

Sumitomo Metal Mining co.,Ltd., Runs Almost On Track With Greatly Improved Operation from FY2018, Large-scale Project Proceeding As Planned

This is a transcription of Sumitomo Metal Mining Co., Ltd. Announcement of the 2nd Quarter of Financial Result for the Year Ended March 31, 2019 / Progress of Business Strategy held in 18 November, 2019.

<Speakers>

Akira Nozaki	President and Representative Director
Hiroshi Asahi	Director, Managing Executive Officer, General Manager of Mineral Resources Div.
Nobuhiro Matsumoto	Director, Executive Officer, General Manager, Non-Ferrous Metals Div.
Isao Abe	Executive Officer, General Manager of Battery Materials Div.
Fumikazu Oshita	Executive Officer, General Manager of Functional Materials Div.

<Presentation>

2nd Quarter of FY2019 Progress of Business Strategy

Akira Nozaki : Good morning, everyone. Thank you for coming to our 2nd Quarter of FY2019 Progress of Business Strategy today.

And thank you for your continued support. Although the 2nd quarter of FY2019 and performance forecast is as we've announced, I'll explain it including the current status of our businesses today.

Contents

Contents	
I	Summary
II	FY2019 Results Forecast
III	Current Issues and Priority Measures Hiroshi Asahi Director, Managing Executive Officer, General Manager of Mineral Resources Div. Nobuhiro Matsumoto Director, Executive Officer, General Manager, Non-Ferrous Metals Div. Isao Abe Executive Officer, General Manager of Battery Materials Div. Fumikazu Oshita Executive Officer, General Manager of Functional Materials Div.
IV	SMM Group's Vision for 2030
V	Supplementary Materials

I'll talk about the current situation of the whole business, and each general manager will do about their topics. Please note that Q & A session is set after all presentations.

I. Summary (1)

I. Summary (1)

1. Global economy and business environment

- World economy becoming more uncertain
 - Movements of the U.S. against China, Iran, and North Korea
 - Fears of a slowing Chinese economy
 - Continued turmoil in the Middle East
 - No end in sight for Brexit
- Changes in the business environment surrounding resource development and smelting & refining operation
 - Heightening resource nationalism (mining ban in Indonesia brought forward)
 - Environmental accidents (Brumadinho tailings dam collapse, Ramu slurry leak)
 - Further strengthening of environmental regulations, obtaining understanding of residents becoming more difficult
 - Increase of investment and running costs
- Evolution and development of digital technology
 - Accelerating commercialization of AI, IoT, 5G, VR technology

SUMITOMO METAL MINING CO., LTD.4

First of all, this is the summary of the 2nd quarter of FY2019. Here are the topics of the global economy and business environment. Needless to say, the global economy has been forced to stagnate by uncertainty such as US-China trade friction, slowing the Chinese economy with it, and geopolitical risk.

Especially, the slowdown of the Chinese economy seems quite great, and as for non-ferrous metal such as copper that China accounts the half of global demands, there was a decline in its price by market sentiment.

Regarding nickel, its price increased because of the decrease of inventory of LME and news of nickel ore export ban in Indonesia.

Although the demands of the non-ferrous metals in the whole world have been forecast as well-balanced or little negative balanced, supply and demand in East Asia are weakened in actual state. As to sales for domestic users centered on China market, both non-ferrous metal and advanced material decreased under our expectations.

In the field of electronic components, people say these bad conditions almost ended, but we forecast that it'll need more time to get the situation back in Materials Business.

The next topic changes in the business environment surrounding resource development and smelting & refining operation. As for the business environment, there has been still resource nationalism such as the Indonesia mining ban. In the current resource industry, the greatest and urgent challenge is to design a management standard establishment of tailing dam of mines based on dam collapse at the iron ore mine in Brazil.

ICMM, a global organization of mine smelting companies we've joined, is now handling with it. Besides, as the current situation, the affairs of copper producing country Chili became unstable. It has not had an impact on our mine operation or development projects so far, but we should continue to watch it.

Then, regarding evolution and development of digital technology, commercialization of advanced telecommunication technology including 5G that can make ICT enable such as Big Data, IoT, and AI and including high technology such as VR and AR. As the car industry has discussed, they may change not only the quality of life but also the whole business and industry.

In consideration of these movements, we are sure that now is the business chance of the supply of materials. Also, we want to use such advanced technology for ensuring safety as a manufacturing business, a complement of manpower in routine business, more accurate examination, and operation management.

I. Summary (2)

I. Summary (2)

2. Recent management challenges

- 1) To make growth strategy and reinforcement of business base compatible
- 2) To demonstrate a cross-departmental leadership in tackling issues

SUMITOMO METAL MINING CO., LTD. 5

I chose two recent management challenges: 'growth strategy and reinforcement of business base' and 'demonstration of a cross-departmental leadership in tackling issues'.

This year is the first year of the 3-year plan, and success or failure of the plan depends preparation in this term. Although general managers of each business segment will explain the progress of the business challenge and growth strategy, roughly speaking, each strategy for growth is ongoing steadily and we are aware of some issues that we should overcome.

On the other hand, we see some progress in operations in terms of strengthening of business base which supports our profit, but there is room for improvement.

As to our current income status, the results forecast can be said as natural in consideration of external factors such as the change of market condition. However, ROA went down to a 3 percent level in the recent situation.

Since monetization of growth investments is planned after the next 3-year plan as I've mentioned, this may be just a growing pain. But we consider the necessity of confirmation about these fears: the decrease of capital efficiency by malfunction of business management with extra expansion and the possibility that it will cause weakening of our profitability.

To businesses like us that are commonly influenced by the change of business environment, increasing and maintaining profitability is the best risk hedge. I'm sure our profitability will be more demonstrated since the recent situation is not so bad and there is no dangerous risk to us, though the market is not so good, too.

I'll touch on the concern of our moves related to this when I explain the topic of results later.

The second heading is a topic of management of the organization. Nowadays, to solve some social issues that companies have faced, company should be responsible for contributing to many of them. For example, the establishment of low carbon society is the challenge that all the industries have to address along with each other organically. Likely, I'm sure the responsible link is needed in just one company.

Our company has promoted to collaborate with each division. But the issues related to corporate such as reform of working style, adopting digitalization, recruiting difficulties, and realizing low carbon society are not the problem at the level of one division.

So, I expect all divisions to view the theme more macroscopically, and to make not an isolated individual strategy but organizational power with depth and force to face the issues with the multi-layered ways by any divisions.

Also, though it is a good thing that each employee is diversified, when it comes to be as an organization, they should act like one person with a certain will, and everyone should be one voice for corporate philosophy and essential points. This can be underlying strength for a company.

We are going to be the organization to strengthen the company value by using our total various powers such as good memory, creating ideas, imagination, and proceeding performance for resolving our facing challenges.

1) Trend of Business Performance

1) Trend of Business Performance								
	Japanese standards [J-GAAP]					[IFRS]		
	2013	2014	2015	2016	2017	2017	2018	2019 forecast
Net sales	8,305	9,213	8,554	7,861	9,335	9,297	9,122	8,570
Operating Income	754	1,258	597	764	1,102	-	-	-
Recurring Profit	1,144	1,742	-128	-16	1,249	-	-	-
Profit before tax	1,110	1,233	6	-60	1,058	1,083	894	790
Equity Method profit	298	239	-732	-860	114	123	-49	65
Segment Profit	Mineral Resources	691	538	-443	-536	560	580	365
	Smelting & Refining	291	813	253	333	515	478	540
	Materials	111	129	60	121	153	71	138
	Other	16	-1	-8	-1	2	-74	-20
	Diff. Adjustment	35	263	10	67	19	28	2
Net Income (Profit attributable to owners of parent)	803	911	-3	-185	916	902	668	600
Copper (\$/t)	7,104	6,554	5,215	5,154	6,444	6,444	6,341	5,828
Nickel (\$/lb)	6.51	7.62	4.71	4.56	5.06	5.06	5.85	6.91
Gold (\$/Toz)	1,327	1,248	1,150	1,258	1,285	1,285	1,263	1,459
Cobalt (\$/lb)	12.67	13.69	11.73	13.67	30.64	30.64	31.64	15.01
Exchange (¥/\$)	100.24	109.93	120.15	108.40	110.86	110.86	110.92	106.82

SUMITOMO METAL MINING CO., LTD.

7

Let me move to FY2019 Results Forecast. This slide shows the trend of business performance from 2013 to this time. Although it's hard for our company to estimate the figure for each fiscal year because income fluctuates by metal price and exchange, I will try to compare 2019 and 2018.

Since FY2018 (Profit before tax) is 89.4 billion yen and FY2019 (forecast) is 79.0 billion yen, the decline will be about 10.0 billion yen. That's because of decrease in the price of cobalt and copper, on the other hand increase in the price of nickel, and material business goes downwards.

2) FY2019 1H Results and FY2019 Forecast November Forecast vs. May Forecast

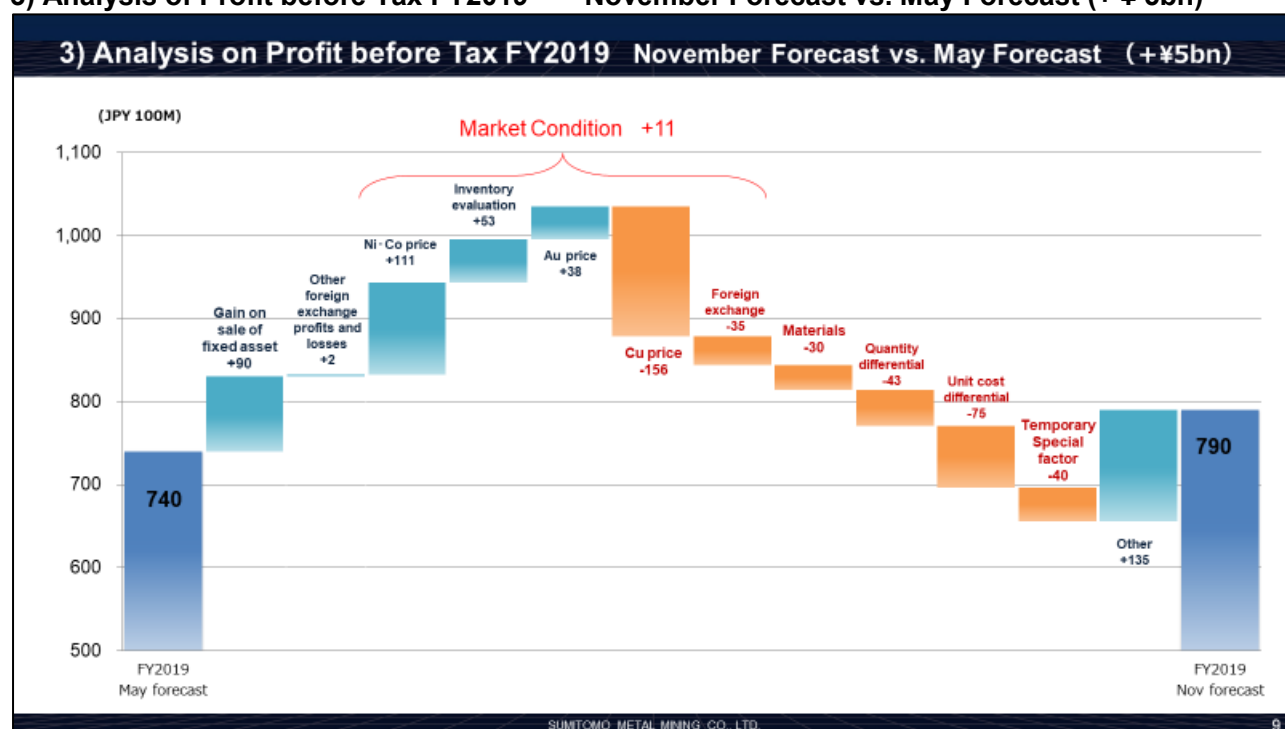
2) FY2019 1H Results and FY2019 Forecast November Forecast vs. May Forecast					
	2019/1st half results (A)	2019/2nd half forecast (B)	FY2019 November forecast (C)	FY2019 May forecast (D)	Difference (C) - (D)
Net sales	4,224	4,346	8,570	8,680	-110
Gross Operating Profit	548	612	1,160	1,240	-80
Pretax Profit	364	426	790	740	+50
Equity Method profit	45	20	65	70	-5
Segment Profit	Mineral Resources	165	125	290	0
	Smelting & Refining	177	363	390	+150
	Materials	28	42	100	-30
	Other	1	-1	-30	+30
	Diff. Adjustment	-7	-103	-10	-100
Net income (Profit attributable to owners of parent)	294	306	600	640	-40
Copper (\$/t)	5,956	5,700	5,828	6,300	-472
Nickel (\$/lb)	6.32	7.50	6.91	6.00	+0.91
Gold (\$/Toz)	1,392	1,525	1,459	1,275	+184
Cobalt (\$/lb)	15.02	15.00	15.01	18.00	-2.99
Exchange (¥/¥)	108.63	105.00	106.82	110.00	-3.18

SUMITOMO METAL MINING CO., LTD.

8

This is a comparison of November Forecast vs. May Forecast.

3) Analysis of Profit before Tax FY2019 November Forecast vs. May Forecast (+ ¥5bn)



SUMITOMO METAL MINING CO., LTD.

9

I'll explain it with a waterfall chart. I described 'Market Condition + 11' at the center of this graph, but it's almost flat. Still, as the yellow area on the right side, what I'm concerned about is declining profit caused by Quantity differential and Unit cost differential. Although I've mentioned them as a matter of concern, let me confirm their status.

As for Mineral Resources, I've confirmed that a matter of production of overseas copper mine has been almost under control. Also, there has been an example of the great improvement of operation performances; Sierra Gorda copper mine.

Concerning Smelting & Refining, although the reduced production of THPAL has not been at the level of full capacity yet, we could have reduced any troubles led to greatly reduced production that had happened frequently last year.

As to unit cost, since there was an overseas mine with the reduced production by the change of the mining sequences and the decreased production of HPAL compared to the plan, unit cost differential became worse.

4) By Segment ROA Results

4) By Segment ROA Results				
	Mineral Resources	Smelting & Refining	Materials	Overall
FY2014	14.3%	11.7%	7.8%	5.5%
FY2015	-12.3%	3.7%	3.2%	0.0%
FY2016	-13.7%	5.0%	6.1%	-1.1%
FY2017	11.9%	7.8%	6.9%	5.4%
FY2018	6.6%	6.0%	5.6%	3.8%
FY2019 Q2 Total	5.3%	5.2%	2.4%	3.3%

(Remark) ROA by segment is based recurring profit(loss) / profit before tax. ROA for the whole company is based on net income or loss.
Based on Japanese standards up to FY2017, based on IFRS from FY2018
The cumulative total for Q2 of FY2019 is calculated by simply doubling profits during the period

SUMITOMO METAL MINING CO., LTD. 10

This is a topic of concern about the deterioration of capital efficiency that I mentioned before. Here are ROA results by segment. Repeatedly, our company has promoted the growth strategy, but there have been some concerns like a compromise for achieving it or the cause of some troubles on income.

Of course, it's common to postpone inventory management of raw materials and products in expanding the production. And it's not special that bad and unprofitable corrupted assets are found out beside a new investment. But such "normalized uselessness" definitely causes a decrease in income.

So, since I've been sure that undiscovered uselessness must be found there somewhere, I've directed each division to inspect such excess assets in the 2nd quarter results. Of course, it's not easy to proceed it rapidly, but I think there are some things to be included at the budgeting stage for step-by-step execution.

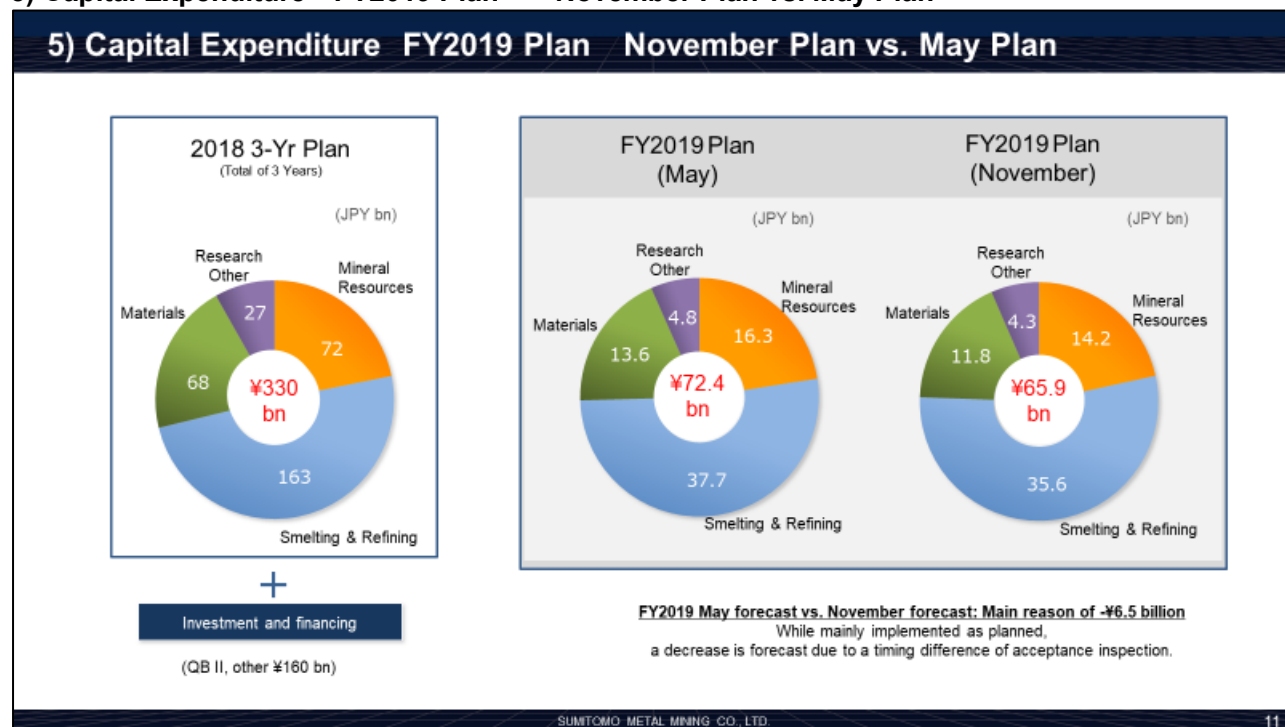
While it's unclear the results of asset inspection will show clear improvement, what I've expected is to doubt the current situation and think hard about improvement in each class of each division. If we could understand what the problem is here, we would enhance the reproducibility at the management level for continuous growth strategy and investment.

As a matter of course, I'm sure this is not all but will be the first step to improve the mind of business management.

This is the ROA results. FY2015 and FY2016 are impossible to evaluate due to impairment loss of Sierra Gorda copper mine, but 5 percent level once has been going down to 3 percent level.

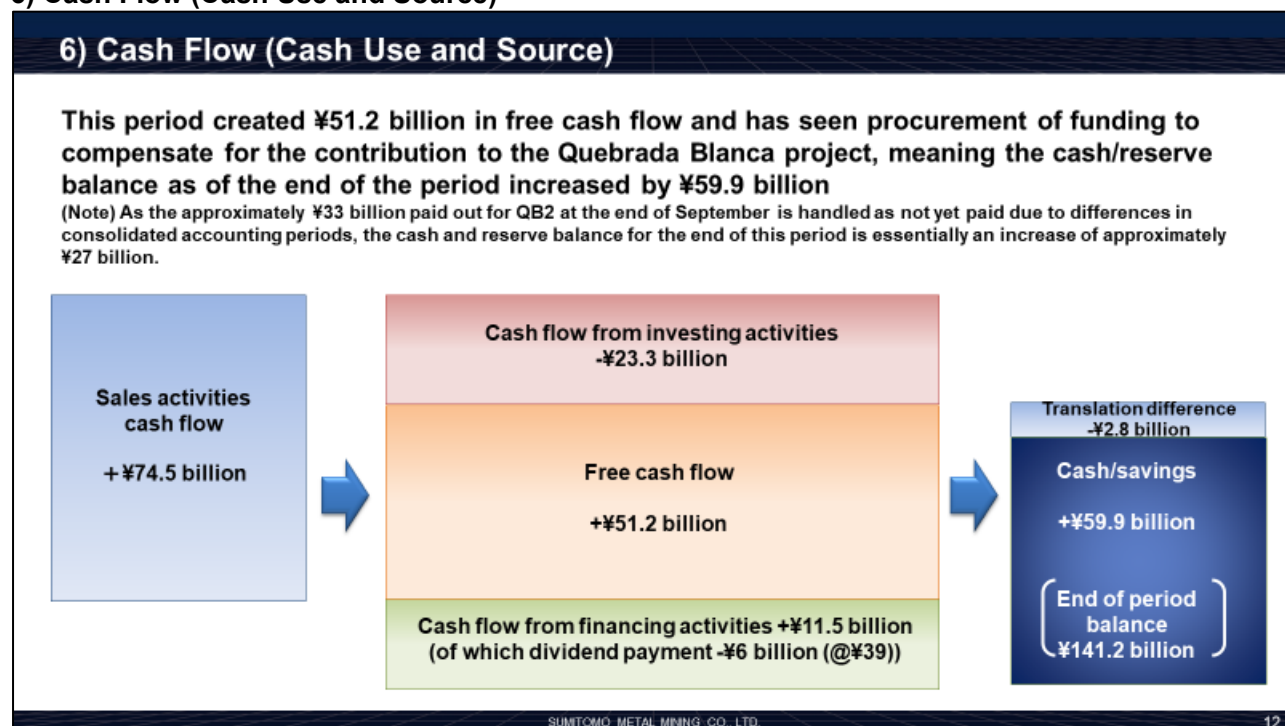
Just to tell you, although the numerator (to calculate ROA) of the business segment is Profit before tax, that of the total is net income.

5) Capital Expenditure FY2019 Plan November Plan vs. May Plan



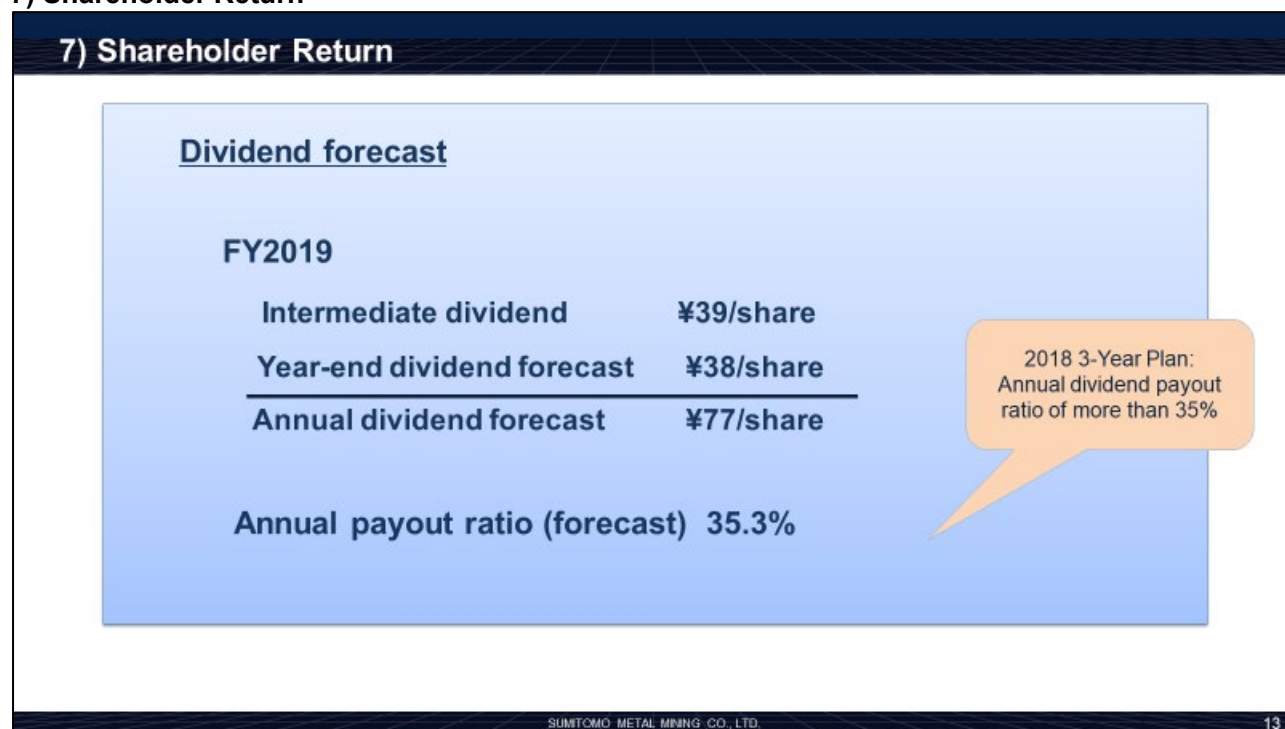
I'll skip capital expenditure since it was as this slide showed.

6) Cash Flow (Cash Use and Source)



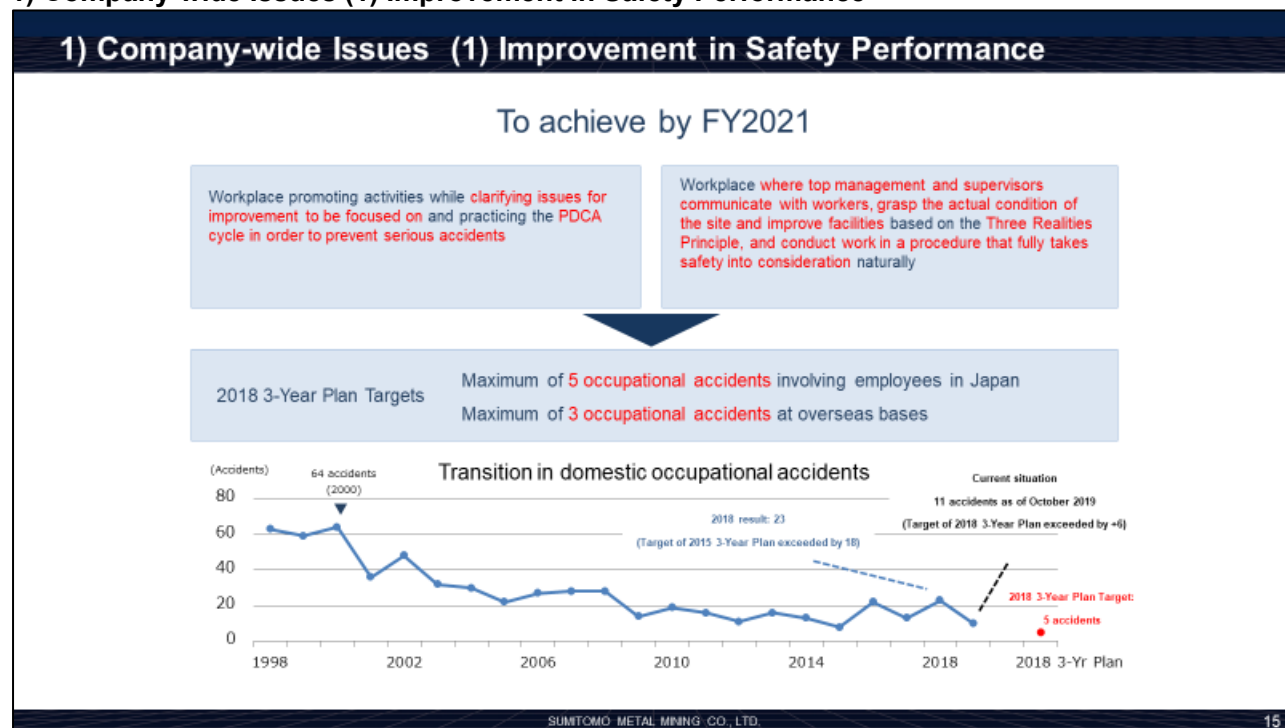
As to cash flow, I described 'Cash/savings + ¥ 59.9 billion' on the right side of this slide, but note that it includes an extra 33.0 billion yen in consideration of the difference between the timing of fundraising and payment.

7) Shareholder Return



Regarding the shareholder return, I described the intermediate dividend and year-end dividend forecast of FY2019, and the annual payout ratio is more than 35 percent from this fiscal year.

1) Company-wide Issues (1) Improvement in Safety Performance



As for the current issues and priority measures, I'll talk about the common issues, and each general manager will explain their ones.

The first topic is safety. Our company's safety performance is based on the calendar year, and there is only almost one month left for this year. We've not achieved the 2018 3-year plan yet, but we've forecast that we will have improved more than the last year.

However, we have many things to introspect much more than this figure since serious accidents happened on the first of this year.

1) Company-wide Issues (2) Strengthening of Management Base

1) Company-wide Issues (2) Strengthening of Management Base

2015 3-Year Plan

FY2016 Issuing of integrated report

FY2018 Early application of IFRS

2018 3-Year Plan

In order to face SMM's own unique problems, environmental and generational changes, and trends...
 Approach proactively / break a mannerism / develop an open and vibrant organizational climate → **Be More Proactive**

To increase awareness of need to take action, realize the need for reform and improve agility
 by integrating corporate departments based on their function...

FY2019 April 1 Reorganization of HQ as part of corporate function enhancement
 Corporate Communication Department, Corporate Management Department, Corporate Planning Department

Further concrete actions (example)
October 1 Launch of "Smmart" Project
 An activity that focuses on finance and accounting related department in SMM group, using digital technology to
 efficiently realize a wide variety of working styles and bring about a company-wide reform movement

SUMITOMO METAL MINING CO., LTD.
16

I'll talk about strengthening of management base. Reorganization of HQ as part of corporate function enhancement was done with the start of the 2018 3-year plan. Although I mentioned just before, I think it as the core to tell clearly a message of our company's thoughts about various issues and to spontaneously demonstrate each divisions' roles and functions against the challenges with multiple strategies and total organizational power, and I expected that to the reorganization.

As evaluation after 6 months, some isolated efforts of only single division have been still seen many times. I'm sure the success case is fundamental. Fortunately, since there are many issues, now is just the time of breakthrough.

Although I wrote 'October 1 Launch of "Smmart" Project' at the bottom of this slide, we've started the project. This is not a top-down project but the finance division's spontaneous one.

Although I just understand it partly, the core of this suggestion is the feeling of fear as problem awareness that they have not been able to handle some fundamental tasks such as business management and problem-solving that they should have done essentially because of expansion of financial tasks such as institutional and tax accounting in both quality and quantity.

Since this has something in common with the issues that I mentioned on the topic of business management and also is the challenge shared with managers, I accepted the project.


They will create the time to think by the efficiency of tasks first, and then try to sophisticate them. This may be a long project which continued until the period of the next 3-year plan. My explanation of the first part is all.

2) Current Issues and Priority Measures (1) Mineral Resources (1) Sierra Gorda


2) Current Issues and Priority Measures (1) Mineral Resources (1) Sierra Gorda

Promote establishment of stable full operation and cost reduction through implementation of de-bottlenecking as planned, and improvement of operating ratio

- Production FY2018 97 kt (result)
FY2019 104 kt (May forecast) -> 108 kt (November forecast)
- Both ore processing volume and copper production volume continue to be close to the level of full production. Production increased compared to initial plan in FY2019 .
- Mineral ore processing volume after debottlenecking completion
Present 110 kt/day → 130 kt/day in 2020



Year	Production (kt)
2016	~85
2017	~90
2018	~105
2019 planned	~108



Given the FY2019 National Mining Society Award
by the Sociedad Nacional de Minería (SONAMI)

SUMITOMO METAL MINING CO., LTD.

17

Hiroshi Asahi : I'll explain the Mineral Resource business. As the president talked, there have been still some concerns such as riot and strike in Chili in October as to copper business. We've tried to collect information, and I think the situation is still unsettled.

In such sense, there is the possibility of short-, medium-, and long-term impact, so we have to prepare for it. In the recent situation, we've had no fundamental impacts by operation of Sierra Gorda copper mine or construction of Quebrada Blanca copper mine.

Now, first, let me talk about Sierra Gorda copper mine. We have to promote the implementation of debottlenecking as the plan, establishment of full operation including improvement of operation ratio, cost reduction, and strengthening of management base.

Although we had worried you by impairment loss in FY2015 and FY2016, we've improved greatly in FY2019. I described copper production on this slide, we planned 108kt in the current situation against 97kt of the previous year or 104kt of the initial plan of FY2019.

As this graph indicates, it has increased gradually and will do more in 2021 and 2020.

Regarding de-bottlenecking, we've planned to increase the number of processing ore from 11kt per day to 13kt. The construction will be completed in 2020; we've made an effort to optimize plants and enhance equipment.

As the image on the slide shows, we were given the National Mining Society Award by the SONAMI in Chili in September. This means our achievement of planned operation ratio and contribution to the development of mining in Chili.

2) Current Issues and Priority Measures (1) Mineral Resources (2) Overseas Copper Mines

2) Current Issues and Priority Measures (1) Mineral Resources (2) Overseas Copper Mines						
Continued stable production at main copper mines. Maintain 250,000 tonnes of copper attributable production.						
Morenci Copper Mine (USA)						
Production forecast to exceed plan due to robust cathode production						
Cerro Verde Copper Mine (Peru)						
Production lower than plan due to changes in copper grade and mining sequence. Grade expected to recover somewhat in 2nd half.						
La Candelaria Copper Mine (Chile)						
Ore supply increase from open pit to result in grade increase in 2nd half. Production volume forecast to be as planned.						
(Morenci copper mine FY2019 operations)*Equity interests (25%) base						
(kt)	Q1 R	Q2 R	1H R	2H F	Year F (Nov)	Year F (May)
Production volume	26	29	55	55	110	100
Sales volume	24	29	53	56	109	101
(Cerro Verde copper mine FY2019 operations)*Equity interests (16.8%) base						
(kt)	Q1 R	Q2 R	1H R	2H F	Year F (Nov)	Year F (May)
Production volume	20	18	38	39	77	81
Sales volume	20	18	38	39	77	81
(Candelaria copper mine FY2019 operations)*Equity interests (16%) base						
(kt)	Q1 R	Q2 R	1H R	2H F	Year F (Nov)	Year F (May)
Production volume	4	4	8	11	19	19
Sales volume	4	4	8	11	19	19

SUMITOMO METAL MINING CO., LTD.

18

This is the situation of the copper mine. As the president explained, it's been almost under control; operation of seven copper mines of North America, South America, and Australia including Sierra Gorda are stable. In FY2019, they are going to maintain 250 thousand tonnes of copper attributable production as the plan.

Here are three mines on the slide, and two of them are very famous large-scale mines around the world. As to Morenci Copper Mine, JV with Freeport-McMoRan Inc., in Arizona, the U.S.A., its production of a cathode which occupied about 70 percent has been robust. From our forecast, its production will exceed an annual plan, and the production of equity interests will be 110kt.

Although Cerro Verde Copper Mine is JV with the same company in Peru, there was a little deterioration of ore grade and change of mining sequences. Consequently, although undershooting the production goal a bit, we will catch up on the ore grade in the latter half. Besides that, we forecast the copper production volume of equity interests will be 77kt compared to the planned 81kt.

As to La Candelaria Copper Mine, JV with Lundin Mining Corporation, although we've mined inside and outside, high-grade ore supply will increase from the open pit, and its production volume of equity interests will be 19kt as the plan.

2) Current Issues and Priority Measures (1) Mineral Resources (3) New Projects

2) Current Issues and Priority Measures (1) Mineral Resources (3) New Projects	
While QB is mostly on track, the start of construction for Cote is behind schedule	
Quebrada Blanca2 PJ <div> <p>Project Outlook</p> <p>Equity interest ratio: Teck 60%, SMM 25%, Sumitomo Corporation 5%, Others 10%</p> <p>Planned investment amount: USD\$4.7 bn (project 100% base)</p> <p>Avg production volume: 240kt /year</p> <p>Planned start of production: 2021</p> <p>Location: 165 km southeast of Iquique City, capital of Chile's Region I</p> </div> <p>• Progressing mainly as planned</p> <p>• The project-related costs below have been paid out Cost relating to acquisition of interest USD\$800m*1 Amount corresponding to interest from paid capex USD\$400m*2</p> <p><small>*1 Total payment by Sumitomo Corporation and SMM *2 However, the USD\$400m is an outgoing in consolidated accounts for Q3</small></p>	Côte Gold Project <div> <p>Project Outlook</p> <p>Equity interest ratio: IAMGOLD 64.75%, SMM 27.75%, Other 7.5%</p> <p>Acquired income: USD\$195m (around ¥21.5bn)</p> <p>Mine life: 16 years</p> <p>Planned total production volume: Gold 182 t</p> <p>Planned start of production: 2021</p> <p>Location: Ontario, Canada</p> </div> <p>• Preparations are underway, but the start of operation may be delayed due to delayed start of construction</p>

SUMITOMO METAL MINING CO., LTD.

19

Here are two new projects. Regarding Quebrada Blanca Copper Mine, its progress is almost as the plan. As to Côte Gold Project, in short, the start of construction has been delayed.

Concerning Quebrada Blanca 2 PJ, we had decided to join in December last year, and the acquisition application had been completed on 30, May. The planned amount of investment is 4.7 billion dollars, and the start of production will be 2021.

This project is going as JV with Teck Inc., and its progress is almost as planned. We've accelerated construction related to ports, pipelines, and plants with tailing dams. And, funding is as scheduled.

As to Côte Gold Project, it's JV with IAMGOLD Inc. in Canada. Acquired income is USD \$ 195m, and the start of production will start in 2021. Now we are promoting details design, permission matter, and preparatory work for construction.

The discussion on the judgment of the construction start is still unsettled, so I recognize the possibility that the operation start will be a delay. In any case, please understand that we are now promoting the necessary tasks.

2) Current Issues and Priority Measures (2) Smelting & Refining (1) THPAL Operation

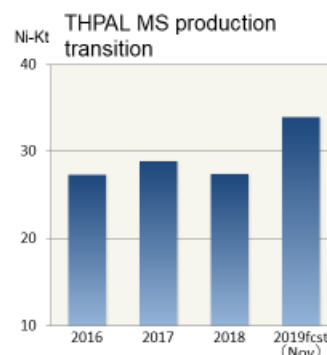
2) Current Issues and Priority Measures (2) Smelting & Refining (1) THPAL Operation

Due to facility inspection/improvements in regular operation interruptions and implementation of regular preventive maintenance (in March), no significant facility trouble in 1st half of FY2019, great improvement in comparison with previous year.

THPAL MS production (FY2019)

November forecast			May forecast	Difference	FY2018 Results	Difference
1H R	15.9					
2H F	18.0	33.9	36.0	-2.1	27.4	+6.5

- However, due to mineral ore composition (decreased Ni grade, lower sedimentation properties) and the impact of small-scale problems, the target in the plan for the fiscal year is forecast to be narrowly missed



SUMITOMO METAL MINING CO., LTD.

20

Nobuhiro Matsumoto : I'll explain the Smelting and Refining business. There are two topics; operational status of THPAL with the greatly reduced production last year and the progress of Pomalaa Project, a strategy of nickel business.

Let me talk about THPAL operation first. Although there was a greatly reduced production last year, we inspected and improved its facility in regular maintenance and repair work in March. Also, the implementation of daily preventive maintenance prevented significant facility trouble in the first half of FY2019, and operation improved greatly in comparison with the previous year.

Please look at the figure on the slide. Although this shows the production volume of Mixed Sulfide in THPAL, the results of the first half were 15.9 Ni-Kt, and the forecast for the second half will be 18 Ni-Kt. And we've planned that the sum of this fiscal year is 33.9 Ni-Kt.

In comparison with 27.4 Ni-Kt the result in 2018, it increased by 6.5 Ni-Kt. On the other hand, it also decreased by 2.1 Ni-Kt against 36.0 Ni-Kt the May forecast.

Although the reason was described at the bottom of this page, one was ore composition; the grade of nickel in ore was lower than the plan. Also, the deterioration of sedimentation properties due to impurities decreased the amount of feed.

Another one is that there have been still some small troubles, though almost no significant troubles. Due to these two reasons, we think the production will be less a bit than the May forecast.

We are trying to closely communicate with NAC that supplies us with ores for stabilization of ore feed and to strengthen maintenance for the increase of the production volume.

2) Current Issues and Priority Measures (2) Smelting & Refining (2) Pomalaa Project

2) Current Issues and Priority Measures

(2) Smelting & Refining

(2) Pomalaa Project

· DFS progressing as planned. Continue discussions with partner (PT Vale Indonesia).

With long-term vision production structure of nickel 150kt/year, it is regarded as the **third HPAL plant** following CBNC and THPAL in the Philippines.

From April 2018: Started DFS (Definitive Feasibility Study)
Expect to complete DFS in FY2019 → Decide on investment

▼ **If decide to participate**

· Production: 40kt-Ni of mixed sulfides (roughly)

· Investment: Several billion US\$ (Project 100% base)

· Operation to start in the mid-2020s (target)

Sorowako

South Sulawesi

Pomalaa

Southeast Sulawesi

Sulawesi Island, Indonesia

SUMITOMO METAL MINING CO., LTD.

21

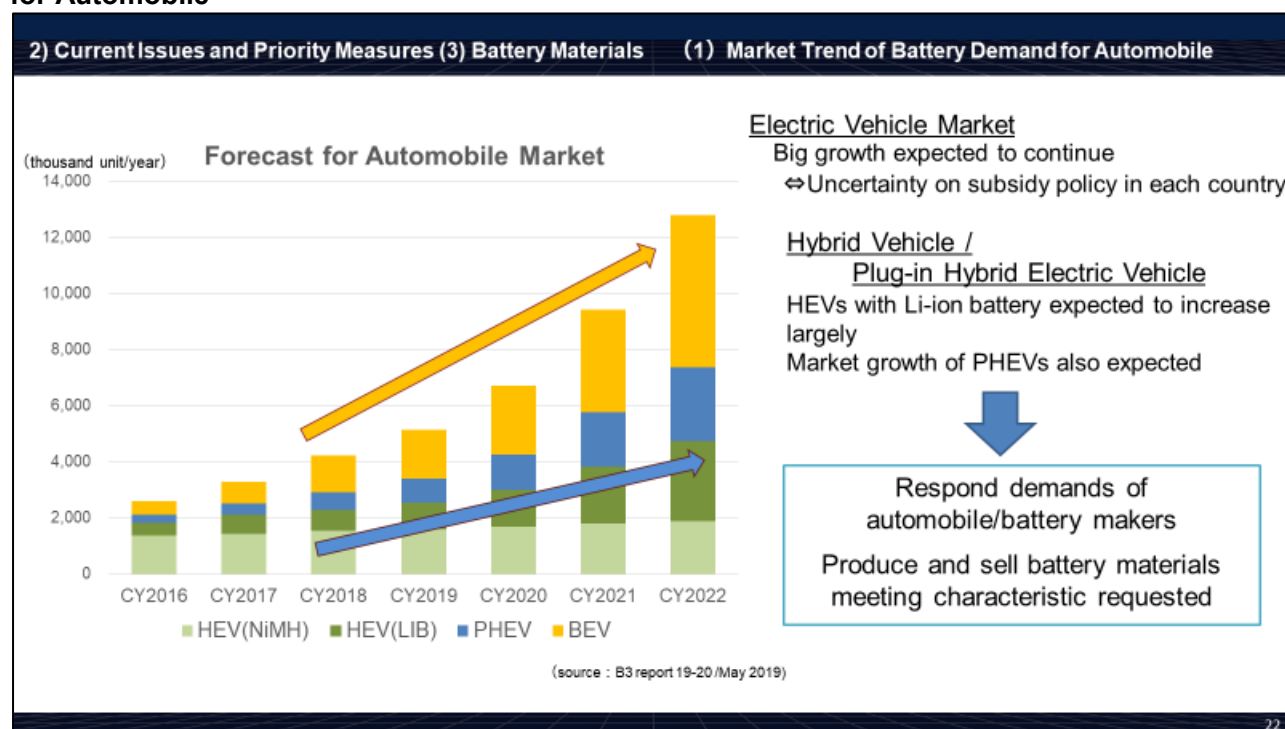
The second topic is the progress status of the Pomalaa Project. As I wrote at the bottom of this slide, as a result, DFS is going well with the plan, and we've continued to discuss with our partner, PT Vale Indonesia.

Although a map is printed on the right side, Pomalaa Project is located at the place about 200 km in a straight line from Sorowako, the area that PT Vale Indonesia has operated, to south-southeast. We are now planning to develop this place.

As to the progress, we are going to complete DFS within FY2019 and to make a decision of investment, and it's as the plan. When the decision of investment completed, the MS annual production of nickel would be 40 kt as I described at the bottom of this slide.

Also, as for investment, it's several billion US\$ with 100 percent base. The start of operation is planned in the mid-2020s. My explanation is all.

2) Current Issues and Priority Measures (3) Battery Materials (1) Market Trend of Battery Demand for Automobile



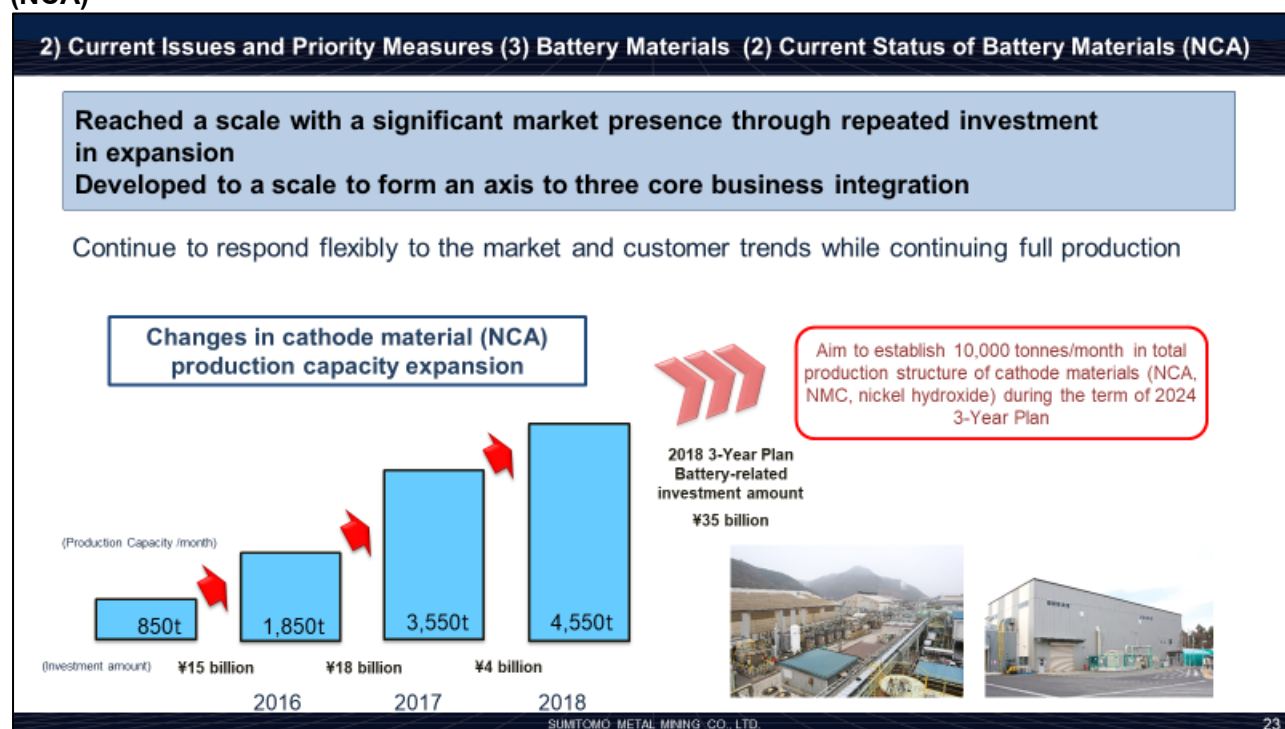
Isao Abe : I'll explain Battery Materials Business. First, as this presentation, regarding the forecast for the automobile market, the great growth of it is expected for 2025.

Especially in EV, its growth depends mainly on subsidy policy in each country; in China, it was cut off half percent in this fiscal year, so sales of EV reduced half percent. This year is a year when we could understand that the movements of subsidy policy in each country affected significantly the spread of EV.

Although we also pay attention to EV, as this forecast tells, we think that HEV and PHEV will be spread widely. Moreover, Toyota announced in June that they are planning to advance electrification of 500 million cars, five years ahead of the schedule.

Our company's strength is various R&D for responding demands of automobile and battery makers since we've prepared materials for hybrid vehicle most around the world and we've paid attention to the increase of it, of course including EV.

2) Current Issues and Priority Measures (3) Battery Materials (2) Current Status of Battery Materials (NCA)

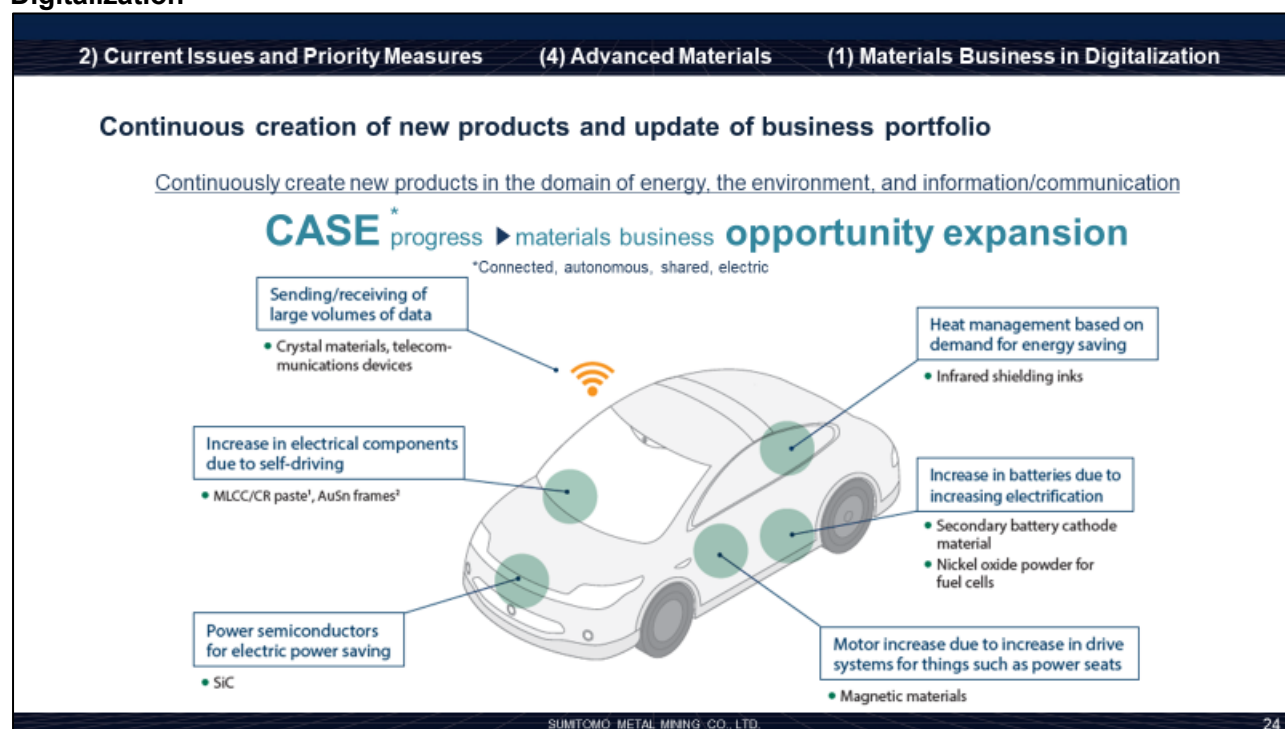


Our company produce NCA mainly for EV. As this slide shows, through repeated investment to strengthen production, monthly production capacity increased by 5.3 times from 850 tonnes in FY2018 to 4,550 tonnes. We are planning to establish monthly 10 thousand tonnes in total production structure of cathode materials such as NCA, NMC, and nickel hydroxide during the term of 2024 3-year plan.

In the recent situation, as to cathode materials, NCA was monthly 4,550-tonne production, and the total was monthly more than 5,000 tonnes. Besides NCA, we are aiming to increase and strengthen the production of NMC expected to grow.

And, we are planning to increase sales to automobile and battery makers for realizing the monthly 10 thousand tonnes during the 2024 3-year plan. That's all for my presentation.

2) Current Issues and Priority Measures (4) Advanced Materials (1) Materials Business in Digitalization

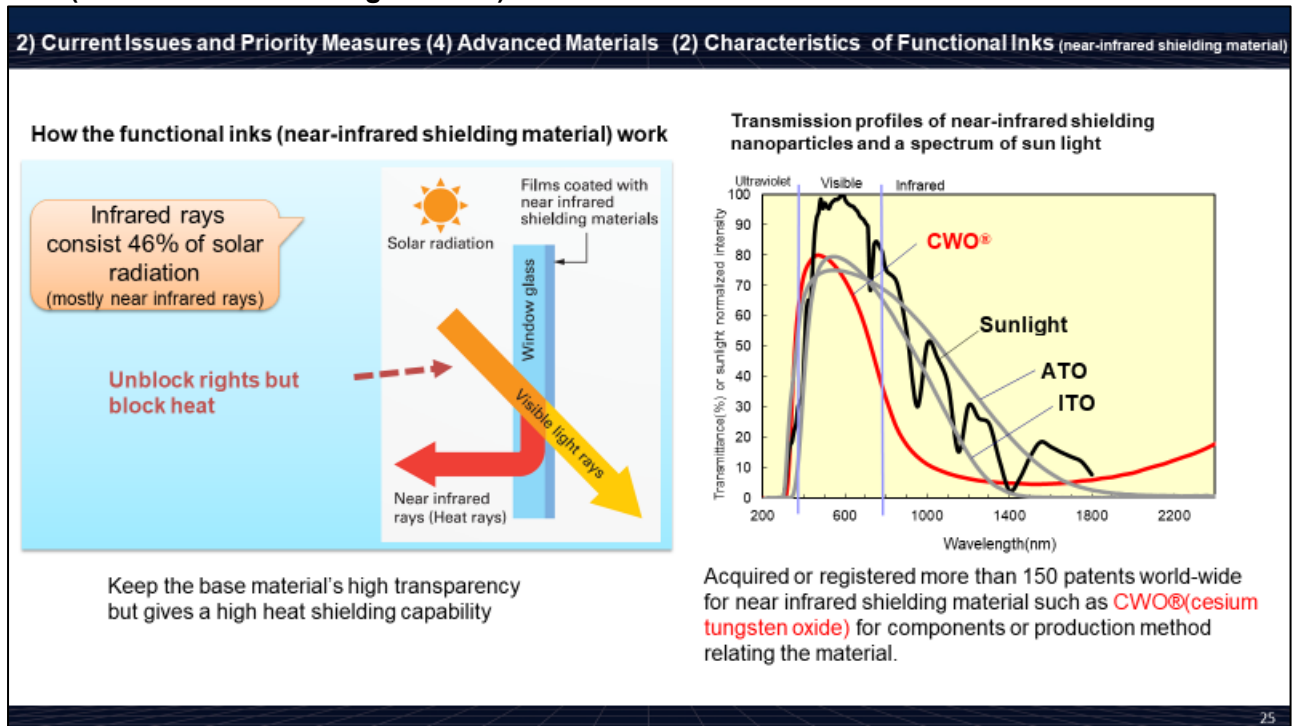


Fumikazu Oshita : I'll explain the Advanced Materials business. Advanced Materials business division has promoted the continuous creation of new products and renewal of business portfolio. Especially, our domain is energy, the environment, information, and communication, we've created continuously new products.

Nowadays, CASE progress expands material business opportunity for cars. Electrification and automation progress increase continuously electric components for cars that we've produced including battery materials.

The opportunity to supply materials such as paste for MLCC/CR, crystal materials for sending/receiving large volumes of data, communication device, power semiconductors for electric power saving, and materials for motor by increasing drive system including power seats in cars.

2) Current Issues and Priority Measures (4) Advanced Materials (2) Characteristics of Functional Inks (near-infrared shielding material)



From the view of saving power, our functional inks (near-infrared shielding material) for thermal management are used in a car. Today, I've prepared a promotion video, I would like you to watch it.

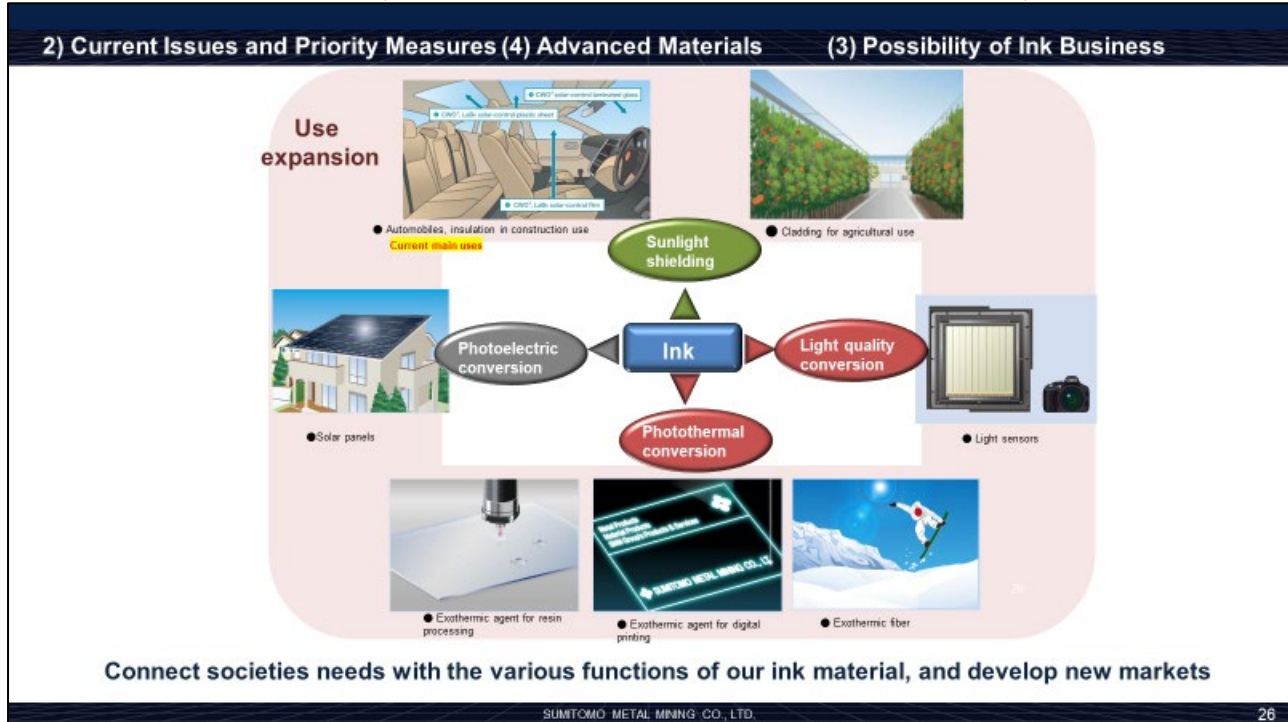
(Movie playing)

As you see in the movie, CWO(cesium tungsten oxide) that our company has developed is the dispersing element of fine particle and transparent near-infrared shielding material. According to the explanation in the movie, we've acquired or registered more than 150 patents worldwide.

Please look at the graph. Solar radiation is composed of ultraviolet rays, visible light rays, and near-infrared rays. Especially, infrared rays account for 46 percent, and it's called heat rays since it has a high fever effect penetrating the skin and shorter infrared rays have a stronger radiation intensity.

The characteristic of CWO we've developed is removed of this heat rays. Although the illustration is on the left side of this slide, CWO can unblock lights but block heat basically. Besides, its high transparency makes processing of this easier. Especially, we've used as an attached film for cars and interlayer film for laminated glass.

2) Current Issues and Priority Measures (4) Advanced Materials (3) Possibility of Ink Business



CWO is used as a material for sunlight shielding for cars, construction and so on. Especially, we are now expanding it for a new use including polytunnels for agriculture.

As the slide tells you, we are trying to develop a new market with a new use such as photothermal conversion materials, light quality conversion materials, and photoelectric conversion materials. Today's movie is for overseas promotion of the development of such materials. That's all for my explanation.

About SMM Group's Vision for 2030

About SMM Group's Vision for 2030

Publication: Early March 2020 (planned)

Publication method: Explanatory session by the president in addition to a press release

Full model change for the goal for 2020

Sustainable growth through CSR in our main business and maximization of corporate value



TCFD

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

**Environment
Social
Governance**

Nozaki : This is about SMM Group's Vision for 2030. We've aimed for sustainable growth through CSR in our core business and maximization of corporate value and promoted to improve for realizing the vision for 2020.

Although there are goals that we've achieved, undershot, and changed our approaches, we are now reviewing our vision for 2030 in consideration of 2020 at the last minute, and our results, issues, and the change of social demands.

The vision for 2020 was reviewed once in 2015 from the original one. In that sense, despite inherit most of it as the base, this review is just full model change.

Moreover, the review is being promoted in enough consideration of some factors such as SDGs, TCGD, and ESG investment that we described at the bottom of this slide.

As to sustainability, we consider it an issue that a company has to face spontaneously, and a strategy led to reducing various management risks from the management perspective. Although the announcement is going to be on the next March, I'll prepare the meeting for its explanation then.

That's all. Thank you for listening.

Q&A The Trend of Nickel Ore Export Ban in Indonesia

Questioner 1 : As to the trend of nickel ore export ban in Indonesia, how do you think about the impact of this to the nickel market? Could you tell me some knowledge such as supply and demand of nickel metal and ore and buying ore conditions?

Matsumoto : Regarding Indonesia's mining policy, there is no direct impact on our nickel business since we don't buy ore from Indonesia. However, the effect of the export ban may reflect on the price, though it depends on the balance of supply and demand. In such sense, we've forecast there will be a little impact on our company's performance.

Questioner 1 : As to coral bay nickel, its raw ore runs almost short. Have you ensured alternative source?

Matsumoto : As you pointed out, we're now at the stage of seeking various strategies regarding ore. The first is the development of nearby mining areas. We ordered it to our company's business partner NAC.

The second is that we are now considering the use of an area around Rio Tuba with coral bay nickel and a new ore resource at an area excluding Palawan Island. But we've not found like what we wish in the current situation.

Questioner 1 : How many years does coral bay nickel raw ore maintain for?

Matsumoto : I have no concrete idea since it depends on the amount of mining in the future.

Q&A Operation Status of THPAL

Questioner 2 : As to the operational status of THPAL, I think that there is not so fundamental issue, but in this downward revision, the total decline was 7.0 billion yen by cost differential and quantity differential in the Smelting & Refining segment, and it looks like a significant impact to income. Please tell me the vision of improvement and counter-measures.

Matsumoto : As for the operation of THPAL, of course, we will stamp out some small troubles at daily inspection and by maintenance with regular shut-down twice a year.

Also, as for cost, there are some issues. One is to enlarge the amount of necessary material since it was hard to ensure production volume unless we increased the new amount of feed in accordance with a lower grade of nickel in the ore.

Another is impurities in the ore. Although its impact is a little larger, there are various ones, and processing it takes some costs such as needs sulfuric acid and neutralizer, so totally, the unit cost of nickel increased actually.

Questioner 2 : Regarding cathode materials for battery, probably, although cobalt-less high-nickel was key, please tell me any changes in your forecast, responding to the decline of cobalt price.

Abe : As for the high nickel, you asked there is something changed due to the decline of the cobalt price. You know, the movement of the high capacity of a battery is decisive. You can strengthen the capacity of the battery by increasing nickel ratio with cobalt use ratio down, so this movement of high nickel is unchanged in spite of lower cobalt price.

The ratio of 8:1:1 is beginning to be used in China, but they've started to recognize that it's hard material to use. According to the recent information, even in China, high-nickel with the ratio of 8:1:1 or more is much harder than expected. It might be in delay, in our view.

The other is that the cobalt market is a flurry. As the current situation, the level is 15 dollars that were over 40 dollars once. This is one of the reasons why car makers avoid it. Also, as a different point of view, they strongly concerned about child labor and political issues related to cobalt. With consideration of not only its battery function but also the violent fluctuation of its metal price and political issues, reduction of use would be unavoidable.

Q&A Chinese Resource Development in Indonesia and Sulawesi

Questioner 2 : Frequently speaking, although Chinese have tried hydrometallurgical refining on Sulawesi, how do you estimate such competitors and their real power?

Nozaki : As to resource development of Chinese on Sulawesi, it's natural to accept their ability since they've achieved results of nickel development for producing nickel pig iron with pyrometallurgical refining on Sulawesi.

However, in connection with the question of the first person, the future of the development of class 1 nickel used for battery materials is fundamental in the nickel market. The plan Chinese have made is to produce things like class 1 nickel.

Regarding pyrometallurgical refining, they have enough power as I mentioned just before, but about hydrometallurgical refining, we have not been able to answer it yet since they have not to case or result yet. Still, we are watching it closely because technology will advance.

Q&A Expansion of Battery Materials

Questioner 3 : As to the expansion of battery materials, you've tried to expand various partnerships such as Toyota. Would you mind if I ask you to share your recent status? How confident are you in expansion and marketing?

Abe : Regarding expansion status, as I mentioned just before, we are now promoting R&D on NMC not only NCA with battery maker. We are seeing its progress little by little nowadays. Although we are getting results gradually with other materials not only NCA. I can't talk in detail due to NDA, but we just begin to expand sales besides NCA.

Questioner 3 : If EV didn't spread but hybrid did and advanced, how can I understand the impact toward the demand of nickel and your result or income in battery material business?

Abe : Concerning the impact to nickel market in case of increasing hybrid, in comparison to EV and hybrid on the amount of cathode per car, it decreases from about one-fiftieth to one eightieth. For example, while about 100 kg of cathode material per a car is used for EV, about less than 2 kg for the hybrid. So, there is a great difference between the amount of them.

In a word, EV decline and hybrid increase mean the reduction will happen in the amount of nickel to be used. Conversely, I think that there might be a negative effect on the nickel market. An increasing amount of hybrid decreases the amount of use of EV and cathode materials and sales. Consequently, it will be a great impact to us as a cathode maker, so we are watching the balance of hybrid and EV that carmakers aim to keep.

Q&A Component Ratio of NMC and NCA During the 2024 3-Yr Plan

Questioner 4 : As to NMC, could you tell me more detail? You said that although expanding the NMC production, you could not talk in detail due to NDA.

Is there anything you can update such as the component ratio of NMC and NCA or its schedule during the 2024 3-year plan?

Abe : Regarding the component ratio of NMC and NCA during the 2024 3-year plan, it's hard to answer. We are now promoting R&D with battery and carmakers. While we aim to expand NMC, it's still unclear whether the aim will be achieved. Hopefully, it would be the 6:4 ratio of NCA and NMC. However, the competition in this industry will be more intense, so I'm not sure of the realization.

Questioner 4 : When you talked about advanced materials, there was a new introduction to the ink business. And you expected a new demand such as light quality conversion, photothermal conversion, and photoelectric conversion excluding sunlight shielding, but do you think about each scale of business and term to increase the profitability?

Oshita : I'll explain the business development of the ink business. We are now seeking a new use, and we've estimated the market scale as several billion (yen) level. However, there are new various uses such as photothermal conversion for clothes and materials for 3D printer, but customers are still in the progress of considering. We are going to improve this business with patience.

Q&A Nickel Pomalaa Project

Questioner 5 : As to the Pomalaa Project of nickel, the document showed that DFS will have been completed within this fiscal year and the stage will move to decide on investment. In the topic you mentioned just before, you estimated the project the Chinese have promoted on Sulawesi. You are now just between DFS and deciding on an investment, and then do you estimate your company's competitiveness and strength? Please tell me things you can talk about if any.

Especially, I would like to know about the viewpoint of comparison to other projects around Sulawesi.

Matsumoto : Regarding other new Chinese-main projects on Sulawesi, we've not to estimate superiority yet since we've had little information yet.

I'll tell you some strengths of Pomalaa Project that we've promoted. One is that PT Vale Indonesia has a mining area at the site we've planned to start the project and that we already ensured enough amount of ores there. Another is that we've examined to process such representative ores in advance.

According to the result, we're sure that the ores are for HPAL we've planned to do. The other is our technical achievement such as vertical start-up of plants including coral bay nickel and THPAL in the Philippine. These three strengths are the Pomalaa Projects advantage.

Q&A Payout Ratio

Questioner 5 : It might be my impressions more than a question, but I would like to ask this to the president. As to the plan of cash flow, you explained that payout ratio was 35 percent in this 3-year plan with a will of increasing shareholder return even a little since finance became more robust and profitability was realized despite the great negative forecast of free cash flow of 110 billion yen for the next three years.

I understood simply that your 35 percent decision since dividend reduction had been announced this time, but I felt a little carelessness from you. This time, originally, I could not get the link to the background that you decided 35 percent. Please talk about what commitment was.

I'm concerned about a risk that shareholder return will be reduced with the link to payout ratio with ease in case of expanding expenses of amount or cost for investment in promoting FS. For example, probably, there is a way that it is decided at the end of the period without an announcement of dividend amount if you set a payout ratio in one shot at the end of the period. What do you think the balance of this?

Nozaki : This question is very hard. As our company has mentioned, we aim for performance-linked type shareholder return, and the payout ratio during this 3-year plan is 35 percent since FY2019.

As management, I think it as management issue how we make an effort to increase the net income of the body of payout ratio with it fixed. Certainly, cash flow exceeds more than 100 billion yen for these three years, and you asked our remaining power for the dividend. But, since this 3-year plan is for the next stage, we've planned large-scale investment. Our hope underlain this dividend policy is that we would like to return dividends deservedly for your time that you've given to us for such duration.

Of course, while there are some cash-in and cash-out since we are a company, there are also dividend and maintenance and growth investment. More widely speaking, there is tax payment as a social role and salary and bonus payment for employees. In this balance, the whole concept of payout ratio is still within allowance, so I think this percentage is fine.

Although there is a way to decide dividend at the end of the fiscal year, the current way means that we try to commit ourselves to make a certain profit for our shareholders.

Questioner 5 : As a trend of cash flow, in consideration of the current status, how do I understand your correspondence with the expansion of the amount of investment?

Nozaki : Before that, I think it is not until I can make an equivalent plan to invest that we ensure profitability. Although the investment plan for this 3-year plan looked large-scale, we were sure that we had enough power at least.

Q&A Directionality of Dividend at Profit Decline

Questioner 6 : As to dividend, please tell me more details. I just understood you explained it was 35 percent and performance-linked type in the 3-year plan. After that, I felt that the takeover defense measure was accepted and stability of management was ensured.

In the case of your company, as my understanding, it's possible that net income is affected greatly by profit or loss of inventory valuation due to your company's business characteristic. From that viewpoint, I think there is a room of consideration in case profit fluctuate in where irrelevant to cash flow, but how do you think about it?

Nozaki : Discussed for a long time in our company was the topic of consideration of dividend in case of declining profit factors other than cash flow. Rise and fall of inventory assets is short-term after all, though it's impressive since now is the term of the quarter result, it's flat throughout a year and will converge in some ways.

Although it's unrelated to cash flow certainly, there is not an idea of considering this. For example, although dividend was unchanged at when we booked impairment loss, in a sense, we focused on the last commitment. Thinking from our company's theory, what we wrote off was the amount of investment we did, that it was very hard to commit dividend at that time originally.

In a sense, some shareholders and investors would be confused by changing the standard. Especially, as to cash flow, it's difficult to explain partly. We are going to keep our performance-linked type.

Questioner 6 : As the second question, in the document of financial results, although you explained the change of profit before tax in super detail, there was something unclear such as unrealized profit, the change of meaning of tax rate in comparison of profit before tax and net income, and non-controlling interest change. Especially for individual investors, it would be hard to understand so please teach things that you can say in detail.

Nozaki : For the change from profit before tax to net income, as you pointed out, there was a part of complexed calculation due to many foreign investments in this tax accounting. Deduction system in foreign investment is used fully, and we are a company with a great fluctuation of calculation by each fiscal year.

In addition, as for minority interest deductions, there was partly the fact of a misunderstanding of its system at planning. It's hard to disclose this individually at a planning stage, and we've known that it is not in requirement of disclosure. Of course, although we'll make an effort to explain it for you as we can, we can not disclose individually.