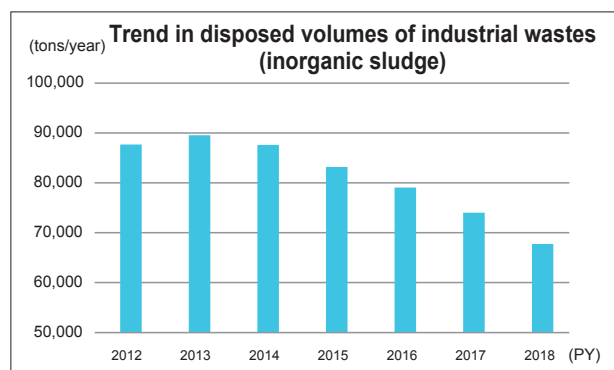
Note 3: Japanese pollutant release and transfer register Act

Initiatives for the reduction of industrial wastes

Industrial wastes (inorganic sludge) are generated in the production of Titanium Dioxide and other products at the Yokkaichi Plant. The reduction of these wastes is a challenge that our company must address.

As a result of recent activities on reduction, through innovations to reduce wastes in the production processes (yield improvement) and in wastewater treatment conditions (neutralization/oxidation reaction), the plant succeeded in cutting wastes generation from approximately 90,000 tons for the year in FY2013 to just under 70,000 tons in FY2018, a reduction of approximately 20,000 tons.

We have projected that we will be able to achieve further reductions of several thousand tons by continuing to pursue the above improvements, and we will proceed with the necessary measures, including installation of equipment.



Central Research Institute(CRI)

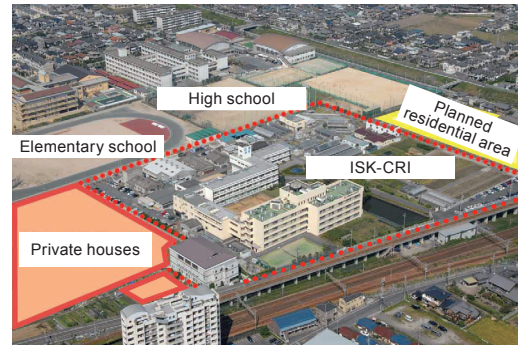
The CRI is surrounded by private houses, an elementary school and a high school, and the rice paddies in the institute's north area are also scheduled to be converted into housing land.

In order to sustain our research activities in such an environment, we have concluded an Environmental Safety Agreement with the city authorities. In this agreement, we have agreed to conduct day-to-day control based on voluntary standards for atmospheric pollution, waste water quality, noise, vibration, odors and other factors that are more stringent than the standards prescribed by laws and regulations. We are striving to protect the health of neighboring residents and to preserve a favorable environment.

Odors are regulated according to odor indices based on the human sense of smell.

Although noise and odor are controlled according to standards, there are times when certain individuals will find them more unpleasant than others.

For this reason as well, we are engaging in environmental protection that includes developing the sensitivity of the eyes, ears and noses of all the CRI staffs.



Vicinity of the CRI



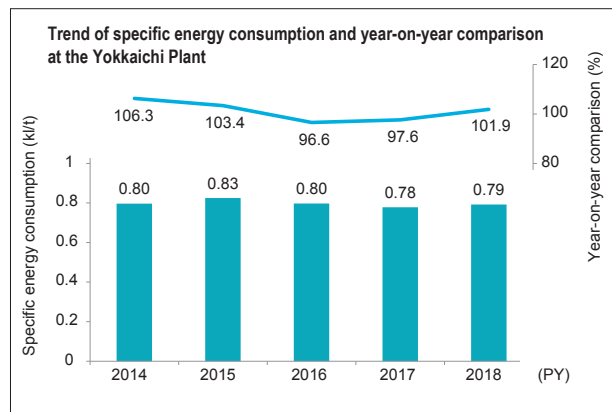
Patrol of institute premises

Trend of Energy Use

ISK is a "Specified company" and the Yokkaichi Plant is a "Type-1 Designated energy management factory" under the Energy Saving Act. In terms of freight transportation, we are also a "Specified consignor".

Specified company

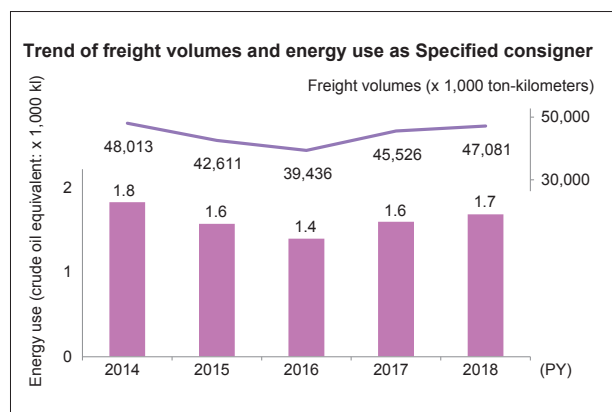
The Yokkaichi Plant uses most of energy in ISK. Its specific energy consumption in FY2018 was worse than FY2017 by 1.9%. However in the average figures for the past five years, it is improved by 0.1%.



Specified consignor

Trends of freight volumes and energy use as a Specified consignor for freight transport are shown in bar graphs right side.

To reduce our impact on the environment, as a consignor, we ask our logistics partner companies to be thorough in the pursuit of low environmental-impact freight operations with efficient transport and delivery operations (e.g. reducing the number of trucks by using large vehicles, and improving loading ratios).



Dialogue with Community

▶ Yokkaichi Plant

At the Yokkaichi Plant, we aim to build further relationships of trust with the local community through communication. We do this by holding factory tours twice a year and special classes for the local junior high school students.

In our social contribution activities, we voluntarily conduct clean-ups of the area around the Plant and participate in the Suzuka River Clean Campaign, which is a clean-up activity held annually through the collaboration of the community, local government and related companies. We consider these kinds of community events is very important. Further, in an effort to contribute to traffic safety in the region, we have joined the local Traffic Safety Association and are involved in traffic safety awareness activities at the roads in the city.

The activities of the Yokkaichi Plant are reported in "Kizuna", the local information magazine, which is regularly issued to local residents.



Local information magazine, "Kizuna"



Special class at local junior high school



Joint disaster prevention drills with local fire brigade

▶ Central Research Institute(CRI)

The CRI holds voluntary clean-up activities in May and October, in which CRI staff pick up trashes and pull weeds along their commuting routes. Every time about 60 employees volunteer for this activity, even on their days off.

The CRI also conducts the following activities for nearby educational institutions.

In autumn every year, the CRI invites approximately 100 students in the science courses at the high school for the CRI tour. This tour provides them with the opportunity to learn about the research and development of agrochemicals. Results of the post-tour questionnaire show that the tours are very useful for students in deciding future courses. The neighboring elementary school is engaged very passionately in environmental education, receiving accreditation as an Eco School from local Government for six years continuously. There is an Eco School Support Committee, comprised of prefectural

and municipal agencies, neighboring companies, and school officers. Two people from the CRI participate as members of this committee and cooperate with its activities.



Volunteer clean-up



Aiming for Active Communication of CSR Activities

Director of Finance & Accounting Headquarters
Yasunobu Kawazoe

Q1 In recent times, investors' interest has turned to corporate governance, environmental contributions, social initiatives and the like. Could you tell us current topics?

Recently institutional investors have emphasized more for company engaging in ESG initiatives. There is a trend among investors to select companies for the investment under several conditions. Investing to companies that are considerate of ESG is commonly named as ESG investment. Many institutional investors around the world are doing the ESG investment and the total amount of them is very increasing. According to recent newspapers, in the ESG trend investors' interest is overwhelmingly governance (G), followed by environment (E). In respect of governance, there is a need to check whether board members are monitoring the company according to the governance code indicated by the Tokyo Stock Exchange, and whether the company is being operated with transparency. I believe ISK is becoming a well regulated company in terms of governance. We reported those corporate circumstances to date, but moving forward we should communicate those ESG perspectives more, so that external parties can use the information in their assessments.

Q2 Could you tell us about any distinctive features of the company's initiative for the environment?

The environment is one area that society has always had a strong interest in, but recently responses to single issues are tending to change drastically. For example, the pollution of the oceans with plastic wastes has ever been a problem, but these days plastic removal at convenience

stores and in the fast food industry have been proceeding rapidly. In terms of our own situation, we have a coal-fired boiler that is used to generate electricity to run our plant. However, if we would upgrade that coal-fired boiler, some of institutional investors have already concluded that they don't lend us the money. Activities to prevent global warming and promote the use of clean energies are expected to accelerate into the future. Under these circumstances, it is time for us to consider how to secure energy.

Q3 Based on trend in society, what are your thoughts on future developments?

At the beginning of this year we have received ESG/SDGs assessment by external party. Although the result of assessment is reasonably good, we want to aim even higher in the future. There are several things we will need to do to achieve this. Firstly, in our core businesses, we need to clarify what parts of our inorganic and organic chemical businesses are related to the environment (E) and society (S), and how they are contributing. Having done that, we will need to leverage our strengths to pursue CSR activities and commit to our responses to the ESG /SDGs. There are various key points, but the first thing we need to do is to build necessary structures in line with the corporate governance code.

Q4 To seek the various measures you have mentioned, what will you need in the perspectives of organization and human resources?

These measures will be company-wide initiatives, so I think we will need to set up a new Preparatory

TOPICS Interview with Director of Finance & Accounting Headquarters

Committee, and we will also need to raise awareness among all employees. For other necessary steps we will appoint more outside directors, be more innovative for the contents of the CSR Report and the information about environmental measures and performance data on the website. CSR Reports, which are prepared voluntarily by companies, disclose to external parties the company's initiatives in social contributions, and the like. However there is the risk that they could take on a self-righteous. ESG, on the other hand, can be understood as an evaluation of the company in the eyes of society. It is important to develop our evaluation criteria for checking whether the organization and its business activities are acceptable to the society, to ensure no gap between CSR and ESG activities. Therefore we also need to refer to the examples of other companies.

Q5 Please show a final message?

Precisely because ISK has gone through many and varied experiences, ISK was evaluated as having dealt with ESG. However, it has been pointed out that communication to the society is still not sufficient. If we communicate our various activities well, I believe that we can change ISK more impressively to external parties. We continue our efforts to obtain higher ESG evaluation score three years later from the perspectives of ESG and SDGs. For the purpose we need our awareness and steady efforts.

ISK Employees' Approaches to Environmental Protection and Social Contributions

Masaya Yamaguchi, Production Div.



Our top priority in our day-to-day production activities is to have no incident, no disaster and no pollution. We will continue these efforts and aim to be a plant that is trusted by the people of the area.

Emma Fukumori, Development & Marketing Div.



We aim to contribute to society by hearing opinions from growers and cooperating with relevant departments to provide the products that growers want.

Takayuki Kashima, R&D Div.



While retaining the current selection criteria that are considerate of the environment and beneficial organisms, we will develop and reliable agrochemicals that consumers and growers would like to have.

Noriaki Yamamoto, Procurement Div.



To embody the ISK's corporate philosophy of contributing to society, life, and the environment, we are putting efforts into green procurement, purchasing raw materials and ingredients that have less burden on the environment.