

# Mega Minerals Long-term Iron Ore Offtake Contracts - Nippon Metals

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## 1. Introduction

This document provides comprehensive details on Mega Minerals' long-term iron ore offtake agreement with Nippon Metals, model TM-OFK-NIPPON-2025. It aims to serve as a reference for contractual provisions, pricing mechanisms, environmental commitments, and internal policies aligned with the company's strategic sustainability objectives. This document is structured to support retrieval-augmented generation applications and facilitate accurate knowledge extraction and compliance enforcement.

## 2. Contract Overview

The offtake agreement with Nippon Metals establishes a binding relationship for supply of high-grade iron ore over a long-term horizon, typically spanning 5-10 years. The agreement specifies quantities, contractual clauses on pricing formulas, delivery windows, quality standards, and environmental compliance requirements. It aims to balance price stability with flexibility to adapt to market indices, freight rate fluctuations, foreign exchange variations, and evolving regulatory frameworks.

**Contract Identifier:** MM-OFK-2025-NIPPON

**Effective Date:** January 1, 2025

**Expiration Date:** December 31, 2034

## 3. Contractual Clauses

### 3.1. Key Contractual Sections

- Pricing Mechanisms
- Volume Commitments
- Delivery Terms and Laycan Periods
- Quality Specifications
- Environmental and Regulatory Provisions
- Dispute Resolution
- Termination and Reopening Conditions

### 3.2. Typical Contract Clauses with Reference Identifiers

Clause Number	Description	Keywords
Clause 4.1	Pricing Formula based on Market Index + Freight + FX Adjustment	Price Formula, Market Index, Freight, FX

Clause 5.2	Minimum Volume Commitment (e.g., 1 million tonnes/year)	Volume Commitment, Minimum Offtake
Clause 6.1	Quality Specification Standards (Fe $\geq$ 62%, moisture $\leq$ 8%)	Quality, Fe, Moisture, SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , P
Clause 8.3	Price Re-opener Conditions in Case of Regulatory Changes	Price Reopener, Regulatory Changes, Carbon Tax

## 4. Pricing Formula and Adjustments

### 4.1. Base Price Calculation

The base price is calculated on a formula referencing the Platts Iron Ore Index (IODEX) 62% CFR North China, adjusted for contractual premiums, freight costs, and foreign exchange rates. The general formula is:

$$\text{Effective Price} = \text{Index Price} + \text{Premium} - \text{Freight Adjustment} + \text{FX}$$

### 4.2. Index Reference and Market Data

The primary index used is the **Platts Iron Ore Index (IODEX) 62% CFR North China**. The contract stipulates data services and data feed sources, including subscription to Platts market reports, with reference to monthly index publication dates.

### 4.3. Freight Adjustment

Freight costs are derived from current bilateral freight rates, indexed monthly, and incorporated into the price formula. For example, if the freight rate increases by \$X per tonne, the adjusted price accounts for this change.

## 4.4. FX Adjustment Clause

Pricing adjustments for foreign exchange rate fluctuations are based on the contractual FX rate lock-in. Should the USD/EUR rate move beyond established thresholds, the price formula adjusts accordingly to mitigate currency risk.

## 4.5. Example Pricing Calculation

```
Base Index (Platts IODEX) : $150/tonne
Premium: $5/tonne
Freight Adjustment: $3/tonne (increase)
FX Adjustment: +$2/tonne (USD appreciation)
-----
Effective Price: $150 + $5 - $3 + $2 = $154/tonne
```

## 5. Volume Commitments and Laycan Periods

### 5.1. Volume Commitments

The agreement mandates a minimum annual off-take volume of 1 million tonnes, with optional volume rebalancing clauses. Flexibility provisions allow for adjustments up to ±10% based on market demand, subject to mutual agreement.

### 5.2. Delivery Window and Laycan

Parameter	Details
Laycan Period	15th to 25th of each month
Total Delivery Window	Each quarter: Jan-Mar, Apr-Jun, Jul-Sep, Oct-Dec

Demurrage Penalties	\$5,000 per day for shipments delayed beyond permitted laycan
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## 5.3. Delivery Procedure

Shipments are scheduled via electronic booking, with notice at least 10 days prior. Follows Incoterms FOB or CFR, with responsibilities for loading, freight, and customs shared per contractual clauses.

# 6. Quality Specifications and Penalties

## 6.1. Quality Standards

Parameter	Standard	Tolerance
Iron Content (Fe)	$\geq 62\%$	$\pm 0.5\%$
Moisture	$\leq 8\%$	$\pm 0.5\%$
SiO <sub>2</sub>	$\leq 4\%$	-
Al <sub>2</sub> O <sub>3</sub>	$\leq 2.5\%$	-
P (Phosphorus)	$\leq 0.06\%$	-

## 6.2. Penalties and Bonuses

Deviations from quality standards may invoke penalties, such as a 1% price reduction per 0.5% Fe shortfall. Conversely, higher quality grades may attract bonuses up to 2% increases over base price, subject to verification.

## 6.3. Quality Testing Procedure

Sampling occurs at port of shipment, with analysis performed by accredited

labs. A batch report is provided to the buyer within 7 days, and disputes are resolved based on this data.

## 7. Environmental and Regulatory Provisions

### 7.1. Carbon Tax Pass-through Clause

The agreement allows for the pass-through of applicable carbon taxes to the buyer, effective upon regulatory implementation. The clause specifies mechanisms for cost recovery and invoicing adjustments.

### 7.2. Price Reopener due to Regulatory Changes

Clause 8.3 stipulates that if new carbon taxation or emission compliance costs exceed forecasted levels by more than 10%, parties can renegotiate pricing provisions and delivery commitments.

### 7.3. Scope of Environmental Regulations

Includes compliance with local and international standards such as the EU Green Deal, CBAM, and international climate accords.

## 8. Internal ESG Policies & Reporting

### 8.1. Scope of Emissions

- **Scope 1:** Direct emissions from mining and processing operations
- **Scope 2:** Indirect emissions from purchased electricity
- **Scope 3:** Emissions from supply chain, logistics, and product use

### 8.2. Emissions Thresholds & Triggered Reporting

Company policy mandates additional disclosure if Scope 3 emissions per tonne of iron ore exceed 0.5 tonnes CO<sub>2</sub>-eq. This triggers external verification and public reporting procedures.

## 8.3. Internal Monitoring Process

Data collection through ERP systems, with annual sustainability reports aligned with GRI Standards. Oversight by ESG Compliance Committee ensures data integrity and transparency.

# 9. Sustainability and Decarbonization Strategies

## 9.1. Decarbonization Pathways

Mega Minerals aims to reduce overall carbon intensity of its iron ore supply chain by 30% by 2030 through:

- Adoption of renewable energy sources in mining operations
- Electrification of fleet vehicles and processing equipment
- Implementation of carbon capture and storage (CCS) technologies

## 9.2. Customer Commitments on Low-Carbon Products

Part of contractual obligations includes providing low-carbon-certified iron ore, with documented emission reductions verified by third-party auditors.

## 9.3. Carbon Intensity Metrics

Parameter	Current Level	Target Level (2030)
Carbon Intensity (kg CO <sub>2</sub> -eq per tonne of ore)	20	14

# 10. Internal Memos on Carbon Pricing Schemes

## 10.1. EU CBAM and Carbon Cost Implications

Sample table illustrating potential CBAM carbon costs per tonne of imported iron ore:

Country	Carbon Cost (EUR per tonne)	Notes
Germany	€15	CBAM applicable from 2026
France	€14	Part of broader EU ETS integration
UK	N/A	Post-Brexit separate scheme

## 10.2. Sample Memo Extract

Subject: Impact of EU CBAM on Iron Ore Supplies

Date: March 15, 2025

To: Procurement and Logistics Teams

Effective immediately, all iron ore imports to the EU will inc

Action Items:

- Update pricing spreadsheets to include CBAM costs.
- Notify customers about potential pass-through adjustments.
- Monitor ongoing regulatory developments.

# 11. Legal Guidance and Scope 3

# Reporting Obligations

## 11.1. Contract Interpretation Guidelines

Clauses referencing "Scope 3" emissions, "carbon tax," or "price re-opener" are designed to ensure flexibility and compliance with evolving regulations. Proper interpretation involves understanding both contractual language and applicable legal standards, including international climate agreements.

## 11.2. Scope 3 Reporting Requirements

In accordance with the GHG Protocol and EU legislation, companies must report Scope 3 emissions if they exceed certain thresholds. Contract clauses specify procedures for data collection, third-party verification, and stakeholder disclosures.

## 11.3. Example: Scope 3 Emissions Data Table

Item	Description	Estimated Emissions (tonnes CO <sub>2</sub> -eq)
Supply Chain Logistics	Transport from mine to port	50,000
Product Use	Steel manufacturing emissions	200,000</