



SOJITZ IR DAY 2018

Metals & Mineral Resources Division

September 3, 2018
Sojitz Corporation

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Contents

- ◆ Metals & Mineral Resources Division
- ◆ Division Policy Under Medium-Term Management Plan 2020
- ◆ Reconstruction of Asset Portfolio
- ◆ Response to New Social Needs 1
- ◆ Response to New Social Needs 2
- ◆ Measures Targeting Future Growth

Caution regarding Forward-looking Statements

This document contains forward-looking statements based on information available to the company at the time of disclosure and certain assumptions that management believes to be reasonable. Sojitz makes no assurances as to the actual results and/or other outcomes, which may differ substantially from those expressed or implied by such forward-looking statements due to various factors including changes in economic conditions in key markets, both in and outside of Japan, and exchange rate movements.

The company will provide timely disclosure of any material changes, events, or other relevant issues.



Metals & Mineral Resources Division

Metals & Mineral Resources Division

Coal & Iron Ore Dept.



- ◇ Coal and iron ore trading and related businesses
 - **No. 1 share of exports to Japan** for Russian coal, a traditional area of strength
 - High share of offshore coal trades and exports of high-grade iron ore to Japan

Mineral Resources Development Dept.



- ◇ Coal and mineral resource interest investment and development
 - Only trading company with **coal mine operation functions**
 - Expansion into new business areas by leveraging operation functions

Ferroalloys, Non-Ferrous & Precious Metals Dept.



- ◇ Trading of rare metals, nonferrous metals, and precious metals and investment in mining interests
 - Share of **approximately 80%** of niobium imports to Japan
 - Development of systems for stable supply of high-grade steel auxiliary feedstock

Industrial Minerals Dept.



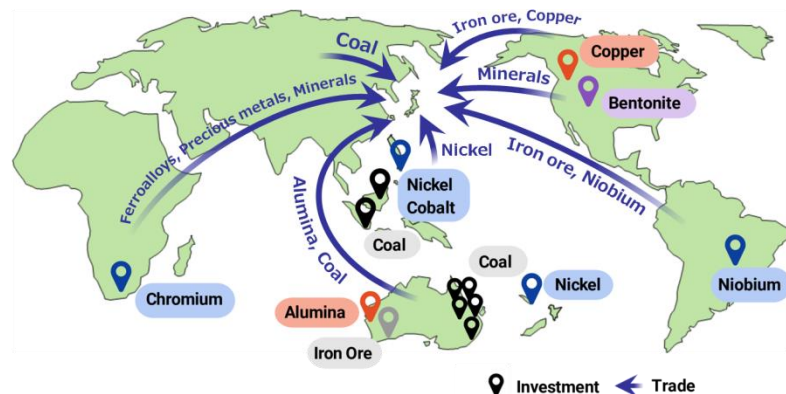
- ◇ Trading of steel auxiliary feedstock and auxiliary materials and industrial minerals
 - **Top trading company** for fluorite and vermiculite
 - Development of supply chain spanning upstream and downstream areas for such articles as bentonite and electrode

Metal Products Office

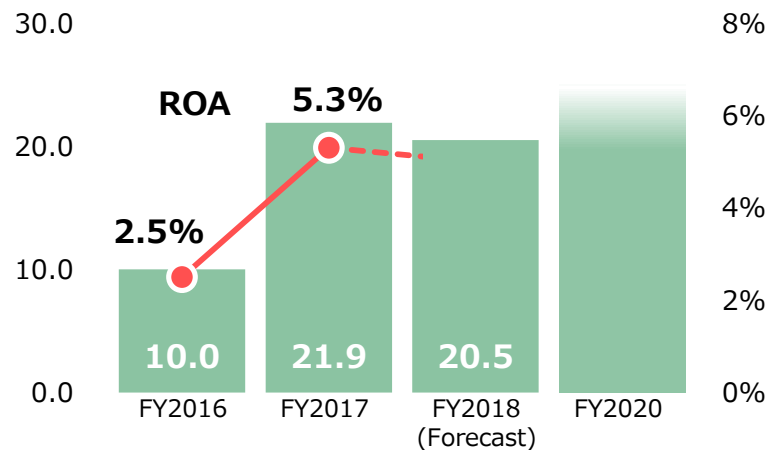


- ◇ Businesses overseen by Metal One and exploration of new businesses
 - Steel product distribution and processing business through Metal One
 - **Japan's first 3D metal printer business** to perform everything from metal powder production to product manufacturing and mass production

Stable supply of resources to a wide range of areas centered on Japan and Asia through trading and upstream interest operations



(Billions of Yen)



Consolidated Profit for the Year / ROA



Division Policy Under Medium-Term Management Plan 2020

Basic Policy

The Metals & Mineral Resources Division will strengthen the functions of existing businesses and develop and promote businesses that **address new social needs**. Meanwhile, the division will be working to **establish foundations for generating stable earnings** that are resilient to market fluctuations by optimizing its asset portfolio.

Operating Environment Changes

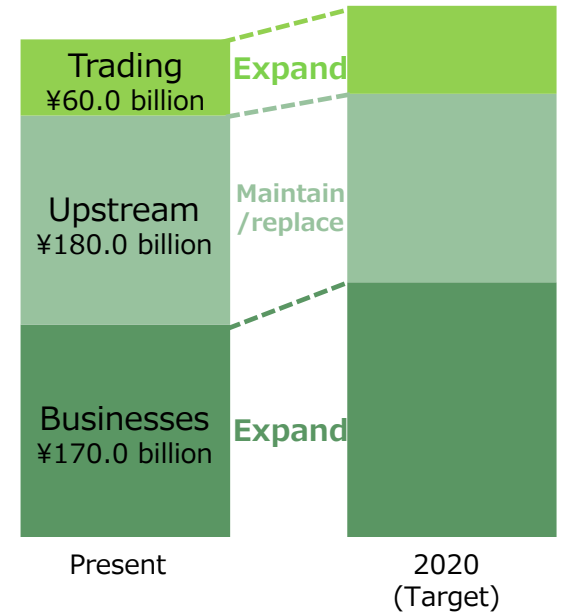


- Robust demand in emerging countries
- Sluggish growth in Japanese market
- Volatile commodity prices



- More rigorous environmental regulations
- Rising environmental awareness
- Emergence of new materials and technologies

Asset Accumulation Plan



Specific Initiatives

Establishment of foundations for generating stable earnings

- Enhance trading operations (strengthen functions and explore growth markets)
- Cut costs associated with and replace upstream assets (reconstruct portfolio)
- Create businesses that are resilient to market fluctuations

Address social needs

- Acquire scare resources
- Develop businesses that contribute to reduced environmental impacts (recycling businesses, etc.)
- Utilize new materials and technologies

- Trading: Increase operating assets through more extensive trading
- Upstream: Replace current assets with higher-quality assets while maintaining portfolio scale Address overconcentration of thermal coal by shifting to coking coal
- Business: Explore new businesses with eye to next-generation businesses



Reconstruction of Asset Portfolio

—Acquisition of Supplies of High-Grade Coking Coal

Policy

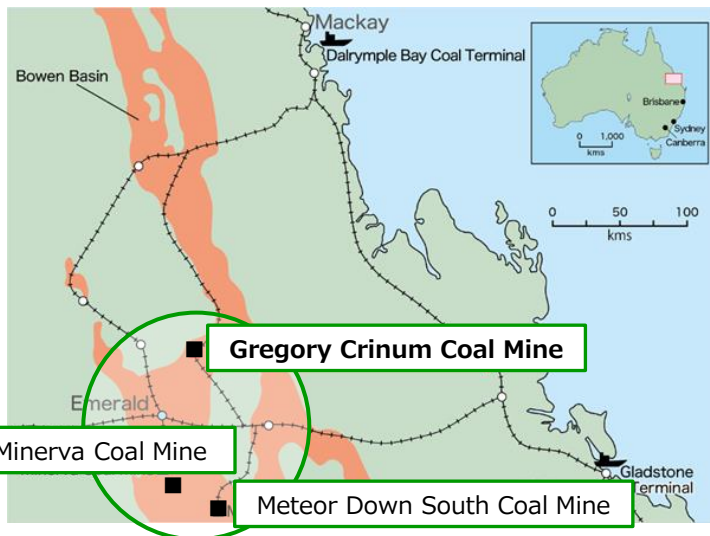
The Sojitz Group will replace its coal assets to address its overconcentration of thermal coal assets and **strengthen coking coal operations** from the perspective of rising global awareness and long-term business continuity in order to construct a balanced portfolio.

■ Acquisition of 100% of Gregory Crinum Coking Coal Mine in Australia

Overview

Agreement reached in May 2018 to acquire 100% of interests in Gregory Crinum coking coal mine located in Queensland from BHP Mitsubishi Alliance, interest transfer to be completed in 2018.

- Acquisition cost: Approx. ¥8.0 billion
- Start of coal production: 2nd half of 2019 (tentative)
- Production volume: Approx. 2 million tons/year
- Deposit volume: Enough to be mined into late 2030s

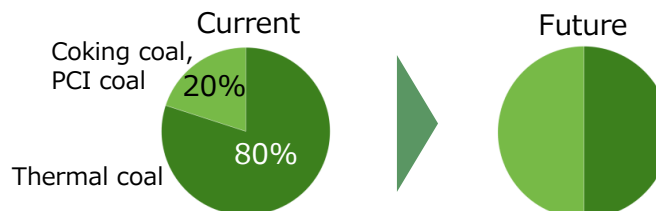


Purposes of Initiatives

1. Acquisition of coking coal interests

- **Improvement of asset portfolio**
- Reinforcement of coking coal trading operations

※Distribution of Production Volumes by Coal Type (Sojitz's Stake)



2. Reduction of costs through integrated operation

- Integration of operation of MDS and Gregory through utilization of existing operation functions of Minerva

3. Creation of new business opportunities

- Utilization of infrastructure obtained through acquisition to expand into surrounding undeveloped mining areas and contract operation business

Continue strengthening coking coal operations while developing contract rehabilitation operations, which are expected to benefit from increased opportunities going forward, and other businesses that address social needs and are resilient to market fluctuations.



Response to New Social Needs 1 —Participation in 3D Metal Printer Business

Policy

As conventional business models are transformed by manufacturing and distribution innovations, Sojitz will pursue a **leading position** in the 3D metal printer business through early participation

■ Establishment of JAMPT Corporation

Overview

Joint venture established with partners boasting expertise and technologies in additive manufacturing industry
Japan's first company to perform everything from metal powder production to product manufacturing

- Investment amount: Approx. ¥0.5 billion (66%)
- Establishment: October 2017
- Partners: Koiwai Co., Ltd.



3D metal printer (left)
Products manufactured using 3D metal printer (above)

Purposes of Initiatives

1. Entry into 3D metal printer market at its dawn ➤ **Acquisition of firstcomer benefits**
2. Development of business model compatible with product manufacturing and mass production ➤ Creation of business generating **stable revenues** that are resilient to market fluctuations
3. Exploration of new fields ➤ **Entry into manufacturing field**
4. Contributions to communities ➤ Establishment of factory in special reconstruction industrial park in Miyagi **Prefecture to contribute to economic recovery** of areas impacted by Great East Japan Earthquake



Steadily move ahead with development of 3D metal printer business using new technologies to play a pioneering role in the industry



Response to New Social Needs 2

—Development of Niobium Anode Materials for Next-Generation EV Batteries

Policy

We will seek to capture EV demand, which is expected to grow on a global scale going forward, by participating in the development of next-generation EV battery materials as a new application for niobium, a type of steel auxiliary feedstock, together with promising partners.

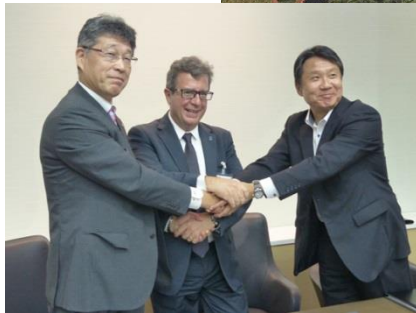
■ Conclusion of Contract for Joint Development of Niobium Anode Materials for High-Capacity, Next-Generation LiBs (SCiBTM) with Toshiba and CBMM

Overview

Conclusion of contract for joint-development of niobium titanium oxide (NTO) for use in EV LiBs between Toshiba Infrastructure Systems & Solutions, CBMM, and Sojitz in June 2018

Role of Each Company

- CBMM: Production of niobium oxide for use in making NTO
- Toshiba Infrastructure Systems & Solutions: Manufacture and performance evaluation of NTO electrodes
- Sojitz: Stable supply of raw materials, project management



Signing ceremony (left)
CBMM Araxá Mine, Brazil (above)

Purposes of Initiatives

1. Capturing of EV demand

- **Response to customer needs** through development of next-generation LiBs with higher energy density and ultra-rapid recharging

2. Exercise of Sojitz's strengths

- **Utilization** of stable supply and application development insight and expertise as sole distribution agent for niobium in Japan

3. Strengthening of relationships with promising partners

- Collaboration with Toshiba as well as with CBMM, which boasts niobium industry-leading technologies

- Provision of SCiBTM, a safe and fast-charging LiB launched by Toshiba in 2008
- Expansion of rechargeable battery business through collaboration between three companies with eye to mass production of next-generation SCiBTM in FY2020

Pursuit of ongoing growth by supporting business foundations and reducing environmental impacts through stable supply of niobium.



Measures Targeting Future Growth

Drive growth of Companywide earnings through promotion of division growth strategies
Achieve ongoing growth by fulfilling resource supply responsibilities and addressing social needs

Three Growth Strategies

Enhance trading operations based on new functions

- Strengthen relationships with customers to respond to their diverse needs
- Expand lineups of products that contribute to reduced environmental impacts



Low-sulfur coal produced near region of use*



Next-generation battery materials

Reform upstream interest operations

- Construct portfolio that can generate profits even when conditions are poor



Exhaustive cost reductions for existing projects



Replacement of assets with higher-quality assets

Explore midstream and downstream businesses that are resilient to market fluctuations

- Create businesses that address social needs and environment changes

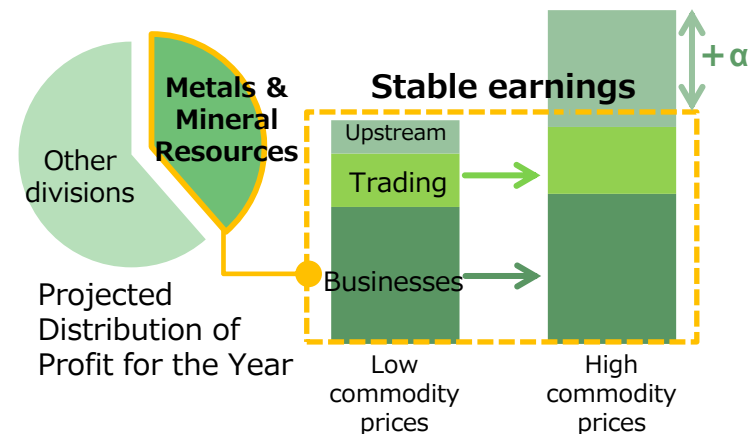


3D metal printer business



Resource recovery / recycling businesses

- Construct earnings foundation that is resilient to market fluctuations to drive growth of Companywide earnings



- Fulfill **responsibility of supplying resources** to resource-scarce Japan and rapidly growing emerging countries
- Respond to **changing social needs** based on environmental issues



* Coal produced near the region of use to contribute to reduced CO2 emissions from transportation



sojitz

New way, New value