

Fastmarkets Benchmark Administration Oy (FBA) Cobalt standard grade, in-whs Rotterdam Benchmark Statement

Last updated: March 2021

1. General disclosures	
Benchmark name	Fastmarkets Cobalt standard grade, in-warehouse (in-whs) Rotterdam, \$/tonne
Date of initial publication	11 th March 2021
Date of last update	11 th March 2021
ISIN (where available)	This Benchmark does not have an ISIN code at the time of publication of this Statement
Determination by contributions of input data	The Benchmark is determined using contributions of input data from a range of market participants within the aluminium market, including producers, industrial consumers and traders.
Qualification of the benchmark	This benchmark is a commodity benchmark as per the definition set out in Article 3(1)(23) of Regulation (EU) 2016/1011. Pursuant to Article 19(1), it falls under the Annex II of the Regulation.
EU Climate Transition Benchmarks/Paris-aligned benchmarks/ESG objectives ((EU) 2019/2089)	Fastmarkets ¹ provides a wide number of commodity price assessments and indices. These do not include any EU Climate Transition Benchmark, EU Paris-aligned Benchmark or Benchmarks that pursue the EU ESG objectives. Accordingly, this benchmark does not pursue ESG objectives and is not an EU Climate Transition Benchmark or EU Paris-aligned benchmark.
2. Key terms relating to the benchmark or family of benchmarks	
General description of the market or economic reality	<p>The Fastmarkets Cobalt standard grade, in-whs Rotterdam price is a daily assessment range for the tradeable low-high levels of spot min 99.8% cobalt metal, on an in-warehouse Rotterdam delivery basis (min 1 tonne, max 100 tonnes). Data inputs from sellers and buyers of cobalt include actual deals, bids and offers, and contributors' own assessment of the market, with deals given the most weighting.</p> <p>The cobalt assessment is reported as a range, which reflects where the bulk of the business has been or is likely to have been concluded over the quotation period.</p> <p>This Benchmark has been designed to meet the requirements of the financial market, as well as the physical market. The Cobalt standard grade price assessment is used as settlement price by global exchanges, including the London Metal Exchange and the Chicago Mercantile Exchange.</p>
Geographical boundaries of the market or economic reality	Fastmarkets' standard cobalt price is a global benchmark used as a reference for cobalt metal business as well as raw materials such as hydroxide. Rotterdam, which trades are included in the assessment, is the main trading hub for cobalt metal.

¹ See the 'About Fastmarkets' section at the end of the statement for information on Fastmarkets.

	<p>Data reported for other smaller trading hubs such as Baltimore may be included if and when they can be normalised to reflect the tradeable level in Rotterdam by collecting freight netbacks from market participants.</p> <p>Contributors include producers and industrial users as well as traders and banks. The global cobalt market is estimated at around 120,000 tonnes, including 40,000 tonnes for metals and 30,000 tonnes specifically in Europe. About 15% change hands on the spot market, while the remaining 85% trade on long-term contracts - these contracts are mostly index-based referencing the Fastmarkets price.</p>
<p>Other relevant information relating to the market or economic reality</p>	<p>Fastmarkets accepts a number of minimum 99.8% cobalt metal brands in their original packaging in its price assessment. These are Katanga cathodes, Chambishi broken cathodes, CTT broken cathodes, Minara briquettes, Ambatovy briquettes, Norilsk grade 1 and grade 2 cut cathodes (production since January 2019).</p> <p>Fastmarkets began daily publication of its standard grade cobalt price assessments in February 2020, following a formal consultation in October and November 2019. Prices were published twice a week until that time.</p>
<p>3. Potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable</p>	
<p>Circumstances in which Fastmarkets would lack enough input data to determine the benchmark according to the methodology</p>	<p>The frequency of publication of the Cobalt standard grade price, in-whs Rotterdam - every weekday - was determined after considering the number of input data that Fastmarkets can reasonably expect to collect on a consistent basis over the selected period to support the price assessment process, ensuring that the Benchmark can be determined on each pricing day and is a reliable indicator for the physical market it relates to.</p> <p>In order to provide a representative price for the market, Fastmarkets' price reporters aim to collect as many representative data points as possible within the defined collection window.</p> <p>Because commodity markets differ in liquidity level at different periods, Fastmarkets typically does not set a minimum number, or threshold, of price points to be gathered on which to base the assessment.</p> <p>A pricing session typically includes concluded transactions, bids and offers, contributors' market indications or deals heard. Several separate sources from a cross section of the market (producers, consumers, traders) will typically contribute to a price assessment and Fastmarkets ensures that there is no key submitter dependency.</p> <p>This means one contributor cannot account for a significant proportion of the data, defined as 50% or more of the six data points collected during a pricing session. Should 50% or more of the data on which to base the assessment be provided by a single source,</p>

	<p>the price reporter would continue to collect data points from market participants until the minimum threshold is reached.</p> <p>Fastmarkets cannot guarantee a minimum threshold for actual transactions as markets naturally vary in liquidity, but every effort is made to collect as many transactions as possible.</p>
<p>Circumstances in which the degree of liquidity of the underlying market becomes insufficient to ensure the integrity and reliability of the benchmark determination</p>	<p>Fastmarkets aims to engage a broad and balanced range of physical market participants in the provision of data, including producers, consumers and traders who are selling or buying standard cobalt metal.</p> <p>A pricing session typically includes concluded transactions, bids and offers, contributors' market indications or deals heard. Several separate sources from a cross section of the market (producers, consumers, traders) will typically contribute to a price assessment and Fastmarkets ensures that there is no key submitter dependency.</p> <p>When no actual transactions can be collected, extra caution is applied during the price assessment process. Price reporters are encouraged to keep the price unchanged until actual transactions back up a change. However, should bids, offers and estimates fall outside the existing price range, price reporters can move the price to reflect the levels where business would take place if transactions were to actually take place</p> <p>Any market participant actively involved in the physical cobalt spot market may become a data contributor following a review by Fastmarkets of its activities. The aim is to ensure that submitters have sufficient visibility and understanding of the market to be able to provide reliable price data.</p>
<p>4. The controls and rules that govern the exercise of judgment or discretion in the calculation of the benchmark or family of benchmarks</p>	
<p>Description of the exercise of judgement or discretion in the calculation of a benchmark</p>	<p>Fastmarkets price reporters are required to adhere to Fastmarkets' Code of Conduct and published methodologies². They are trained to record every step of each pricing session within Fastmarkets' Markets Information Database (MInD), which enforces strict pricing procedures, peer review checks, security of data, consistency and accountability.</p> <p>Fastmarkets does not treat all collected input data equally, but has a publically available justification and rationale for how each piece of information obtained has been used. Greater weighting is given to actual concluded transaction data, but other data is also used: bids and offers are second behind transactions in order of importance, followed by deals indirectly reported to Fastmarkets (referred to as deals heard) and lastly by data sources' own indications of the market when they have no business to report.</p> <p>As a general rule, larger deals carry more weight but</p>

² See <https://www.fastmarkets.com/benchmark-admin> for more details.

	<p>Fastmarkets MB tries and ascertains what sort of discount a large lot size carries or what sort of premium a smaller deal would carry.</p> <p>Other considerations might also intervene in the price assessment such as, the trustworthiness of a data source based on past data submissions, or their willingness to provide data on a consistent basis.</p> <p>Fastmarkets may use its expert judgment to exclude input data that is not fairly presented or is believed to be questionable, unreliable or an attempt to distort the price calculation. The exercise of judgement requires senior editorial approval and a detailed justification that is published in the daily pricing rationale and/or market commentary.</p> <p>Outliers will be investigated and suspected attempts to unfairly influence the index may result in the data submitter being warned or excluded from the pricing process.</p> <p>Fastmarkets will compare the information received from a single source with the information provided by the same source in the previous pricing cycle. This way, if a source consistently gives low or high numbers, Fastmarkets can still use the data without it unduly influencing its assessment.</p> <p>Occasionally, Fastmarkets receives price data for material with different specifications – for instance, different material quality, delivery terms or delivery location, different cargo size or payment terms. In such cases, when appropriate, Fastmarkets normalises data to its typical specifications.</p>
<p>Controls governing the exercise of judgement or discretion</p>	<p>In exercising expert judgment, Fastmarkets price reporters must consider the following guidelines:</p> <ul style="list-style-type: none"> • Is the information received credible? If questionable: have they seen signed contracts (preferable), or has it been confirmed on both sides of the deal? • If credible: were all the prices in a similar range? Were all the deals reported of a similar size? • Do the reported deals all have the same terms and specifications? • Did all the sources indicate the market was headed in the same direction? If not, why not? • It is not unusual for different sources to report slightly different numbers but it is important, as far as possible, to understand why they are different. • In the absence of trade, what are the prevailing bids/offers in the market? Did the source provide firm bids/offers or indicative numbers? • What are the positions of the contributors? • Are they confident about the freight or free-on-charge costs? • Has an adequate sample been obtained that correctly represents the market?

<p>Ex-post evaluation process</p>	<p>All prices are subject to peer review and are signed off by a senior member of Fastmarkets’ editorial or index teams prior to publication. This peer-review process is in place to make sure that pricing procedures and methodologies are correctly and consistently applied and to ensure integrity and quality of the published prices. Full details of data inputs and calculations are stored in Fastmarkets’ MInD database and may be accessed at any time for internal review and auditing purposes.</p> <p>To enhance market transparency and to provide evidence of data inputs that support the price discovery process, Fastmarkets publishes trade logs for its cobalt price assessment, while maintaining full counterparty confidentiality, pricing data and volume received from data contributors.</p> <p>Fastmarkets’ compliance team performs ex-post ad-hoc internal audits to ensure adherence to the methodologies and the Compliance Manual and reports its findings to FBA and its oversight committee at least on a quarterly basis. Any suspicion of breach of the pricing procedures is investigated and a correction notice is promptly issued to market participants if and when necessary. Any complaint related to Fastmarkets’ assessments and indices will be investigated.</p> <p>Fastmarkets’ benchmarks are also externally and independently audited once a year for their compliance with the International Organisation of Securities Commissions (IOSCO) Principles for Price Reporting Agencies.</p>
<p>5. Review of the methodology and changes to, or cessation of the benchmark or family of benchmarks</p>	
<p>Methodology review</p>	<p>Since markets evolve continually, it may become necessary to make changes to a benchmark’s methodology or specifications. Fastmarkets carries out a formal review of its methodologies at least on an annual basis to ensure that they reliably meet industry needs and reflect the physical market under assessment.</p> <p>The process starts with an open consultation when editorial teams may propose changes to the methodology to reflect changed market conditions and invite market participants to share feedback or propose changes.</p> <p>At the end of the consultation, the editorial teams review any feedback received, decide on whether further consultation is needed or whether a change should be made.</p> <p>Any proposed change to the methodology requires approval by a senior member of Fastmarkets’ editorial team and by the Managing Director of FBA. Any material change to the methodology requires approval by the Board of Directors of FBA.</p>

	<p>The decision is announced via a pricing notice that clearly outlines the rationale for the change, the feedback received (unless stated as confidential) and the timeline for its implementation. Fastmarkets will provide ample notice to give stakeholders sufficient opportunity to analyse and comment on the impact of any proposed changes.</p>
<p>Changes to or cessation of a benchmark or family of benchmarks</p>	<p>It is possible that factors, including external factors beyond Fastmarkets' control, could necessitate changes to, or in extremis the cessation of, a Fastmarkets benchmark or family of benchmarks. It is also possible that changes to or the cessation of a Fastmarkets benchmark or family of benchmarks may have an impact upon the financial instruments that reference them.</p> <p>Fastmarkets makes all reasonable efforts to maintain the highest standards of accuracy in its published benchmarks. Where errors are detected, these will be corrected as promptly as reasonably possible, with notification being provided to users and subscribers at the earliest opportunity via a pricing notice.</p> <p>When proposing to discontinue a benchmark, Fastmarkets must have thoroughly reviewed the following considerations:</p> <ul style="list-style-type: none"> • <u>Assessment process and methodology</u>: Is the price still assessable or has the assessment become obsolete? Has it used the right specifications? How robust is the assessment/index? • <u>Market fundamentals</u>: Is there insufficient spot activity in the market? Does the product lack features of commoditisation? (spot assessments may have been premature). <p>FBA expects that in practice, a requirement to fully discontinue a benchmark is unlikely and a need to update the methodology is more likely.</p> <p>However, if Fastmarkets decided to go ahead with a proposal to terminate a benchmark, it would follow the same procedure set out for a proposal for a material change to the methodology. It would seek the views of the benchmark users via a consultation process and a notice that outlines the rationale for a discontinuation and presents a proposed timetable that would give users sufficient warning should the change go ahead.</p>
<p>6. Commodity benchmarks</p>	
<p>Qualification as a commodity benchmark</p>	<p>Fastmarkets benchmarks are commodity benchmarks</p>
<p>Title II or Annex II regime</p>	<p>Fastmarkets benchmarks meet the conditions specified in Article 19 of the EU Benchmarks Regulation to be subject to the requirements of Annex II for commodity benchmarks.</p>
<p>Criteria that defines the relevant underlying physical commodity</p>	<p>The Fastmarkets Cobalt price assessment, in-whs dup Rotterdam, represents the spot value of physically traded standard grade cobalt metal delivered in warehouses in Rotterdam.</p>
<p>Publication of information relating to commodity benchmark</p>	<p>Fastmarkets benchmark information and related calculations and assessment processes are published on Fastmarkets' relevant websites and platforms in the</p>

	form of pricing rationales, trade logs and market commentaries and the related methodologies are publicly available on the FBA webpage.
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Updates

This Benchmark Statement is published in accordance with Article 27 of the EU Benchmarks Regulation (Regulation (EU) 2016/1011). FBA will review it at least every two years and update it at any point if and when the information contained in the statement ceases to be correct or sufficiently precise, and including in any event in the following cases:

- (a) whenever there is a change in the type of the benchmark;
- (b) whenever there is a material change in the methodology used for determining the benchmark.

About Fastmarkets

Fastmarkets is a leading commodity price reporting agency (PRA) covering the metals, mining, minerals, forest products and agriculture industries. Its products and brands include Fastmarkets MB, AMM, RISI, FOEX, Random Lengths, AgriCensus and The Jacobsen. For more than 100 years it has provided assessments and indices of commodity prices as well as news, research and commentary on the underlying markets, to enable trading in the markets it operates.

Its mission is to meet the market's data requirements honestly and independently, acting with integrity and care to ensure that the trust and confidence placed in the reliability of its pricing methodologies is maintained. It does not have a vested interest in the markets on which it reports.

Contact us

For more information, including methodology please visit <https://www.fastmarkets.com/benchmark-admin> or contact us at info@fastmarketsbenchmarkadmin.com.