

SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 23-453 (1 of 2)

Organization: Commodity Exchange, Inc. ("COMEX")

Filing as a: DCM SEF DCO SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 11/22/23 **Filing Description:** Initial Listing of the Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option and Cobalt Metal (Fastmarkets) Average Price Option Contracts

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

- | | | |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Notification | § 40.6(d) |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change | § 40.10(h) |

Rule Numbers:

New Product

Please note only ONE product per Submission.

- | | | |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification | § 40.2(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.23(a) |
| <input type="checkbox"/> | Certification Swap Class | § 40.2(d) |
| <input type="checkbox"/> | Approval | § 40.3(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.23(b) |
| <input type="checkbox"/> | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/> | Swap Submission | § 39.5 |

Product Terms and Conditions (product related Rules and Rule Amendments)

- | | | |
|--------------------------|---|----------------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Certification Made Available to Trade Determination | § 40.6(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.24(a) |
| <input type="checkbox"/> | Delisting (No Open Interest) | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Approval Made Available to Trade Determination | § 40.5(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.24(c) |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | “Non-Material Agricultural Rule Change” | § 40.4(b)(5) |
| <input type="checkbox"/> | Notification | § 40.6(d) |

Official Name(s) of Product(s) Affected: See filing.

Rule Numbers: See filing.



Timothy Elliott
 Managing Director and Chief Regulatory Counsel
 Legal Department

November 22, 2023

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick
 Office of the Secretariat
 Commodity Futures Trading Commission
 Three Lafayette Centre
 1155 21st Street, N.W.
 Washington, DC 20581

**Re: CFTC Regulation 40.2(a) Certification. Initial Listing of the Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option and Cobalt Metal (Fastmarkets) Average Price Option Contracts.
 COMEX Submission No. 23-453 (1 of 2)**

Dear Mr. Kirkpatrick:

Commodity Exchange, Inc. (“COMEX” or “Exchange”) is certifying to the Commodity Futures Trading Commission (“CFTC” or “Commission”) the initial listing of the Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option and the Cobalt Metal (Fastmarkets) Average Price Option contracts (the “Contracts”) for trading on the CME Globex electronic trading platform and for submission for clearing via CME ClearPort effective Sunday, December 10, 2023, for trade date Monday, December 11, 2023, as noted in the table below:

Contract Title	Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option	Cobalt Metal (Fastmarkets) Average Price Option
CME Globex and CME ClearPort Code	LHO	COO
Rulebook Chapter	700	690
Underlying Futures Contract / Commodity Code	Lithium Hydroxide CIF CJK (Fastmarkets) Futures / LTH	Cobalt Metal (Fastmarkets) Futures / COB
Contract Size	1,000 kilograms	2,204.62 pounds
Price Quotation	U.S. dollars and cents per kilogram	U.S. dollars and cents per pound
Minimum Price Fluctuation	\$0.01 per kilogram	\$0.01 per pound
Value per Tick	\$10.00	\$22.0462
Option Exercise Style	European	
Settlement Type	Financial	
Listing Schedule	Monthly contracts listed for twenty-four (24) consecutive months	Monthly contracts listed for the current year and the next four (4) calendar years
Initial Listing	January 2024	
Termination of Trading	Trading terminates on the last U.S. business day of the contract month.	Trading terminates on the last UK business day of the contract month. If this is not a U.S. business day, trading terminates on the prior U.S. business day.
Strike Price Increment	\$0.25 per kg	\$0.25 per lbs.
Strike Price Listing Schedule	Minimum at-the-money strike at \$0.25 per kilogram increment plus dynamic strikes at \$0.25 per kilogram increment.	Minimum at-the-money strike at \$0.25 per pound increment plus dynamic strikes at \$0.25 per pound increment.

Block Trade Minimum Threshold and Reporting Window	2 contracts - subject to a 15-minute reporting window
CME Globex Match Algorithm	K - Configurable
Trading and Clearing Hours	CME Globex Pre-open: Sunday 4:00 p.m. - 5:00 p.m. Central Time/CT Monday – Thursday 4:45 p.m. - 5:00 p.m. CT CME Globex Open: Sunday 5:00 p.m. - Friday 4:00 p.m. CT with a daily maintenance period from 4:00 p.m. - 5:00 p.m. CT CME ClearPort: Sunday 5:00 p.m. - Friday 4:00 p.m. CT with no reporting Monday - Thursday from 4:00 p.m. - 5:00 p.m. CT

The Exchange reviewed the designated contracts market core principles (“Core Principles”) as set forth in the Commodity Exchange Act (“CEA” or “Act”) and identified that the Contracts may have some bearing on the following Core Principles:

- **Availability of General Information:** The Exchange will publish information on the Contracts' specification on its website, together with daily trading volume, open interest and price information.
- **Contracts Not Readily Subject to Manipulation:** The Contracts are based on a cash price series that is reflective of the underlying cash market and is commonly relied on and used as a reference price by cash market brokers and commercial market participants.
- **Compliance with Rules:** Trading in these Contracts will be subject to Chapter 4 of the Exchange rules which includes prohibitions against fraudulent, non-competitive, unfair and abusive practices and will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department. The Market Regulation Department may use its investigatory and enforcement power where potential rule violations are identified during its regular surveillance reviews.
- **Prevention of Market Disruption:** Trading in the Contracts will be subject to the Rules of COMEX which include prohibitions on manipulation, price distortion, and disruption to the cash settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the Contracts proposed herein will be subject to monitoring and surveillance by CME Group's Market Regulation Department.
- **Position Limitations or Accountability:** The speculative position limits for the Contracts as demonstrated in this submission are consistent with the Commission's guidance.
- **Financial Integrity of Contracts:** The Contracts will be cleared by the CME Clearing House which is a registered derivatives clearing organisation with the Commission and is subject to all Commission regulations related thereto.
- **Execution of Transactions:** The Contracts will be listed for trading on the CME Globex electronic trading and for clearing through CME ClearPort. The CME Globex electronic trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity.
- **Trade Information:** All requisite trade information for the Contracts will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.
- **Protection of Market Participants:** COMEX Rulebook Chapters contain multiple prohibitions precluding intermediaries from disadvantaging their customers. These rules apply to trading on all Exchange's competitive venues and will be applicable to transactions in these Contracts.

- **Disciplinary Procedures:** Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the Contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in this product are identified.
- **Dispute Resolution:** Disputes with respect to trading in the Contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all non-members to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a non-member is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.
- **Daily Publication of Trading Information:** The Exchange will publish information regarding trading volume, open interest and price information daily on its website and through quote vendors for the Contracts.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.2(a), the Exchange certifies that the Contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the CME Group website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

Should you have any questions concerning the above, please contact the undersigned at (312) 466-7478 or via e-mail at CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Timothy Elliott
Managing Director and Chief Regulatory Counsel

Attachments: Exhibit A: COMEX Rulebook Chapters 690 and 700
Exhibit B: Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the COMEX Rulebook (attached under separate cover)
Exhibit C: Exchange Fees
Exhibit D: COMEX Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table
Exhibit E: COMEX Rule 300.20. – Strike Price Listing and Exercise Procedures Table
Exhibit F: Cash Market Overview and Analysis of Deliverable Supply

Exhibit A

COMEX Rulebook

Chapter 690

Cobalt Metal (Fastmarkets) Average Price Option

690100. SCOPE OF CHAPTER

This chapter is limited in application to put and call average price options on Cobalt Metal (Fastmarkets) Futures contract. In addition to the rules of this chapter, transactions in options on Cobalt Metal (Fastmarkets) Futures shall be subject to the general rules of the Exchange insofar as applicable.

690101. OPTION CHARACTERISTICS

The number of contract months open for trading at a given time shall be determined by the Exchange.

690101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

690101.B. Trading Unit

A Cobalt Metal (Fastmarkets) Average Price put option traded on the Exchange represents the cash difference between the exercise price and the settlement price of the Cobalt Metal (Fastmarkets) Futures multiplied by 2,204.62, or zero, whichever is greater. A Cobalt Metal (Fastmarkets) call option traded on the Exchange represents the cash difference between the settlement price of the Cobalt Metal (Fastmarkets) Futures and the exercise price multiplied by 2,204.62, or zero, whichever is greater.

690101.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per pound. The minimum daily trading price fluctuation and minimum daily settlement price fluctuation shall be \$0.01 per pound. The minimum final settlement price fluctuation shall be \$0.01 per pound.

690101D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

690101.E. Termination of Trading

The option shall expire at the close of trading on the last day of trading of the underlying Cobalt Metal (Fastmarkets) Futures contract.

690101.F. Type of Option

The option is a European-style option cash settled on expiration day.

690102. EXERCISE PRICES AND CHARACTERISTICS

Transactions shall be conducted for option contracts as set forth in Rule 300.20.

690103. DISCLAIMER

See [NYMEX/COMEX Chapter iv. \("DISCLAIMERS"\)](#) incorporated herein by reference.

Chapter 700

Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option

700100. **SCOPE OF CHAPTER**

This chapter is limited in application to put and call average price options on Lithium Hydroxide CIF CJK (Fastmarkets) Futures contract. In addition to the rules of this chapter, transactions in options on Lithium Hydroxide CIF CJK (Fastmarkets) Futures shall be subject to the general rules of the Exchange insofar as applicable.

700101. **OPTION CHARACTERISTICS**

The number of contract months open for trading at a given time shall be determined by the Exchange.

700101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

700101.B. Trading Unit

A Lithium Hydroxide CIF CJK (Fastmarkets) Average Price put option traded on the Exchange represents the cash difference between the exercise price and the settlement price of the Lithium Hydroxide CIF CJK (Fastmarkets) Futures multiplied by 1,000, or zero, whichever is greater. A Lithium Hydroxide CIF CJK (Fastmarkets) call option traded on the Exchange represents the cash difference between the settlement price of the Lithium Hydroxide CIF CJK (Fastmarkets) Futures and the exercise price multiplied by 1,000, or zero, whichever is greater.

700101.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per kilogram. The minimum daily trading price fluctuation and minimum daily settlement price fluctuation shall be \$0.01 per kilogram. The minimum final settlement price fluctuation shall be \$0.01 per kilogram.

700101D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

700101.E. Termination of Trading

The option shall expire at the close of trading on the last day of trading of the underlying Lithium Hydroxide CIF CJK (Fastmarkets) Futures contract.

700101.F. Type of Option

The option is a European-style option cash settled on expiration day.

700102. **EXERCISE PRICES AND CHARACTERISTICS**

Transactions shall be conducted for option contracts as set forth in Rule 300.20.

700103. **DISCLAIMER**

See [NYMEX/COMEX Chapter iv. \("DISCLAIMERS"\)](#) incorporated herein by reference.

Exhibit B

**COMEX Rulebook
Chapter 5
("Trading Qualifications and Practices")**

Position Limits, Position Accountability and Reportable Level Table

(attached under separate cover)

Exhibit C

Exchange Fees

Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option (Commodity Code: LHO)

	Member	Non-Member
CME Globex	\$3.00	\$6.00
Block	\$4.00	\$7.00
EFR/EOO	\$4.00	\$7.00
Processing Fees	Member	Non-Member
Cash Settlement	\$4.00	\$7.00
Facilitation Fee		\$0.60
Give-Up Surcharge		\$0.05
Position Adjustment/Position Transfer		\$0.10

Cobalt Metal (Fastmarkets) Average Price Option (Commodity Code: COO)

	Member	Non-Member
CME Globex	\$4.00	\$8.00
Block	\$9.00	\$10.00
EFR/EOO	\$9.00	\$10.00
Processing Fees	Member	Non-Member
Cash Settlement	\$9.00	\$10.00
Facilitation Fee		\$0.60
Give-Up Surcharge		\$0.05
Position Adjustment/Position Transfer		\$0.10

Exhibit D

**COMEX Rulebook
Chapter 5
("Trading Qualifications and Practices")
COMEX Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table
(additions underscored)**

Instrument	Globex Symbol	Globex Non-Reviewable Ranges (NRR)
<u>Cobalt Metal (Fastmarkets) Average Price Option</u>	COO	The greater of the following: • <u>Delta multiplied by the underlying futures non-reviewable range</u> • <u>20% of premium up to ¼ of the underlying futures non-reviewable range</u> • <u>5 ticks</u>
<u>Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option</u>	LHO	The greater of the following: • <u>Delta multiplied by the underlying futures non-reviewable range</u> • <u>20% of premium up to ¼ of the underlying futures non-reviewable range</u> • <u>5 ticks</u>

Exhibit E

COMEX Rulebook Chapter 300 ("Option Contracts")

Rule 300.20.- Strike Price Listing and Exercise Procedure Table

Commodity Code	CME Globex Code	Product Name	Product Group	Product Subgroup	Exchange	Rulebook Chapter	Strike Price Listing Rule	Option Style	Contrary Instructions	Margin Style	Exact At-The-Money Characteristics	Underlying Commodity Code	Underlying Product Name
COO	COO	Cobalt Metal (Fastmarkets) Average Price Option	Metals	Battery	COMEX	690	Minimum at-the-money strike at \$0.25 per pound increment plus dynamic strikes at \$0.25 per pound increment.	European	N/A - Financially Settled	Equity	N/A - Financially Settled	COB	Cobalt Metal (Fastmarkets) Futures
LHO	LHO	Lithium Hydroxide CIF CJK (Fastmarkets) Average Price Option	Metals	Battery	COMEX	700	Minimum at-the-money strike at \$0.25 per kilogram increment plus dynamic strikes at \$0.25 per kilogram increment.	European	N/A - Financially Settled	Equity	N/A - Financially Settled	LTH	Lithium Hydroxide CIF CJK (Fastmarkets) Futures

Exhibit F

Cash Market Overview and Analysis of Deliverable Supply

CASH MARKET OVERVIEW

In its cash market and deliverable supply analysis, the Exchange has incorporated data from a range of sources as described below.

Fastmarkets (“FM”) is a leading global provider of price information for metals, agriculture and forestry products. FM’s assessment methodologies for the futures contracts are available on its website¹ (under product code MB-LI-0033 for lithium and MB-CO-0005 for cobalt). CME Group Inc. (parent company of COMEX) is a party to license agreements with FM to utilize its pricing data for final settlement of the contracts.

The United States Geological Survey (“USGS”) is a scientific public agency in the United States. It is tasked with studying the landscape of the United States, its natural resources, and the natural hazards that threaten it.

The **UN Comtrade Database (“Comtrade”)** provides free access to detailed global trade data. Comtrade is a data repository of official trade statistics and relevant analytical tables. It contains annual trade statistics starting from 1962 and monthly trade statistics since 2010.

Final settlement of the underlying lithium futures contract is based on the monthly average of all price assessments for “Lithium hydroxide monohydrate 56.5% LiOH.H₂O min, battery grade, spot price cif China, Japan & Korea, \$/kg” price assessment published by FM. The methodology refers to battery grade lithium hydroxide monohydrate delivered CIF in China, Japan or South Korea. The quantity required for assessment inclusion is 5 metric tonnes minimum. The denomination is \$/kg. The assessment is published daily.

Final settlement of the underlying cobalt futures contract is based on the monthly average of all daily price assessments for FM “Cobalt standard grade, in-whs Rotterdam, \$/lb.” The methodology refers to cobalt metal with a quality of minimum 99.8% cobalt metal content and matching the standard specifications of the following brands in original packaging: Katanga cathodes, Chambishi broken cathodes, CTT broken cathodes, Minara briquettes, Ambatovy briquettes, Norilsk grade 1 and grade 2 cut cathodes (production since January 2019), Sherritt, Vale Long Harbour standard grade. The quantity required for inclusion is minimum 1 metric tonne, maximum 100 metric tonnes and the location is in-warehouse, Rotterdam. The denomination is \$/lb. The assessment is provided daily.

¹ <https://www.fastmarkets.com/methodology/metals/lithium>
<https://www.fastmarkets.com/methodology/metals/cobalt>

CASH MARKET OVERVIEW - LITHIUM

Lithium is a metal that is widely used in industrial applications, notably in battery manufacturing. Lithium mining comes in two main forms: the metal can be produced from spodumene (lithium-containing rock) or brine. After extraction, lithium raw materials are refined into lithium carbonate or lithium hydroxide. According to the USGS, end-user markets for refined lithium were batteries (80%); ceramics and glass (7%); lubricating greases (4%); continuous casting mold flux powders (2%); air treatment (1%); medical (1%); and other uses (5%).² The global lithium industry is concentrated in Asia, which accounts for most of the global refining and battery manufacturing capacity. Major producing countries include Australia, Chile and China (Table 1). As a key material for lithium-ion batteries used in electric vehicles (EVs), market analysts expect that the global lithium industry will grow significantly over the coming decade(s) – FM stated that global lithium production must quadruple from 2020 to 2030 in order to meet growing demand.³

Table 1 – Global Lithium Production (source: USGS⁴)

Metric tonnes contained lithium	2020	2021	2022 (estimate)
Argentina	5,900	5,970	6,200
Australia	39,700	55,300	61,000
Brazil	1,420	1,700	2,200
Canada	0	0	500
Chile	21,500	28,300	39,000
China	13,300	14,000	19,000
Portugal	348	900	600
Zimbabwe	417	710	800
Total (rounded)	82,500	107,000	130,000

Table 2 shows that an average of 92,482 metric tonnes of lithium hydroxide was imported into North Asia during the past three years for which data is available.

² <https://pubs.usgs.gov/periodicals/mcs2023/mcs2023-lithium.pdf>

³ <https://www.fastmarkets.com/article/3999803/lithium-supply-and-demand-to-2030>

⁴ <https://pubs.usgs.gov/periodicals/mcs2023/mcs2023-lithium.pdf>;

<https://pubs.usgs.gov/periodicals/mcs2022/mcs2022-lithium.pdf>; please note that the USGS withheld production data for the United States to avoid disclosing company proprietary data

Table 2 – Lithium Hydroxide– imports into North Asia⁵

Imports - Metric tonnes	2020	2021	2022	Average 2020-2022
China	527	3,600	3,088	2,405
Japan	37,339	33,876	35,543	35,586
Rep. of Korea	36,189	53,745	70,907	53,614
Total	74,054	91,221	109,538	91,605

Note: Japan import data for 2020 was not available and was assumed to be equal to 2019.

Lithium hydroxide is traded both in the spot and term markets. Term contracts are using fixed price or a “formula pricing,” meaning a floating price component that may include customs data and/or price indexation. Term contracts typically allow to freely re-trade contracted volume.

⁵ 2020 data under <https://wits.worldbank.org/trade/comtrade/en/country/ALL/year/2020/tradeflow/Imports/partner/WLD/product/282520>, 2021 data under <https://wits.worldbank.org/trade/comtrade/en/country/ALL/year/2021/tradeflow/Imports/partner/WLD/product/282520>, 2022 data under <https://wits.worldbank.org/trade/comtrade/en/country/ALL/year/2022/tradeflow/Imports/partner/WLD/product/282520>

CASH MARKET OVERVIEW - COBALT

Cobalt is a ferromagnetic metal found in the earth's crust. It is typically mined as a by-product of copper and nickel mining operations. The Democratic Republic of Congo (DRC) is the world's largest producer of cobalt. According to the USGS, it produced 68% of the global total in 2022.

Table 1 – Global cobalt production (source: USGS⁶)

Mine production (metric tonnes)	2020	2021	2022 (estimate)
United States	600	650	800
Australia	5,630	5,295	5,900
Canada	3,690	4,361	3,900
China	2,200	2,200	2,200
Congo (Kinshasa)	98,000	119,000	130,000
Cuba	3,800	4,000	3,800
Indonesia	1,100	2,700	10,000
Madagascar	850	2,800	3,000
Morocco	2,300	2,300	2,300
Papua New Guinea	2,940	2,953	3,000
Philippines	4,500	3,600	3,800
Russia	9,000	8,000	8,900
Turkey	-	2,400	2,700
Other Countries	7,640	4,567	5,200
World Total (rounded)	142,000	165,000	190,000

Cobalt is used in many applications, among which are: use of cobalt in alloys (for aerospace, gas turbines, medical equipment, etc.), lithium-ion batteries, various electronics (integrated circuits, semi-conductors) and catalysts. Since cobalt is a key component in battery manufacturing, it is expected that growth in electric vehicle usage will translate into increased demand for cobalt in the coming years.

The cobalt brands currently allowed in the FM assessment are mined and refined in the following regions and by the following firms:

Table 2 – Cobalt brands used in assessment (source: Fastmarkets)

Name	Location	Ownership
Katanga cathodes	Katanga Province, DRC	Katanga Mining/ Glencore
Chambishi broken cathodes	Kitwe, Zambia	Eurasian Resources Group
CTT broken cathodes	Bou-Azzer mine, Morocco	Managem Group
Minara briquettes	Perth, Australia	Glencore
Ambatovy briquettes	Moramanga, Madagascar	Sumitomo
Norilsk grade 1 and 2 cut cathodes	Norilsk, Russia	Nornickel
Sherritt Briquettes	Cuba/Canada ⁷	Sherritt Corporation

⁶ <https://pubs.usgs.gov/periodicals/mcs2023/mcs2023-cobalt.pdf>, <https://pubs.usgs.gov/periodicals/mcs2022/mcs2022-cobalt.pdf>

⁷ Sherritt briquettes are refined in Alberta province, Canada, from material mined and processed in Moa, Cuba.

Vale Long Harbour standard grade Long Harbour, Canada Vale

Based on publicly available annual reports, the Exchange determined annual production volume for the locations producing the assessed brands as follows. Overall, the locations account for about 1/5 of global cobalt production.

Table 3 – Production volumes of assessed brands (source: company reports)

Production ('000 MT)	2020	2021	2022	2020-2022 average
Katanga cathodes	23.9	23.8	25.5	24.4
Chambishi broken cathodes*	3.4	3.4	3.4	3.4
CTT broken cathodes**	2.4	1.8	1.8	2.0
Minara briquettes	2.9	2.5	3.0	2.8
Ambatovy briquettes***	2.8	2.8	2.8	2.8
Norilsk grade 1 and grade 2 cut cathodes****	6.0	5.0	5.0	5.3
Sherritt	3.4	3.5	3.4	3.4
Vale *****	2.5	2.5	2.4	2.5
Total	47.3	45.3	47.3	46.6

Notes:

* Production data for Chambishi was not available. The Chambishi refinery has an annual capacity of 6,800 tonnes/ year. We assumed that it was producing at 50% of capacity.

** 2022 data for CTT not available, assumed same production as prior year

*** Production data for Ambatovy was not available. The Ambatovy refinery has an annual capacity of 5,600 tonnes/ year. We assumed that it was producing at 50% of capacity.

**** 2022 data for Norilsk not available, assumed same production as prior year

***** Vale does not break down production by standard grade/ alloy grade. We assumed a 50% is standard grade

For links to company reports see appendix below.

Physical trade in cobalt takes place throughout a complex supply chain involving producers, refiners, merchants, and end-users. Cobalt is traded in the spot market as well as using floating index prices or on a fixed price basis for term contracts. Term contracts typically allow to freely re-trade contracted volume.

The growth in electric vehicle manufacturing has led to higher demand for cobalt sulfate, the cobalt intermediate product used in lithium-ion batteries. Cobalt sulfate can be manufactured from cobalt metal but is typically refined directly from cobalt intermediate products such as cobalt hydroxide. Since cobalt metal is consumed in traditional industrial applications and can also find its way in lithium-ion batteries via chemical conversion, it serves as the benchmark price in both sectors. Intermediate products in the cobalt supply chain are priced with reference to the price of cobalt metal on a “percent payable basis.”

ANALYSIS OF DELIVERABLE SUPPLY

Appendix C to part 38 of the Commission's regulations defines deliverable supply as "the quantity of the commodity meeting the contract's delivery specifications that can reasonably be expected to be readily available to short traders and saleable by long traders at its market value in normal cash marketing channels at the derivative contract's delivery points during the specified delivery period, barring abnormal movement in interstate commerce."

The Exchange is assessing spot month position limits for the lithium contract based on Comtrade import data for lithium hydroxide into China, Japan and Republic of Korea. Average annual import volume into the three countries represents 91,605 metric tonnes (MT) annually for the 2020-2022 period, equivalent to 7,634 MT per month (7,634 contracts equivalent). The Exchange proposes a spot month position limit of 400 contracts, equivalent to 5.2% of deliverable supply.

The Exchange is assessing spot month limits for the cobalt contract based on production data for the mines whose brands are eligible for inclusion in the underlying FM market assessment. Deliverable supply is defined as the average annual production volumes of 46,600 MT, equivalent to 3,900 MT per month (3,900 contracts equivalent per month). The Exchange proposes a spot month position limit of 800 contracts, equivalent to 20.50% of deliverable supply.

Appendix – company reports for production volumes

Glencore

https://www.glencore.com/dam/jcr:e43e5f94-6484-4332-9f09-e3601aafb44f/GLEN_2022-FY_ProductionReport.pdf

https://www.glencore.com/dam/jcr:90d4d8f9-a85e-42ec-ad8a-b75b657f55d2/GLEN_2021-full-year_ProductionReport.pdf

Chambishi

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