

FY2022 Business Unit IR Meeting

Mineral Resources, Energy, Chemical & Electronics Business Unit Initiatives under SHIFT 2023 and Growth Strategy

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Cautionary Statement Concerning Forward-looking Statements

This report includes forward-looking statements relating to our future plans, forecasts, objectives, expectations and intentions.

The forward-looking statements reflect management's current assumptions and expectations of future events, and accordingly, they are inherently susceptible to uncertainties and changes in circumstances and are not guarantees of future performance. Actual results may differ materially, for a wide range of possible reasons, including general industry and market conditions and general international economic conditions. In light of the many risks and uncertainties, you are advised not to put undue reliance on these statements.

The management forecasts included in this report are not projections, and do not represent management's current estimates of future performance. Rather, they represent forecasts that management strives to achieve through the successful implementation of the Company's business strategies. The Company may be unsuccessful in implementing its business strategies, and management may fail to achieve its forecasts. The Company is under no obligation -- and expressly disclaims any such obligation -- to update or alter its forward-looking statements.

I am Sakamoto from Mineral Resources, Energy, Chemical & Electronics Business Unit. Thank you. I would like to explain our division's SHIFT 2023 initiatives and our future growth strategy.

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Today, I will first provide an overview of the business unit's overall business and then explain our initiatives under SHIFT 2023 for the growth of the business unit and SBUs, as well as our outlook for the future. I would then like to focus on two individual SBUs and delve into their growth strategies.

01

Business Unit Overview

First, here is an overview of the business unit as a whole.

Business Development in Mineral Resources, Energy, Chemical & Electronics Fields

- In the Mineral Resources & Energy Field, developing businesses related to non-ferrous metal materials and products, iron ore, petroleum and natural gas, coal, and carbon materials and products
- In the Chemical & Electronics Field, developing businesses related to basic chemicals (organic/inorganic chemicals, and biochemicals), battery and electronic materials, electronics, pharmaceuticals, cosmetics, crop protections, fertilizers, and veterinary drugs

Mineral Resources Division No.1



Mineral Resources Division No.2



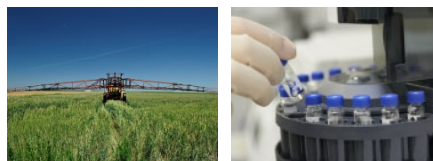
Energy Division



Basic Chemicals & Electronics Division

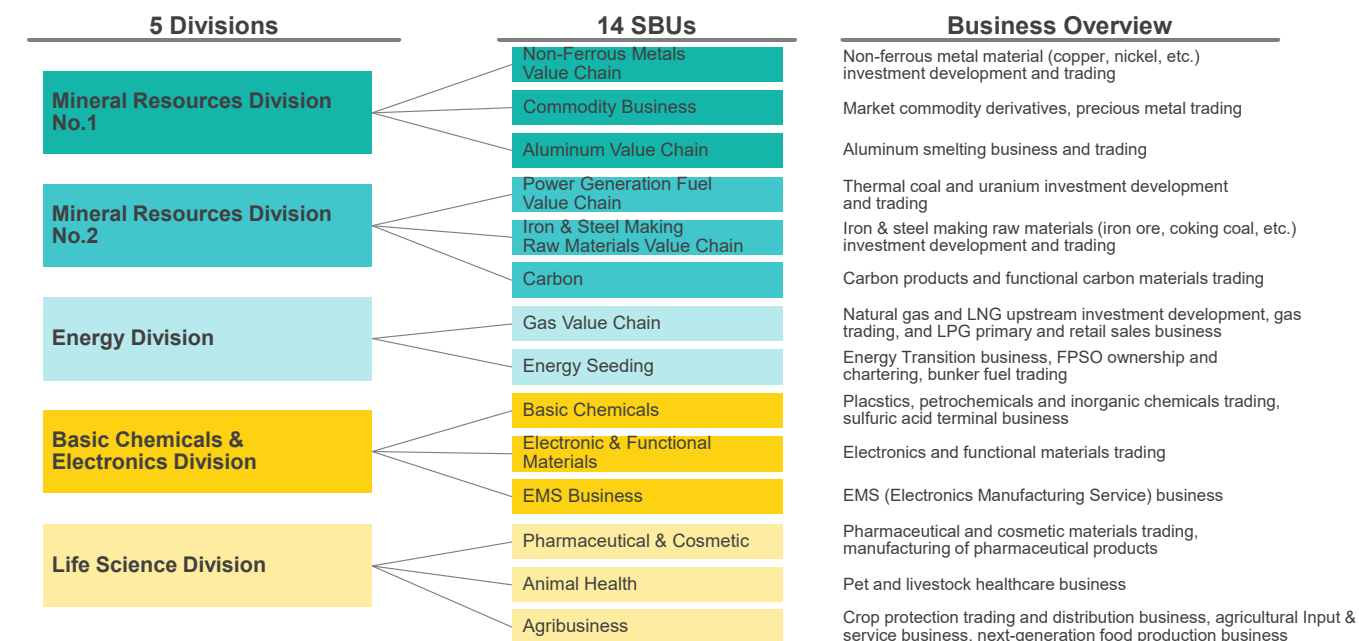


Life Science Division



Mineral Resources, Energy, Chemical & Electronics Business Unit consists of five divisions: Mineral Resources Division No. 1; Mineral Resources Division No. 2; Energy Division; Basic Chemicals & Electronics Division; and Life Science Division. We are engaged in the businesses globally in the mineral resources and energy fields and chemicals and electronics fields.

Unit Strategy Promotion Centered on SBUs



The following is a list of the business unit's organization and SBUs or strategic business units. There are 14 SBUs, with each strategy as one unit. Each SBU has clearly defined its position and role in the execution of the strategy.

02

Business Unit/SBU Growth Strategy

Next, I will explain our future growth strategy of business unit and SBU.

Business Portfolio SHIFT

- Capital recycling progressing as planned; investing in focused area along with divestment
- As for businesses with value-up on the way, such as nickel mining and refining business in Madagascar, we continue to work on increasing their value
- Accelerating building a portfolio that is both more highly profitable and resilient through reallocation of management resources



This slide summarizes the shifts in the business unit's portfolio during the medium-term management plan, SHIFT 2023. On the left are the divestment area, in the middle are the value creation/steady business growth area, and on the far right are the seeding areas.

First, in the divestment area, we are making steady progress in downsizing and withdrawing from the fossil fuel asset, toward carbon neutrality by 2050. During the period of this medium-term management plan, we withdrew from Rolleston, our interest in Australian thermal coal, and from North Sea oilfields in the United Kingdom and Norway.

In the value creation area in the middle, we will seek to increase our presence and business value in our respective industries by leveraging our strengths and increasing profitability, while maintaining invested capital level.

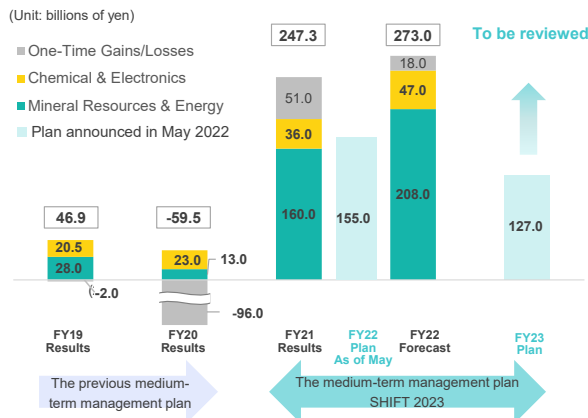
Focused businesses are areas where we will concentrate our management resources to aggressively accumulate prime assets and promote regional development to expand our earning power. In this business unit, the steady business growth areas include the expansion of products and functions and geographic expansion of the agricultural input and service business and further regional development of the aluminum smelting investment, where further demand growth is expected.

Finally, the rightmost area is the seeding area. We will create new businesses and nurture next-generation businesses over the medium- to long-term time horizon in order to solve key social issues. In the energy field, we will accelerate the creation of new businesses by building up our knowledge and experience in next-generation energy businesses, including participation in a business study to establish a hydrogen value chain centered on the Bacton gas terminal in the United Kingdom.

Outlook

- Expanding scale of profits through strong midstream and downstream business in the Mineral Resources & Energy Field and solid business growth in the Chemical & Electronics Field, with some help from the tailwind effects of mineral resources and energy prices
- Taking on various measures to achieve both further growth and solutions to key social issues in the future

Net Income Results(FY2019-21) and Forecasts/Plans



*Due to reorganization carried out as of Apr.1 2021, FY19 and FY20 results are described on a reclassified basis.

Outlook

【Mineral Resources & Energy】

- Increase profits by investing capitals in focused areas (battery metals/base metals, etc.)
- Raise profits through stabilization of Ambatovy operations, stable earnings in the trading business, etc.

【Chemical & Electronics】

- Further earning contribution from the basic chemicals field, which has been solidly built up profit even throughout COVID-19, and the EMS business which has seen easing of the tight supply-demand balance for semiconductors
- Increase profits by investing capitals for geographic expansion and function enhancement in the agricultural input & service business, and by tackling the reduction of CO₂ emissions from the agricultural sector through innovation

【Initiatives for Mitigation of Climate Change and a Circular Economy】

- Promote Energy Transition business through collaboration with other SBUs, including hydrogen production and CCS/CCUS businesses, in addition to downsizing and withdrawing from fossil fuel assets
- Reduce environmental impact in the Chemical & Electronics Field by promoting businesses such as recycling-oriented raw materials and waste recovery and utilization

Aim to achieve further growth of the business unit, as well as solve key social issues, such as carbon neutrality by 2050, through business portfolio SHIFT

We will now review our medium-term management plan, SHIFT 2023, and explain the business unit's initiatives for future growth.

On the left side of the slide, we show the business unit's performance in recent years and our profit plan through FY2023. In FY2020, the final year of the previous medium-term management plan, the profit was about negative JPY60 billion. The shutdown of upstream resource projects due to the spread of the COVID-19 infection and the sluggish market conditions resulted in a drop in business revenues, especially in the resource sector, and a large one-off loss was also recorded.

Although we started the current medium-term management plan in an extremely difficult business environment, the recovery of market conditions and recovery demand from COVID-19 have steadily led to earnings that reached JPY247.3 billion in FY2021, and the recently announced forecast for FY2022 is JPY273 billion, the highest ever for the business unit.

In the chemical and electronics field, shown in yellow on the bar graph, we have steadily built up profitability since the past, and this fiscal year we forecast a record profit of JPY47 billion by steadily linking demand growth to earnings.

The plan for FY2023 announced in May of this year called for JPY127 billion in the next fiscal year, but we are currently considering an upward revision to the plan. We hope to be able to present specific figures to you when we announce our full year consolidated results next May.

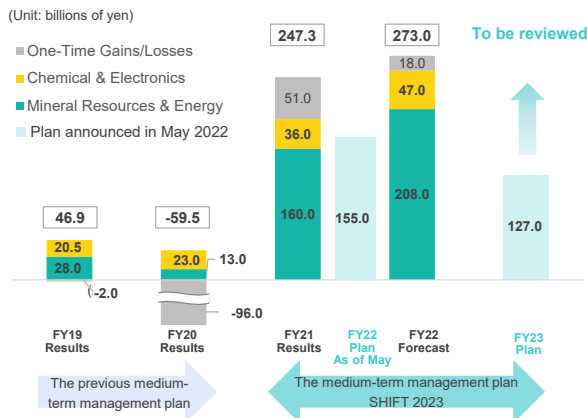
On the right side of the slide, the outlook for each of the mineral resources and energy field and chemical and electronics field is described, as well as the mid- to long-term time frame for climate change mitigation and the circular economy that the business unit should address, among other key social issues.

In the mineral resources and energy field, we are considering building up our invested capital in battery and base metals, such as copper, nickel, and lithium, which we consider relatively more attractive in our investment discipline. Although the hurdles to participation have become higher due to the recent surge in resource prices, we are considering investment projects that are not limited to upstream but also include midstream and downstream projects based on an assessment of the profit pool. We will also discuss the future of Ambatovy later.

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(Continued)

Next, in the chemical and electronics field, as evidenced by our results, we have been accumulating solid earnings even with the COVID-19 pandemic. In particular, we have accumulated solid revenues in the basic chemicals field. Among them, in the electronics field, we expected to further contribute to earnings in the EMS, which stands for electronics manufacturing service, or contract manufacturing services for electronic devices, where we have an advantage.

Until last fiscal year, the contract manufacturing service for electronic devices and components had been sluggish due to the shortage of semiconductors. However, we have been proposing alternative parts and strengthening our procurement capabilities as a group, including the flexible exchange of parts among our global bases. The shortage of semiconductors has eased since July, and earnings are rapidly recovering.

In addition, the agricultural input and service business is positioned as a focus business and is considered a future earnings pillar. We will also explain our overall agribusiness, including the agricultural input and service business, later.

Finally, let me talk about our initiatives toward climate change mitigation and circular economy. With regard to climate change mitigation, as mentioned in the previous slide, we are downsizing and withdrawing from fossil fuel assets, and our Australian thermal coal mine is going to close in FY2027. That business has driven our earnings due to the recent surge in coal price, but we are currently working to promote the energy transition business, a new earnings pillar that could replace the business.

In the chemical and electronics field, we are working to promote a circular economy through the use of technologies that contribute to reducing environmental impact, such as the use of recycling-oriented raw materials and waste recovery and utilization. In May 2021, we created an organization called the green chemicals development office in the Basic Chemicals and Electronics Division to promote the resolution and commercialization of key social issues through this initiative. Through these efforts, we will achieve both further growth of the business unit and solutions to key social issues.

03

SBU's Initiatives toward Growth

Next, I would like to take this opportunity to introduce two initiatives for growth at SBU.

03

Non-Ferrous Metals Value Chain SBU

< Ambatovy Nickel Project >

The first is the Ambatovy nickel project in Madagascar.

Ambatovy Nickel Project

- One of the world's largest nickel production businesses in Madagascar
- Producing high-grade nickel and cobalt, demand for which is expected to increase in order to realize a decarbonized society in the future

Significance of the project

- One of the largest integrated (from mining to refining) nickel metal production projects in the world, with long-life (appx. 30 years)
- In addition to stainless steel, which is essential for infrastructure development accompanying economic growth, demand of EV batteries is expected to expand, Ambatovy secures resources and provide a stable supply of high-grade nickel and cobalt to the world and Japan.
- A model case for the diversification and advancement of Madagascar's developing economy as well as development of the local economy
- As an operator and largest shareholder, we will continue to focus on stabilizing the business and maximizing its value from a medium- to long-term perspective, contributing to earnings and strengthening the foundation of the mineral resources business for the future



[Reference] Contribution to Economy of Madagascar

Job Creation: 9,000 employment, including contractors

Local Procurement: US\$ 360 million per year, purchased from over 450 local companies

Education: Ambatovy Training Center, local vocational training, scholarships, etc.

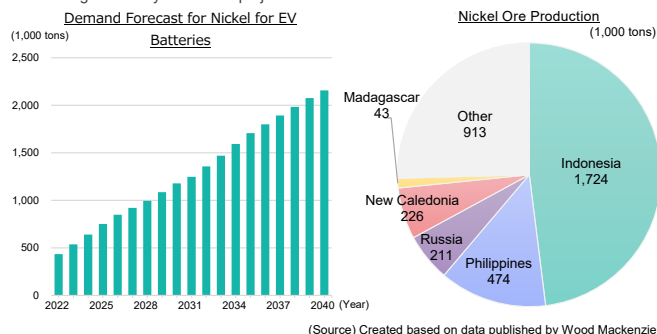
Environment: Conservation of over 18,000 ha of forests and wetlands, protection of biodiversity

Infrastructure: Road, rail, commercial, and medical infrastructure development and support

Agriculture and Food: Support for regional organizations, microcredits, food crises, etc.

Nickel Demand Outlook

- In addition to stainless steel, which is essential for infrastructure development accompanying economic growth, demand for EV batteries is expected to expand.
- However, as nickel resources are concentrated in Asia, stable supply from other regions is a major issue.
- Despite steady growth in demand, producers of high-purity nickel metals are limited, and there are hurdles to increase production and development of new projects in the future, thus making Ambatovy a valuable project.



Ambatovy is a 30-year long-life mine. We provide a stable supply of high-grade, high-purity nickel and cobalt to the world and Japan, which is becoming increasingly important as demand for EVs grows. This is the precious existing asset that continues to produce despite high barriers to entry and is not directly affected by Indonesia, where resources are unevenly distributed, or China, which leads the industry in terms of bullion production and consumption.

It is also a model case of local contribution in Madagascar, one of the least developed countries in the world, not only in terms of direct economic contribution, but also in terms of social, environmental, and human resource development. These values are exactly important for us.

Although we have gone through a difficult path to reach today, we will continue our efforts to stabilize the business as the operator and the largest shareholder. The accumulation of such experience is one of the strengths of our mineral resources' businesses, and we will continue to strengthen our foundation for further growth.

Ambatovy Nickel Project

- Nickel price is expected to remain solid over the long term, and the costs of major commodities are expected to stabilize
- Tackling the reduction of breakeven costs by realizing high-level, stable operations in order to improve profitability

Growth

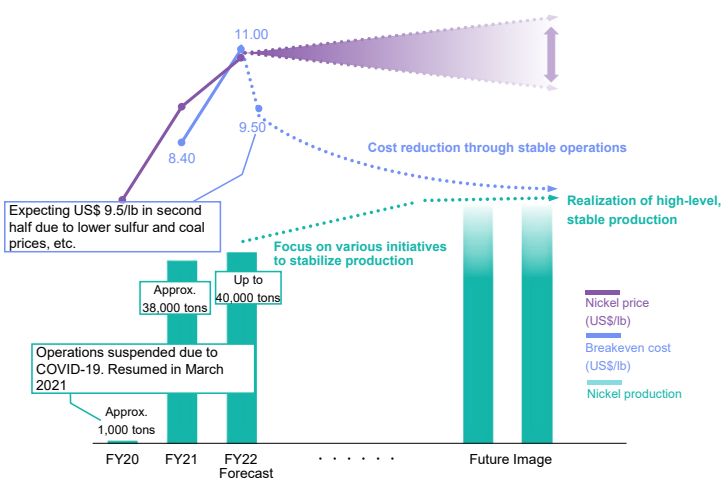
- Nickel price is expected to remain solid over the long term, while costs for major commodities (sulfur, coal, etc.), which have risen sharply this year, are expected to fall and stabilize. Aim to reduce fixed costs gradually.
- After resuming production and steady ramp-up during COVID-19, stable production of over 40,000 tons is planned from FY2023 onward; aiming for nickel production in the upper 40,000-ton range in the future, depending on ore grades and other factors.

Short and Medium- to Long-Term Initiatives

- Stabilizing operation is the highest priority, the foundation for stable operation is being steadily strengthened through ongoing implementation of facility repairs, such as the replacement of a portion of the slurry pipeline*, as well as ongoing efforts to preserve and improve the quality of operations and maintenance and improve systems, including the training of human resources
- Planning to gradually reduce operating costs in the future by achieving high-level, stable operations, with reduced cost of commodities and equipment, outsourcing costs, and promoting localization of human resources, etc.

*1Slurry pipeline: it is for transporting the mined and hydrated ore from the mine to the processing and refinery plant.

Image of Profitability Improvement for the Ambatovy Project



Next, I will explain the growth potential and the Ambatovy project initiatives in the short to medium term.

Production resumed in March 2021 after a one-year shutdown due to the COVID-19 pandemic. As shown in the graph on the lower right of the slide, nickel production in FY2022 is expected to be just under 40,000 tons. Although it is difficult to operate a large and complex plant in Madagascar, we are continuing various efforts to stabilize operations.

In the mid to long term, we are aiming for stable production in the upper 40,000-tons range, depending on various conditions, such as ore grades.

The nickel price and breakeven cost are also shown in the upper-right corner. The current FY2022 annual forecast calls for a breakeven cost of about USD11 per pound, but we expect it to be in the mid-USD9 range for H2 of the current fiscal year due to the calming of the surge in prices of sulfur, coal, and other sub-materials.

By achieving high and stable production, we will reduce fixed costs and operating costs, and grow the business into one that can make a stable contribution to earnings.

03

Agribusiness SBU

Next, I will explain our agribusiness and agricultural business, which we are focusing on in the chemical and electronics field.

Business Environment

- While demand for agricultural materials is expected to increase against a backdrop of rising food demand, the ways of agriculture and food production need to be changed; great business opportunities in this area

Agribusiness SBU (From Apr. 2022)

AgriScience Dept.

Agri-Inputs & Services Dept.

Agri-Innovation Dept.

Crop protections trading, processing, import, and wholesale distribution

Agricultural inputs & services business*, fertilizer secondary processing and sales business (*Providing comprehensive services to agricultural producers, including direct sales of crop protections, seeds, agricultural machinery, etc.)

Development of innovative business in agriculture, livestock, and food production



Changes in the External Environment

- Population growth, growth of the middle class: Growing demand for food
- Environmental and resource conservation: Growing concern about environmental impact of chemical crop protections and fertilizers
- Climate change: Requirement for reduction of greenhouse gas emissions from agriculture and food production

Opportunities

- Growing demand for crop protections and fertilizers to improve productivity
- Shift in demand to agricultural materials and services with low environmental impact **due to restrictions on the use of chemical crop protections and fertilizers**
- Shift to sustainable food production system such as circular agriculture

First, a business overview and business environment. The agribusiness SBU consists of three departments: the agrochemical trade and the overseas import and wholesale business; the direct sales business to farmers; the development of new businesses related to food production.

The external environment surrounding agricultural production is changing by the minute. The world's population is expected to reach 10 billion by 2050, while the amount of arable land may not continue to increase. In fact, global warming is increasing the risk of water and arable land shortages. Therefore, the only way to meet the growing population and consequent increase in food demand is to increase the yield per unit area, and it is clear that the demand for crop protections and fertilizers will continue to grow.

However, there are concerns about the environmental impact of chemical crop protections and fertilizers, and there is a need to simultaneously resolve the conflicting themes of increasing food production and reducing environmental impact. We believe that this is where we can find a great business opportunity.

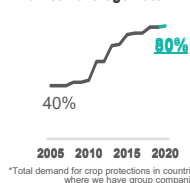
Key Strengths

- Our strength is our group companies and network covering the world's major agricultural regions as well as our integrated business model

1 Network covering the world's major agricultural regions

- Access to approximately 80% of the global crop protection market
- Presence of experienced local employees and managements at each region
- Ability to propose new technologies and agricultural inputs that meet local needs

Crop Protection Distribution
Market Coverage Rate*



2 Integrated business model that comprehensively covers the value chain

- Started fertilizer trading in 1950s and crop protection trading in 1970s
- Expanded functions in response to changes in the external environment; entered into profitable wholesale and direct sales business for farmers by leveraging knowledge cultivated from trading business
- Accumulated knowledge in each business in the value chain; expanded base, leading to expanded functions, by making use of such knowledge in proposals to farmers and new investments

Business sites in 38 countries
Global consolidated workforce:
approx. 2,400



Let me introduce two of the strengths of our agribusiness.

The first is knowledge and networking in the major agricultural regions of the world. Agricultural methods and varieties differ from country to country, and proposals must be tailored to the needs of each country. As shown in the map at the bottom of the slide, we have agricultural group companies in 38 countries around the world. Each country has local employees with in-depth knowledge of the country, and many of these are headed by personnel with local expertise. This network enables us to propose new technologies and materials that meet local needs even in the midst of industry transformation.

The second strength is our integrated business model that covers the entire value chain. We started our fertilizer and agrochemical trading business more than 50 years ago, and since then, we have shifted our position in the industry in response to the changing times and business environment.

To be more specific, in the 1990s, we entered the import and wholesale position overseas, and in the 2010s, we entered the direct sales business for farmers, utilizing the knowledge we gained in the trade. Currently, we are developing businesses in major agricultural countries, such as the production of bioagrochemicals with low environmental impact, seed processing, and fertilizer production, and we share this knowledge globally and apply it to business expansion and new investments.

Future Growth Strategy

- Focusing on function enhancement and geographic expansion in the fast-growing Brazilian market



Growth Strategy in Brazil

Function Enhancement



- Acquisition of fertilizer manufacturing capabilities
- Participation in seed processing business
- Enhancement of consulting functions



Strengthening relationships with farmers through digital platforms/increasing value provided

Agro Amazonia

- Headquarters: Cuiabá, Mato Grosso, Brazil
- Basic information: Established in 1983; approx. 800 employees
- Business overview: Sales of agricultural and livestock materials



- ✓ Since our investment in 2015, shifted from a crop protection sales specialist to a comprehensive agricultural input & service company, including fertilizers and seeds; sales have increased six-fold to date
- ✓ Planning to acquire Nativa, a company in the same industry, in FY2022

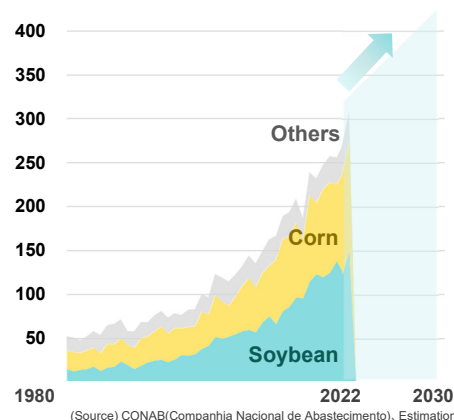


- New branch establishment
- M&A

Geographic Expansion

Brazilian Market Growth Potential

Crop Production/ mil MT



We will now briefly explain the future growth of our agribusiness.

First, let's look at Brazil, a market we have positioned as a focus market. As shown in the graph on the right, Brazil is one of the world's leading agricultural countries and is expected to continue to achieve high growth in agricultural production. One of the core components of our strategy in Brazil is a company called Agro Amazonia, which we joined in 2015.

The figure on the left shows a picture of growth, with functional enhancement on the vertical axis and geographic expansion on the horizontal axis. Agro Amazonia was almost exclusively an agrochemical company before 2015, but after our investment, it began handling fertilizers and seeds, transforming itself into a comprehensive agricultural input direct sales company. This is functional enhancement.

At the same time, we have expanded our customer base by accelerating the opening of new stores. This is geographic expansion. Multiplying this, sales have grown sixfold in about six or seven years, from the time of our investment, 2015, to the present.

And we intend to aggressively pursue M&A to further accelerate that growth. As we already announced in a press release in July of this year, we plan to acquire a company called Nativa, which operates a direct sales business to farmers and a fertilizer manufacturing business in other states adjacent to Agro Amazonia's main markets during this fiscal year. This will allow us to simultaneously expand our access to new markets and enhance the capabilities we offer our customers through our own manufacturing fertilizers.

We have positioned Brazil as a focus market, and we will strive to expand our earnings by capturing the growth of the Brazilian market.

Future Growth Strategy

- Aiming to achieve dramatic growth through business development in the innovation field, in addition to strengthening the existing crop protection distribution business and agricultural input & service business

Growth Strategy

Crop Protection
Distribution Business



SUMMIT AGRO

- **Diversification of sales channels**
Business expansion in major agricultural countries
- **Expansion of highly profitable portfolio**
Sales expansion in high-performance and bio-products
- **Enhancement of functions**
In-house processing, low-environmental-impact formulation technology, etc.

Agricultural Input &
Service Business



- **Geographic expansion**
Expansion of sales network through branch expansion and M&A
- **Expansion of goods portfolio**
Sales expansion in high-performance products and soil neutralizers
- **Enhancement of functions**
Seed processing, secondary fertilizer processing, etc.

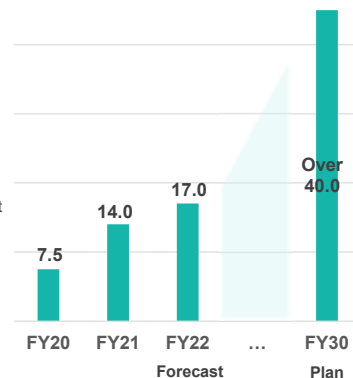
Innovation **New!**



- **Clean farming**
Agricultural and livestock technologies that reduce greenhouse gas emissions, etc.
- **Smart farming**
Farming data analysis/small-scale farmer support business, etc.
- **Next-generation food production**
Genome editing technology, insect protein business, etc.

Profit Plan

After-Tax Income (Excluding One-Time Gains/Losses)/billions of Yen



Finally, I will explain the profit plan and overall growth strategy for the entire agribusiness.

In FY2020, we had an after-tax profit scale of JPY7.5 billion, but due to growth in our core agrochemical distribution business and agricultural input and service business, we are projecting JPY17 billion for this year.

We plan to further accelerate the expansion of our customer base by enhancing the functions we provide to improve profitability and geographic expansion and to multiply this by new fields of innovation to grow to a scale exceeding JPY40 billion by FY2030.

Although we are still in the seeding stage for the innovation area, there are three themes. One of them is clean farming, which is an agricultural method that contributes to the reduction of environmental impact. Specifically, as mentioned here, we will provide customers and farmers with greenhouse gas-reducing agricultural and livestock technologies, such as feed additives for methane reduction. We will be happy to provide customers with such technologies.

In addition to that, there is smart farming. As I mentioned earlier, improving productivity is an urgent issue. We are currently working on the smart farming project to provide farmers with data that contributes to improving their productivity through agricultural drones, soil analysis, and other data, and to provide them with guidance on farming.

Finally, I would like to see the next generation of food production start by investing in startups in alternative protein, insect protein and genome editing technology that will contribute to increased food production and let this blossom into a big flower by 2030. In this way, we will solve key social issues from three angles and link them to business growth.

We hope you will look forward to the future growth of our agribusiness and our business unit.

[END]