Sumitomo Metal Mining co., Itd.,

Takes a Stab at New Stage in the First Year of 2018 3-Yr Plan

This is a transcription of Sumitomo Metal Mining Co., Ltd. Announcement of Financial Result for the Year Ended March 31, 2018 / Progress of Business Strategy held in 17 May, 2019.

FY2018 Progress of Business Strategy

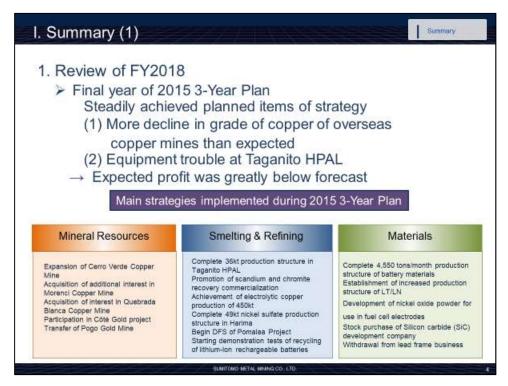
Akira Nozaki: Good morning, ladies and gentlemen. Thank you very much for coming to our presentation meeting 'FY2018 Progress of Business Strategy' today.

In addition, thank you for your support and understanding with respect to our business. Altho ugh we disclosed 2018 fiscal year financial results and our earnings forecast of FY2019 alre ady, I will explain that again including today's business situation. Time has been set aside for any questions at the end of this briefing.



The explanation will be going along with the document. Today I'll explain these from 1 to 4.

1. Summary



First of all, as a summary, let me explain the review of FY2018 and plan of FY2019. Please t urn page 4.

FY2018 is the final year of the 2015-year business plan. Regarding the progress of strategie s in the plan, we disclosed it already in this slide. In 2018 fiscal year, there were some major progress such as the acquisition of the interest of Quebrada Blanca, commercialization of sc andium, starting of DFS (Definitive Feasibility Study) of Pomalaa project, and completion of c athode material 4,550 tonness production capacity in battery material.

Also, we got started the demonstration of recycling lithium-ion battery that process we have considered with lab test previously, building the test plant. We already began the demonstrat ion trials of the proceeding process.

Although our company has recovered copper and nickel from the waste battery, we expecte d to gain cobalt also in the new process. Those recovered nickel and cobalt will become a part of the raw material of the battery cathode material in our company.

Therefore, we can respond to the social demands of battery-to-battery recycling system, by not only battery recycling but also a production of cathode material from the waste battery.

Regarding our performance, the goal is unreached at all because of factors to production de crease such as overseas copper mines and Taganito HPAL.

I will explain that point including the issue in strategy later.

1. Summary 2



Please move to page 5.

This indicates the outlook of 2019FY. As the business environment, we made the plan in con sideration of sentiment of weakness in 2018 fiscal second half. In spite of the beginning of the e 2019 fiscal year, we concerned that the current situation became harder to forecast. As I listed here, there are notable events.

We are concerned about both a direct and indirect influence of intense US-China trade friction n and high-rate tariff to our businesses. To me, it looks like that sentiment dominated market

is firm than fundamentals, the actuality of the supply and demand in commodities market, be cause of deceleration of Chinese economy and wariness of its influence on the world economy.

Regarding the price of non-ferrous metals, although it seemed there was a recovery trend at the beginning of 2019, there have been 7 or 8 percent decline in copper and nickel than the peak in April because of intensification of the trade friction. Not limited to the topic of non-ferr ous metal, regarding commodities or larger market of crude oil, though I've often watch WTI, there have been 5 or 6 percent decline than the peak of April.

At the second headline, we layed out 'safety target'. It's the key for our business core, and we are planning to do safety activities steadily mainly including the aim for essentially-secured equipment. Of them, we are going to put efforts in line management and good communication at the field based on Three Realities Principle of the site, actual objects we have, and reality.

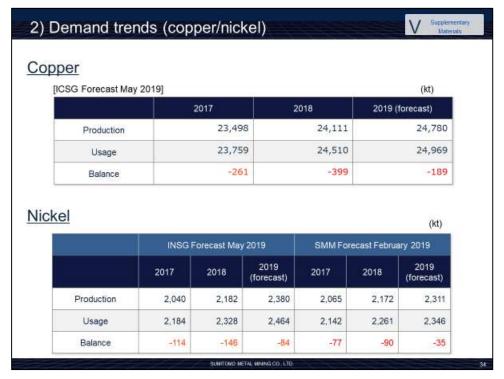
And, FY2019 is the first year of the 2018-year business plan. I have been stating one of our t argets is maximizing corporate value. We are planning to further promote to enhance and im prove the production capability and project management in order to realize a structure to make any strategies profitable steadily.

Also, this year is just the term of the beginning of large-scale strategy project mentioned in the 2018-year business plan. We have learned the importance of the moment of the start of projects from any previous projects. If we fail to make a decision or to forestall something wron g at that timing, we would lose the schedule as planned or smooth shift to operation. We know the key to the project is how we begin.

Although we did not list on this slide, in 2019FY, we separated Material Division into two, Bat tery Materials Division and Advanced Materials Division on April 1. That's because we aimed for getting rid of bottlenecking of making a decision and we found that there were their differences in characters of both product and business such as quantity, type, and lifecycle.

Surely people said the relation between the amount of information and attentiveness is a tra de-off, but we think it's possible to catch up with environment changes accordingly and spee dily by defining business domain to cover, enhance sensitivity to the change and highlighting any issues further. We are going to execute business management thus.

2) Demand Trend (copper and nickel)



Regarding our external environment in 2019FY, would you move to page 33 and 34?

I would like to brief the summary. First of all, I'll touch on a topic of mineral resources busine ss and smelting & refining business. There is a demand trend on page 34, and the supply an d demand for copper is almost balanced. According to the latest forecast of ICSG in May 20 19, but minus the balance of it's 19 hundred thousand tonnes. As a whole, I think it's well bal anced.

As to the production of mines, there is the only plan of large-scale development of Cobre Pa nama copper mine at the end of this year. Since the revision of labor-management agreeme nt is not carried out, our forecast is still as planned at the beginning of the year.

Regarding the nickel, it's on the bottom of the slide, we have forecast it will have been a neg ative balance a little as a total despite the supply and demand increasing than the previous y ear. Although increasing of world-wide nickeldemand for stainlessd is the highest portion, we forecast the expansion of production of nickel pig iron in China and Indonesia further.

On the other hand, there is not a new development account of class 1 nickel used for alloy a nd battery materials within this year until now. Furthermore, since existing producers would n ot increase production, LME has only class 1 inventory, and there are an inventory decreasin g tendency and possibility to go on.

1) Our External Environment



Concerning material business, our description is on the bottom of page 33. In the movement of digitalization, there are some keywords we would be involved in the field of battery, magn ets for motor, control system components, telecommunication, energy saving.

We have some materials can support this time of digitalization such as cathode material for s econdary batteries, nickel powders for multilayer ceramic capacitors, nickel paste, crystalline materials for communication SAW (surface acoustic wave) filters, and now-developing silico n carbide for power semiconductor.

In the current situation, sluggish demand on Materials business has lasted since the last half of 2018. So, with watching the effect and trend of US-China trade friction, we are going to prepare for the trend of demand for 5G and market rising after inventory adjustments.

1) Trend of Business Performance

			Japanese	nese standards [J-GAAP] [IFRS]					
		2013	2014	2015	2016	2017	2017	2018 20	19Foreca:
iet Sales		8,305	9,213	8,554	7,861	9,335	9,297	9,122	8,680
perating	Income	754	1,258	597	764	1,102	-	-	-
Recurring Profit		1,144	1,742	-128	-16	1,249	-	15	7
Profit before tax		1,110	1,233	6	-60	1,058	1,083	894	740
Equity Method profit		298	239	-732	-860	114	123	-49	70
	Mineral Resources	691	538	-443	-536	560	580	365	290
Hoff.	Smelting & Refining	291	813	253	333	515	478	409	390
Segment Profit	Materials	111	129	60	121	153	71	138	100
Seg	Other	16	-1	-8	-1	2	-74	-20	-30
	Diff. Adjustment	35	263	10	67	19	28	2	-10
Net locome (Profit attributable to owners of parent)		803	911	-3	-185	916	902	668	640
Copper (\$/t)		7,104	6,554	5,215	5,154	6,444	6,444	6,341	6,300
Nickel (\$/Ib)		6.51	7.62	4.71	4.56	5.06	5.06	5.85	6.00
Gold (\$/Toz)		1,327	1,248	1,150	1,258	1,285	1,285	1,263	1,275
obalt (\$	(an	12.67	13.69	11.73	13.67	30.64	30,64	31.64	18.00

Please go on to page 7. This is our trend of business performance from 2013 to 2019 including the forecast.

As I mentioned before, because of the impairment loss of overseas mines in 2015 and 2016, we announced the deficit at the stage of ordinary income. Although this display looks differen t because of switching to IFRS, regarding pretax profit and loss, it was over 100 billion yen b ut now is as this with dwindling down.

2) FY2018 Results & FY2019 Forecast

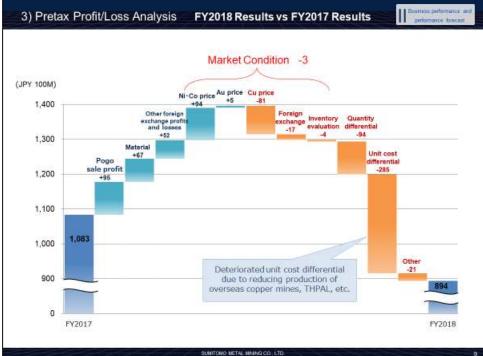


This table indicates a comparison of results in FY2018 to FY2017 and forecast of FY2019.

Regarding metal price, at the bottom of this table, we have listed copper, nickel, gold, and co balt because of profit and loss impact these days. There was little fluctuation in FY2017 and 2018 results, but we forecast copper will be 6300 USD, nickel 6 USD, and cobalt 18 USD in FY2019.

I am going to explain the income of variance analysis after the next page.

3) Pretax Profit / Loss Analysis FY2018 Results vs FY2017 Results



Please look at page 9. You can see the comparison of results of FY2018 and FY2017.

There was not intense fluctuation in market price, one of the strong factors to influence on our business performance.

In FY2018, pretax profit and loss were 89.4 billion yen, less 18.9 billion than FY2017. Of the m, the decline of equity method profit was 17.2 billion yen due to reduced production at over seas mines. I'll talk about its summary later.

In FY2018, limited in our products, the market of non-ferrous ingots and battery materials was s firm, and that of advanced material was weak a little.

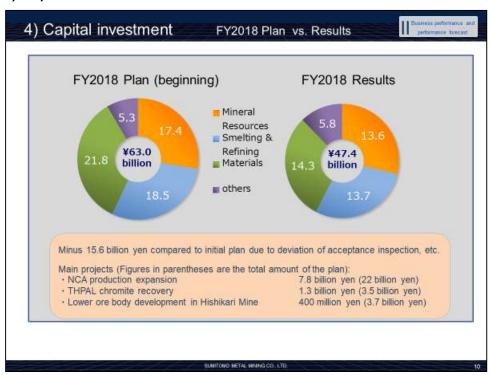
Although non-ferrous metal prices had been rising at the beginning of this fiscal year, it stopp ed since July because of being worried about sentiment such as the trend of US-China trade friction. After that, the problem was not solved, and it weakened the sentiment, and non-ferro us metal prices fallen down for the middle and end of the year.

Entering in 2019, while prices of main metals have came back, skyrocketing cobalt price has taken a nosedive.

As to sales, as I mentioned before, although there has been a demand of non-ferrous metal steadily through a year, material market has been influenced by the decline of Chinese mark et originated with US-China trade friction.

On the other hand, regarding business management excluding business environment, there was reduced production by operation trouble and decline of income by the decline of ore grade at overseas mines.

4) Capital Investment FY2018 Plan vs. Results



Would you open page 10 as to equipment investment?

Compared to the plan, it recorded less 15.6 billion yen, but it has not been changed. Since the schedule of acceptance inspections of investment is going behind FY 2019 partly, our performance is less than the plan a little. Main investments are indicated as in this graph.

5) Pretax Profit/Loss Analysis FY2019 Results vs FY2018 Forecast Market Condition -186 (JPY 100M) 1.200 Unit cost 1,100 Ni · Co price -82 1,000 900 Other 800 Improved unit cost differential of overseas copper mines, THPAL, etc. 740 700 600 FY 2019 FY2018

5) Pretax Profit / Loss Analysis FY2019 Results vs FY2018 Forecast

Please see page 11 for the comparison of the plan for the 2019 fiscal year and results of the 2018 fiscal year.

In FY2019, we plan pretax profit will be 74 billion yen that decreases by 15.4 billion yen then. This include the potential decline of 18.6 billion yen due to foreign exchange and metal price.

As we indicated in the previous table, although equity method income will increase mainly the anks to the recovery of overseas copper mines and cost improvement, reduced the production of Morenci copper mine due to decline of ore grade will offset partly.

In Mineral Resources segment, there are a potential negative 7.5 billion yen, almost equal to decreasing of the copper price (7.8 billion yen).

As for Smelting & Refining segment, while production of nickel will be coming back, there will be a strong influence of decline of cobalt price.

As I stated in the previous presentation meeting last November, a matter that we should be c oncerned about most now is whether there is a sign of weakening of our business and profit

ability cores. Especially we are watching even a slight decreasing in our capability to make p rofits such as cost competitiveness.

We can divide that into two: One is long-term slump of profitability with the deterioration of gr ade of overseas copper mines in Mineral Resources business, and another is a possibility to recover reduced production of Taganito HPAL in Smelting & Refining business I'll explain this again, though there is similar to what I had talked before.

Firstly, regarding mineral resources environment, it's inevitable that the mining business is fr ee from mineral resources consumption because of its character. We also will have been to f ace up the deterioration of copper ore grade in our large-scale good copper mines such as Morenci and Cerro Verde in a long perspective. As a result, the production unit cost will incre ase.

Either of these two mines has the amount of resources to keep operating at the high-level an d proceeding capability to make up for decline of ore grade of the copper mine. However, the re is a perpetual issue of cost down by efficiency that we should work on. And, as I stated jus t before since the resource is limited, we decided to take part in a new potential project such as Quebrada Blanca.

Next, as for Taganito HPAL, its capability increased by 20 percent in 2017:. We invested sev eral hundred million yen to increase its production (equal nickel 6,000 tonnes) We have confirmed its annual production capability of 36 thousand tonnes.

Although, in general, several hundred million USD investments is needed for production cap ability of 10 thousand tonnes nickel, it can be said that the investment for enforcement of TH PAL is equal to 'debottlenecking'.

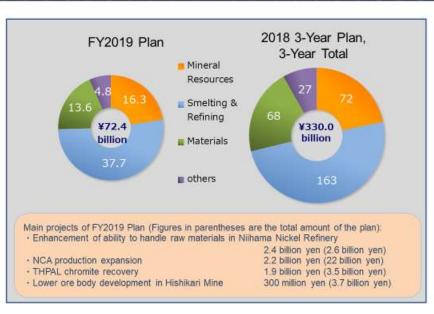
As to new additional equipment and already-existing potential capability, at the stage to ram p up these two, in our understanding, equipment troubles happened at any sites that had be en just potential in the operational load.

In our Smelting & Refining business, we have operated without a stop at 100 percent of capa bility;. Sometimes over 100 percent I explained that we can hardly get back reduced producti on by unexpected repairings, though with a little allowance.

So, in THAPL, there is still a challenge of establishing measures to recover from the sudden operation stop. As our tentative plans, we decided to adopt the way to increase allowance op erations. In other words, we'll compress two regular no-running days in a year, so it'll be pos sible to recovery some troubles.

Of course, although it's impossible to do that without costs, we are still investing a little to make the structure to do an efficient no-running construction. Within 2019, in the plan, we will do the full of running of THPAL.

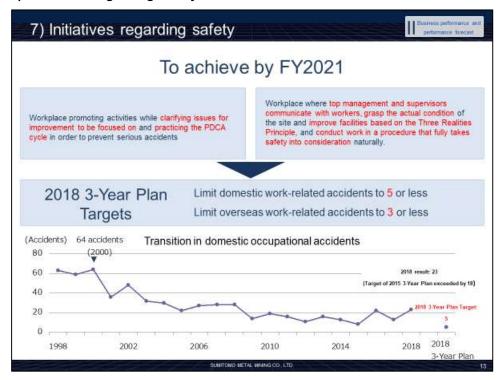
6) Capital Expenditure FY2019 Plan vs. 2018 3-Year Plan, 3-Year Total 6) Capital investment FY2019 Plan vs. 2018 3-Year Plan, 3-Year Total [] Establish performance, Springer, Springer,



Next, we'll explain the capital expenditure FY2019 plan on page 12.

In the 2018 3-year business plan, it's high: 330 billion yen. We are planning to act that from n ow at the level like that in 2019.

7) Initiatives regarding safety

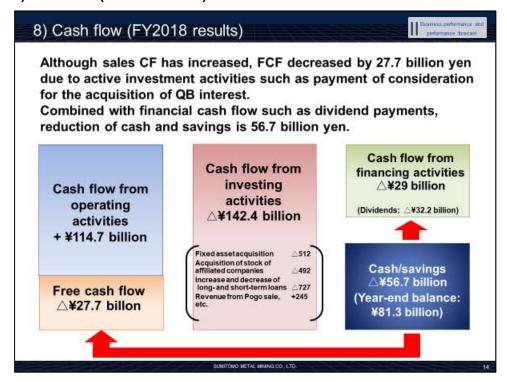


Please look at the next page 13 about initiatives regarding safety.

Transition in domestic occupational accidents is as you see, and its improvement has had no progress in these years; as to FY2019, it's over the target.

Operating is on the edge of statistics and probability of work-related accidents. Although era dication of severe disaster is the most prior issue, needless to cite Heinrich, we are sure it's i mportant to reduce the whole accidents including lighter ones. For that, we have to take suc h measures as in this slide.

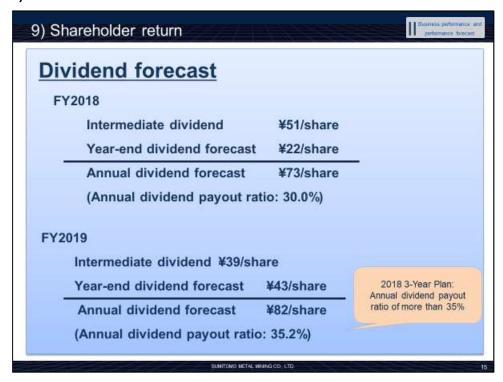
8) Cash flow (FY2018 results)



I'll touch on cash flow results of FY2018.

Although I will mention later, the expenditure of investment activity of acquisition of the intere st of Quebrada Blanca copper mine that was closed on March 30 is included cash flow. The current cash savings is compressed by 56.7 billion yen, and the year-end balance is 81.3 billion yen.

9) Shareholder return



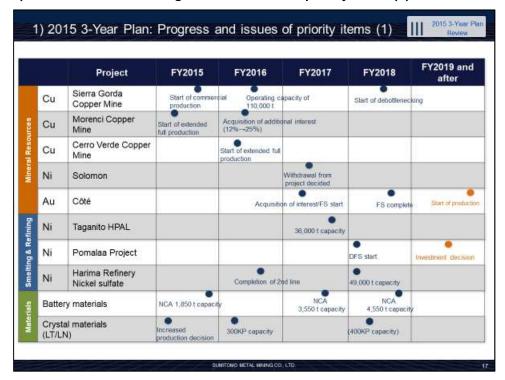
Shareholder return is on page 15.

Our dividend policy is to see a consolidated performance, and we decide the dividend payou t ratio linked to our results. Annual dividend forecast is as in this figure.

Just one thing that I want to say is the change of dividend payout ratio; from over 30 percent of the previous plan to over 35 percent in FY2019.

Next, here is a review of the 2015 3-year business plan.

1) 2015 3-Year Plan: Progress and issues of priority items (1)



We'll skip the detail of the content of page 17 since it's the usual one. We have achieved each strategic project one by one.

1) 2015 3-Year Plan: Progress and issues of priority items (2)



On page 18, it's the same figure as I showed just before. While the upper is the previous plan, you can see the actual activities; of course, they are concrete and wide.

In Mineral Resources business, in these three years, there has been an acquisition of the ad ditional interest of Morenci copper mine, the acquisition of interest of Quebrada Blanca copp er mine, and large-scale investment for production increase of Cerro Verde copper mine. As to gold, we had sold Pogo gold mine and decided to take part in the development project of Côté gold mine.

In Smelting & Refining, we have complished expansion of Taganito and starting production of scandium as planned. In Toyo Smelter & Refinery, we have achieved annual production of electrolytic copper of 450 thousand tonnes within this term that we've been concerned for a long year.

Regarding Harima Refinery, it was a workplace of pyrometallurgical refining of zinc once, an d its business converted into a plant of nickel sulfate in hydrometallurgical process, and now we have completed to reform its business with a lineup of precursor manufacturing plant for battery materials. Through our history, this is a remarkable business conversion.

In this figure, we reddened the current challenges.

Firstly, in Mineral Resources business, there is an issue of Sierra Gorda copper mine. There was numerous loss in FY2015 and FY2016 because of delay of full production. Now, it's ste ady thanks to the improvement of the amount of mining and proceeding ore and mineral processing and recovery rate.

Although KGHM, our majority partner, already put out the press release, operation is going w ell as the plan since entering in 2019. Currently, we are promoting debottlenecking construction for more improvement and higher profitability.

In Smelting & Refining business, we are doing 20 percent production increase of Taganito H PAL for more profitability and recovery of scandium. Or, now under construction, we are plan ning to recovery chromite.

In the material business, enforcement of LT / LN is planned. Although there is little demand o f this now, we expect it will contribute to our income in the movement of advanced communic ation.

2) 2015 3-Yr Plan Status of Achievement of Long-Term Vision Cu Νi 2018 2018 300kt 150kt 150 240kt 240kt 93kt 85kt 100 200 50 100 2019 2016 2017 2018 2021 2016 2017 2018 2019 2021 planned planned Au Materials business 2018 ¥25.0 billion 20 250 200 ¥13,8 ¥10.0 150 8.7t 10 100 50 0 0 2016 2017 2019 2018 2016 2017 2021 2018 2019 planned planned

2) 2015 3-Yr Plan Status of Achievement of Long-Term Vision

In page 19, I'll explain a topic of long-term vision, though you may be confused with the mix of the figure of 2018 3-year plan.

Regarding copper, we have not changed the long-term vision of 300 thousand tonnes in FY2 021. We are planning to achieve this with completion of development of Quebrada Blanca copper mine.

As for 150 thousand tonnes of nickel, it would not reach a bit with Pomalaa project started. S o, we have to consider in making an additional business chance.

As to gold, although the 2015 3-year business plan aimed at 300 thousand tonnes, as I ment ioned just before, sale of Pogo and participation in Côté have been decided in this term. The re are wide-characters from high-grade small gold mine development to low-grade large-scal e one.

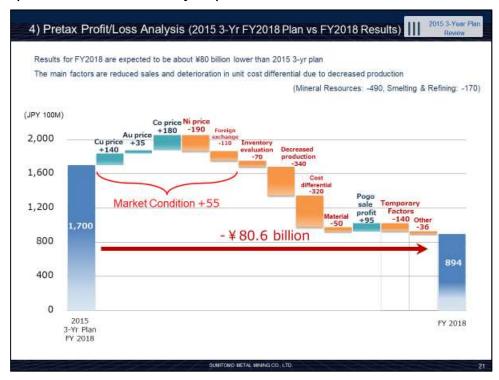
Since we are going to prioritize the supreme project that we can demonstrate our knowledge and technology, we excluded the 300 thousand tonnes target out of a long-term vision of the 2018 3-year plan.

3) Trend of Business Performance

<ifrs></ifrs>	2018 Result	2018 (2015 3-Yr Plan trial calculation)	Difference
Net Sales (¥100M)	9,122	10,600	-1,478
Profit before tax (¥100M)	894	1,700	-806
Equity Method profit (¥100M)	-49	270	-319
Net Income(¥100M)	668	1,200	-532
Copper (\$/t)	6,341	6,000	+34
Nickel (\$/lb)	5.85	7.0	-1.19
Gold (\$/Toz)	1,263	1,150	+113
Cobalt (\$/lb)	31.64	14.5	+17.14
Exchange (¥/\$)	110.92	120.0	-9.08

On page 20, there is a topic of the result of FY2018 and FY2018 forecast in the 2015 3-year plan. The planned figure has been unachieved at all, and I will explain it in the next page.

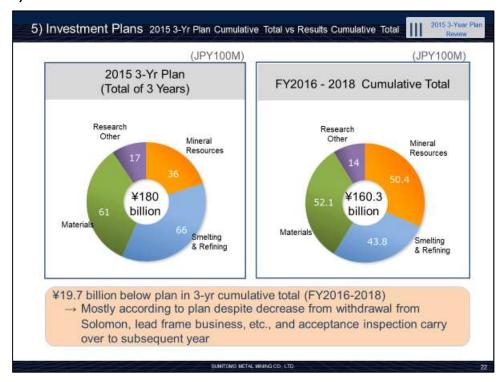
4) Pretax Profit / Loss Analysis (2015 3-Yr FY2018 Plan vs FY2018 Results)



As FY2018 results, pretax profit and loss are 80 billion yen negative than the 2015 3-year pla n. Market factor is still minus 1.5 billion yen, but 66 billion is counted as quantity difference a nd cost difference with decreasing production by the deterioration of ore grade in overseas mines and increasing costs by that.

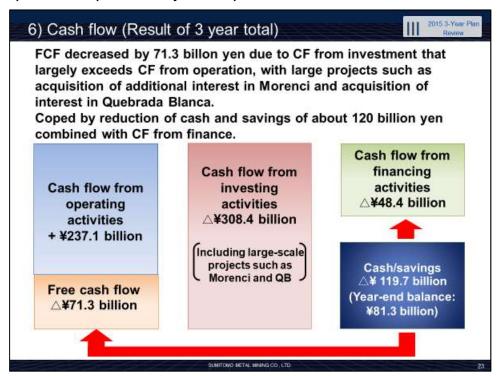
Although there are no factors by our missing strategies, as I said just before, we have had a n issue in business management after conducting strategies; operation rate of overseas cop per mines decreased than the 2015 3-year plan in mineral resources, decline of ore grade (n ot that it was not trouble because each mine can increase its processing amount), and decre asing production of nickel in Smelting & Refining.

5) Investment Plans 2015 3-Yr Plan Cumulative Total vs Results Cumulative Total



This shows investment results. It's 160.3 billion yen in practice, that is, about 20 billion yen b elow the plan despite the decrease from withdrawal from the Solomon nickel project, lead fra me business, and acceptance inspection carry over to subsequent year.

6) Cash flow (Result of 3 year total)



This is cumulative cash flow for three years on page 23. Although cash flow in the 3-year pla n is as you can see, there are large scale accounts such as the additional interest of Morenci copper mine and purchase of the interest of Quebrada Blanca copper mine. There has been a reduction of cash balance by 120 billion for these three years (from 2016 to 2019).

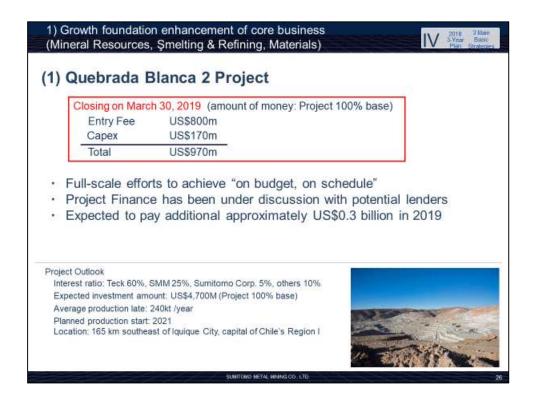
7) Trend of dividend and capital adequacy ratio



We described the trend of divided and shareholder's equity ratio on the next page. This is a validation of our finance target that we set in the 2015 3-year business plan. As to FY2016, it went into the red, but we could keep shareholder's equity ratio over 50 percent. So to speak, we could make a speedy decision to acquire a new interest of mine due to this capital adequacy ratio or good finance structure.

The upper table indicates dividend: Dividend payout ratio in this term is 53 billion 200 million from 2016 to 2018. We think this figure is similar to finance cash flow in that cash flow I show ed just before.

1) Growth foundation enhancement of core business (Mineral Resources, Smelting & Refinin g, Materials)



From here, we will talk about a topic of the progress of 3 main basic strategies in the 2018 3year plan.

As I stated before, this fiscal year is the first year of the 2018 3-year plan, and, most of them start in this year. Concerning Quebrada Blanca copper mine, we are promoting to prepare for the dispatch of experts team to monitor the situation of construction and make good use of our knowledge including of course confirmation by regular committee.

Currently, the construction is going well though it had just started. You can see the summary of this project below. There has been long-term relation with Teck, majority partner of this project, that we have made business deals of copper concentrate since 1966, especially mana gers have had a friendship.

Additionally, in 1961, it was Bethlehem mine in Canada that we acquired the interest of over seas copper mines of first in Japan. After that, the owner of this mine had changed many tim

es. Now, Teck is operating the mine at the site (former Bethlehem mine), and we have a clos e connection like that, too.

1) Growth foundation enhancement of core business (Mineral Resources, Smelting & Refinin g, Materials) 2

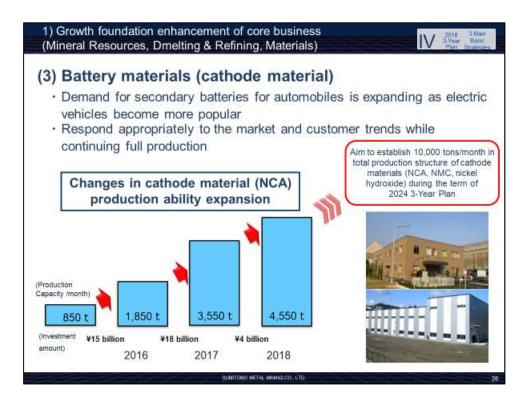


This is Pomalaa project. We are now in the process of DFS. In our forecast, the demand for f unctional material of nickel such as battery materials of the cathode material will increase. M ain will be class 1 nickel used for this functional material or nickel chemical products such as nickel sulfate with little impurities.

There are very few development accounts for class 1. Our HPAL technology is prior and me aningful that can make intermediate raw materials for class 1 nickel production from rich existing laterite deposits.

As this indicates, we expected that there is 40 thousand tonnes scale (nickel), and it's very la rge account. Therefore, although the careful judgment is needed, Non-ferrous Metals Division is considering it.

1) Growth foundation enhancement of core business (Mineral Resources, Smelting & Refinin g, Materials) 3



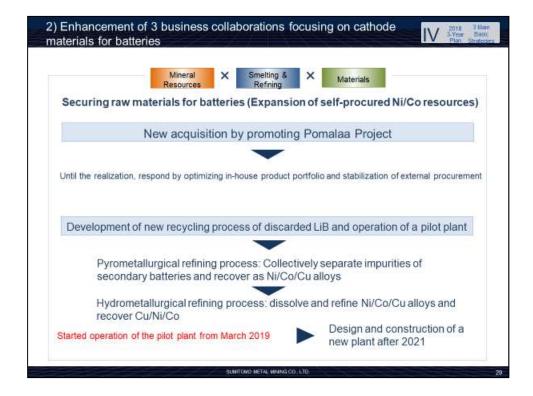
Our third core businesses is battery materials business.

Top priority in the cathode of the battery material business is grasping the trend of clients. We have to take a sound measure in corresponding to circumstance with business environment dynamic. Now, we are putting effort to make a profit, completing the structure of monthly 4, 550 tonnes.

Although xEV market is expanding rapidly, integration is advanced with car companies, batte ry manufacturers and other companies. On the other hand, the change is intensive and rapid such as concern on the influence of high-rate tariffs by US-China trade friction in the current situation.

As I said, we have to see through this movement, read up on many variables, and deal with i t well for growth.

2) Enhancement of 3 business collaborations focusing on cathode materials for batteries



This is enforcement of three business collaboration focusing on cathode materials for batteri es, which content I always talked about.

Three business collaboration means making good use of the character of our businesses, or 'integration', and it's key to obtain competitive advantage unimitable to other companies.

To our clients, we are also a producer of cathode material with many materials: cathode mat erial, precursor, products of nickel and cobalt for that, intermediate product, the process of s melting and refining for the products, and raw materials ore. We are a company that defines the supply chain as core business and this is key to earn clients' trust. Therefore, we are con sidering the expansion of Smelting & Refining business as I have talked.

In addition to that, we can supply total service with the recycling process of waste lithium-ion battery as menu.

3) Enhancement of corporate functions



Next, I will explain the enhancement of corporate functions though it's a story at another leve I a bit. Let me introduce this since the 3-year plan included it.

Nowadays, companies are widely demanded to understand the trend of the world such as S DGs, ESG, digitalization, and decarbonization, to ensure and educate human resources, to r eform the working style, and to promote diversity as a domestic trend.

Specific issues in SMM on the left side of page 30 might apply to other companies in Japan.

In order to solve those issues, in the corporate department, we reviewed a part of the structure for strengthening to spread information to and collect it from inside and outside of the company. What I problematized in the department was 'be more proactive'.

While our business department has dealt with the request of change of external environment with growth strategies, it's not good that corporate department supporting the business department's speedy movement applies to the old working style.

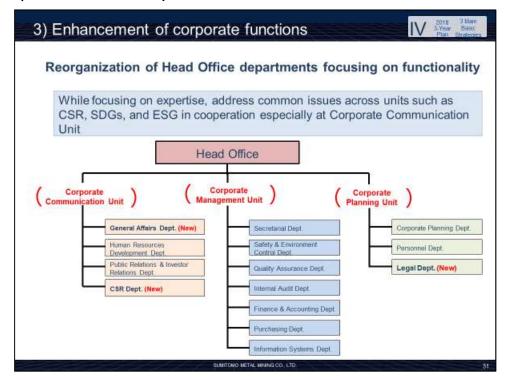
Or, the environment around recruiting and education has changed drastically in response to the reform of the way that young generation think about finding employment and working. Companies are demanded to transform themselves in response to that now.

Also, nowadays, investors, ESG and TCFD have focused on whether the company has contributed and committed to environment and society's sustainable growth, including of course it s business performance.

Moreover, there are some issues such as improvement of lack of communication at the work place because of IT and automation and activation of diversity communication for innovation.

Business activities go bad at the moment when you feel satisfied with the current situation a nd stop running. Likewise, the corporate department has to reform itself; It's indispensable to feel the crisis, change the way to think and move quickly especially under such a shifty circu mstance today.

3) Enhancement of corporate functions 2



In fact, our organization of headquarters was flat and horizontal once. As a matter of course, it had worked, but things went over each domain of department because of complicated and diverse social requests I touched before.

Also, departments with officers holding the post of the director were few. We felt commander near the top management would be needed in order to deal with and convey the sense of m anagement risk and problem consciousness without delay.

For that, this time, we have aimed at sharing management problem consciousness and comprehensive approach for some issues by grouping close departments smoothly and applying officer has worked as director of the department to department heads of the group.

Like this, we are going to establish the structure to support for business department and corp orate growth.

That's my presentation. Thank you for listening for a long time.

Q & A session

Q : As to nickel, as movements in Indonesia and China, there has been increasing of the pro duction capability of nickel pig iron such as the expansion of 8 kiln especially in China, and it has been a burden of the market price even if the balance of supply and demand is going tig ht.

I doubt whether there is a possibility that the market of class 1 and 2 changes when the dem and for class 1 nickel is rising and it's tight, for example. Is there a possibility that class 1 nickel will have higher premium if the demand increases?

Nozaki: You can see the demand of nickel on page 34, and our forecast of FY2019 vs FY20 18 is like these: supply will increase by 139 thousand tonnes and demand will rise by 85 tho usand tonnes, so that's negative balance. In our overview, of the increasing production, clas s 2 nickel will reach to about 100 thousand tonnes, and the rest (about 40 thousand tonnes) will be class 1.

On the other hand, of the increasing demand, things for stainless applications may be 50 or 60 thousand tonnes. That will lead to, you may think class 1 nickel is going to be short, but 1 5 or 16 thousand tonnes of 23 thousand tonnes will be for stainless steel, and capability to s upply of class 2 will be 10 or 11 thousand tonnes, so there will be still many of class 1 nickel s used for stainless steel.

In such a market structure, it's really hard to forecast the trend of LME price for dealing with class 1 nickel and to maintain that class 1 nickel will be handled for a premium, though there is such a tendency, perhaps. Since impossible to exclude class 2 nickel out of the demand of nickel, that's pretty subject to class 2. However, there is a possibility that nickel for alloy and battery materials and cut cathode and round nickel might be going to get a higher premium. Although I do not have showdown by varieties now, as a tendency, what you said is not impossible.

Q: You know, Hanwa Co., Ltd. invested in China, where there has been an unbelievable plan of expansion of production capability. If you know something around the risk of increasing demand of class 1 nickel around your rivals, would you mind sharing it with us?

Nozaki: The resources used for class 1 nickel are sulfide ores near the northern pole and la terite ore near the equator. Regarding sulfide ores, there is less potential to increase further because it has been developed as a resource for a long time. On the other hand, there are st ill many untouched sites as to undeveloped laterite deposits. That depends on technology; y ou know, the level of our technology of HPAL is much higher than other companies. Especial ly HPAL requires certain properties of the ore. Not all ores can be processed by HPAL, so it's critical to carefully pick up.

With our investigations, currently, since there are not many laterite deposits can be raw mate rial of class 1 nickel, there is little possibility that they could supply numerous amounts of class 1 nickel from laterite you are concerned about. Of course, there can be a breakthrough of technology suddenly, the current situation doesn't last forever.

Q : As for the operation of Taganito HPAL, I felt there was a great difference against full operation even annualizing FY2018 4Q result. Are you sure of full-capacity operation of it?

Nozaki: Regarding Taganito HPAL, because of the plnned maintainance on March, there is not 36 thousand tonnes if you quadruple this. And we could take a proper measure though it is not perfect, so the operation is going well after that. I have an expectation of the full of operation, the field handling that, though there will be many twists and turns.

Q : You said 'how we start is important in a large project'. What are you planning to prepare f or in Quebrada Blanca copper mine project?

Nozaki: We are proceeding the design of the equipment in detail. As for mining, there is no problem because it's active. Now we are discussing whether the design of crushing and min eral processing equipment is appropriate. Although there is unmet technology to us, we are

making its substantive confirmed one by one. In this process, we have to optimize the design

with experience of Sierra Gorda that we had had some troubles since that time.

Q: As to battery materials on page 28, I wanna know the update of marketing activities for t

he long-term target of monthly 10 thousand tonnes by NCA, NMC and nickel hydroxide. I me

an, could you talk about clients, consensus, the progress of that?

Nozaki: We are now supplying mainly for Panasonic and Toyota in battery materials and cat

hode material, but that's full of our capacity in reality. Of course, there is the potentiality of ca

thode material market in China, but it's hard to make another capacity to supply even if mark

eting is possible. However, since there is such expectation of expansion of that market, it is t

he supply chain will be diversification. Although the existing supply chain is really necessary,

we have to adopt something different in the future, considering our capacity to supply and m

arket condition.

Q: Just to confirm, is there no remarkable progress for this 6 months?

Nozaki: There is no noteworthy topic.

Q: With respect to equipment investment of page 12, it showed you will invest in NCA produ

ction expansion of battery materials in FY2019, too. How could you raise your capacity by th

at investment? If increasing, will you use the capacity for supply to your existing clients?

Nozaki: Not that it can expand our production capacity since acceptance inspection carry ov

er to subsequent year, though there was already completion of the monthly NCA 4,550 tonn

es structure.

Q: What do you think about the mid- and long-term strategy of Hyuga Smelting Co., Ltd.? In

Indonesia, such as Qingshan (in China), production of nickel pig iron and nickel steel is expa

nding with low cost. I think Hyuga Smelting Co., Ltd. does not have so high competitiveness

around the world. Would you tell me the merit of keeping Hyuga Smelting Co., Ltd.?

34

Nozaki: Hyuga Smelting Co., Ltd. provides ferronickel which is alloy of nickel and iron. Onc e it had had production over 20 thousand tonnes nickel, and now decreased by about 60 per cent (12 or 13 thousand tonnes) because of difficulties to procure ore from overseas. In my p erspective of Hyuga Smelting Co., Ltd., in the industry of nickel, the trend of stainless steel is indispensable. 60 or 70 percent of the demand is that stainless steel used nickel.

In that situation, producer of nickel must talk with stainless steel producers as a window to the nickel market, though that needs economic rationality.

Currently, Hyuga Smelting Co., Ltd. smelt and refine mainly ore from New Caledonia. There is no problem in its business level though it can not make a large profit in the current nickel price. Of course, we are promoting the efficiency of production.

Also, it's hard to evaluate global competitiveness. Most of our clients are domestic, and this is business we can make profit margin comparatively such as transport fee and some charges. On the other hand, it's almost impossible to compare to the business method of production from nickel pig iron to stainless steel because the content of the method is unknown. Rather, the stainless steel mill is well-suited to such a business method. We have seen Hyuga S melting Co., Ltd. and ferronickel business as important sites and products.

Q: In FY2019, you have planned Morenci copper mine will decrease production. Although there has been a tendency of decreasing for these years, are there any forecasts for this?

Nozaki: As to Morenci copper mine, as you pointed out, production has decreased in the mi d-term. In Morenci copper mine, there are two operations: operation of sulfide ores for copper concentrate and that of oxide ore for electrolytic copper by SX-EW. There are still various points and the plan will change by development, but generally speaking, we expect it will be goint galong with the plan. Although there will be a little fluctuation, there will be no drastic decline like previous.

Q : Regarding the continuation of the very low level of spot smelting margin from tightening of supply and demand of copper ore recently, is there its influence in the future?

Nozaki: The low level in TC / RC means the lack of copper concentrate. While people say a new development of the copper mine is the only of Cobre Panama in this year, two new refin eries with 400 thousand tonnes capability will be built in China in this year. Therefore, I hear d that there will be movement of procurement of copper concentrate in advance, so that's the reason of the low level in TC / RC.

I think the supply and demand of copper concentrate will loosen around 2021 or 2022, or the year of operation beginning of our Quebrada Blanca copper mine and Anglo American Corp oration 's Quellaveco copper mine. But, the current situation from last year or two years ago will be unchanged in this year or next year. We are also concerned about spot TC / RCs.

Q : As for the Côté gold project, in IAMGOLD Corporation announced the delay of this project in March. The start of construction in 2019 and operation in 2021 was the plan, but will it be revised? Is there a risk of expansion of the total project cost?

Nozaki: Actually, we are promoting this project and plan steadily. We dispatched many engineers to de-risk. As to the plan, we do not have to revise it at this stage. We are considering the best timing to make a decision.