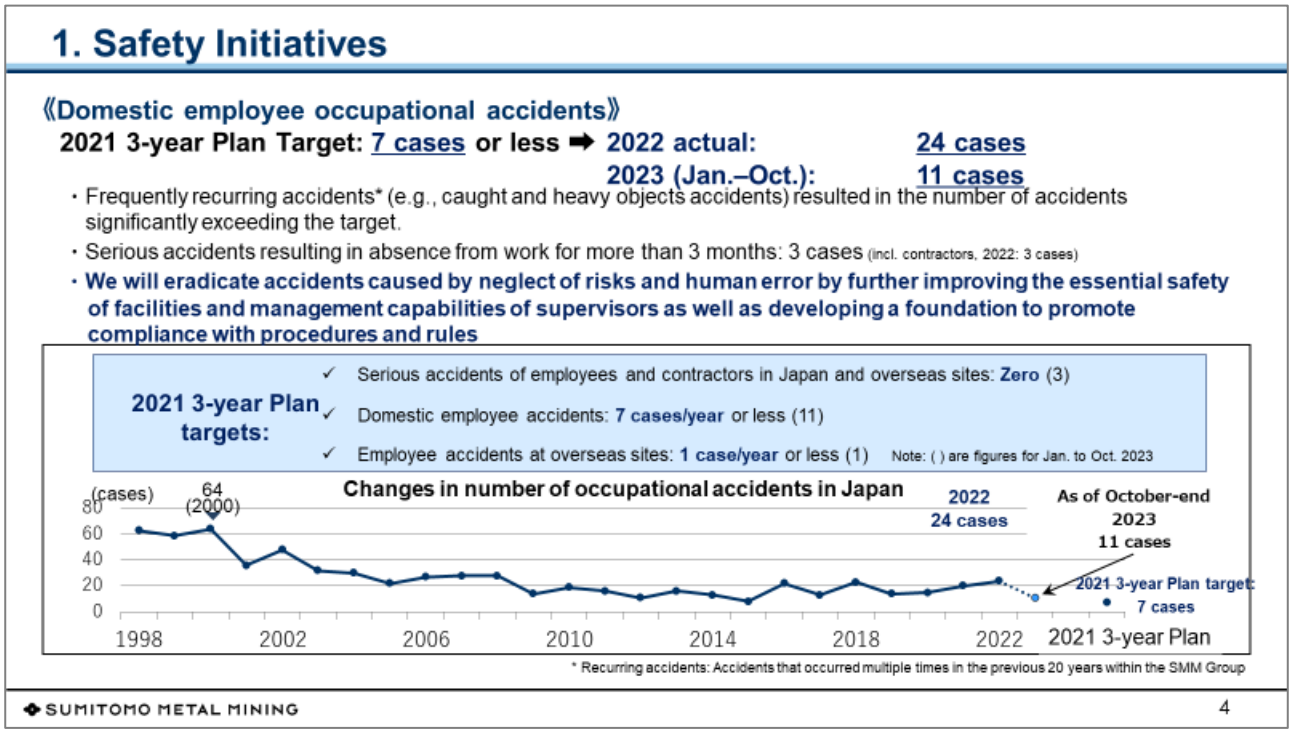
SMM Revises Up Earnings Forecast Given Tailwind from Yen's Depreciation
Aiming to Realize Management Conscious of Capital Cost and Share Price

This is a transcript of Sumitomo Metal Mining Co., Ltd.'s Progress of Business Strategy briefing for the second quarter of FY2023, held on November 16, 2023.

<Speakers>
SUMITOMO METAL MINING, President and Representative Director, Akira Nozaki
SUMITOMO METAL MINING, Executive Officer and General Manager of Mineral Resources Div., Eiichi Fukuda
SUMITOMO METAL MINING, Director, Managing Executive Officer, and General Manager of Non-Ferrous Metals Div., Masaru Takebayashi
SUMITOMO METAL MINING, Managing Executive Officer and General Manager of Battery Materials Div., Katsuya Tanaka
SUMITOMO METAL MINING, Managing Executive Officer and General Manager of Advanced Materials Div., Shuichi Ogasawara

1. Safety Initiatives



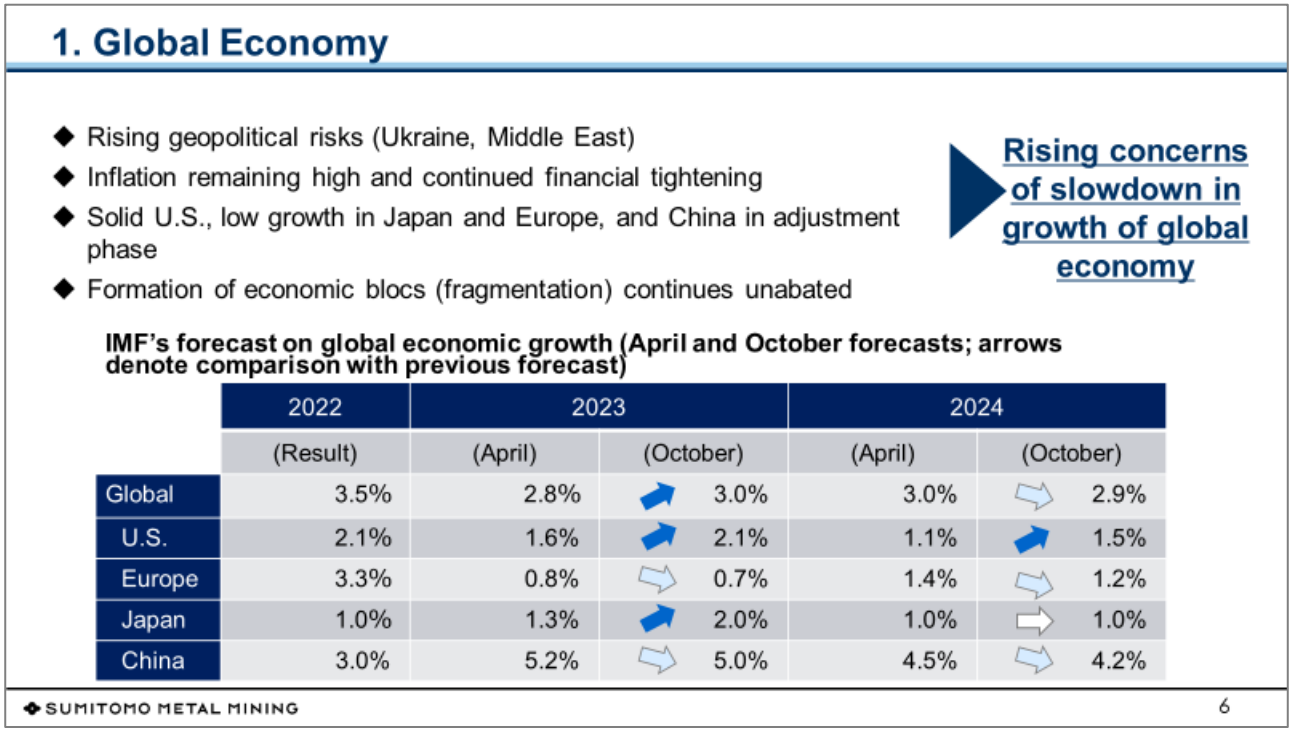
Akira Nozaki: Thank you very much for attending our business strategy briefing today despite your busy schedule. We would like to express our sincere gratitude to all of you for your continued understanding and support of our company's business. I will explain the points of today's briefing using the presentation material.

First, we will look at the safety initiatives. As shown in the graph on this slide, the number of domestic employee accidents till October this year was 11. Though the number is half of last year, the content is not exactly good. Caught and heavy objects accidents and other such frequently recurring accidents have exceeded the target.

Still, to begin with, it is important to have the awareness that the site is a dangerous place and think about how to maintain safety.

Accidents are occurring at places that are far removed from ideal conditions, such as temporary facilities that continue to be in use or worn-out facilities that are neglected. In terms of maintaining facilities and devices in their ideal state, we would like to start by instructing supervisors to firmly maintain the ideal state at sites.

1. Global Economy

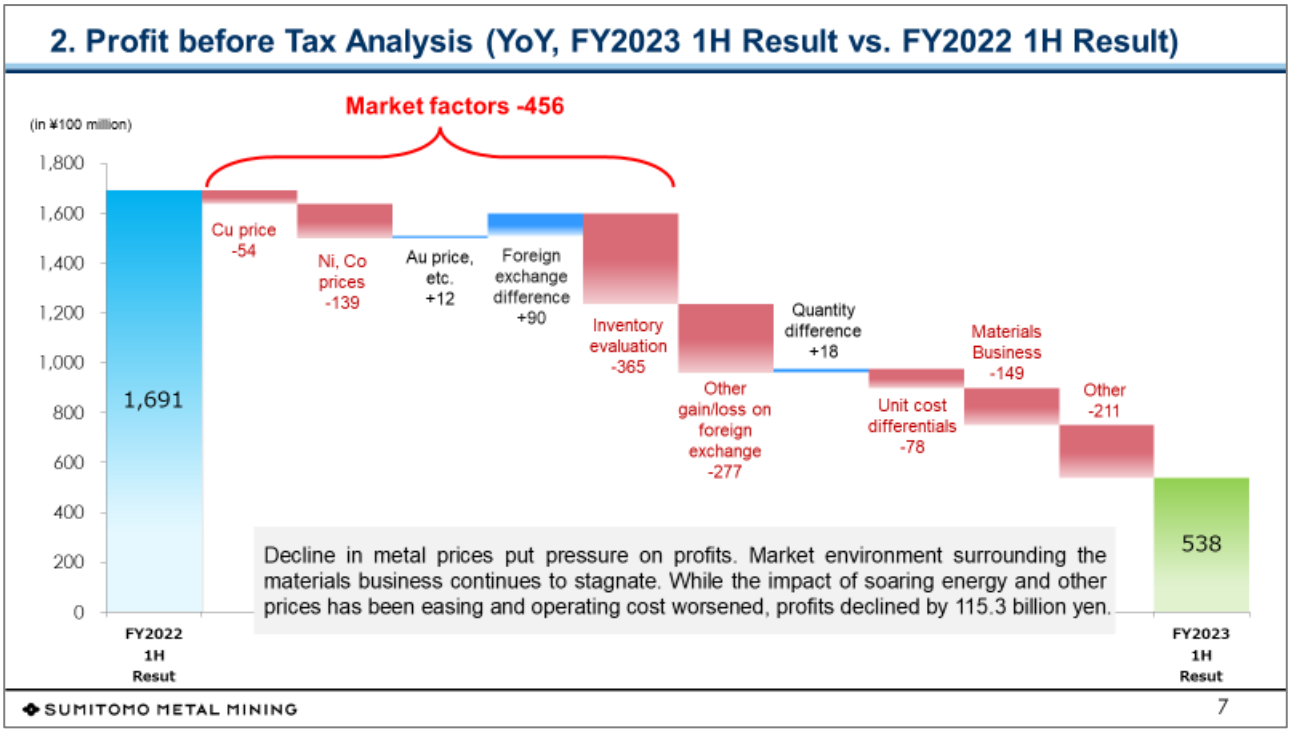


Regarding the environment surrounding SMM, first, I would like to talk about the global economy. Geopolitical risks have emerged around the world, and regarding the economy, we are seeing inflation and changes in monetary policies.

Though we are in the post-Covid era, a feeling of stagnation is persisting in the global economy. In particular, China's recovery not reaching the anticipated levels is having an impact. Especially, debt problems related to real estate, which accounts for almost 30% of the GDP, are in the news.

While there are stimulus measures such as the issuance of government bonds worth one trillion yen, we are paying attention to the sentiments around the non-ferrous metals market and how the electronic parts-related situation, in which our Materials Business is involved, is going to change depending on the pace at which the Chinese economy recovers in the future.

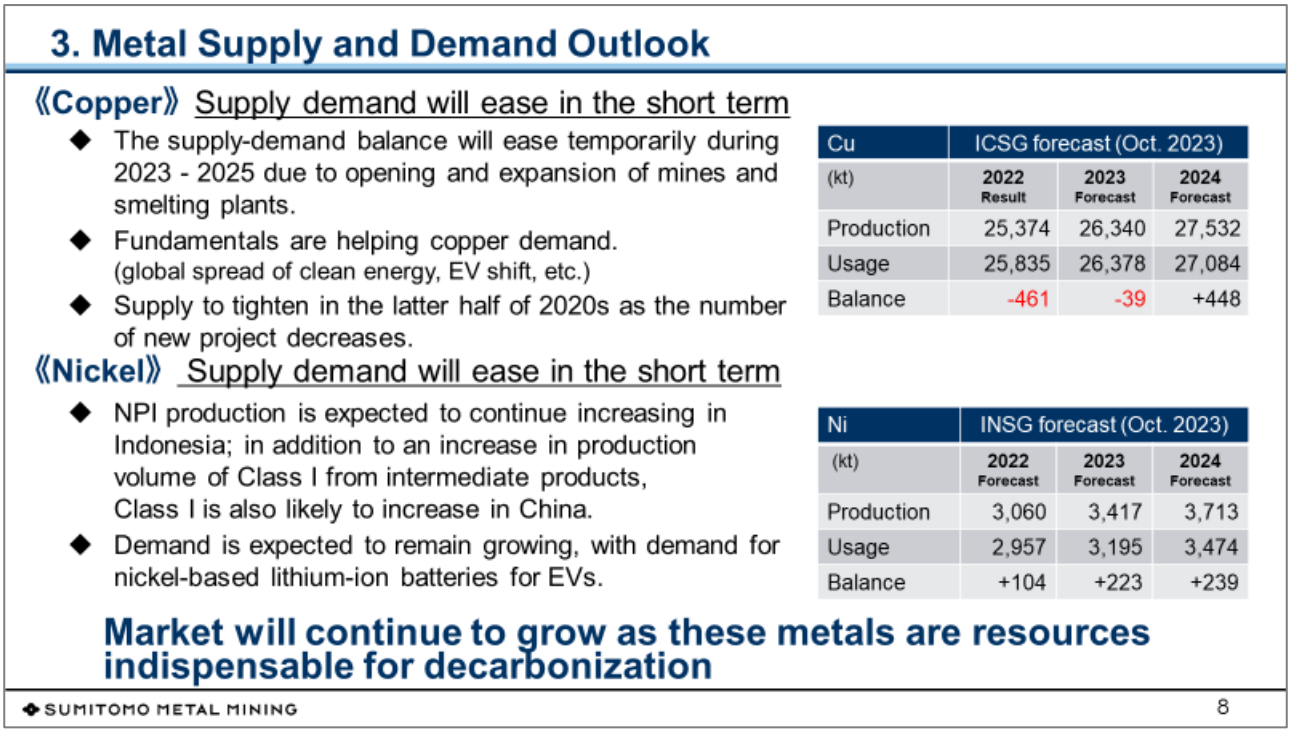
2. Profit before Tax Analysis (YoY, FY2023 1H Result vs. FY2022 1H Result)



Here, we compare the performance between the second quarter of FY2023 with the same period of the previous year. This is something which has already been explained by the concerned division. As shown on the left side of the waterfall chart, there is a large fluctuation of -45.0 billion yen as a market factor.

Foreign exchange rates are looking up with weaker yen, but the non-ferrous metals market is in a declining phase. In terms of impact on performance, a prolonged declining trend will have a significantly large impact on inventory evaluation and gain/loss on foreign exchange related to financial balance. At any rate, profit before tax for the first half was 53.8 billion yen, down 115.3 billion yen year on year.

3. Metal Supply and Demand Outlook

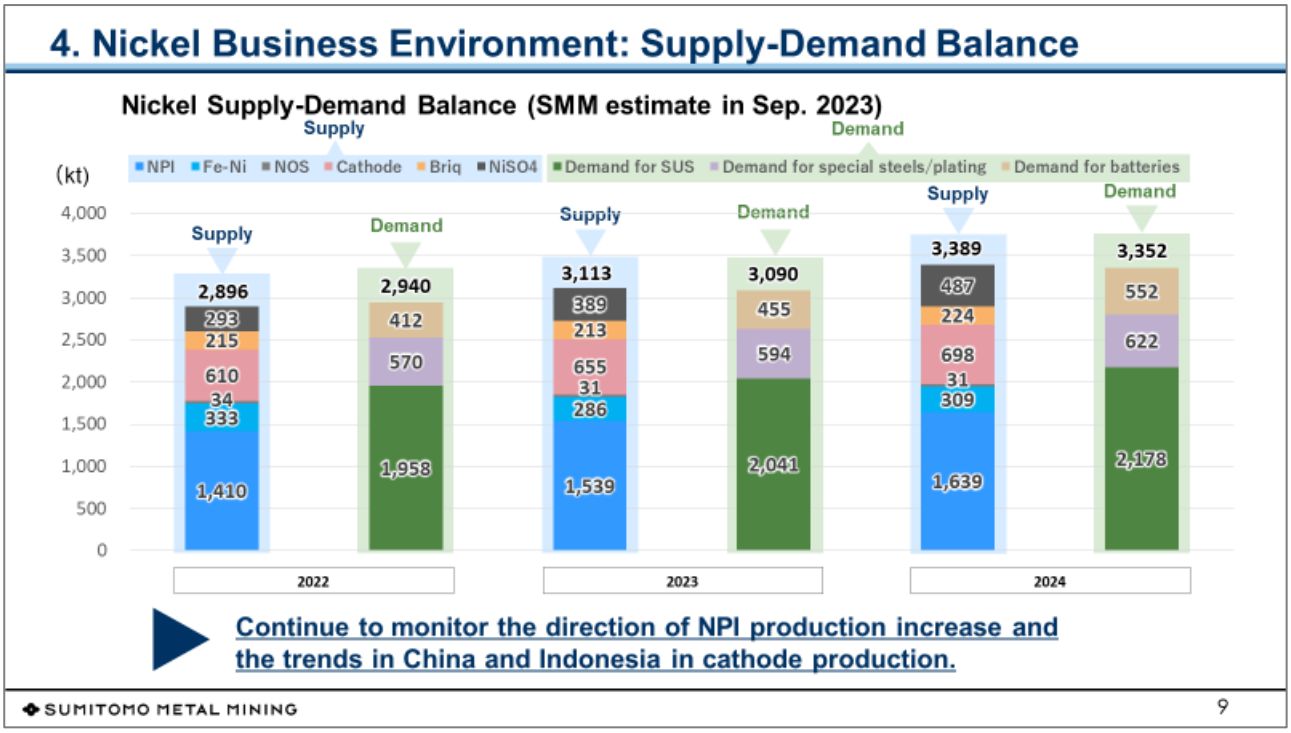


In this slide, I will explain the outlook for performance and market environment. First, we will look at the outlook for metal supply and demand. The slide shows the forecast for the key cooper and nickel market by international organizations. Amidst the shift to electrification and environmentally friendly societies, copper demand is expected to increase in terms of fundamentals. While it forecasts strong demand in the long term, demand and supply are shown to be easing in the short term. The supply-demand balance of copper is negative in 2023 again, and we think copper prices are currently falling due to concerns regarding future uncertainties.

Nickel also is expected to see increasing demand in the long term. However, as shown in the slide, NPI (nickel pig iron) production is increasing in Indonesia currently, which is somewhat affecting the sentiment.

When discussing future demand increases for these metals, the subject tends to be electrification led by demand for EVs, etc. However, the demand from the infrastructure fields in countries and regions that are still developing is expected to grow as in the past. In that sense, the long-term fundamentals are not that bad in our view.

4. Nickel Business Environment: Supply-Demand Balance

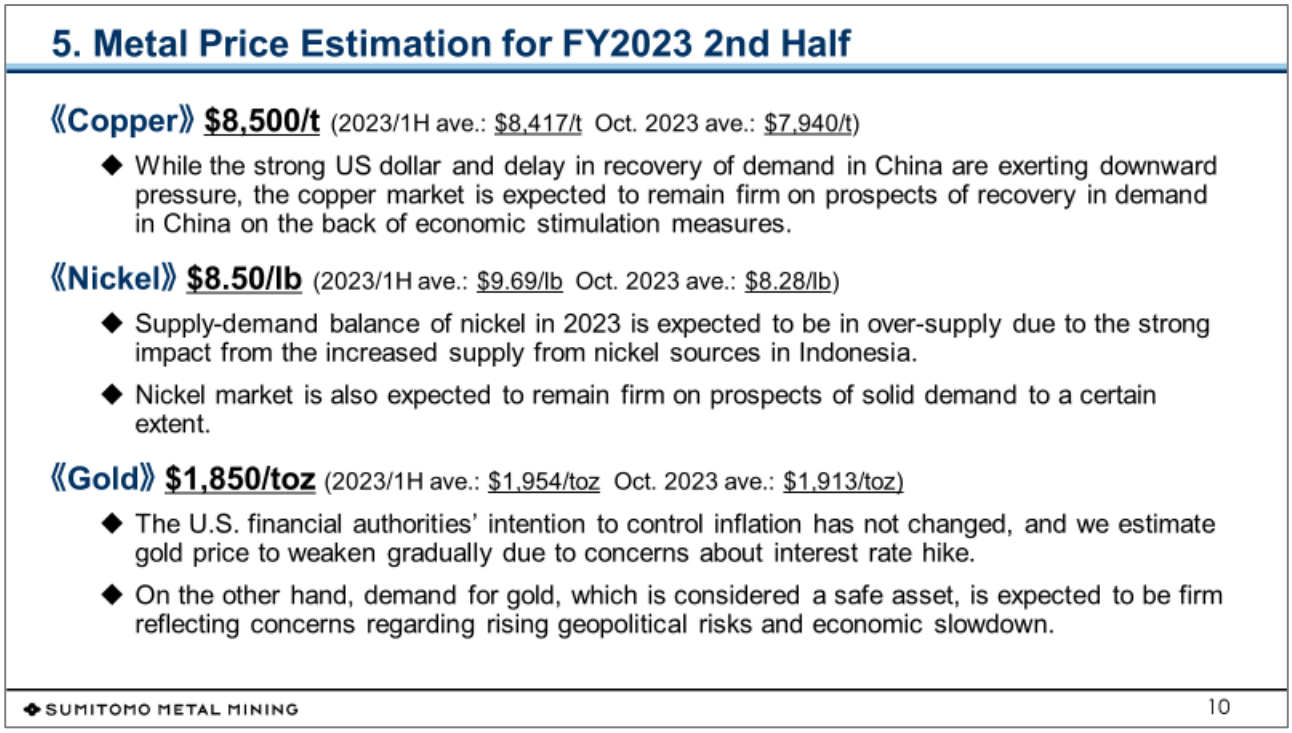


This is our forecast for nickel supply-demand balance. The supply-demand balance forecast put out by the international organization is +223,000 tons as of October 2023, and our estimate is +23,000 tons, so there is a difference of 200,000 tons.

SMM believes that the supply-demand, especially for NPI produced in Indonesia, has become quite loose, and some of it will be converted to intermediate materials, such as nickel matte and subsequently made into nickel ingot or nickel sulfate. We look at the supply-demand balance by tracking the portion of this ingot and nickel sulfate that ultimately ends up as products, and that is the reason behind the discrepancy.

It is difficult to describe, but we doubt they are producing without the demand. Of course, it can reappear in the market after being stored as NPI or other such products. However, it is not transparent as of now, and we have not considered it when making our supply-demand forecast.

5. Metal Price Estimation for FY2023 2nd Half

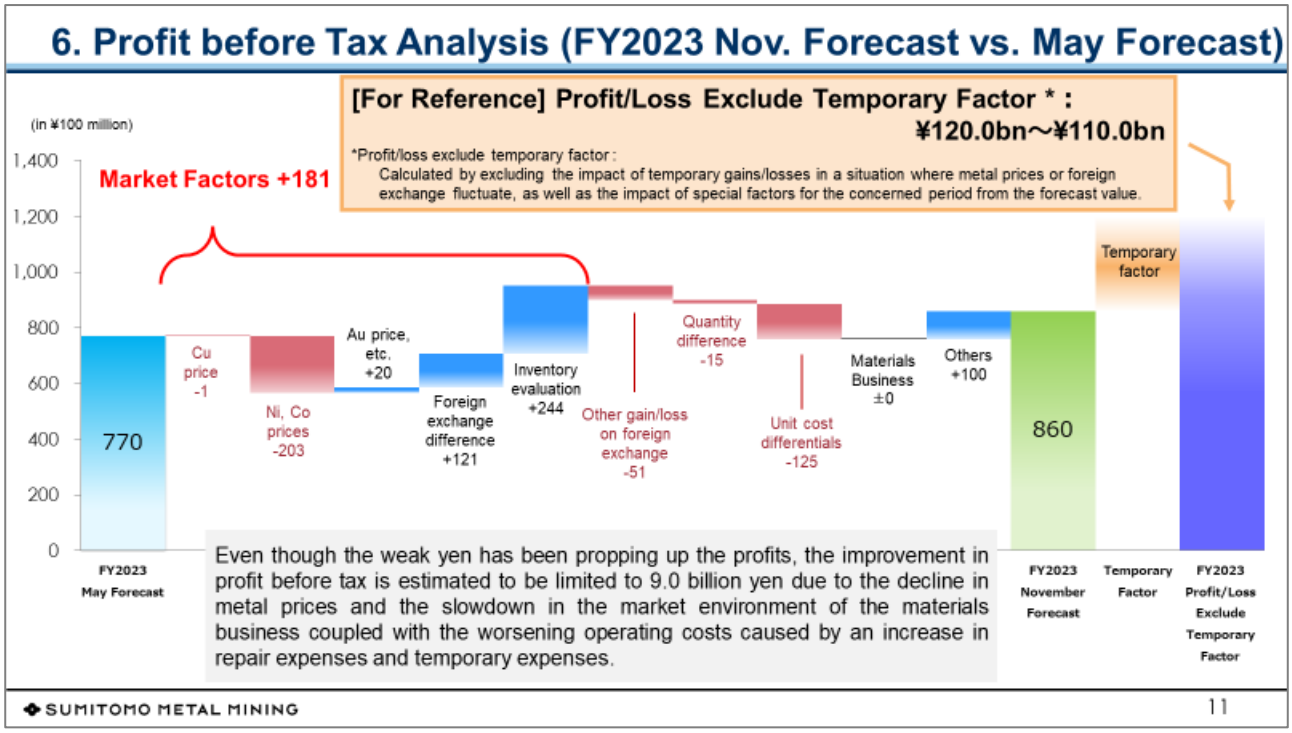


This slide looks at metal price estimation for copper, nickel, and gold. As mentioned earlier, the slight declining trend in copper due to appears to be showing the effect of the sentiment, though near-term fundamentals are not necessarily bad.

There is no large fluctuation in nickel either, as you can see from the stock status of Class 1 traded at LME. Since we are of the view that there is excessive production of Class 2, the price is currently trending slightly lower than the price set by SMM due to this.

Gold is considered to be between commodities and financial products, so it tends to be linked with foreign exchange rates, the strength or weakness of the dollar, or dollar interest rates. It sometimes appears contradictory, but the fact that both the dollar and gold are rising means people are buying them as safe assets given the rising geopolitical risks, inflation, and concerns regarding economic slowdown.

6. Profit before Tax Analysis (FY2023 Nov. Forecast vs. May Forecast)



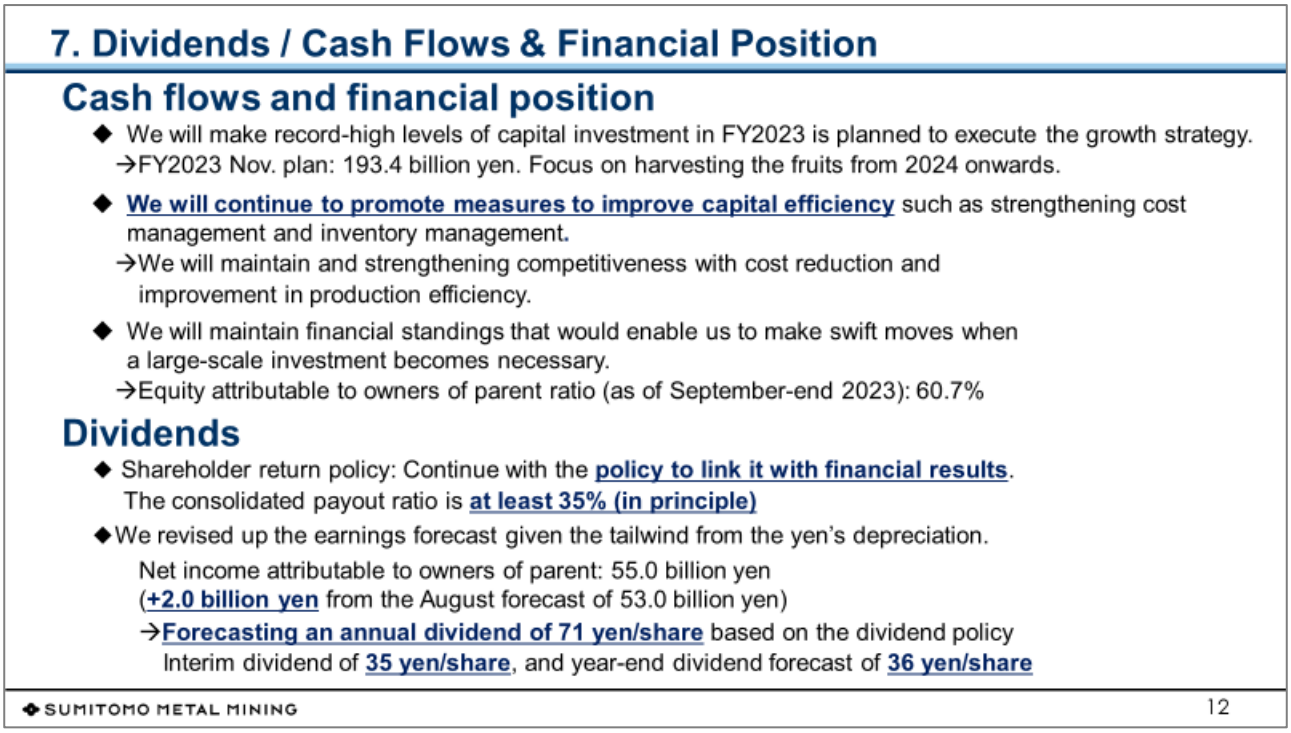
This is the full-year forecast for FY2023. The price premise here, including the market, has moved a bit from what we mentioned earlier, but we think there is not much of an impact when we offset increases and decreases.

The period of the 2021 3-Year Plan is the time for large investments, and especially this fiscal year, investments centered on overseas copper mines are making progress. In that sense, we view this as a period in which we cannot avoid a slowdown in the rate of return on assets.

In addition to this, we are also actively injecting investment funds into carbon neutrality, DX, and human resources strategy, which, if we do not address now, will return to haunt us in the future. These are not something that would improve profitability in a few years. On the other hand, the large mineral resource development investment that I mentioned earlier is progressing toward completion, and we are expecting it to give us a boost in the near future.

Under such circumstances, you have pointed out that our profitability and profit/loss excluding temporary factors are declining. In such cases, we will have to think of reducing fixed costs and streamlining as support measures. We are, of course, determined to firmly manage redundant costs and plan to address this by improving production efficiency as well as productivity of operations, including DX.

7. Dividends / Cash Flows & Financial Position



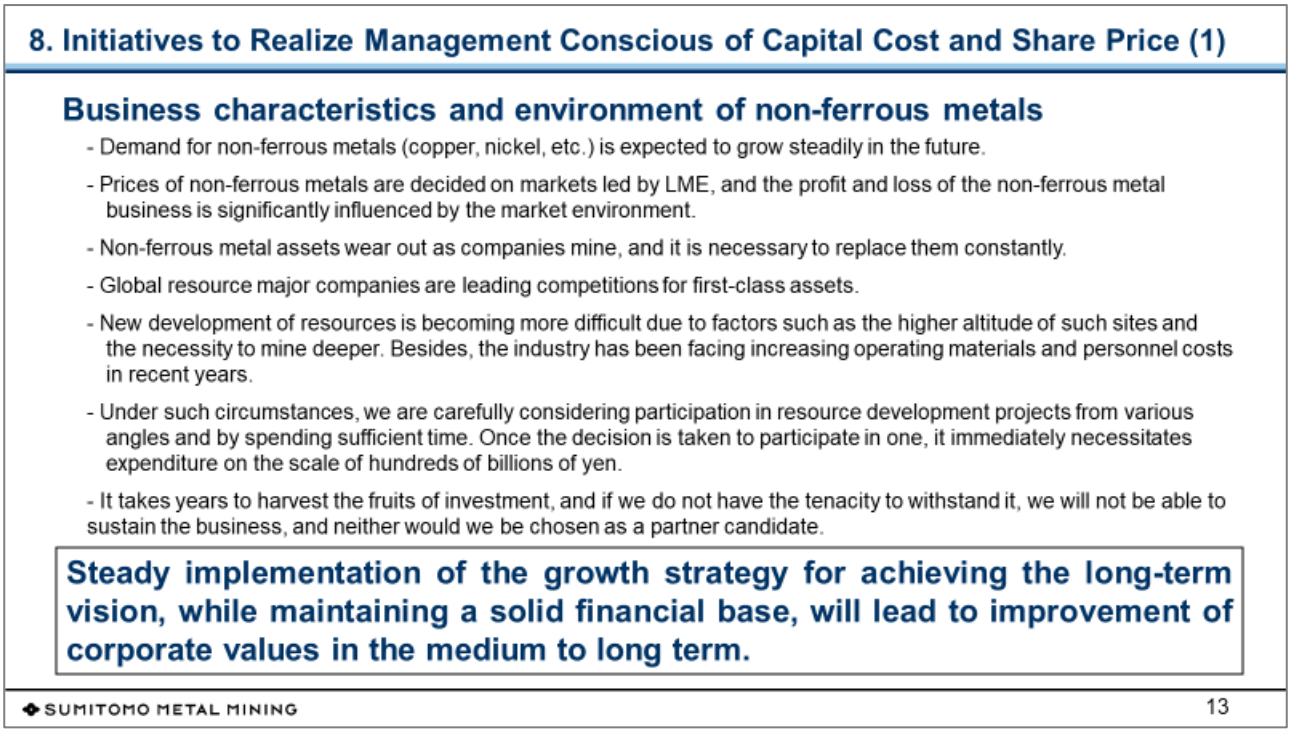
This slide looks at dividends, cash flows, and financial position. Cash flow is as shown here, with capital investment at a record high of 193.4 billion yen.

Depreciation and amortization is 54.0 billion yen. If we take this as maintenance and update investment, consider the remaining close to 150.0 billion yen as a growth investment.

We also mentioned improving capital efficiency through means such as cost management and inventory management in the Progress of Business Strategy Briefing we held in May, where we said, “It is important to raise the capital efficiency given the existing situation.” September is mid-term, and one year has not passed since then, but if you look at the interim balance sheet, the figure for inventory, for example, is down about 56.0 billion yen.

If we consider the addition and subtraction of undelivered raw materials, it is effectively about the same level as at the end of March. However, there has been a significant accumulation of anode for the scheduled shutdown of Toyo Smelter & Refinery, which is underway, and inventories have fallen considerably in reality if you consider that. The Battery Materials Div. especially has demonstrated major improvement in inventory management.

8. Initiatives to Realize Management Conscious of Capital Cost and Share Price (1)

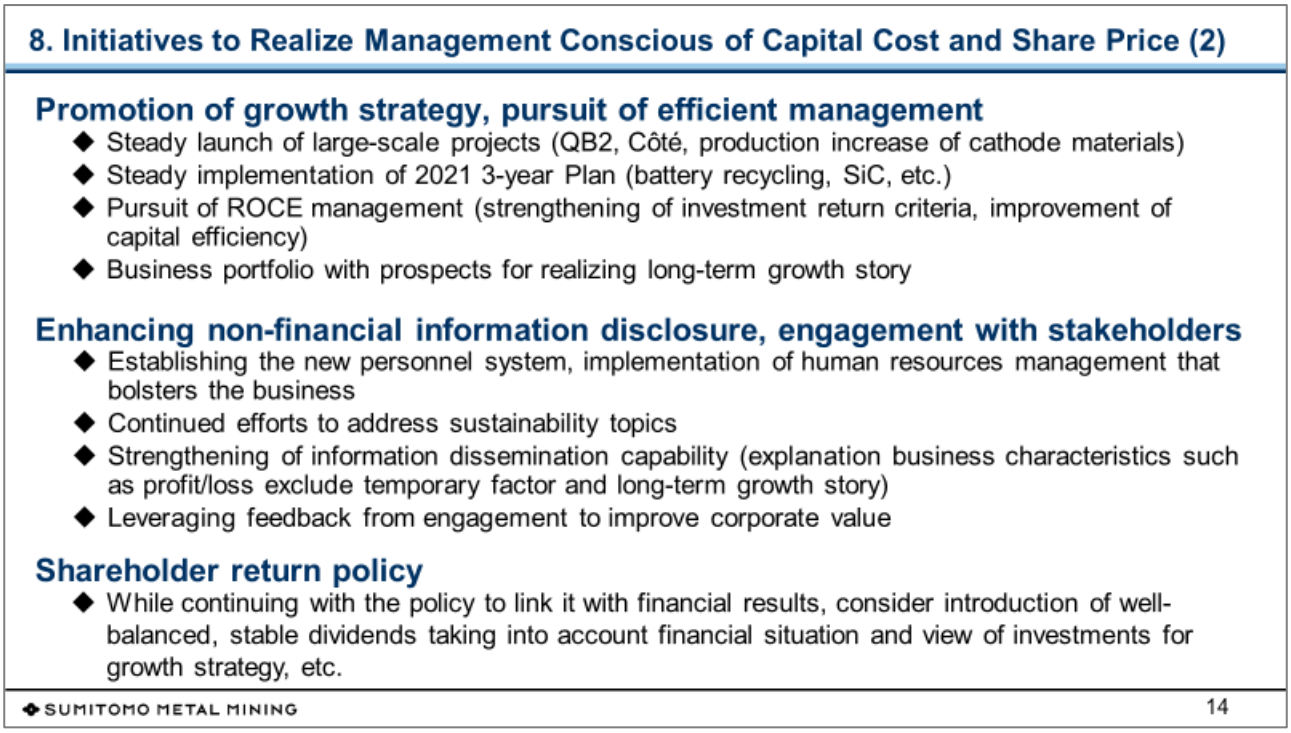


In this slide, I will explain the initiatives being taken to realize management conscious of capital cost and stock price, regarding which the Tokyo Stock Exchange is also seeking implementation of various measures. The contents are similar to what we have been explaining before. Strengthening financial position is important from SMM's business characteristics and environmental perspective. The key point, in particular, is mineral resource development.

Recently, I went to the opening ceremony of the Quebrada Blanca site. I had told you that we would have to do desalination and that it was 170 km from the port, and we needed to pump fresh water using pipelines to highlands at 4,400m, among other things. But, when I saw the place with my own eyes, I felt that it was a formidable task just in terms of infrastructure investment.

To make the development business profitable, the scale of the development has to be large. The conventional development scale will not pay; therefore, the risks we have to anticipate, including cost overruns, will also increase. So, I think it is necessary to strengthen the financial position that can address such risks.

8. Initiatives to Realize Management Conscious of Capital Cost and Share Price (2)



What SMM can do based on this is promote a growth strategy and pursue efficient management, for one. We are currently implementing this.

Further, we hear about the transition to sustainable capitalism. As for what measures to take to solve the social issues, the only way we can express them is through non-financial information. We intend to fully enhance this and pursue engagement with stakeholders.

With respect to awareness of the problem of PBR going below 1.0 times, we believe that share price is formed on the basis of expected value of the company and its profitability, but market capitalization going below breakup value is something that should not happen from the management perspective.

In spite of SMM having adopted IFRS and mostly following fair value accounting, the fact that the market does not appreciate it to that extent means that we have to remedy it quickly. Towards that end, we are pushing the aforementioned non-financial disclosure and also will present our growth prospects for the future.

Our shareholder return policy is linked to the financial results, which we believe is the right thing from the perspective of cash allocation. At the same time, in our engagement with the shareholders, there has been expectations for the introduction of a well-balanced, stable dividend payout, and we are looking into it.

9. Promotion of ROCE Management

9. Promotion of ROCE Management

Rebuilding the production structure to enable growth of materials business

◆ Battery materials

- Focus limited management resources on "Quality (Q) and Delivery (D)" in particular to respond to customer requirements in the rapidly growing market.
  →While we **acquired share** after winning a certain reputation in the market, **we put off improvements such as inventory management and production efficiency.**

◆ Advanced materials

- Narrow down to **product groups in which growth can be expected** through structural reforms reflecting the environmental changes.

➔However, customer requirements diversified along with the growth in the market, and competition also **intensified.**

- In addition to the Company's current QCDS, it is necessary to have **additional values** (e.g., speed of response to customer needs, ability to make proposals, etc.) that would continuously be chosen by customers to achieve further growth.
- We are rebuilding the production system at important bases by introducing **Toyota Production System (TPS).**

SUMITOMO METAL MINING 15

This slide is about the promotion of ROCE management. The slide shows battery materials and advanced materials, and what I would like to point out in particular is the introduction of the Toyota Production System (TPS).

This is being implemented in the Advanced Materials' powder material business (the paste division). They are engaged in something new on their own initiative, and we appreciate the action they took based on this year's management policy of "we also have to change," and we are hearing that they are seeing the fruits of the efforts on site.

10. Comparison of Financial Results and Forecast

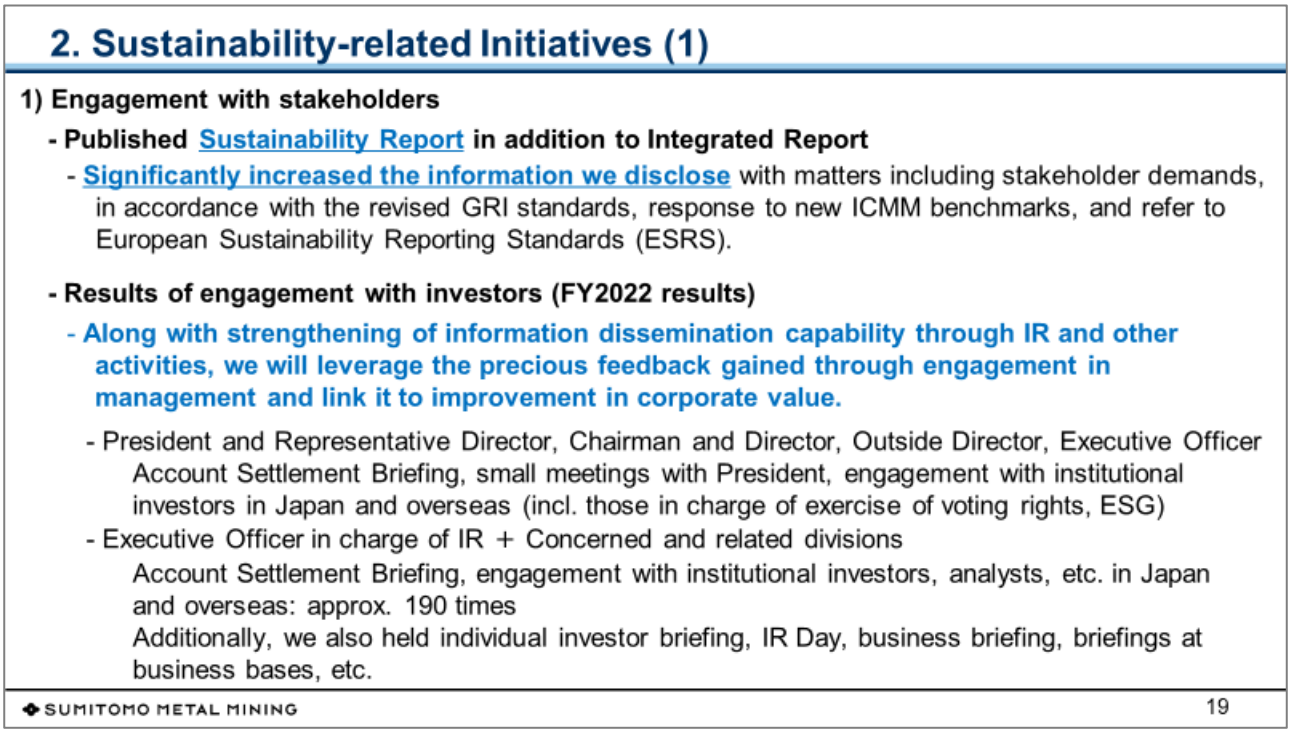
10. Comparison of Financial Results and Forecast

(in ¥100 million)		FY2023 1H Result	FY2023 2H Forecast(Nov.)	FY2023 Forecast(Nov.) (A)	FY2023 Forecast(May) (B)	Change (A)−(B)
Net sales		7,171	7,129	14,300	13,660	+640
Gross profit		886	564	1,450	1,390	+60
Profit / loss before tax		538	322	860	770	+90
Equity method profit/loss		162	203	365	145	+220
Segment profit	Mineral Resources	315	275	590	620	-30
	Smelting & Refining	318	62	380	280	+100
	Materials	28	-68	-40	-40	±0
	Other	-3	-27	-30	-50	+20
	Diff. adjustment	-120	80	-40	-40	±0
Net income attributable to owners of parent		379	171	550	420	+130
Copper (USD/t)		8,417	8,500	8,459	8,500	-41
Nickel (USD/lb)		9.69	8.50	9.10	10.00	-0.90
Gold (USD/toz)		1,954	1,850	1,902	1,800	+102
Cobalt (USD/lb)		14.76	13.00	13.88	17.00	-3.12
Exchange (JPY/$)		141.00	140.00	140.50	130.00	+10.50

SUMITOMO METAL MINING 16

This shows a comparison of financial results and forecasts. As I mentioned earlier, compared to the currently estimated foreign exchange and metal price conditions, the current situation is a bit off. The yen exchange rate is cheaper by almost 10 yens while gold has risen by about 5%. At the same time, cobalt is also down by about 10%. Copper is about 5% below and nickel about 10% below the estimation, and we feel they are at levels that can probably be canceled out in terms of sensitivity.

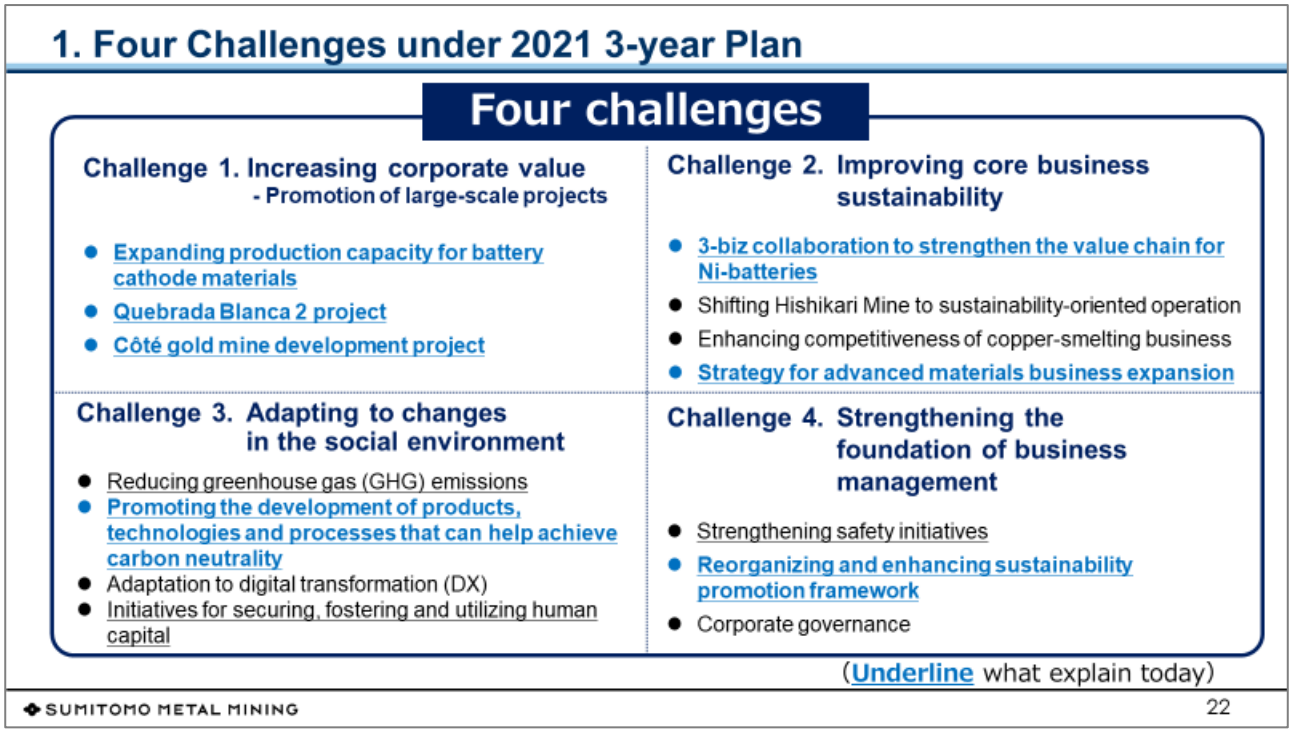
2. Sustainability-related Initiatives (1)



In this slide, I will explain our sustainability-related initiatives. As I mentioned earlier, disclosure of non-financial information is gaining importance when evaluating a company. Therefore, we have been publishing a Sustainability Report in addition to the Integrated Report. We also proactively engage with investors and provide feedback on that status to the Board of Directors and others.

In order to also explain these initiatives, we are planning to hold a sustainability briefing on December 6, 2023, and a small meeting by outside directors on January 16, 2024. Please do attend those meetings. I have given clear instructions to the concerned department to strengthen the information dissemination capability of IR and SR. If you have any views, please do not hesitate to share them with us.

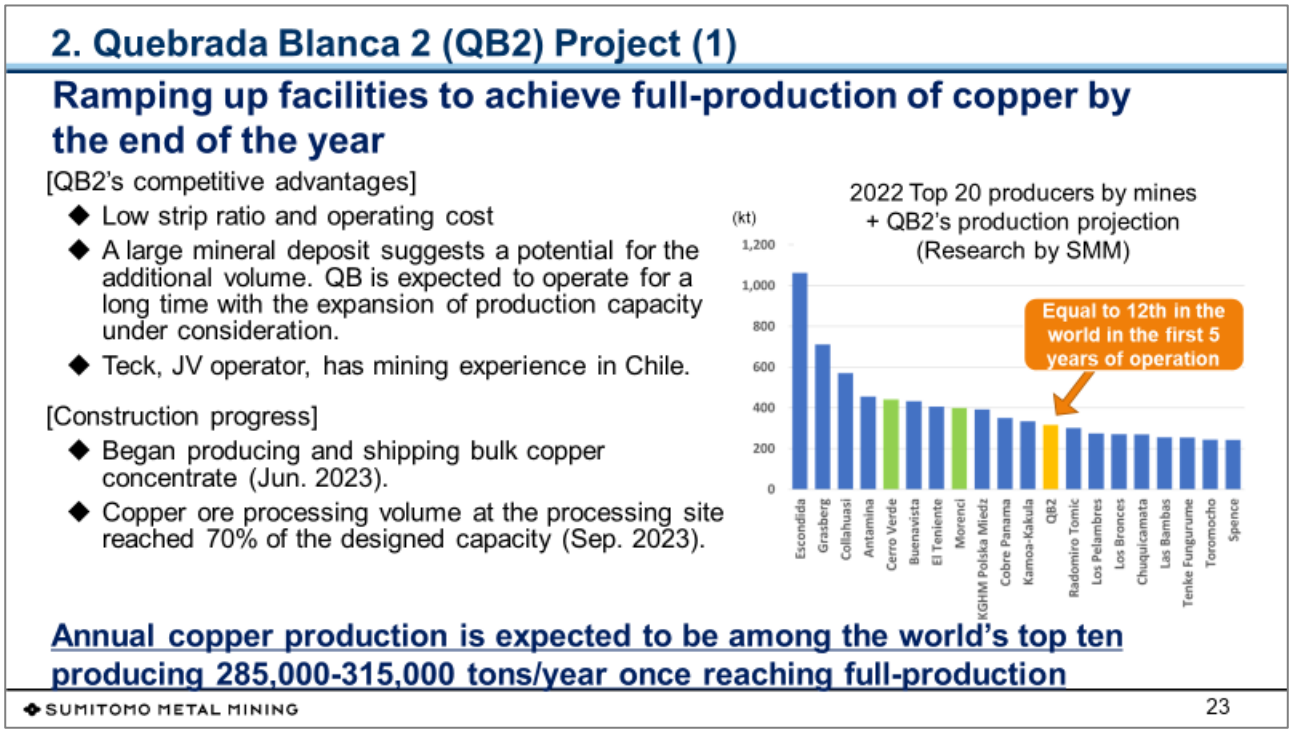
1. Four Challenges under 2021 3-year Plan



Here, we look at the progress made in important strategies under the 2021 3-Year Plan. The slide shows the larger themes as four challenges. Challenges 1 and 2 will be explained later by the general managers of the concerned divisions.

I have already talked about Challenge 4, and I will be explaining later on the products contributing to carbon neutrality, etc., shown under Challenge 3.

2. Quebrada Blanca 2 (QB2) Project (1)



Eiichi Fukuda: I am Fukuda, Executive Officer and General Manager of Mineral Resources Div. I will explain SMM's Mineral Resources Business. This slide details the status of Quebrada Blanca 2, which we call the QB2 Project. To put it in a nutshell, we are in the process of ramping up facilities to achieve full-scale production of copper within the year.

QB2 has three competitive advantages. The first is that it has a low strip ratio and operating cost. When comparing the cost per unit of copper produced and sold, having a low strip ratio is quite advantageous, and operating cost is also relatively low.

The second point is that the mineral deposit is extremely large and has the potential to offer an additional volume of resources currentry. This means that, even if it is not sufficient and not accounted for as resources, there is the likelihood that we can add that as new resources and mineral reserves.

In light of that, we are considering expansion of production capacity. We are already considering increasing the copper ore processing lines from the current two to three or four lines.

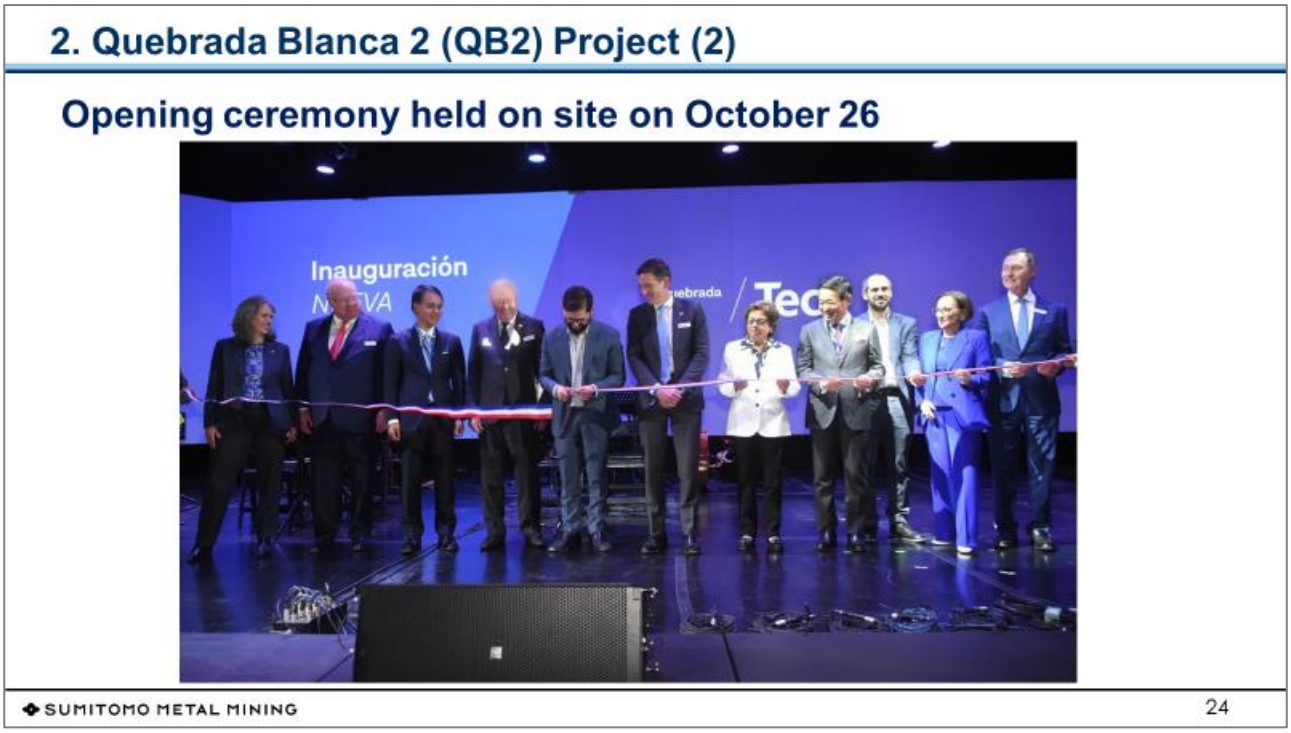
If that happens, it is expected to operate for quite a long time. Also, Teck, which is our joint venture operator, has operational experience in Chile. It also has experience operating Quebrada Blanca 1, or QB1, which is the phase before QB2, and also owns and operates other mines in Chile.

In terms of construction progress, we started producing and shipping bulk copper concentrate still containing molybdenum in June this year.

Going forward, once the molybdenum separation plant is completed, we will sell the two products, copper concentrate and molybdenum concentrate, separately. Copper ore processing volume at the processing site has reached 70% of the designed capacity in September. Once it reaches full-scale production, the capacity is expected to be 285,000 to 315,000 tons annually.

As shown in the graph on the right side of the slide, as of now, it is in the 12th place in the world; we can expect it to climb into the top 10 in the world in the future in terms of annual copper production volume.

2. Quebrada Blanca 2 (QB2) Project (2)



As President Nozaki mentioned earlier, we are constructing a port facility in a city called Iquique in Chile. The picture in the slide is the opening ceremony held on October 26.

The person cutting the ribbon at the center is President Boric of Chile. The tall person to the right of the president is Mr. Jonathan Price, CEO of joint venture operator Teck, and on the president's left is Mr. Norman B. Keevil, Chairman Emeritus of Teck. Next to him is Mr. Nozaki.

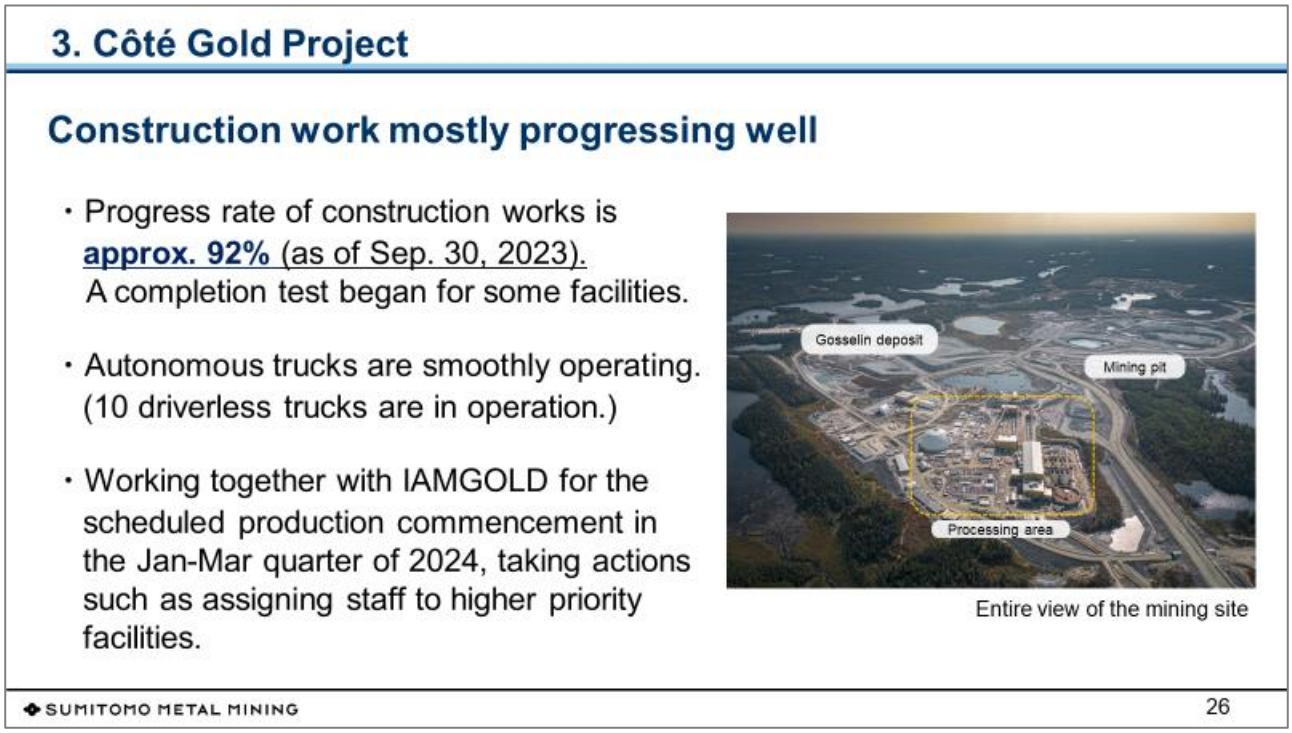
2. Quebrada Blanca 2 (QB2) Project (3)

This slide has pictures of the QB2 Project. The top left is the processing site, which is already operational, and we are ramping up the facility. The picture to the right is the grinding facility, which grinds the ore into fine pieces to be supplied to the processing site. This is also already operational.

The top right is the port offshore facilities, which are under construction, and the facility for loading ships will eventually be completed. The tailing dam on the bottom left is currently being filled with water.

The picture in the bottom center is the copper-molybdenum separation plant, also under construction. Once completed, we will be able to produce both copper and molybdenum concentrates. The right bottom is the bulk copper concentrate storage shed and loading works.

3. Côté Gold Project

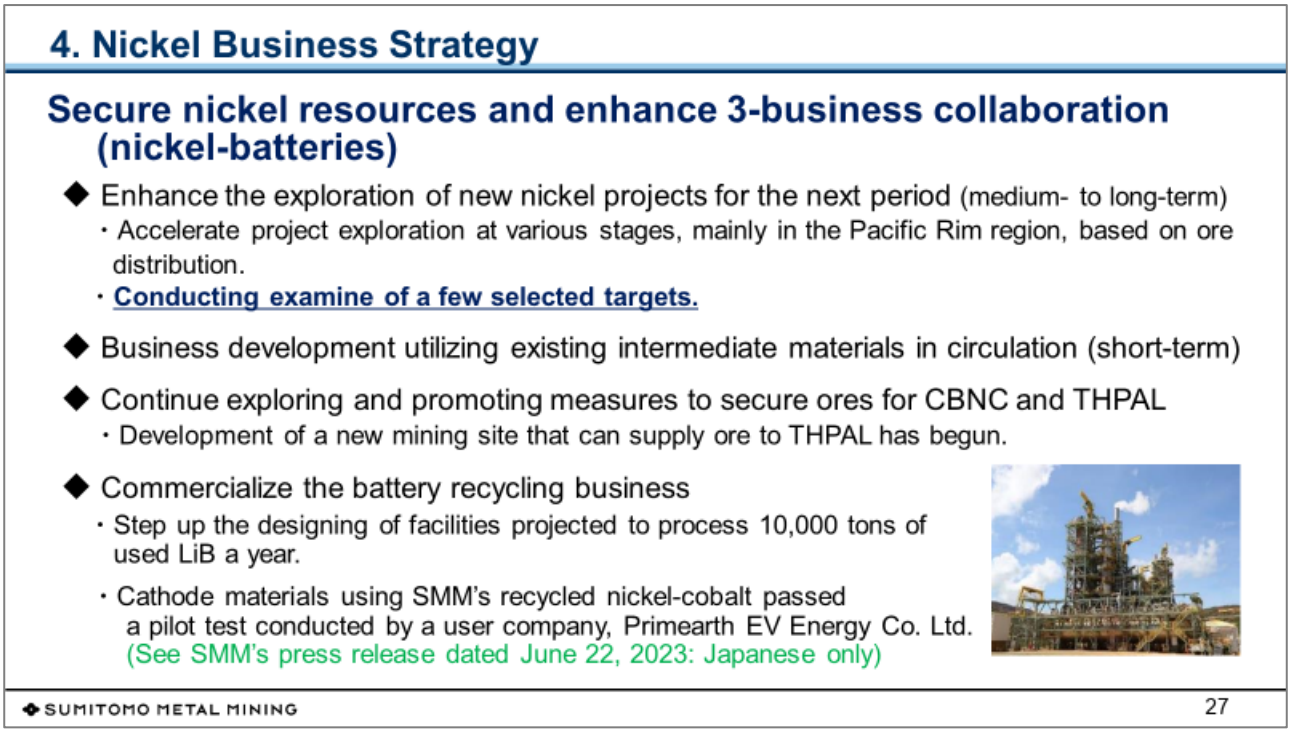


This is the Côté Gold Project underway in the province of Ontario in Canada. Construction work is progressing steadily, with about 92% of the work completed as of the end of September. Completion test has started for some facilities.

With 10 driverless trucks operating smoothly, loading of ore has already started. We are working together with IAMGOLD, assigning staff to facilities with high priority for the scheduled commencement of production in the January to March of 2024.

The picture in the slide shows the entire mining site. The processing area is at the center, with the mining pit on the top right. The Gosselin deposit on the top left is not included in the current development plan, but gold mineralization has been confirmed. We are currently proceeding with exploration and studies because there is the possibility of extracting gold economically in the future.

4. Nickel Business Strategy



Masaru Takebayashi: I am Takebayashi, Director, Managing Executive Officer, and General Manager of Non-Ferrous Metals Div. Regarding the Smelting & Refining Business, I will start my explanations with the business strategy for nickel. The first three points in the slide are about securing nickel resources, and the fourth point is about strengthening the 3-business collaboration.

The first point about securing nickel resources is enhancing the exploration of new nickel projects. This is about securing nickel in the medium to long term and is something that is going to take quite a long time. Nickel ore is primarily distributed mainly in the Pacific Rim region, and we are pursuing project exploration at various stages in the area.Right now, we are examining a few selected targets.

The second point of the strategy is business development utilizing the existing intermediate materials in circulation. We are currently assessing multiple businesses for development in a relatively short period of time.

The third point is about the measures to secure ores for Coral Bay Nickel Corporation (CBNC) and Taganito HPAL Nickel Corporation (THPAL), two subsidiaries that are currently operating.

These two companies process the ore from the Rio Tuba mine for the former and the Taganito mine for the latter. Explorations around the mines are continuously being conducted by Nickel Asia Corporation (NAC) of the Philippines, which is assessing and considering possible use.

Among these, we started one new mining area development project at the Taganito mine in July this year.

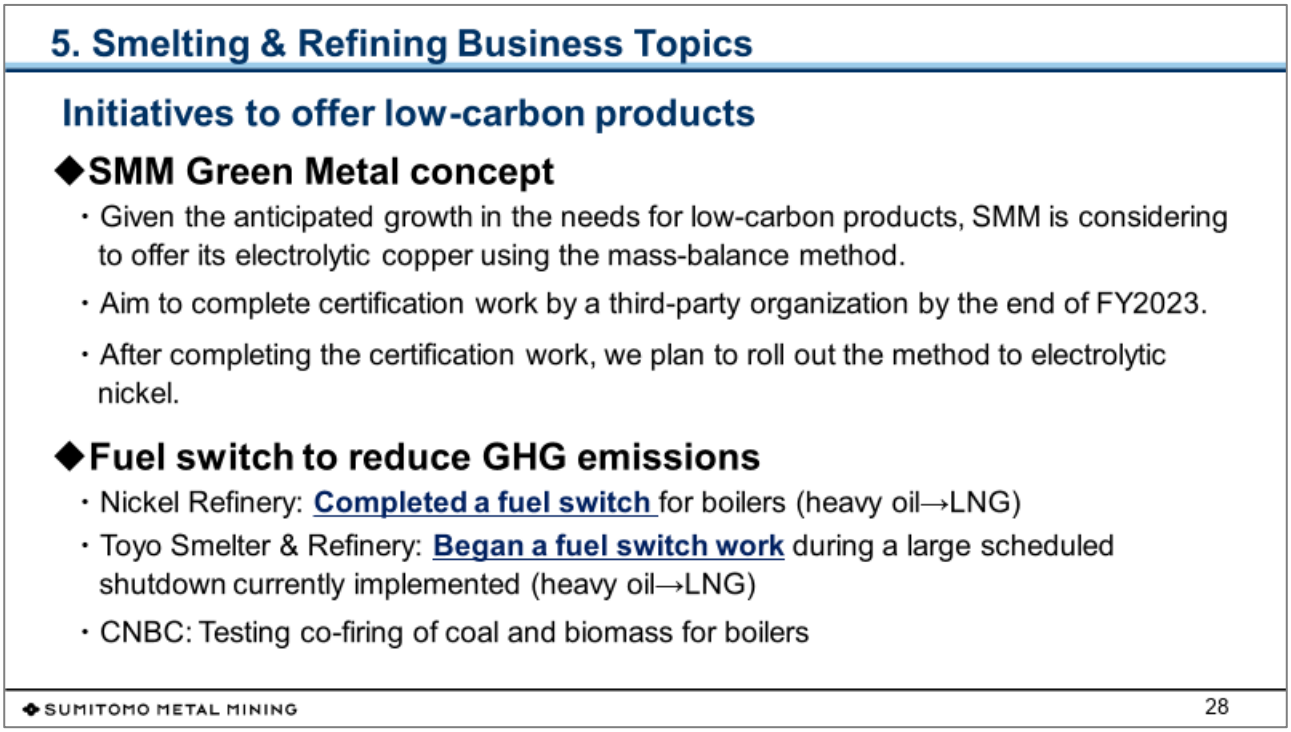
That was about securing nickel ore resources.

The fourth strategy in the slide is commercializing the battery recycling business. LiB is short for lithium-ion batteries. We are conducting a full-fledged study to set up a facility that can process 10,000 tons of used LiB annually. This facility will be operational between FY2025 and FY2027 during the next 2024 3-Year Plan.

This project utilized a plant developed by SMM, and you may refer to the press release dated June 20, 2023, for details.

To put it briefly, cathode materials using the recycled nickel and cobalt produced at our pilot plant, which combines pyro-metallurgical and hydro-metallurgical refining processes, have passed a demonstration test conducted by a user company, Primearth EV Energy. It was confirmed that this delivered performance comparable to cathode materials made from naturally derived nickel and cobalt.

5. Smelting & Refining Business Topics



This slide covers other Smelting and Refining Business topics. Here, I will explain the initiatives being taken to offer low-carbon products. The first point is the SMM Green Metal concept, where we supply green metal using the mass-balance method. We are aiming to complete certification work by a third-party organization by the end of FY2023.

The raw materials offered by SMM include copper concentrate brought from mines as well as recycled raw materials. Recycled raw materials account for about a quarter of our products.

The volume of CO2 generated and the carbon footprint from recycled raw materials and those from copper concentrate vary significantly, with recycled products having a lower carbon footprint, as they are recycled after having gone through production.

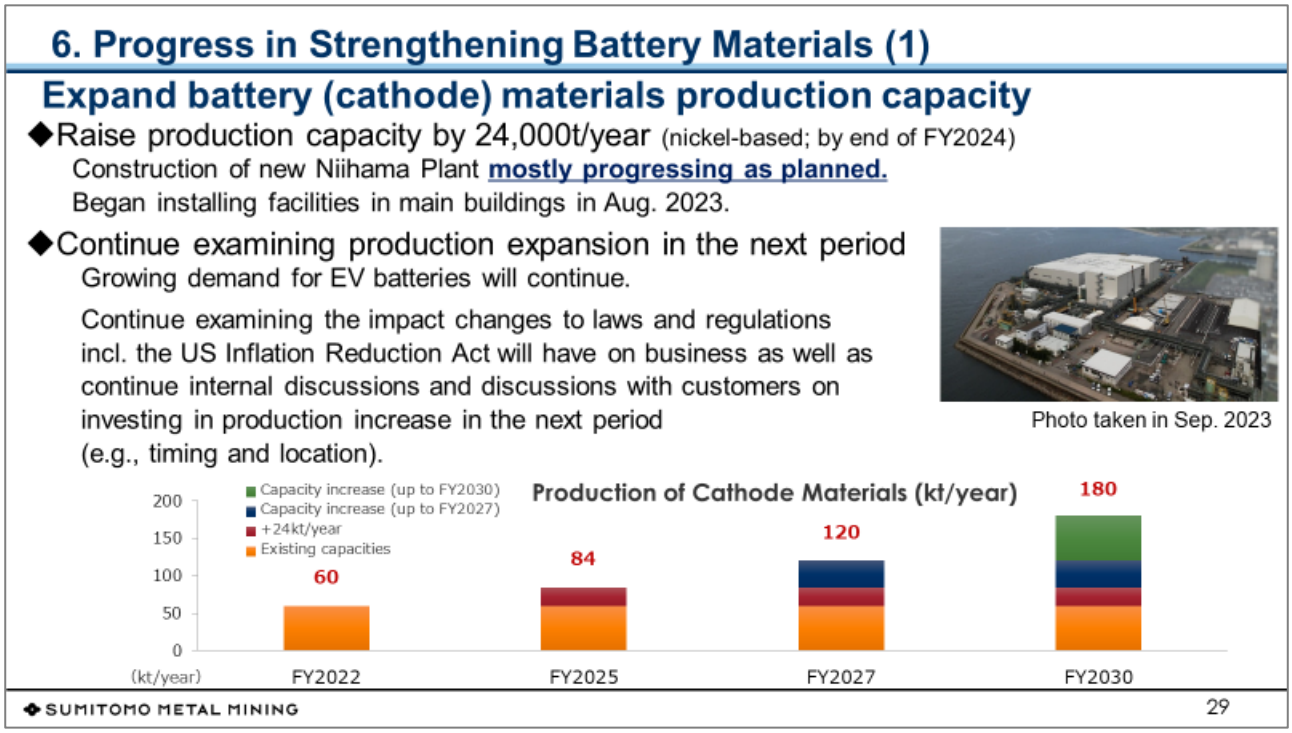
SMM's electrolytic copper falls under recycled products, and we are proceeding with the work to certify it as green metal at a third-party organization. With this, we have planned to start supplying green metal using the mass-balance method starting the next fiscal year and subsequently expand the initiative to electrolytic nickel.

Besides these, we are also implementing various initiatives to reduce greenhouse gas (GHG), or CO2, emissions at our plants. The bottom part of the slide shows the measures to reduce GHG emissions through fuel switch.

For example, in Niihama Nickel Refinery, the fuel used for the boiler that generates steam was switched from heavy oil to LNG to reduce CO2 emissions. This fuel switch has already been completed.

At the Toyo Smelter & Refinery, we have started work to switch from heavy oil to LNG by taking advantage of the large scheduled shutdown currently underway at the plant. As for CBNC, which currently uses coal as boiler fuel for producing steam, we have started testing coal cofiring with biomass.

6. Progress in Strengthening Battery Materials (1)



Katsuya Tanaka: I am Tanaka, Managing Executive Officer and General Manager of Battery Materials Div. I will explain the progress of the Battery Materials Business.

Slide 29 shows the status of the production capacity expansion currently being planned at Niihama. On pages 30 and 31, I will talk about what efforts we are taking as preparations for future capacity expansion.

The picture on the right side of the slide, taken in September, is the Niihama Plant, which is under construction. When I visited the site last week, construction of the large building had been completed, and facilities were being carried in one after another. Infrastructure-related work is scheduled to be completed in November.

The new Niihama Plant will be used for the core process, like firing process, and the third facility has already been installed. As described here, we are preparing to raise the production capacity significantly by 24,000 tons per year, and the work is mostly progressing as planned towards the start of production in January 2025.

The second point is that we are continuing to examine production expansion for the next phase. The demand for batteries for electric vehicles, as you know, is growing, and we expect laws and regulations of the various countries to impact our decision on where the next location will be, when to do it, and so on.

In particular, in the case of the US, especially with the presidential election coming up next year, we are examining it by looking at the situation, such as what form the Inflation Reduction Act will take and other factors.

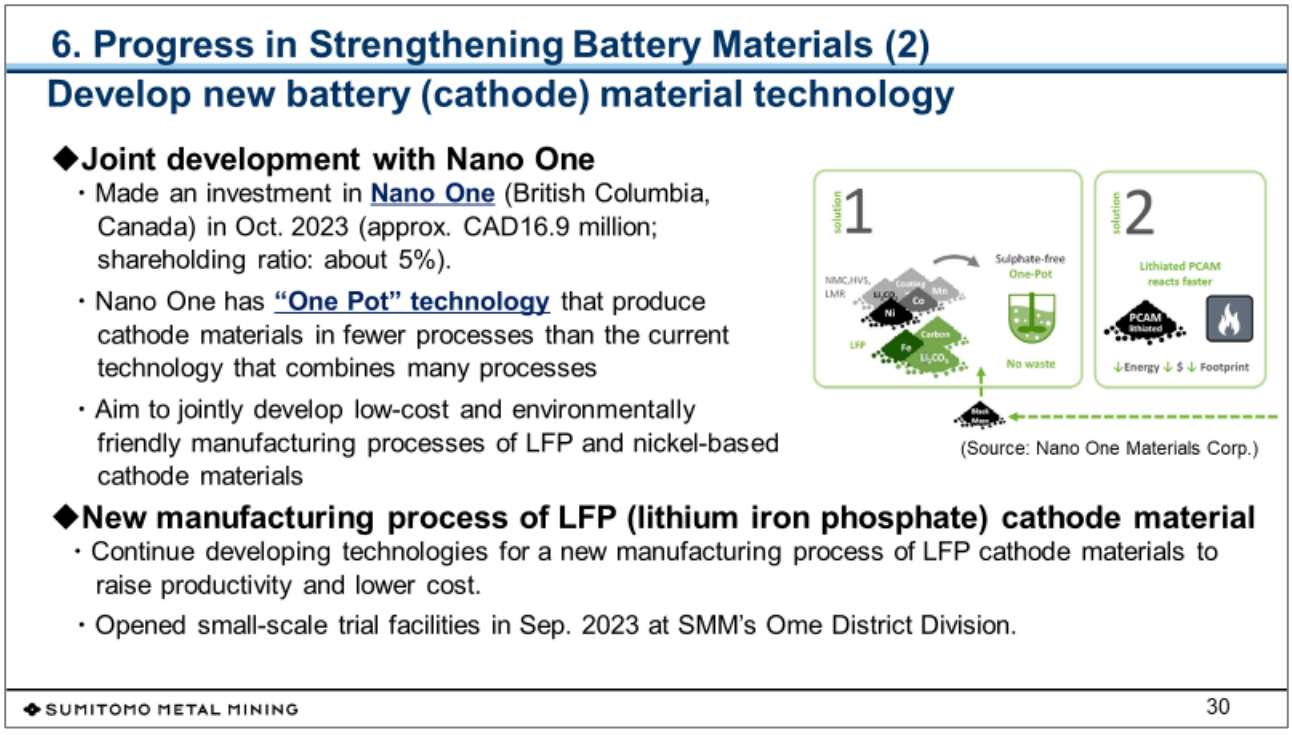
We are already driving forward concrete discussions, and as shown in the graph at the bottom of the slide, the production capacity is set to reach 84,000 tons annually in 2025, including the aforementioned 24,000 ton increase. After that, we also plan to increase the capacity, as shown in the graph.

Though not shown in this graph, we have a track record of increasing production capacity for cathode materials by 15 times in about six years, from 300 tons a month in 2013 to 4,850 tons per month in 2019 and 2020.

Given limited management resources, SMM has been focusing on following our customers' growth till now. While we did grab a certain level of appreciation in the market from the customers and gain market share, improvements in inventory management and production efficiency were often placed on the back burner.

If we pursue the next production expansion in such circumstances, ultimately, there is the risk of not being able to compete when the competition intensifies more and more in the future. We are in the process of developing technologies and establishing the business foundation for the next growth, taking these into account.

6. Progress in Strengthening Battery Materials (2)



In this slide, I will introduce the technology being developed for the next growth. First is the joint development with Nano One of Canada, about which we have already issued a press release. Nano One, though still a startup company, has taken over a plant from another company that exited the cathode materials business, has the necessary equipment, and is ready to start mass production.

Our current method for manufacturing cathode materials is shown on the right side of the slide, and it combines numerous processes.

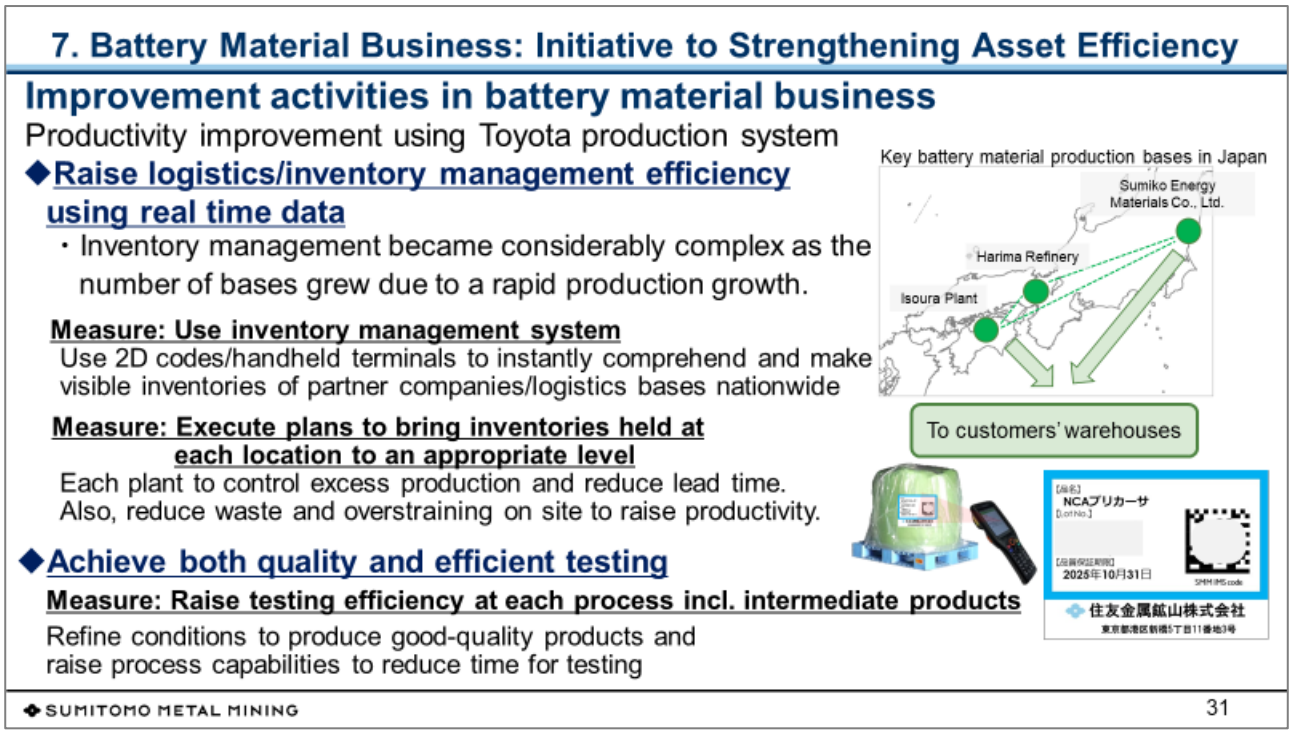
Originally, if you start from metal, in the manufacturing process, it becomes sulfides, hydroxides, and oxides and then is mixed with lithium hydroxide and burnt. The process involves a wide variety of chemical reactions. As a result, each of the chemical reactions incurs costs and simultaneously generates by-products, which will end up as waste if we cannot use them.

In contrast, the One Pot technology of Nano One can produce cathode materials with fewer processes, which will reduce the cost, and the environmental burden is also lowered since not much waste is produced, as explained.

The One Pot technology is already established, but whether the products thus produced will be acceptable to SMM's customers depends on our proposal that combines SMM's mass production technology. We have just kicked off the project and started collaborating based on such an outlook.

Further, regarding lithium iron phosphate (LFP), last year, we took over the business from Sumitomo Osaka Cement Co., Ltd., including the transfer of the Vietnam Plant and the Japanese and local staff numbering 160. The technology Sumitomo Osaka Cement has been employing till now is hydrothermal synthesis process. This is not cost-competitive compared with the method used by the Chinese, which is currently the mainstream technology in the LFP market. Therefore, SMM is now working with a sense of urgency to develop technologies for the new manufacturing process and recently opened a small-scale trial facility at SMM's Ome District Division, where testing is currently in progress.

7. Battery Material Business: Initiative to Strengthening Asset Efficiency



This slide is about the establishment of the business foundation for future production capacity expansion. As mentioned earlier, right now, we are cleaning up the areas that were neglected because of our focus on production expansion to deliver products at the customers' convenience.

The slide says we would reduce inventory. As you know, cathode materials use nickel, cobalt, lithium, and other such costly metals, which makes the ratio of raw materials in the cost very high, and if we maintain inventory, the profitability greatly deteriorates.

However, it is not that we are just simply reducing the inventory volume. If we factorize this inventory mathematically, we will reach varied production factors. For example, it is divided into yield, utilization rate, direct rate, and lead time, including safety stock. Therefore, we position inventory as a comprehensive KPI of manufacturing.

In particular, in this improvement, as I said, factorization will lead to the production factors. So, we introduced the Toyota Production System, and we have Toyota's personnel to directly instruct us mainly on two points regarding streamlining logistics inventory management by grasping inventory levels in real time.

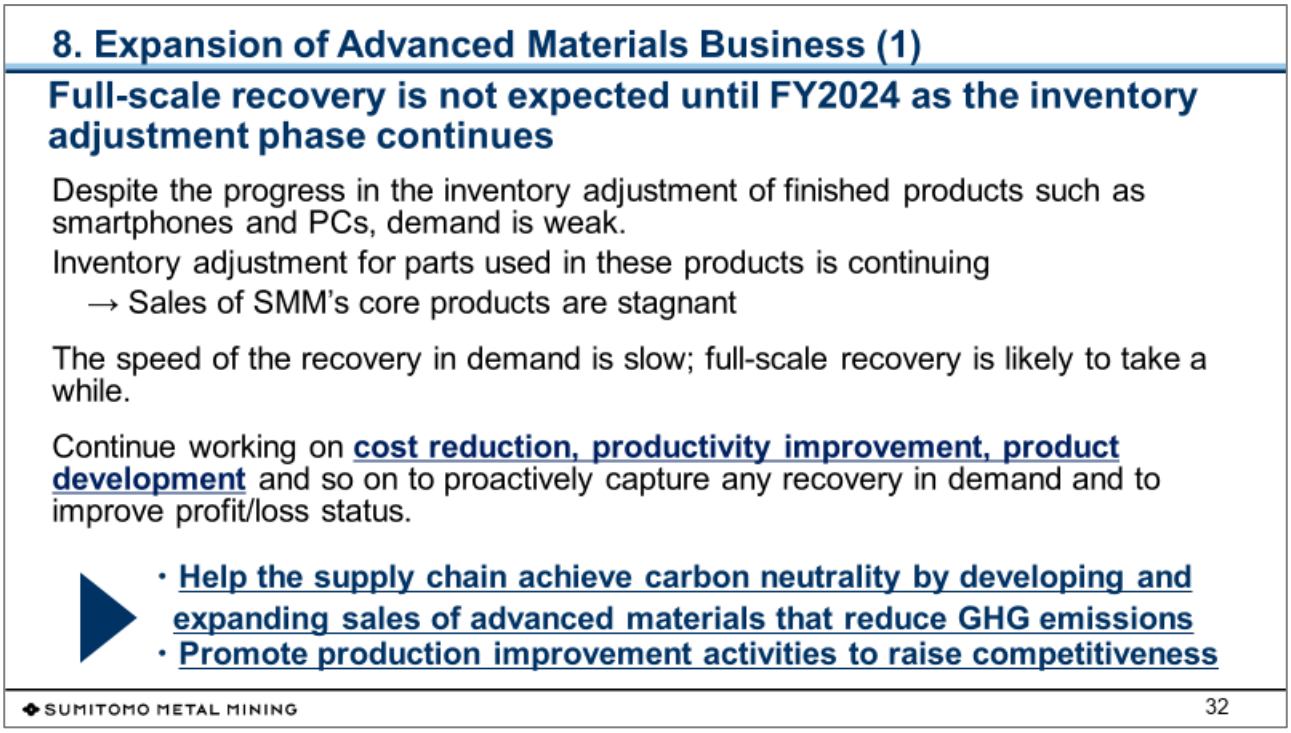
SMM had used buildings and furnaces that were already there to keep pace with the rapid production growth and to meet the customers' lead time for starting production, because of which we have, in addition to the three production bases shown in the figure on the right, another base, and if you include direct and indirect outsourced locations, the number of production bases will be around 10.

Further, we also have many warehouses that link these production bases, which makes inventory management considerably complex. The progress we have made so far is that we have introduced an inventory management system to confirm the levels in real time.

Other than this, since we were pushing ahead till now with a stance of production increase, we had over-produced. By following the concept of Toyota Production System, we aim to reduce lead time and also reduce waste and overstraining on site to raise productivity.

Regarding the balance of quality assurance and efficient testing at the bottom of the slide, traditionally, we used to build quality through the inspection process; therefore, the lead time became long depending on the wait time for inspection. So, we have adopted the Toyota concept of incorporating quality in the production process, which is operational now.

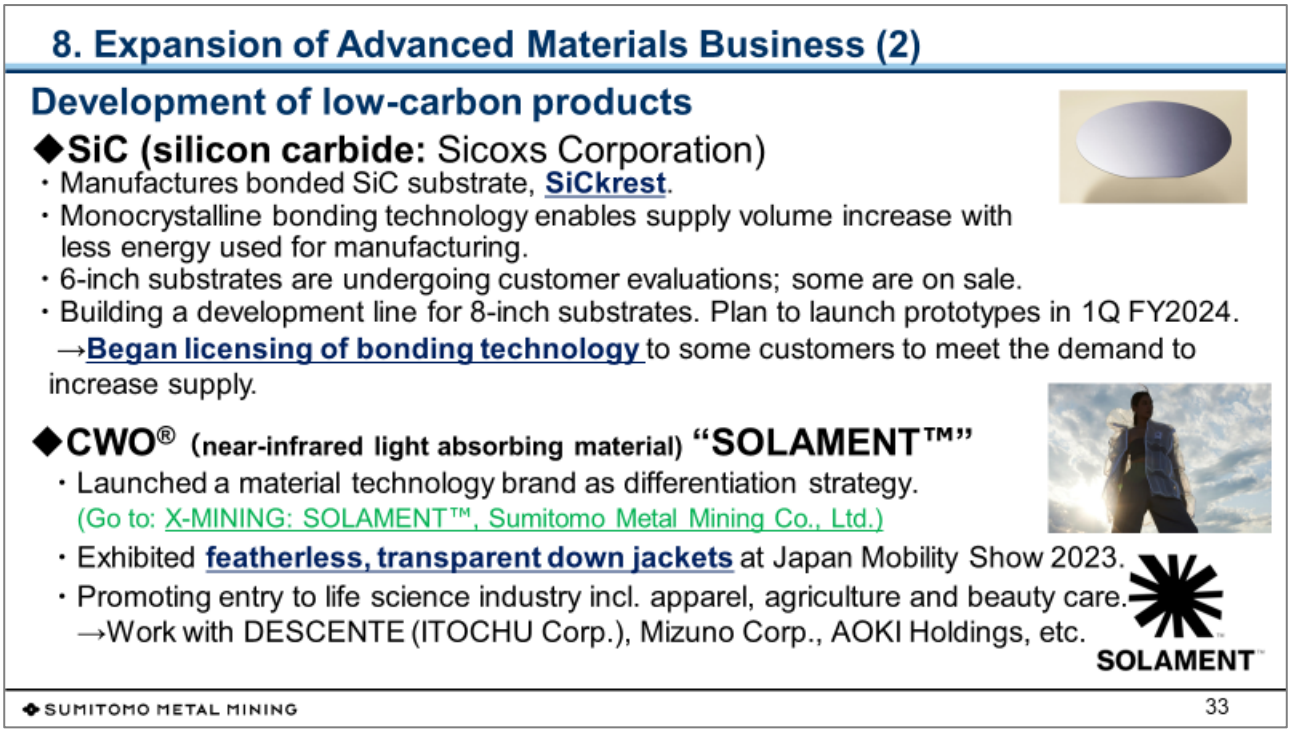
8. Expansion of Advanced Materials Business (1)



Shuichi Ogasawara: I am Ogasawara, Managing Executive Officer and General Manager of Advanced Materials Div. I will be talking about the advanced materials business. The slide shows where we are right now.

Our main market is the electronic parts market, where the full-scale recovery is expected to be delayed till FY2024 as inventory adjustment continues. In times like this, our division plans to continue pursuing cost reduction, productivity improvement, and product development, which I will explain later, so as to build a structure that can capture the advantages when any recovery in demand materializes and thereby improve profits.

8. Expansion of Advanced Materials Business (2)



What we are focusing on in product development is the development of low-carbon products that contribute to carbon neutrality in the supply chain. The first point is silicon carbide (SiC). This is a power semiconductor diode, and since its energy loss is lower compared to conventional silicon substrate, demand is rising rapidly in the power semiconductor field.

SMM has a proprietary bonding technology. We are pursuing development aimed at supplying silicon carbide substrate made of minimum necessary monocrystals by bonding the costly monocrystalline substrate with a polycrystalline substrate that can be manufactured relatively cheaply.

The substrate's features, in addition to advantages from its low cost compared to substrates made entirely with monocrystal, are that it can reduce the carbon footprint in the manufacturing process and reduce the device manufacturing costs of the customer as such when compared to monocrystalline substrate.

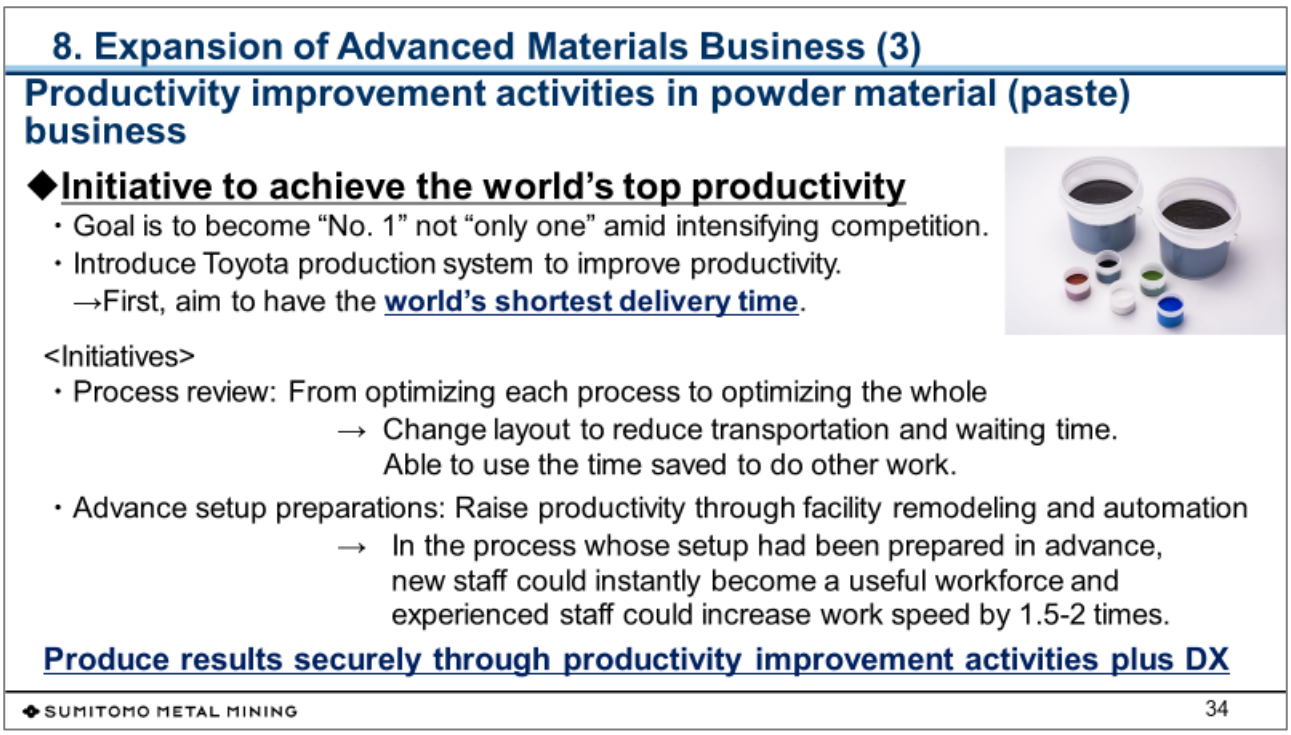
Currently, we have started partial sales of 6-inch substrates, and we are in the process of building the development line for the 8-inch product, the first choice. We plan to launch prototypes in the first quarter of FY2024. SMM will also actively license its bonding technology in order to respond to the demand for business expansion.

SMM's CWO (cesium tungstate), a near-infrared light-absorbing material, has the property of letting wavelengths in the visible range of sunlight pass through it while absorbing the wavelengths in the near-infrared range that becomes heat. It is a proprietary product of SMM.

We named the technology SOLAMENT, a compound word created from solar and elements, and launched it as a material technology brand. As the first step towards its realization, we exhibited a featherless, transparent down jacket at the Japan Mobility Show 2023 held at the Tokyo Big Sight the other day. It works like a down jacket, even without the feathers, by absorbing sunlight and with the material itself releasing heat.

SMM is pushing to enter life science and other such new fields, including apparel, agriculture, and beauty care, in which it originally did not have any presence, leveraging SOLAMENT.

8. Expansion of Advanced Materials Business (3)

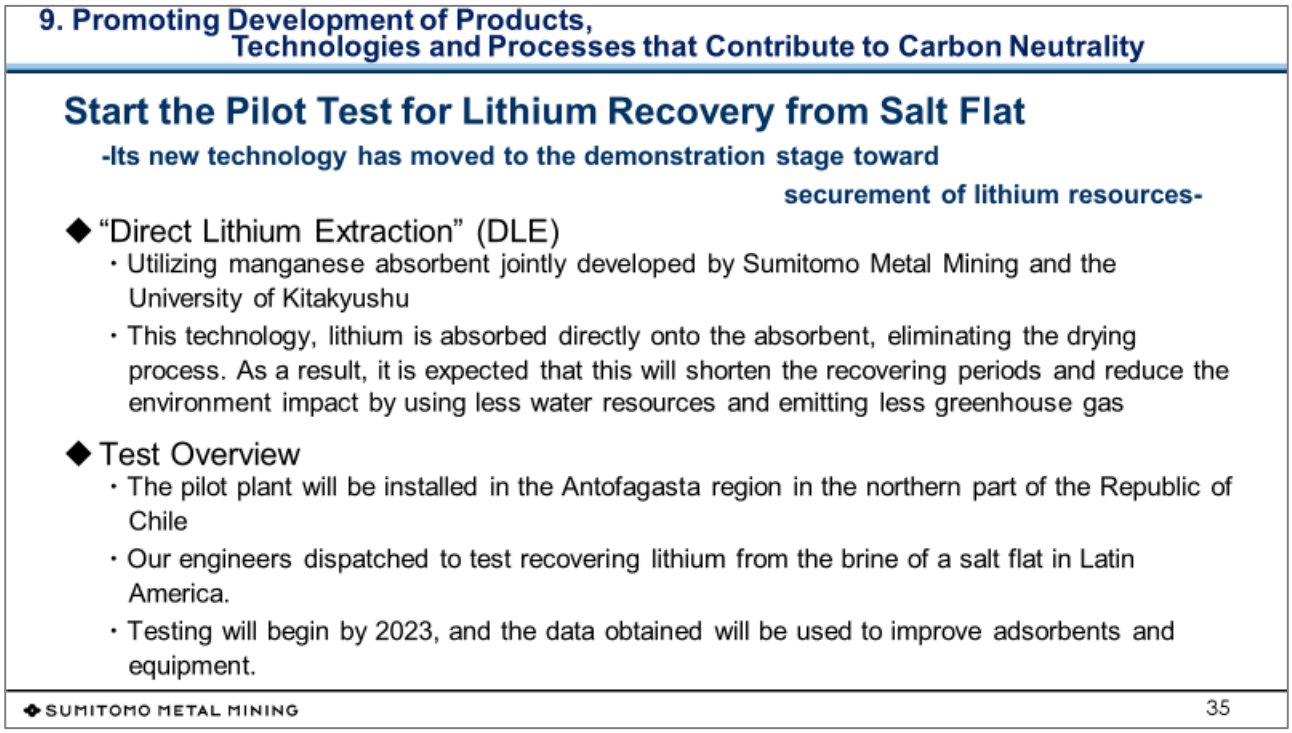


We are promoting productivity improvement activities in the powder material (paste) business, the mainstay product of SMM's advanced materials business. Under the slogan of becoming world No.1 in productivity in the paste field, we will drive forward the introduction of Toyota Production System with the help of experts.

First of all, towards achieving the world's shortest delivery time, we aim to halve the current delivery time and ultimately reduce it to a quarter of what it is now. Specifically, we will review inventory management, plant layout, and flow line not as an extension of existing improvement efforts but at a much higher level.

The paste field's main market is electronic parts, of which the market for EV parts will expand as EVs increase. We will make preparations so as to firmly seize that opportunity.

9. Promoting Development of Products, Technologies and Processes that Contribute to Carbon Neutrality



Nozaki: In this slide, we will look at the start of the pilot test for lithium recovered from salt flats as part of efforts to promote the development of products, new technology, and processes that contribute to carbon neutrality.

Recently, direct lithium extraction (DLE) has been attracting attention. SMM has established the process for that and has started a pilot plant for testing in the Antofagasta region of Chile. This is attracting attention within Chile also.

As we said in the lithium explanation, the advanced materials introduced earlier, i.e., silicon carbide SiCkrest® and CWO "SOLAMENT™," are materials that redefined product applications. The same can be said about DLE and LFP of batteries.

At the same time, we intend to keep focusing on cathode materials for solid-state batteries, which fall under the Green Innovation Fund research projects, battery recycling, and other such fields.

Q&A: Outlook for next fiscal year

Q: First, it is not a question, but I would like to convey what I think as an analyst who is sandwiched between SMM's ideas and investors' opinions. I think there is some mismatch between the time scale of your mining business, where you get the returns on investment over decades, and the investors' time scale of wanting profits and dividends today or tomorrow.

If you dig deeper, there might probably be other reasons, too, but just looking at the major areas, currently, you are in the upfront investment phase. In addition to that, though there was no explanation today, the Teck side apparently has said the cost of QB2 will rise further, and the start-up cost of the Côté project has also actually gone up.

You are also investing in batteries matearials. You have not been able to show any results of the battery materials investment on the financial statements. Yet, you say you are investing further in batteries as you expect profits to accumulate. I feel an explanation is a bit lacking from SMM's side.

With capital costs increasing, the hurdle rate will also increase if there are no profits, and the share price will not go up, either. I assume shareholders have been pointing this out repeatedly, but there also are various ways to consider dividends; for example, the oil refining industry introduced DOE, etc., and share prices have a floor. You should not be explaining your company's concepts in a one-way manner. Instead, SMM should have dialogue with investors. Moreover, I felt that the content of this briefing had not changed much from the previous briefing or the one before that.

The question is from here. Excluding next year's metal market situation and foreign exchange, is it correct to assume, upon preparing the forecast, that Quebrada Blanca 2 will start contributing to the profits as it is being ramped up in terms of organic growth?

At the same time, IFRS accounting standards have changed, and you now have to enter the costs in the income statement during the ramp-up. I would like to know whether you will have a heavy expense burden in the Mineral Resources Business since your Côté Gold Project, though not as large as QB2, will take off next year. Also, if there is anything in particular to be noted about other businesses, please share it. Please explain your outlook for the next year, also including evaluation in terms of profit/loss exclude temporary factor.

Nozaki: Regarding your first comment, we have been continuously saying, from the mid-2000s, that our shareholder returns are linked with financial results. This took into account the then scale of the balance sheet and the depth of business capital, and that was a phase where we had to accumulate.

If we look at where we have reached now, total assets are close to three trillion yen, and equity capital is also close to two trillion yen, including minority interests. Therefore, it is not desirable for us to keep talking about the logic of aiming for depth of equity capital. Hence, we have started considering stable shareholder returns such as DOE.

As for the profit cycle, it is a bit tough during times when investment is heavy, but this, of course, is to thicken the core of the business. Since we are thinking of making it into something that would generate profits worthy of the assets and equity capital volume, we require some more time.

The earnings forecast for the next fiscal year is quite difficult, even if it is a rough estimate. For example, the variance between the profit/loss exclude temporary factor and actual figures in the earnings report can be a double whammy with the inventory evaluation loss when the market is on a declining trend. However, if you level it based on a certain standard, the discrepancy will be eliminated quite a bit, and the figures will be close to the actual values.

As to the business revenue, which is the essence of the figures, Quebrada Blanca 2 will be fully operational next year, and my understanding is that the cost will be high at the beginning of the launch.

However, as per our current estimate, reaching the expected maximum profit recognition will take time, but it is unlikely that Quebrada Blanca 2 operations will drag down the profits. Fukuda will explain the Côté Gold Project, as I do not have the data with me.

Fukuda: We are looking at starting production at Côté Mine sometime between January and March 2024. Ramping up after that is likely to take another year. We are assessing what to do next year onwards.

Nozaki: Among other businesses, we are carrying out negotiations overseas regarding terms of processing costs in the mainstay copper-smelting business. Looking at the status of the benchmark to be finalized based on this, I do not think it will significantly worsen. Toyo Smelter & Refinery, which will get back to full production next year after the shutdown, is expected to contribute next year.

Q&A: Introduction of stable dividend policy and cash flow at overseas mines in the next fiscal year

Q: You mentioned stable dividends in your Integrated Report. Are there any factors hindering the introduction of stable dividends?

Also, if you look at page 51 of the material, I feel the cash flow has worsened as the investments and financing other than capital investment that appears to be related to overseas mines increased significantly compared to the May plan. Why has the investments and financing plan changed compared to May? What is your view for next year on? Especially, what is the cash flow related to overseas mines?

Nozaki: When considering stable dividends, we have been gradually raising the payout ratio linked with financial results, but lowering a flag that we raised once will be quite disappointing for investors.

There is no change to our policy of maintaining the contents that we disclosed once. However, instead of ambiguous talks like maintaining the equity ratio above 50% when considering dividends, I think it will change to something like “This has covered the necessary line till now, so we would like to use this method” upon procuring funds.

Therefore, there are no major hurdles now. However, equity capital in SMM’s balance sheet includes quite a bit of foreign exchange conversion gains. There is a possibility of this changing and moving the equity capital. We are in the process of doing the various related calculations.

The investments and financing question, I believe, is related to Quebrada Blanca 2. Though I do not have the detailed data now, the large investment in the mine will end next year or later. So, I think it is safe to assume that there will not be many investments and financing related to the copper and gold mines we are currently involved with.

However, nickel resource development is a project that we have to embark on, and there is a possibility of new investments and financing occurring in new projects.

Q&A: Impact of solid-state battery development on cathode materials and introduction of stable dividend policy

Q: In the Battery Materials Business, automobile manufacturers are also moving towards the development of solid-state batteries. What will impact your cathode materials business when the electrolyte changes from liquid to solid?

Regarding the introduction of a steady dividend policy, is this basically going to be from the next medium-term plan? Or, as was said in today's briefing, since instructions will be given to consider this immediately, would there be any changes in the current plan? Please explain the timeline for this.

Nozaki: Solid-state batteries with solid electrolytes would probably be using the same type of cathode and anode materials that are used now. Battery Materials Div. General Manager Tanaka will give you the details.

Tanaka: Basically, of the four components of a battery, it is true that only electrolyte is changing. However, the four components do have respective compatibilities. So, as we have been doing till now, we will work closely with our customers and together develop cathode materials that would suit the solid-state battery.

Nozaki: Regarding the dividend policy, we are not going to change the policy to keep it, in principle, at 35% or above of net income. "Stable" here means the base portion and is the concept of how to support the portions that change significantly corresponding to the financial results. So, even if we introduce the policy, it will not deviate from the policy we have in the current 2021 3-Year Plan. We would like to do it as early as possible, but in-house arrangements have not progressed, and the current situation is such that we are unable to disclose a clear timing for that.

Q&A: Production increase of battery materials and new technology

Q: Regarding the increase in battery material production, you mentioned Nano One in addition to new technological initiatives such as LFP and recycling. Could you tell me how much of the unprecedented measures you are taking can be expected to be factored in towards achieving the image for 2030 as shown in the graph for the production increase?

Tanaka: We will further evolve the existing processes at the under-construction Niihama Plant to improve labor productivity. However, looking at the current competitive environment, we have concerns that there are going to be limitations if we just extend the existing processes. For that reason, we are currently engaged in developing new technology with Nano One's technology in preparation for increasing production in the future.

Q: Is my understanding correct that a different approach can be expected to increase production technologically, which you are working on now, during the period till 2030 shown in the graph?

Tanaka: Yes, that is the plan.

Nozaki: If I may add something, demands from customers and the industry are also changing. At the very least, in proceeding with the current nickel-related and LFP businesses, we will implement the best out of the various combinations, including their locations.

Q&A: NPI's impact on the nickel supply-demand environment

Q: In the supply-demand analysis related to securing nickel resources, I am curious to know why you left out NPI's impact. I cannot but feel that it is a hidden risk.

For example, in the ferronickel market, the pricing structure was nickel price plus iron price. Now, there is a tendency for the pricing structure to move in tandem with NPI.

Could you please explain how we should consider such hidden risks among the future nickel resource development and business risks?

Nozaki: It is an undeniable fact that NPI's price is having a significant impact on Class 2 price formation. NPI's future impact on the supply side will be converted to the intermediary product matte and this will considerably loosen the supply and demand of ingot and nickel sulfate. Ingot and nickel sulfate are products asked for by the customers, so it is unlikely that NPI is stocked somewhere, like we presume.

If it is there, it would create a situation where most of the nickel ingot will be stored in the LME warehouse. It is quite difficult to make a guess about that. From the perspective of sustainability, it is hard also to guess at what scale nickel production in Indonesia would expand. Also, from what I heard, in Indonesia, smelting plants are not attached to mines, as many smelting companies buy the ore for their operations.

It appears to be different from the nickel business model that we were thinking of originally. So, all we can do really is to closely monitor it. We will continue to deliver products to the market that meet the customers' requirements for high-quality nickel or other chemical products.

You might be considering it as standard goods, but we are offering slightly different products to meet our customer needs and will continue to offer premium products.

Q&A: Outlook for copper supply-demand

Q: Regarding the supply-demand environment for copper, supply from mines located in various places, including your Quebrada Blanca 2, will be increasing from 2023 through 2025. You also appear to have the same recognition as you said in the briefing today.

As for demand, while there are expectations of a demand recovery in 2025, you also seemed not that optimistic, saying that it would slightly weaken in the medium to long term. On the other hand, could you please explain why you think the demand will go up slightly in the second half, given the current market conditions? Please also share your insight regarding the market forecast in the medium term.

1. Supply Demand Trends (Copper and Nickel)

Data/Reference

Copper

	ICSG Projection (Oct 2023)		
(kt)	2022 Result	2023 Forecast	2024 Forecast
Production	25,374	26,340	27,532
Usage	25,835	26,378	27,084
Balance	-461	-39	+448

Nickel

	INSG Projection (Oct 2023)			SMM Projection(Sep. 2023)		
(kt)	2022 Forecast	2023 Forecast	2024 Forecast	2022 Forecast	2023 Forecast	2024 Forecast
Production	3,060	3,417	3,713	2,896	3,113	3,389
Usage	2,957	3,195	3,474	2,940	3,090	3,352
Balance	+104	+223	+239	-44	+24	+36

SUMITOMO METAL MINING 37

Nozaki: I would like you to pay attention to the demand growth in the copper supply-demand forecast by an international organization shown in slide 37. It grew by 500,000 tons or 700,000 tons year on year, even during the three years shown on the slide.

On the other hand, new development of copper mines will require extremely large infrastructure investment, and therefore, unless it is a very large-scale mine development, it will not pay. So, the reality is that the number of projects is quite limited.

As far as we can tell, there are only a few projects left. The industry is moving towards expanding the production of existing mines. The Quebrada Blanca copper mine, in which we are participating, also has plans ready for the next production increase and the one after that, and other mines are also into production increases.

In other words, for example, if the demand should increase in the scale of 600,000 tons, that would create a situation where you would need two quite large mines to come up every year. As to whether supply can keep up with that momentum, I would have to say that the supply-demand situation is going to be quite tight in the medium to long term.

As you pointed out, the Oyu Tolgoi mine is currently increasing production, and Quebrada Blanca 2 is also, in a sense, switching from oxide ore to sulfide ore. Based on this background, even if the supply-demand is a bit loose, this looseness will not last so long if the current strong demand persists.

Regarding the current market condition forecast, you have pointed out that our estimates are a bit high, but with China accounting for half of the global copper demand, we will have to closely monitor the direction of the Chinese economy.

Our understanding is that the implementation of the economic stimulus measures that had been suggested since summer was recently finalized, and we have expectations towards a recovery in sentiments from the stimulus measures, and that is the reason for the price setting.

Q&A: Impact on profit/loss from productivity improvement of battery materials

Q: Given your plan to reduce the stock held at each base to optimum levels by introducing the Toyota Production System in the Battery Materials Business, can we expect the receipts and payments difference in cobalt, which had a significant impact on the income statement till now, to be lessened from the next fiscal year? What will be the impact on profits?

Tanaka: Reducing inventory is an effective method to achieve a reduction in the difference between receipts and payments. In the case of nickel, cobalt, and lithium, which account for a high percentage of sales, the general idea basically is to pass on to the price by tying it to the customers. Our rules for sales and purchases are also based on assumptions regarding processes and lead time. With the current way of maintaining stock, it is much larger than our assumptions of lead time, and it is a fact that the receipts and payments difference is becoming large.

While it may appear to have an impact on a single fiscal year, with large losses or profits, but over a few years, the impact is more or less zero. However, the reduction in inventory is aimed at leveling by eliminating the impact of these price fluctuations on profits.