Shanghai Metals Market Price Assessment Methodology Shanghai 1#Copper cathode

SMM Shanghai 1#Copper cathode spot price Last consultation date: August 9, 2019 Expiry date: October 28, 2020 Date last updated: October 28, 2019

Catalogue

1. Guidelines to SMM price assessment methodology

2. Guidelines to SMM Shanghai 1#Copper cathode assessment

2.1 Definition

2.2 Introduction of price assessment

2.3 Source of raw price data

- 2.3.1 Collecting from price data submitters
- 2.3.1.1 Criteria for price data submitters
- 2.3.1.1.1 Criteria for smelters
- 2.3.1.1.2 Criteria for traders
- 2.3.1.1.3 Criteria for downstream users
- 2.3.1.2 Formation and adjustment of the price submitter list
- 2.3.1.3 Process of price data collection
- 2.3.2 Collecting price data from other submitters

2.4 Detailed formation process and related regulations

- 2.4.1 Data collection
- 2.4.2 Data normalisation
- 2.4.3 Information data analysis, verification and screening
- 2.4.4 Evaluation of published prices (calculation)
- 2.4.5 Special circumstances
- 2.4.6 Price publication
- 2.4.7 Modification of published prices

2.5 Review of key points

- 2.5.1 Product specification
- 2.5.2 Major brands and producers
- 2.5.3 Reference volume
- 2.5.4 Delivery
- 2.5.5 Payment terms
- 2.5.6 Delivery site
- 2.5.7 Unit
- 2.5.8 Form
- 2.5.9 Publication time

2.6 Price assessment process

2.7 Adjustment to the price assessment methodology

- 3. Historical data
- 4. Compliance with SMM Policies

1. Guidelines to SMM price assessment methodology

Shanghai Metals Market ("SMM") is an independent service provider that does not participate in trades. SMM is a market observer that engages buyers and sellers in the commodities market. By consulting with industry independent participants, SMM drafts the methodology, examines and revises it regularly based on the specifications and terms of trade that are generally used in the market, with equal weighting given to transactions that meet the standards. SMM reserves the right to exclude any unreliable or unrepresentative price data from its price assessment, in line with this methodology and other related Benchmark governance policies and procedures. SMM believes the processes and procedures documented in their Methodologies represent the most accurate way of representing the underlying economic reality of the markets each Benchmark seeks to measure.

SMM price assessments refer to metals spot prices or price indices of both the Chinese and overseas markets reported by SMM on a daily basis. All SMM prices are published according to a set of defined methodologies, indicating how the prices are accessed and reported. These methodologies are published on our website <u>www.metal.com</u> (English) or <u>www.smm.cn</u> (Chinese) or for all market participants to understand and refer to.

To reflect the actual trades in the spot market, SMM will update the methodology for SMM price assessments and publish all the revisions on our website <u>www.metal.com</u> (English) or <u>www.smm.cn</u> (Chinese) 28 days ahead of the changes. For queries or suggestions on the methodology, please contact SMM customer services (please find contact information on the SMM official websites). Please read this paragraph in conjunction with the SMM methodology review and changes policy, and the SMM Complaint Policy available at <u>www.metal.com</u> (English) or <u>www.smm.cn</u> (Chinese).

This document specifies the standards and management methods for the SMM Shanghai 1#copper cathode spot price assessment. These standards are formulated to establish a transparent and verifiable SMM price setting mechanism and provide market participants with an important pricing indicator.

To ensure that SMM Benchmarks and indices are constructed, maintained and operated to the highest standards, the administrator of the SMM Benchmarks – Shanghai Metal Markets ("SMM" or "the Administrator", herein known as "SMM") employs a robust governance framework to manage and approve new Benchmarks and also approve changes to the methodologies of existing Benchmarks.

The SMM Benchmark Management Committee ("the Committee") is responsible for all aspects of the design, management governance and calculation of the SMM Benchmarks, and is responsible for approving all policies and procedures relating to

the provision of the Benchmarks. The Committee will regularly - and no less frequently than annually - review the methodology and its evaluation and publication process. Additionally, the Committee will review the methodology and all other relevant policy and procedure documents in response to changes to market conditions or any aspect of the dynamics of the underlying market the Benchmarks seek to measure.

The Committee maintains oversight of the SMM Benchmark methodology and its compilation process, ensuring that SMM prices and indices reflect as closely as possible the objective conditions of physical markets of relevant commodities. The Committee will immediately point out any problem it finds, and propose external consultations and modifications to the existing methodologies or processes, in order to improve the quality of prices or indices published by SMM. The Committee can only propose changes to the methodologies and processes used in future Benchmark assessments, rather than modifying the already published prices or indices.

2. Guidelines to SMM Shanghai 1#copper cathode spot price assessment

2.1 Definition

The SMM Shanghai 1#copper cathode spot price is assessed and reported based on the methodology defined in this document. As an indicative price, it can be referred to by both parties of a Shanghai 1#copper cathode spot transaction for price settlement. The prices reflect the most tradable levels of spot Shanghai 1# copper cathode, exworks, at the time of publication on each complete trading day. The prices are assessed based on spot transactions that happened in Shanghai, deducting expenses including transportation costs, taxes, and capital costs.

2.2 Introduction of price assessment

SMM collects data information used to evaluate the spot price of Shanghai 1#copper cathode by means of standard acquisition (that is, the collection of raw data information that complies with the SMM Data Standards Policy), from certain price submitters. Collected data include the bids and offers from the buyer and seller that were not traded on the same day, and the actually traded price of spot transaction provided by the price submitters. The amount of each transaction that can be deemed as the standard 1#copper cathode quote or transaction in the price collection will be not less than 500 mt. Data collection, assessment (calculation) and daily management of SMM 1#copper cathode spot prices are conducted by SMM Shanghai 1# copper cathode operational team (consists of 2 price analysts and as a price manager).

SMM's objective is to collect price (or data) reflecting arm's length spot market activity. Types of data collected can include, but not limited to:

- Concluded transactions
- Firm bids that are available to the whole marketplace, with market accepted terms
- Firm offers that are available to the whole marketplace, with market accepted

terms

- Expressions of interest to trade, with market accepted terms
- Third party reports of transactions
- Any other data that may be relevant to SMM prices

The price published by SMM is intended to reflect the real transactable value of a commodity in a time point or period during the day. As such, where a confirmed deal is done for the same specification and loading range as confirmed bids and offers, and when all are declared to the market simultaneously, the deal will take precedence over the bids and offers. During the assessment process, we may consider other information. However, actual transactions, bids and offers will always take precedence.

Please read this paragraph with the SMM Benchmark Guidelines on Hierarchy of Data Inputs<u>available</u> at www.smm.cn.

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For full version of the Shanghai Metals Market DRAFT Price

Assessment Methodology –Shanghai 1#Copper cathode,

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