



Growth strategy and approach to the Latin American market

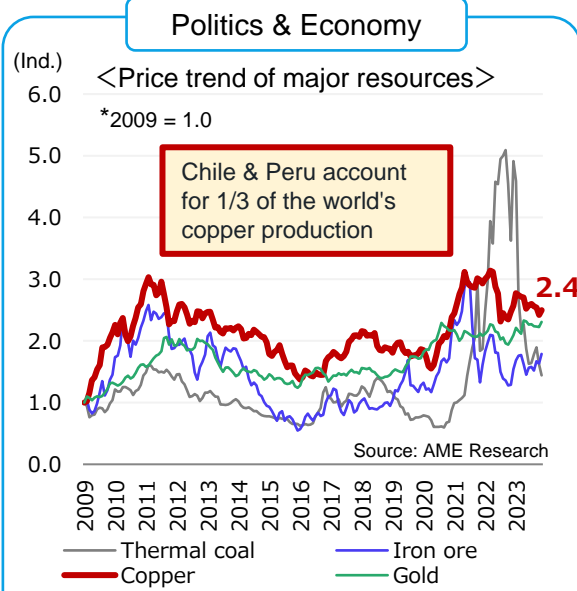
December 19th, 2023

Senior Executive Officer
President, CE Marketing Division
Yasuji Nishiura

- 1. Overview of Komatsu Latin American Business**
- 2. New technologies deployment in the Latin American region**
- 3. ESG initiatives in the Latin American region**

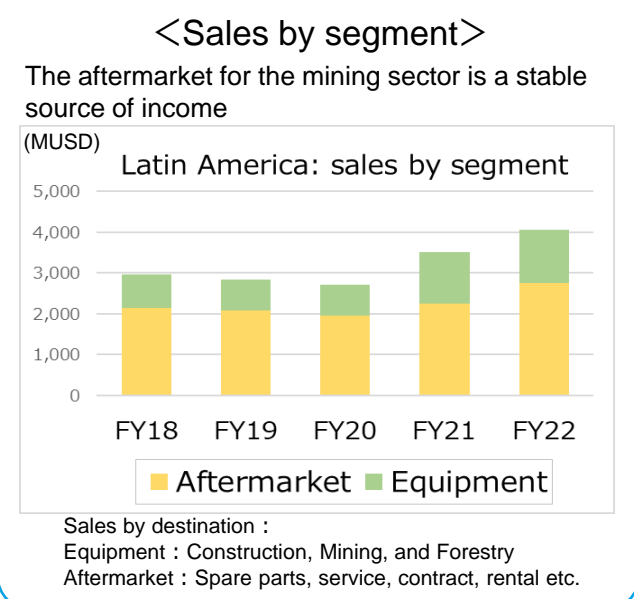
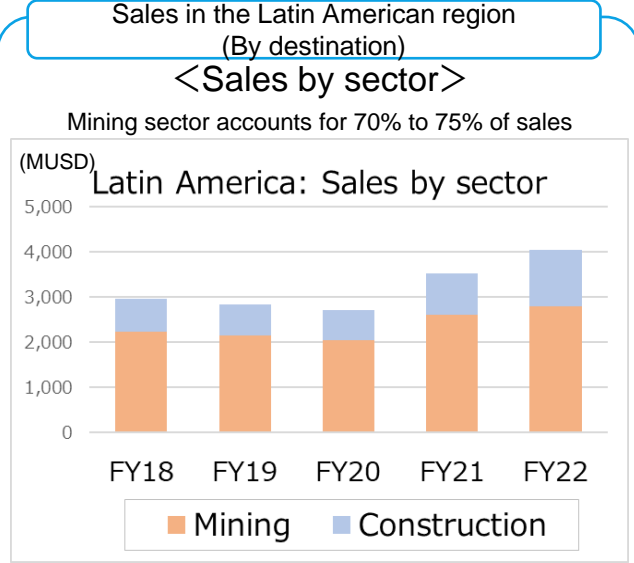
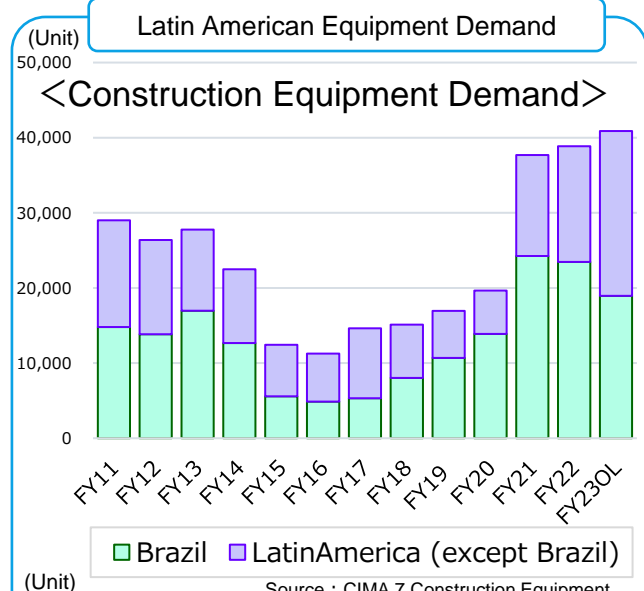
1- (1) Overview of Komatsu Latin American Business

Despite the increasing political risks in the Latin American region, supported by abundant mineral resources and robust infrastructure investments, the medium to long-term outlook for mining and construction equipment remains positive. To countermeasure volatile mining equipment demand driven by commodity prices, Komatsu has built a strong aftermarket business to ensure stable revenue.



<Politics & Economy : Major countries>

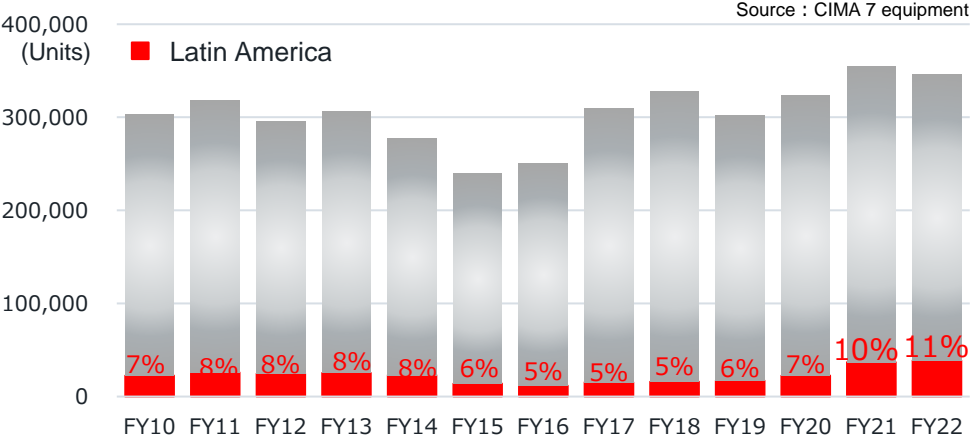
- Political uncertainty in major Latin American countries, such as Brazil, Mexico, Argentina, Chile, Peru, Colombia, and Bolivia.
- Brazil**
Government announced a large-scale infrastructure investment plan of JPY 50 trillion over 5 years (PAC3).
- Mexico**
Maintaining a high growth rate due to the robust infrastructure investment (railway construction).
- Argentina**
High inflation, high interest rates, and strengthened import regulations.



1- (2) Positioning of Komatsu Latin American business

- Komatsu has established a high-profit business model in the Latin American region by directly engaging with mining users through Komatsu owned distributor, facilitating investments, direct contact and contract services.
- The Latin American region has become the second-highest revenue-generating area for Komatsu after North America on a global basis.

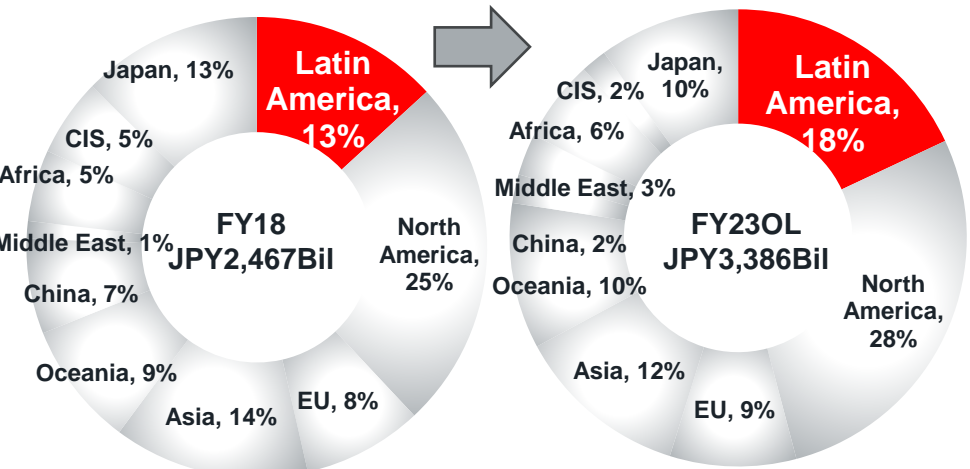
(1) Global and Latin American Demand trend



- Although the Latin American region accounts for approximately 10% of the global demand, the Latin American sales ratio for Komatsu in FY2023 is projected to be 18%.
- Within the Latin American market, the mining business holds a significant share of 70% of the total sales, with a notable portion being aftermarket sales such as parts and services.

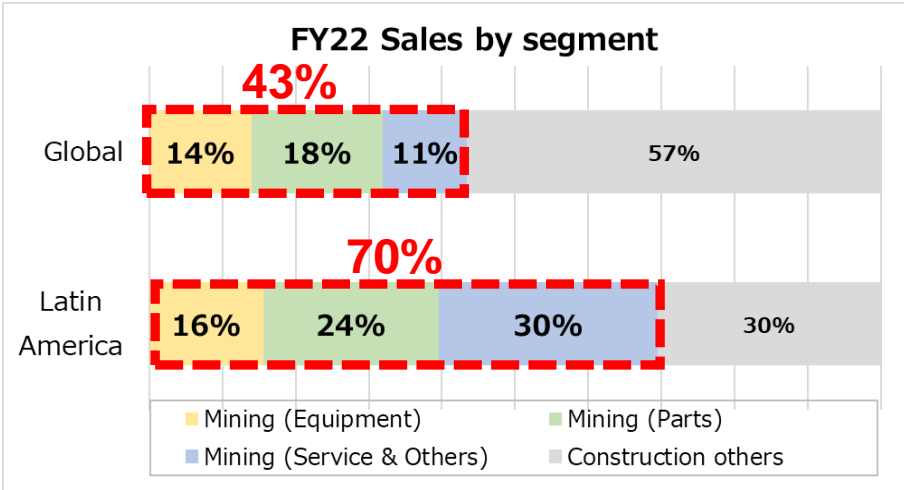
(2) Sales of construction equipment by region

Five years span, Komatsu's overall sales increased by 37%, with a notable growth of 90% in the Latin American region.



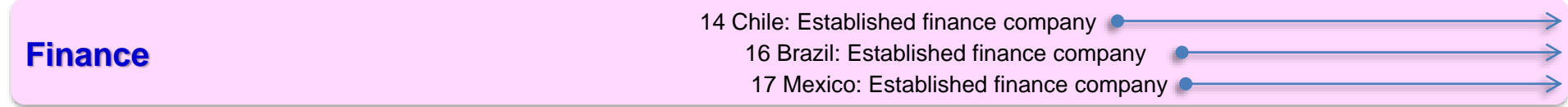
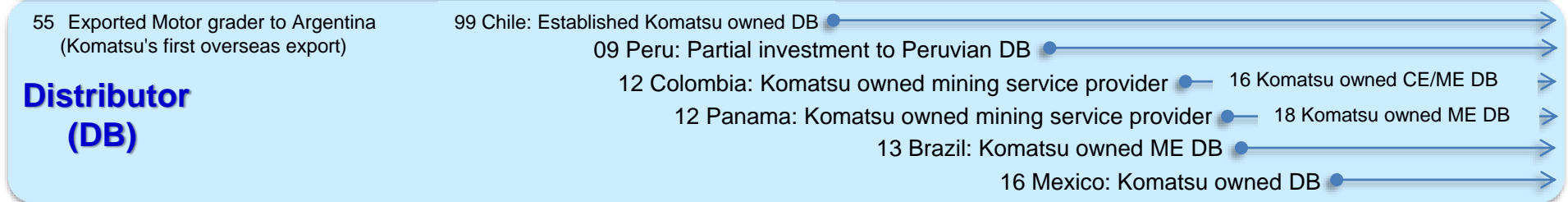
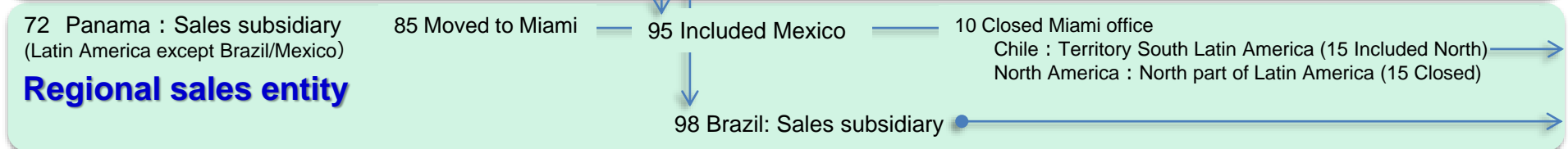
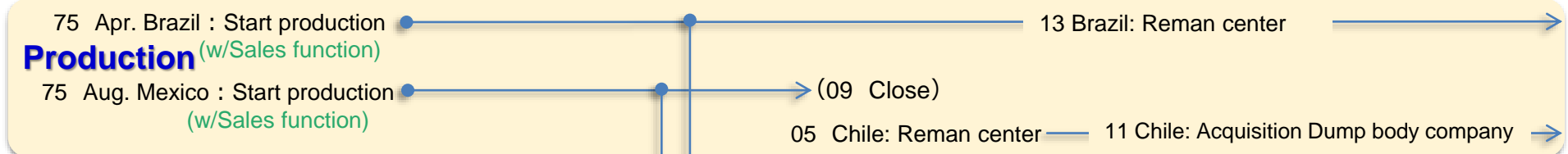
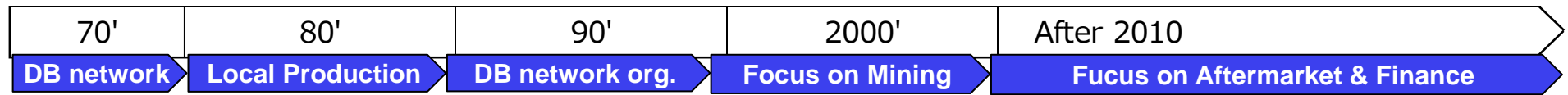
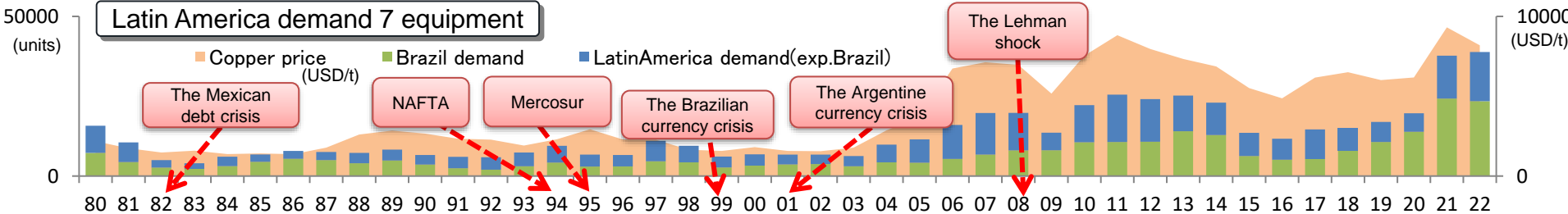
(3) Komatsu sales by segment

70% of the sales in the Latin American region come from the mining sector, including service contracts and parts.



1- (3) The history of Komatsu business in Latin America

• Komatsu's first overseas export was to Argentina in 1955. In the 1970s, Komatsu established its first overseas factory in Brazil, marking a long history in the Latin American region. In recent years, Komatsu has expanded its direct distribution business model, primarily focused on mining, which was initially established in Chile, later expanded to Mexico, Peru, Colombia, Panama, and Brazil.



1- (4) Business structure of Komatsu in Latin America

- Central and South America are rich in mineral resources. As part of Komatsu's policy, we directly invest in mining distributors that require large-scale investments.
- For construction equipment distributors, we appoint local distributors. Through Komatsu's key marketing strategy of brand management, we aim to strengthen the relationship with users.

(1) Global Mineral Production Ranking

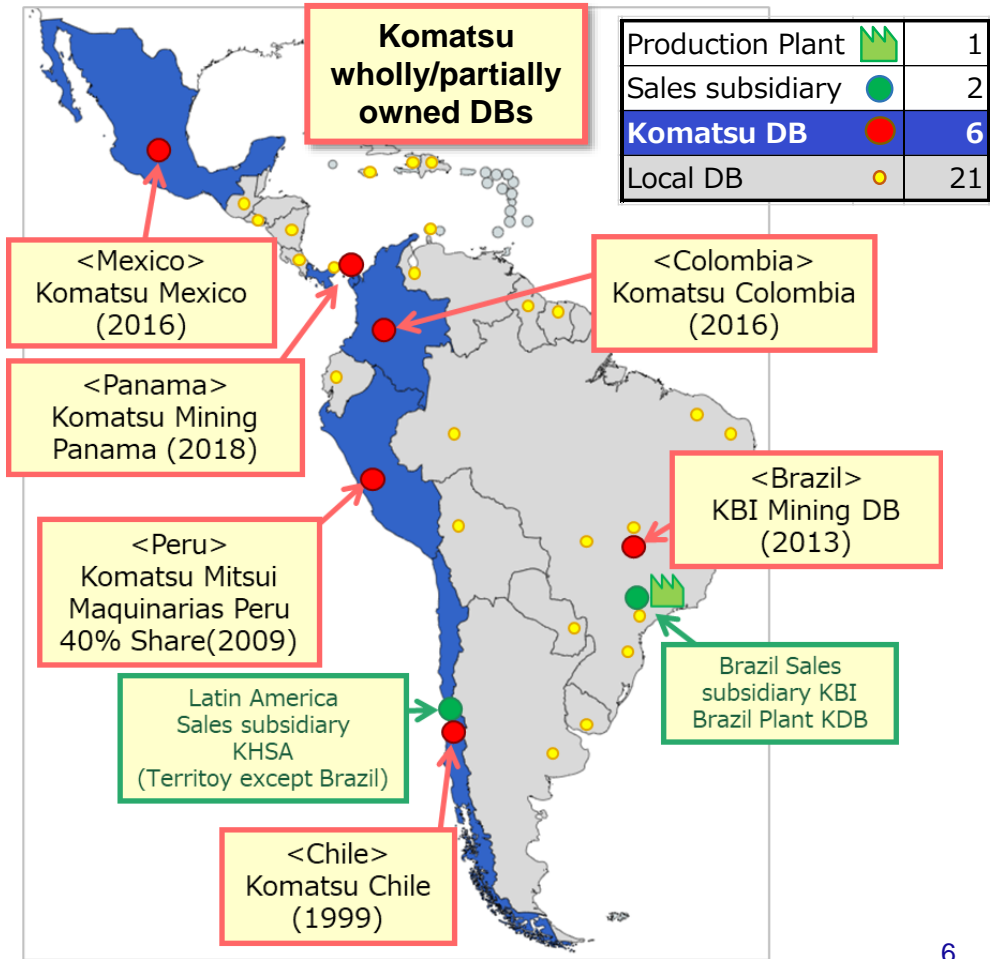
Large mining equipment is required for the extraction of minerals such as gold, silver, copper, iron, and coal.

USGS : 2021			USGS : 2020		USGS : 2020	
	Gold (Ton)		Silver (ton)		Copper (ton)	
1	China	329	Mexico	5,541	Chile	5,733,100
2	Russia	320	China	3,378	Peru	2,153,952
3	Australia	315	Peru	2,772	China	1,723,100
4	Canada	223	Chile	1,576	Congo	1,601,600
5	USA	187	Russia	1,380	USA	1,200,000
6	Mexico	120	Australia	1,343	Australia	885,000
7	Kazakhstan	116	Poland	1,218	Zambia	852,700
8	South Africa	107	USA	1,030	Russia	811,200
9	uzbekistan	100	Bolivia	930	Mexico	732,900
10	Peru	97	Argentina	768	Canada	584,609

Latin America	USGS : 2020		EI : 2022		
	Iron Ore (K ton)		Coal (K ton)		
1	Australia	564,519	1	China	4,560,000
2	Brazil	246,791	2	India	910,872
3	China	225,000	3	Indonesia	687,432
4	India	127,000	4	USA	539,399
5	Russia	69,500	5	Australia	443,425
6	Ukraine	49,300	6	Russia	439,028
7	Canada	36,100	7	South Africa	225,936
13	Chile	9,891	12	Colombia	57,502
14	Mexico	9,377	24	Brazil	7,451
15	Peru	8,894	25	Mexico	5,545

(2) Komatsu: Sales & Production bases

Starting with the establishment of Chilean DB in 1999, Komatsu gradually expanded its presence in the mining markets, investing in DBs in a total of five countries. Currently, Komatsu has a total of six DBs



1- (5) Komatsu operation by country: Chile

- Komatsu's distributorship in Chile is the first directly operated distributorship in Central and South America. Large quantity of equipment and personnel are deployed in Chile to support large-scale mining operations.
- A business model has been established to provide direct sales & services to mining customers, resulting in a stable and high absorption ratio over 300%.

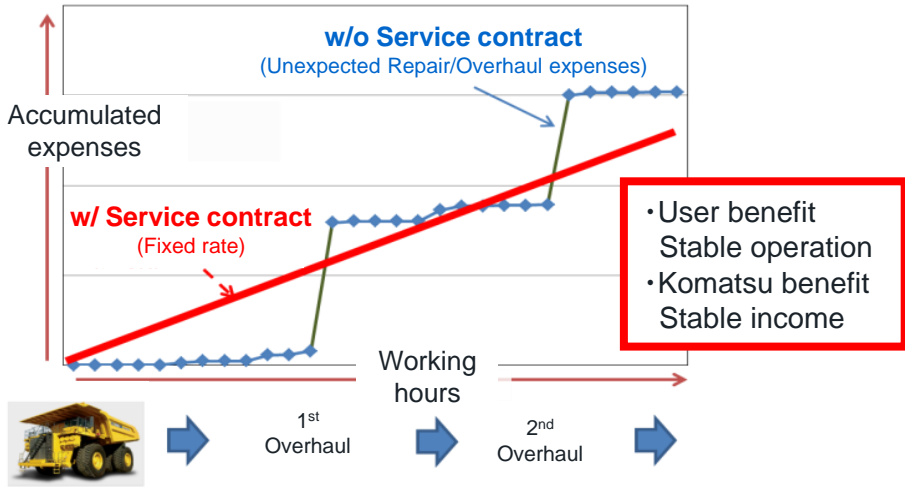
(1) Fleet population of Mining equipment in Chile

Model	Units
Dump truck (Electric/Engine)	1,100
Rope shovel, Drill, Underground	100
Large CE (Bull/Grader etc.)	350
Total	1,550

About 50% of mining equipment are under service contract



(2) Concept of Service contract



(3) Reman business

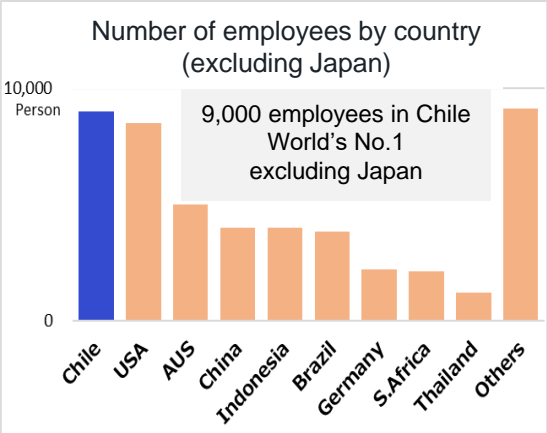
<Reman> = Remanufacturing

Reman center is a refurbishment facility. It delivers warranted components back to the market contributing to a circular economy. (Main components: engine, transmission, cylinder, etc.). The same plant is also expanded to Mexico, Colombia, and Brazil.



(4) Number of employees in Chile (5) Absorption ratio in Chile

Personnel to support service contracts



= Aftermarket profit / Capacity Cost



1- (6) Komatsu operation by country: Brazil

- In the construction equipment market, Komatsu has been utilizing local distributors for operations since the 1970s (currently working with 7 distributors).
- In the mining sector, Komatsu acquired the mining division of a local distributor in Brazil in 2013 & established direct operations, followed by further investment.

(1) Construction sector

The construction equipment market in Brazil has become the world's 4th largest in FY22

【CE demand ranking】

Rank	Country	FY22 (TTL=100)	vs FY17 (Multiple)
1	China	25.4	0.8
2	USA	15.8	1.4
3	Japan	6.6	1.0
4	Brazil	5.0	4.3
5	Indonesia	4.7	2.1
-	Others	42.5	1.4
Total		100.0	1.2

【Feature of Brazilian market】

- With its vast territory and abundant mining resources, infrastructure development, agriculture, and forestry.
- The country has numerous domestic preferential policies, and local production is prioritized.
- Komatsu, with its 7 distributors, covers the entire country.
- In 2016, Komatsu established its own finance company.

Source : CIMA 4 models



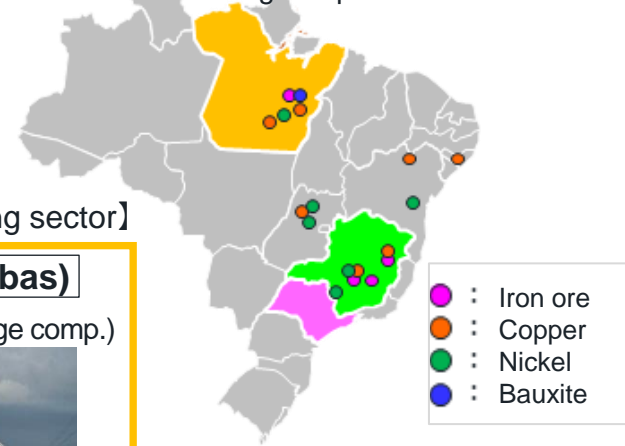
- ✓ Komatsu started production at its first overseas factory in 1975.
- ✓ Production approximately 3,000 units of 34 different models per year, not only for the domestic market in Brazil but also for North America, Europe, and countries in Central and South America.



(2) Mining sector

To strengthen the relationship with major mining users, Komatsu is actively promoting investment and enhancing its operational bases.

【Approach to the Mining sector】



North (Parauapebas)

Current repair center (large comp.)



New facility : 2024~



Sao Paulo

Current reman center



South (Belo Horizonte)

Current office & repair center



New facility : 2025~

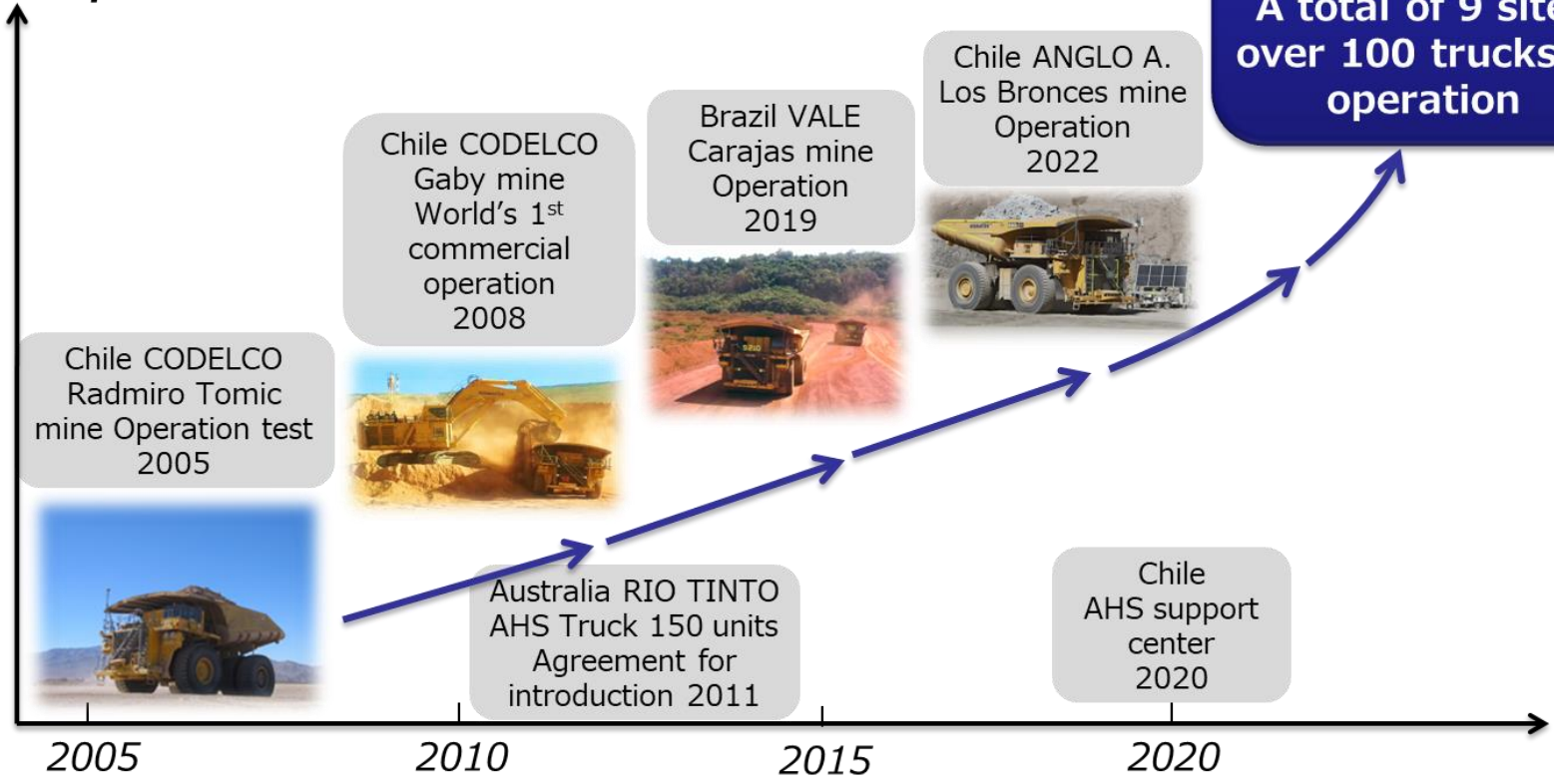


2- (1) New technologies deployment in the Latin American region: Autonomous trucks

- In 2005, Komatsu introduced the world's first Autonomous Haulage System (AHS), an unmanned dump truck, in Chile, leveraging its extensive experience in mining equipment support.
- Building upon the AHS implementation in Chile, Komatsu has been expanding its deployment to other regions such as Australia and Canada.
- In South America, AHS has been implemented in a total of 9 sites, with over 100 trucks in operation.

AHS implementation history

AHS implementation level



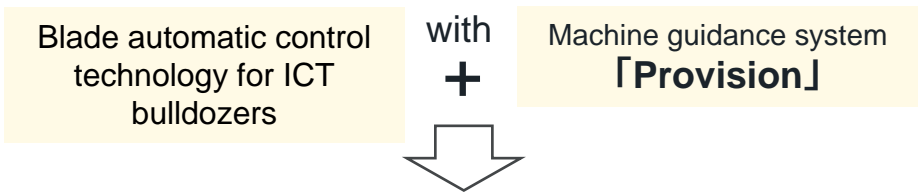
Introduction of AHS trucks in South America: A total of 9 sites over 100 trucks in operation

2- (2) New technologies deployment in the Latin American region: D375 teleoperation

From May 2023, commercial operation of large-scale ICT bulldozer remote control began at Anglo American's Minas-Rio iron ore mine in Brazil. Together with our customers, Komatsu is creating a safe, productive, smart, and clean future site.



【Feature of Komatsu teleoperation Bulldozer】



Even without skilled operators, **easily operate** from remote locations, significantly improving **safety** and **comfort** during operation

【Teleoperated bulldozer during remote operation】

D375 teleoperated bulldozer operating at a mining site (stockpile)



【Female operator performing remote operations】

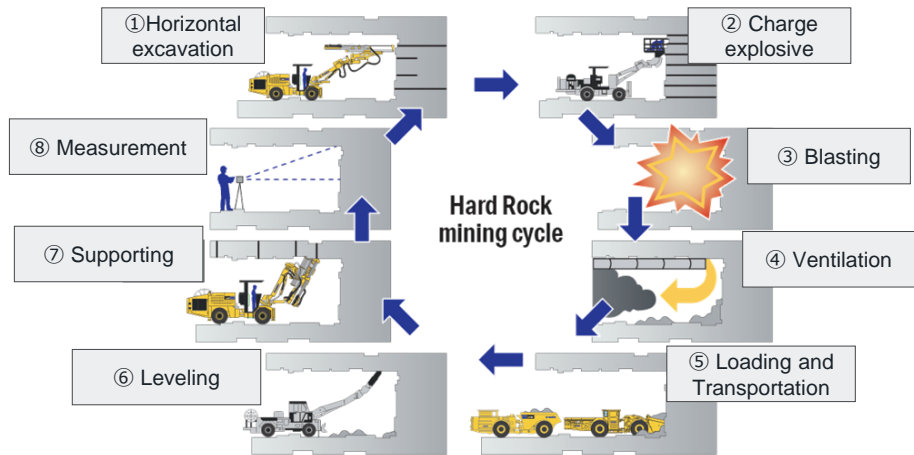
Comfortable control room with no vibration located 2.5 km away from the operating site



2- (3) New technologies deployment in the Latin American region: Under Ground Hard Rock

- Komatsu is developing a Tunnel Boring Machine (TBM) aiming for a step change in underground mining operations. It features no blasting (safety), no batch (productivity), and no diesel (environmental friendliness).
- Building upon conventional tunnel excavation technology, it incorporates new capabilities such as "sharp curve handling" "reversing" and "crossing excavation".
- Quality assurance is expected to be completed by 2024, with trial scheduled to begin in 2025 at Chuquicamata Mine in Chile.

(1) Conventional underground mining method: Drill and Blast method



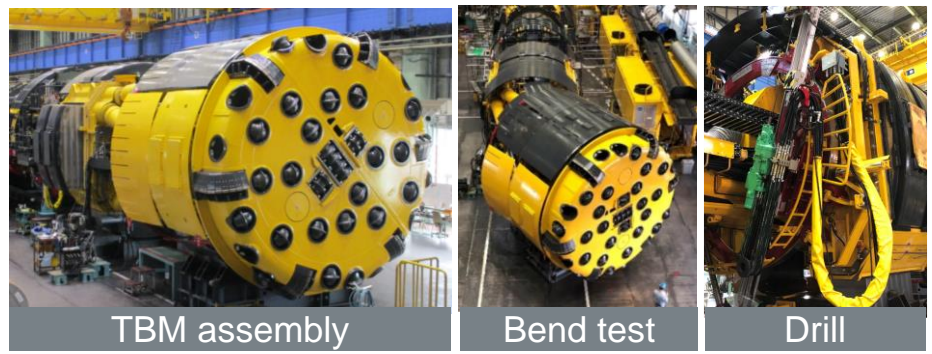
(2) Dantotsu product/system for underground mining

No blasting

No diesel

- Mechanical Cutter
- ✓ Improved safety, enhanced working environment, reduced support construction
- ✓ Adaptability to flexible tunnel shapes.

(3) TBM Status of manufacturing and indoor quality assurance tests



No blasting

No batch

No diesel

- **Mining TBM (Tunnel Boring Machine)**
- ✓ Improved safety, enhanced working environment, reduced support construction
- ✓ High-speed excavation.

No diesel





- Hybrid / Battery LHD
- Hose-less boom battery Drill Jumbo

3- (1) Sustainability in Latin America: ESG activities in general






Komatsu also supports the voluntary participation of employee engages in a wide range of activities for the local community, in addition to contributing to the creation of a prosperous society.

In order to achieve a sustainable future

environmental conservation





-  Carbon neutrality
-  Utilization of renewable energy
-  Recycling and regeneration
-  Forest conservation

For employees and society

-  Safety, health, and well-being
-  Employee engagement
-  Skills development and education
-  Diversity and inclusion (D&I)
-  Human rights

Example: next page

Business related

-  Product safety and quality
-  Providing solutions
-  Governance and compliance
-  Support for local communities



E (Environment)



S (Social)



G (Governance)

3- (2) ESG Activities: Skills Development and Education in Chile & Brazil

Komatsu also actively supports voluntary employee participation implements CSR activities in a wide range of areas to contribute to the creation of a prosperous society, providing educational opportunities and supports skills development.

(1) Examples of activities in Chile

Reinventarse Foundation

Initiation: Under the proposal of Komatsu Chile, a fund for supporting the social reintegration of young offenders was established.

Subsequently, the Chilean government and other companies also sponsored the fund.

Content: The fund provides support to young offenders in obtaining technical skills and high school graduation qualifications related to Komatsu Chile's business.

Achievements: Over the past 10 years, 40 program graduates have been hired by the Komatsu Chile Group.



In December 2021, Komatsu Chile was honored with an award from the United Nations for its outstanding activities in the field of human rights.

Image of the United Nations award ceremony: Komatsu Chile representatives in attendance.

(2) Examples of activities in Brazil

Vale Foundation program

Initiation: Komatsu contributed and participated in a project aimed at improving the basic education level in the northern region of Brazil, specifically in the state of Pará.

Content: The support activities focused on reintegrating children who could not attend school due to poverty or other reasons.

Achievements: Over a period of three years, from FY21 to FY23, Komatsu donated approximately 30 million yen. Collaborating with Vale, the following activities were carried out.

<Activity Examples>

- Conducting surveys and home visits to understand the situation of children who refuse to attend school.
- Collaborating with local governments and public institutions to establish a sustainable support infrastructure.
- Providing education and training for children and stakeholders in public institutions.



3- (3) Diversity and Inclusion through Equal Opportunities: Promoting women participation

Komatsu Group promotes diversity and inclusion through equal opportunities. This commitment extends to the Latin America region, where we actively involve our distributors and affiliated companies in promoting women participation and success across the organization.

(1) Komatsu Chile: Women Employee Development Program

Management level

Next Generation Women Leadership Development Program

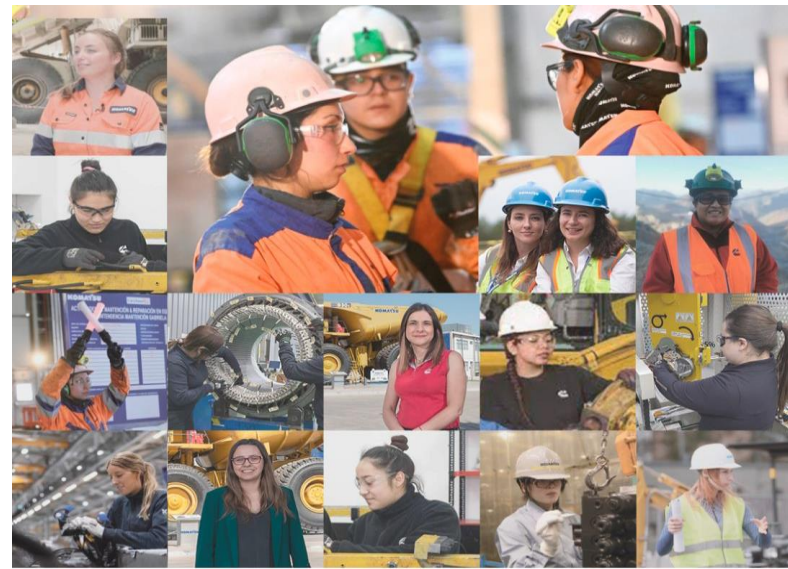
- Promoting strategic understanding of Komatsu Way and Komatsu Chile.
- Promoting women leadership through coaching and group learning.



Specialized Administrative

Mentorship Program for Women Employees

- Introducing a mentorship program for newly hired women employees. Aim to facilitate adaptation to the workplace environment, improve retention rates, and promote early independence.

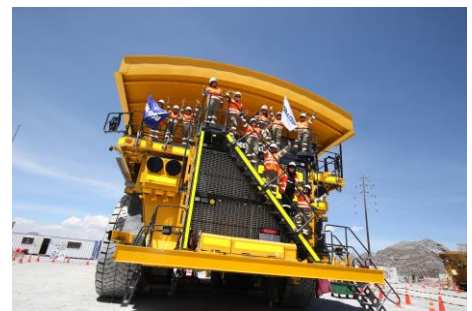


#JUNTAS creamos VALOR

KOMATSU Cummins

(2) Peru: Women Engineer Team (Assembly)

Assembled the Dump Truck 980E (Load capacity 400 tons) with a team of 11 women.



(3) Chile: Female Engine Maintenance Technicians



Providing specialized education on engine maintenance to women Technicians. After completing the training, they will be dispatched to mining sites as maintenance technicians.

KOMATSU

Creating value together