

7 June 2016

**MEDIA WORKSHOP**  
**INTRODUCTION TO THE LME**



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# Agenda

1 History, Purpose and Workings of the London Metal Exchange

2 LME Contracts and Prompt date structure

3 LME Warehousing and Reform

4 LMEshield

5 LME Liquidity Roadmap

6 Clearing

7 Conclusion



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# London Metal Exchange

From 1877 to today

The origins of LME goes back even further...

1. Origins in The Royal Exchange, London from **1571**
2. The Jerusalem Coffee House, Cornhill, London early **1800**
3. The London Metals and Mining Co. **1877** (*Initial metals: Copper and Tin*)

Originate from the need to formalise trading into one market place with:

- fixed trading times
- standard contracts specifications
- source of price 'discovery'



# The London Metal Exchange

**New contracts have been added to the initial Copper and Tin, over the past ~100 years**

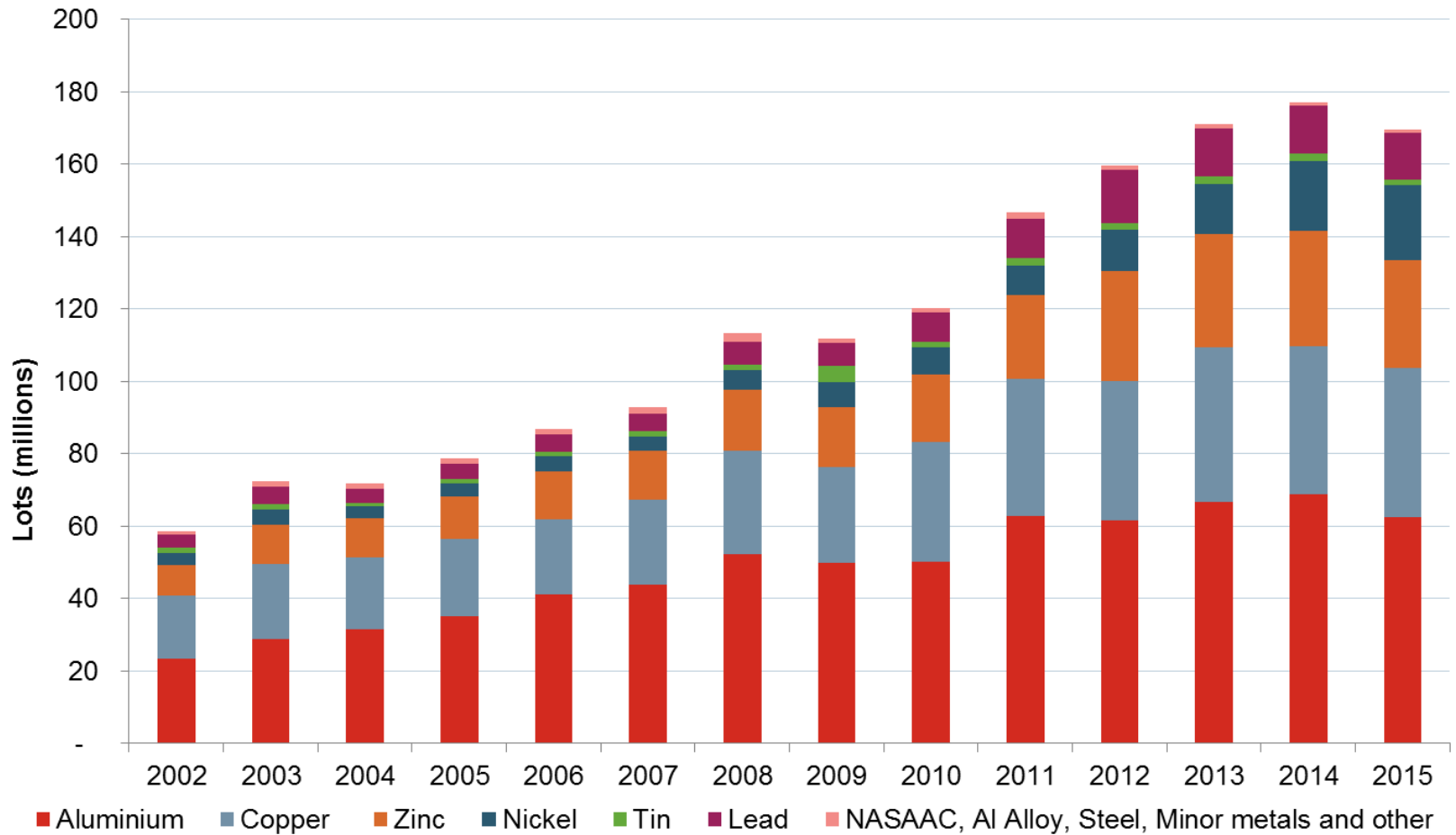


Each year, the exchange reviews its contracts and looks to launch new products to meet the needs of the industry.



# LME Volumes 2002 - 2015

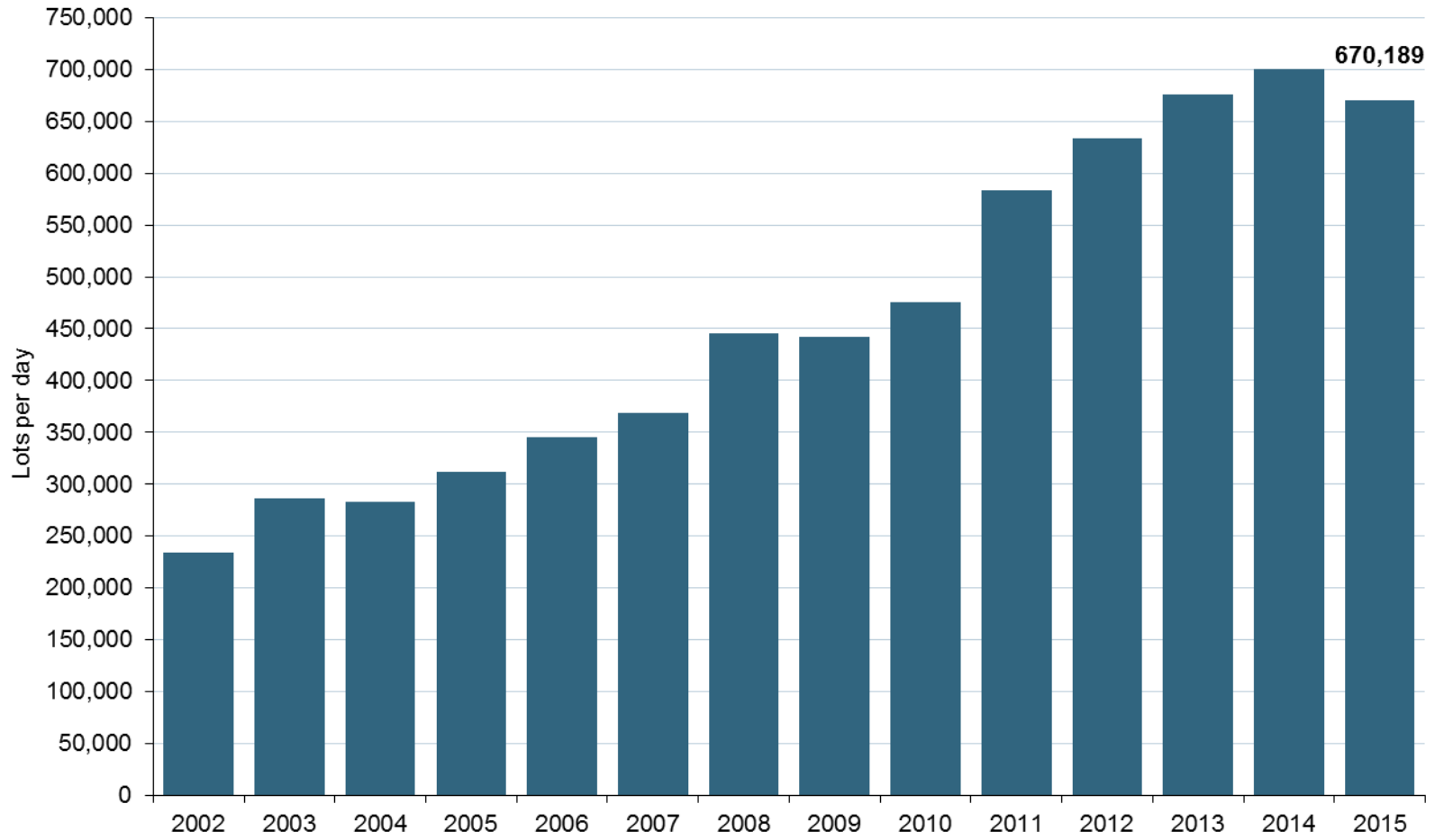
In 2015, 169.6 million lots, down 4.3% from 2014, \$11.9 trillion and 3.8 billion tonnes





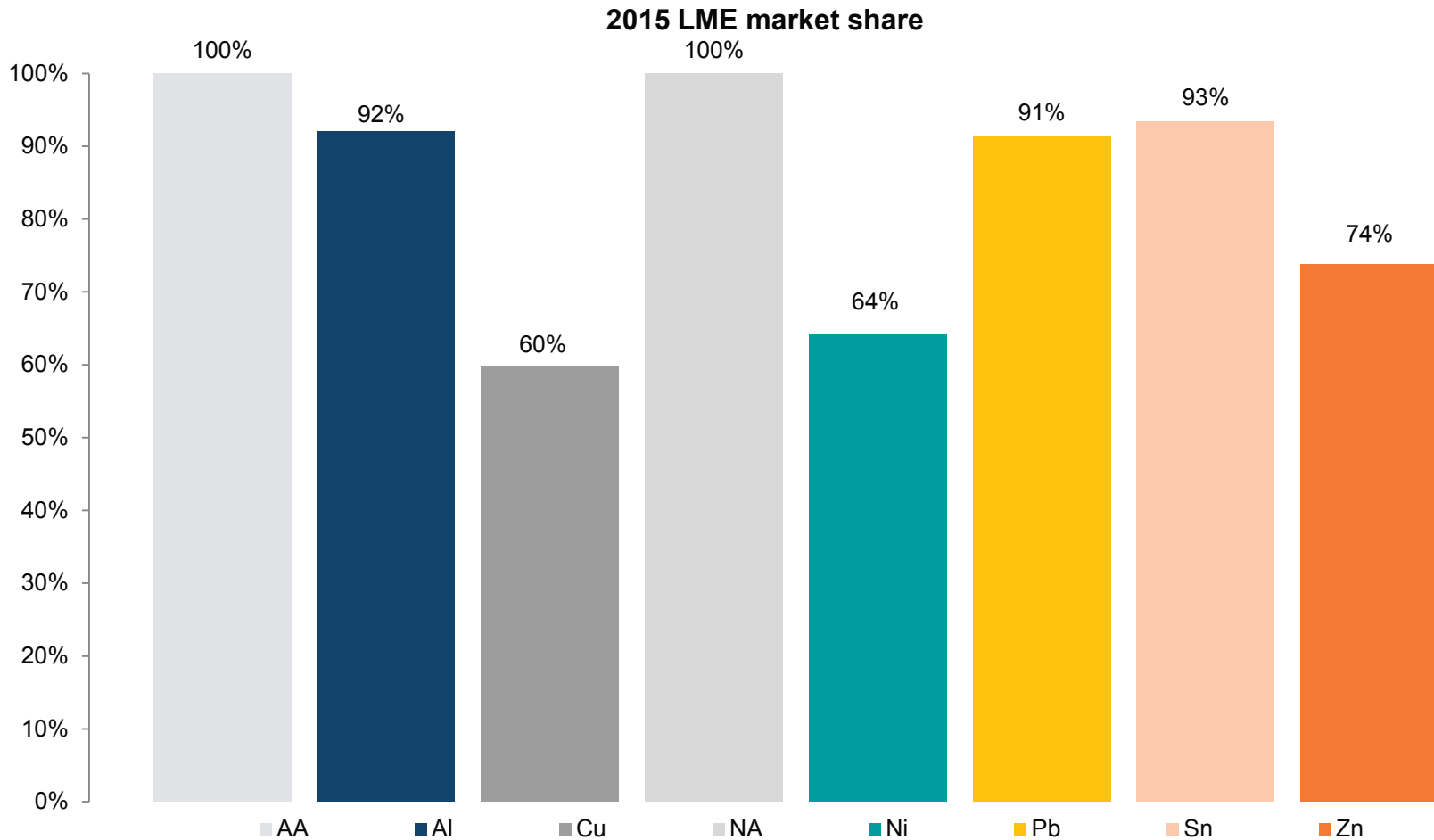
# LME Average Daily Turnover

670,189 lots on average per day in 2015



# The LME is the leading metal exchange

LME Share of exchange metal traded

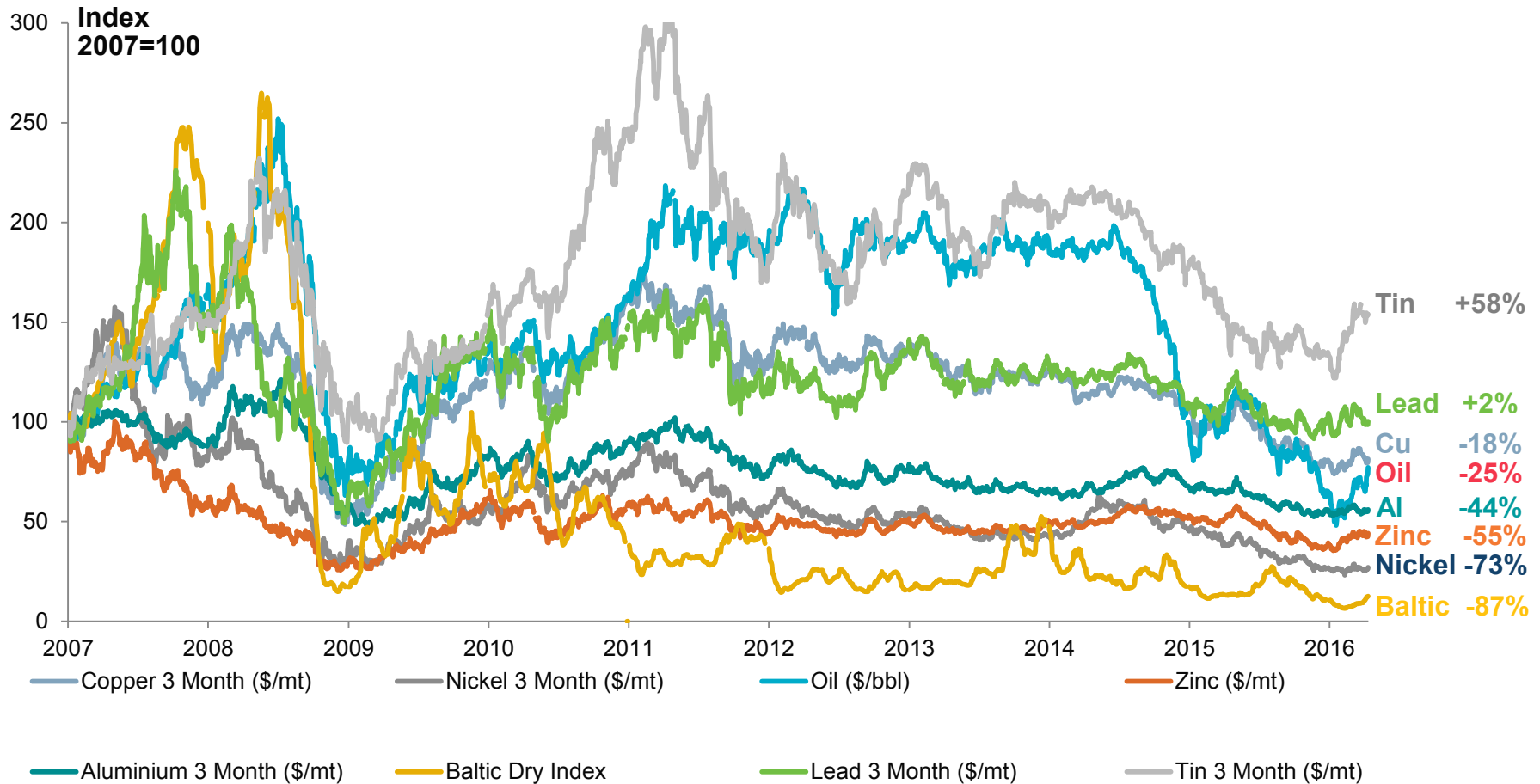




# Global commodity markets are down

Only Tin is up since 2007 whilst lead is flat

Losses as much as 72% Nickel and 87% Baltic Dry Index

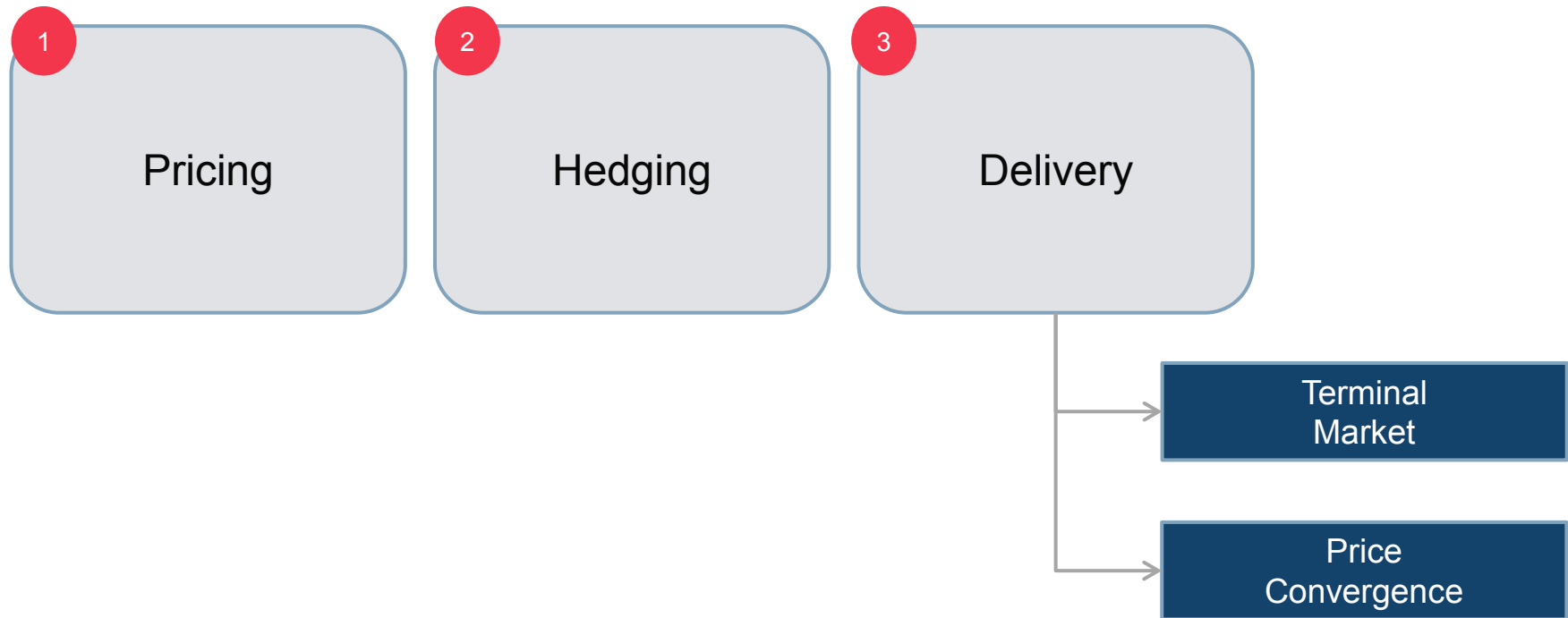


Data as of 14 April 2016  
Source: LME, Bloomberg

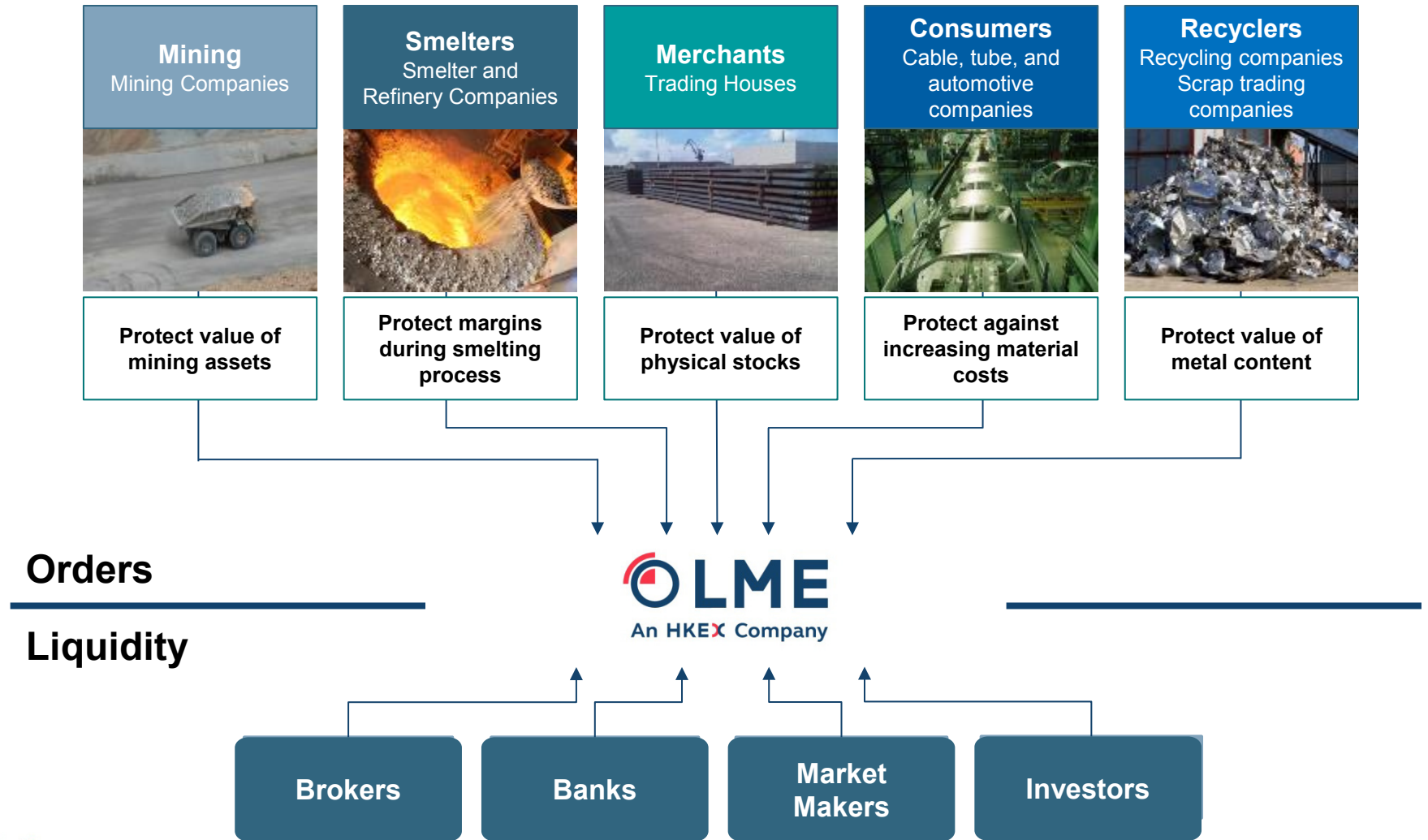




# Primary services of the LME



# A diverse marketplace



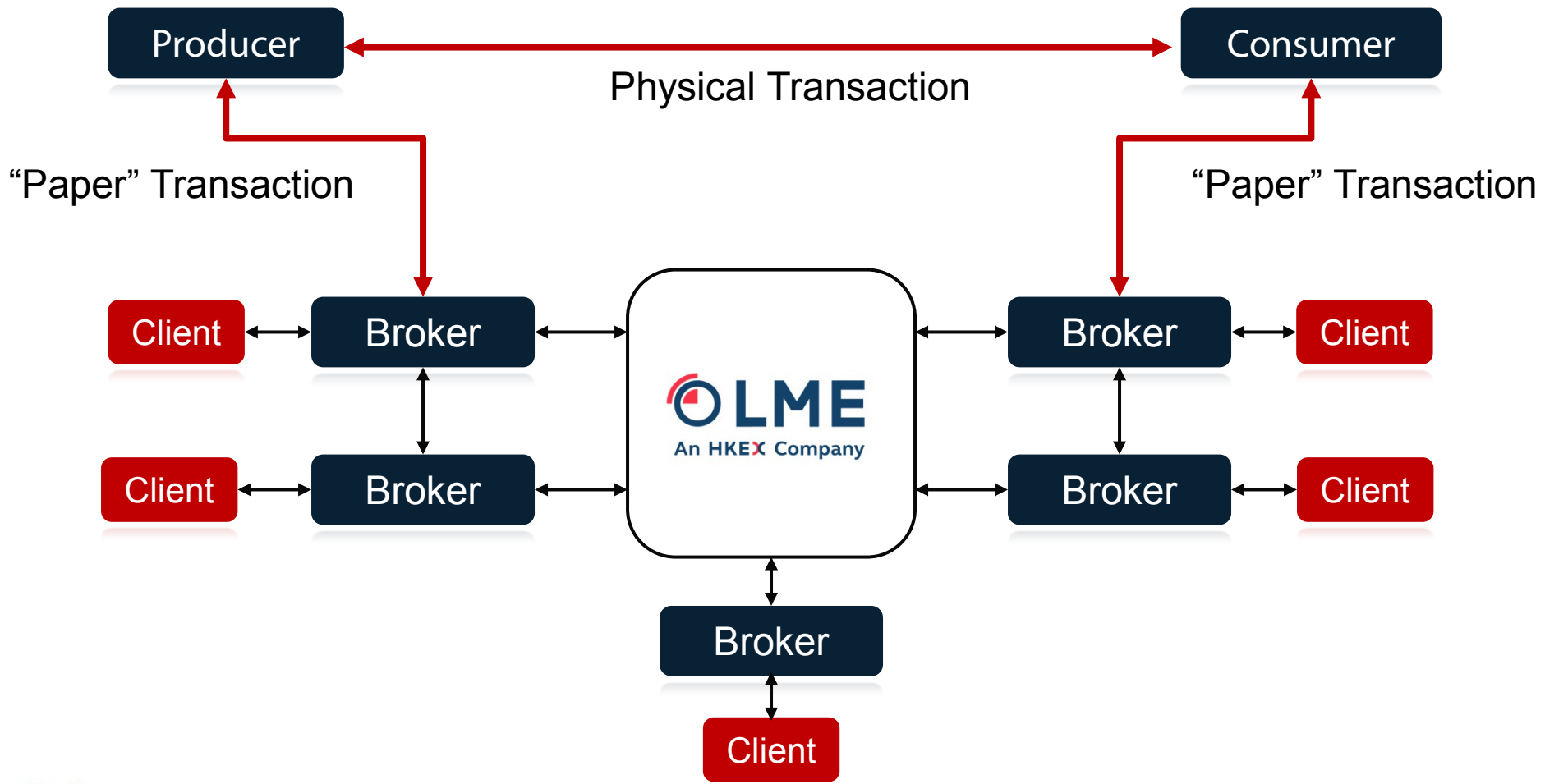
# Hedger vs. Financial Player

A **Hedger** starts **with** a price exposure, buys or sells futures contracts, and therefore offsets the price exposure.

A **Financial Player** starts **without** price exposure, buys or sells futures contracts, and takes on price exposure



# The physical and paper market



# The Ring: global reference price

The home of global metals markets since 1877



1800s



2000s



1950s



1970s



# The LME today

Three venues providing execution choice



Ring



Inter-office



Select

~100 members, 43,000 customers



# LME traded and cleared currencies

## LME contracts trade in US Dollars

LME contracts can also be cleared in the following currencies:

- **Euro**
- **GB Sterling**
- **Japanese Yen**
- *And in RMB when it becomes a freely tradable currency*





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# The LME contract

## Multiple benefits to using LME contracts

### Clearing house guarantee

- Cleared contract holders are guaranteed financial settlement by LME Clear in the event of a counterparty default

### Transparent, reliable pricing

- Fully transparent electronic market
- Ability to participate in setting Official and Closing Prices

LME  
Contract

### Multiple Broker Execution

- Ability to execute through and hold positions with multiple brokers
- Wide range of competitive brokers

### Deepest liquidity

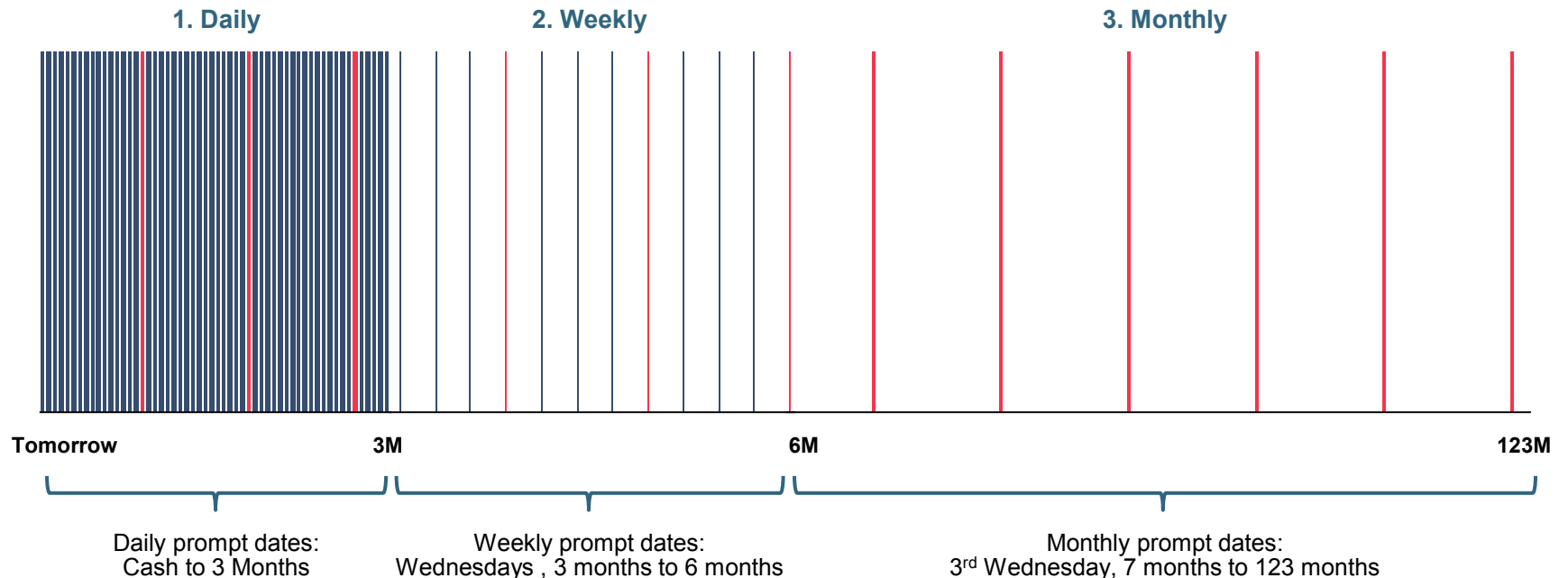
- All market interest comes together to form best market prices



# LME prompt date structure

The LME's prompt date structure runs daily for the first 3 months, then weekly until the end of the 6<sup>th</sup> month and then monthly out to 123 months, for Copper and Aluminium

Illustration of the three phases of the LME's prompt date structure



**3<sup>rd</sup> Wednesday (monthly) prompt dates are available in all months**

Trading horizon for other metals: Lead, Nickel and Zinc out to 63 months, Aluminium Alloy and NASAAC out to 27 months, Tin, Steel Billet, Cobalt and Molybdenum out to 15 months



# Rolling prompt dates

## Tom

Tomorrow's date

## Cash

Two business days from today (sometimes called '**Spot**')

## 3 months

3 calendar months from today

## Two day settlement

Contracts are closed two days prior to the prompt date and settled on the prompt date



# LME and OTC markets

## OTC

Customisation

Credit

Opacity

Counterparty risk

## LME

Standardisation

Credit

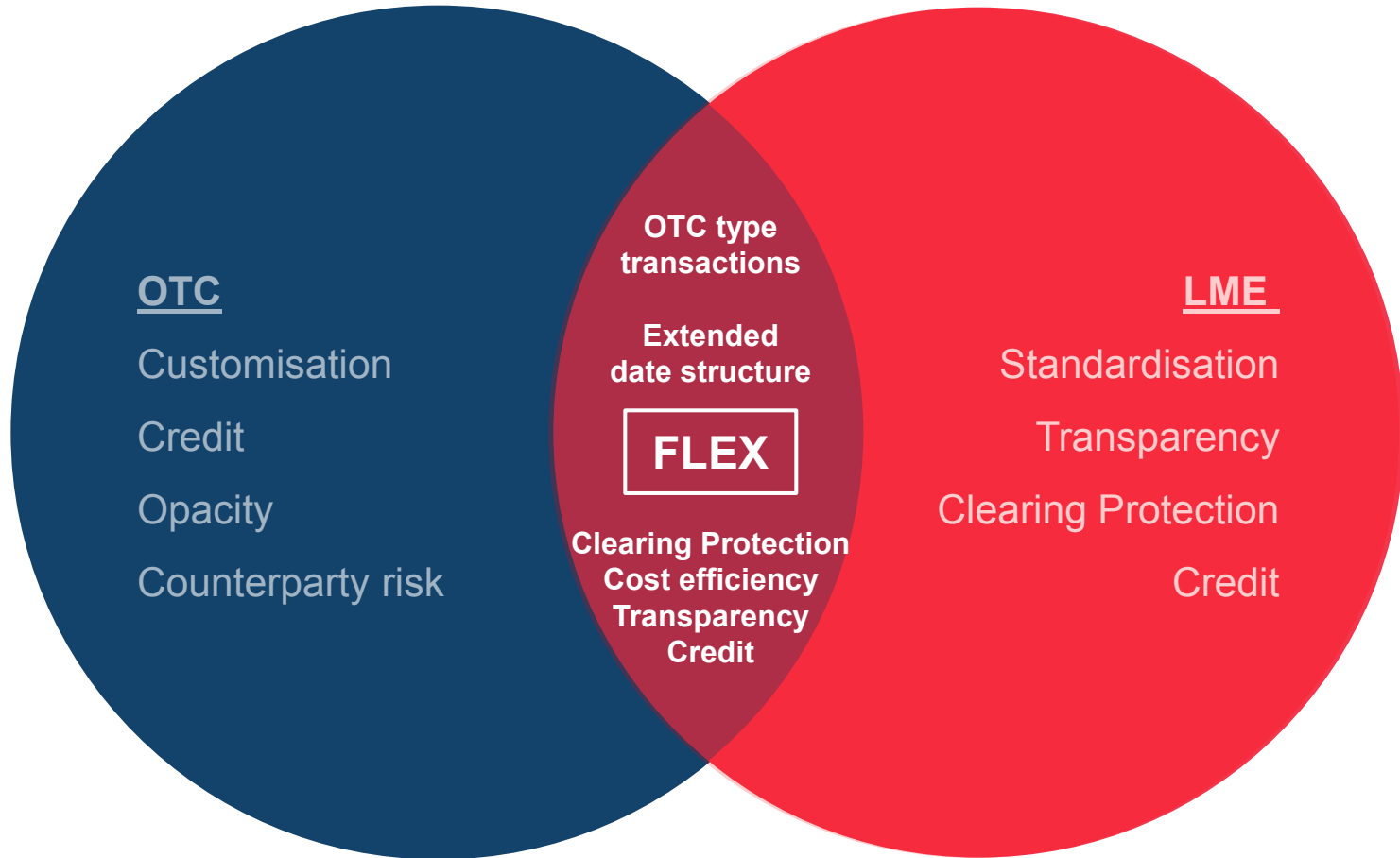
Transparency

Clearing Protection



# Introducing Flex...

Increased product flexibility with the benefits of exchange trading & clearing



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# Warehouse Locations

Over 650 warehouses approved by the LME - 14 countries, 35 locations & LME Shield with MOU to develop along Belt and Road routes

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Antwerp, Belgium       | 10. Vlissingen, Netherlands |
| 2. Bremen, Germany        | 11. Barcelona, Spain        |
| 3. Hamburg, Germany       | 12. Bilbao, Spain           |
| 4. Genoa, Italy           | 13. Helsingborg, Sweden     |
| 5. Leghorn, Italy         | 14. Hull, UK                |
| 6. Ravenna, Italy         | 15. Liverpool, UK           |
| 7. Trieste, Italy         |                             |
| 8. Moerdijk, Netherlands  |                             |
| 9. Rotterdam, Netherlands |                             |

 Silk Road Economic Belt  
 Maritime Silk Road

1. Busan, South Korea
2. Gwangyang, South Korea
3. Incheon, South Korea

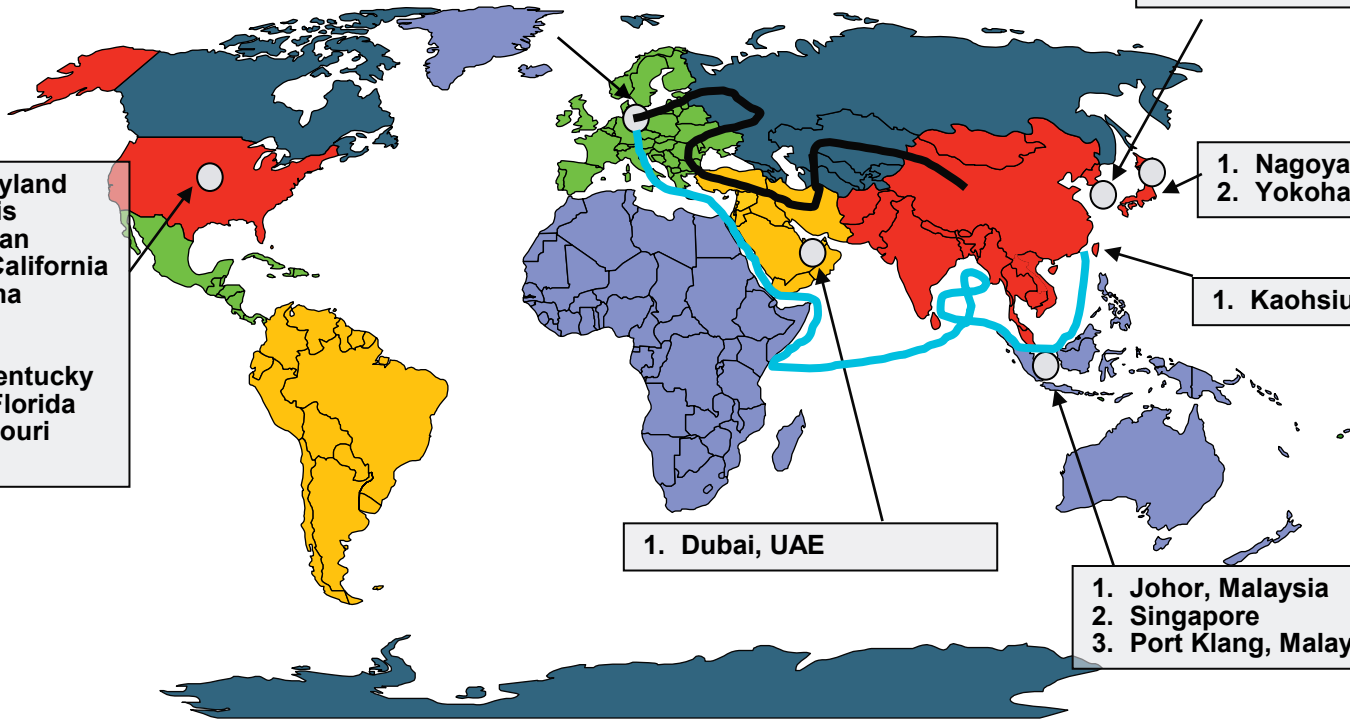
1. Nagoya, Japan
2. Yokohama, Japan

1. Kaohsiung, Taiwan

1. Dubai, UAE

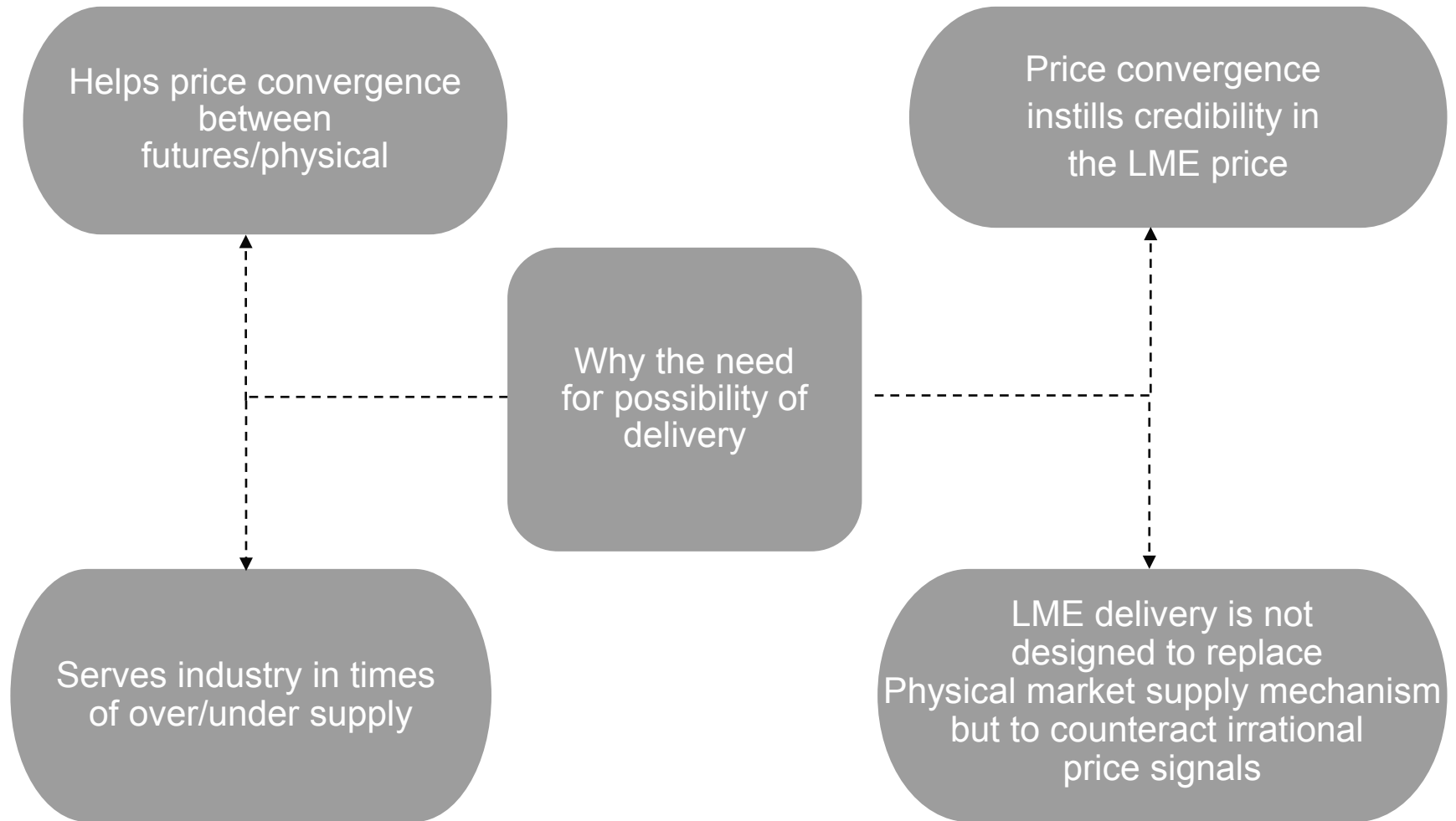
1. Johor, Malaysia
2. Singapore
3. Port Klang, Malaysia

1. Baltimore, Maryland
2. Chicago, Illinois
3. Detroit, Michigan
4. Los Angeles, California
5. Mobile, Alabama
6. New Orleans, Louisiana
7. Owensboro, Kentucky
8. Panama City, Florida
9. St. Louis, Missouri
10. Toledo, Ohio

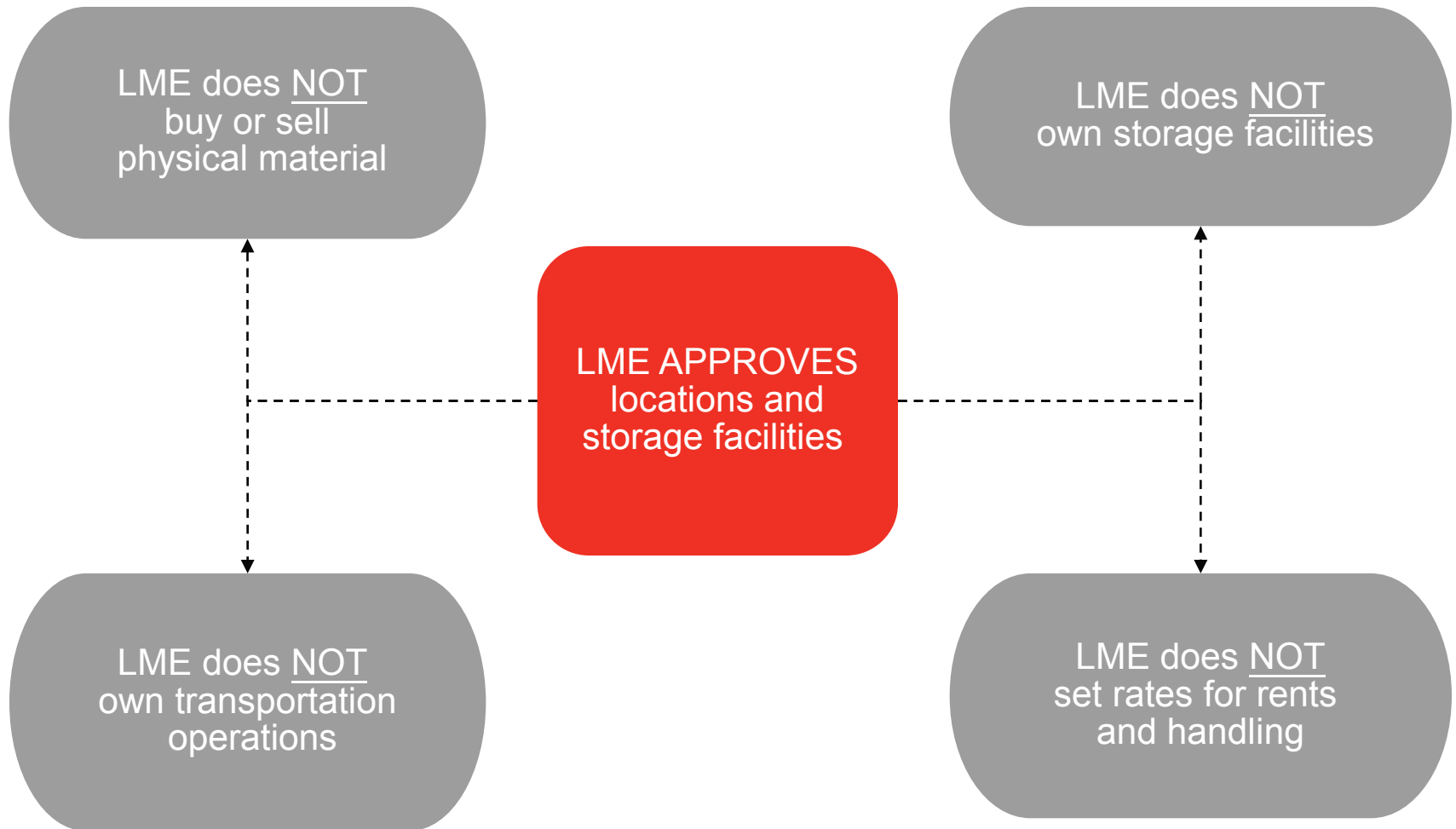




# LME delivery: why?

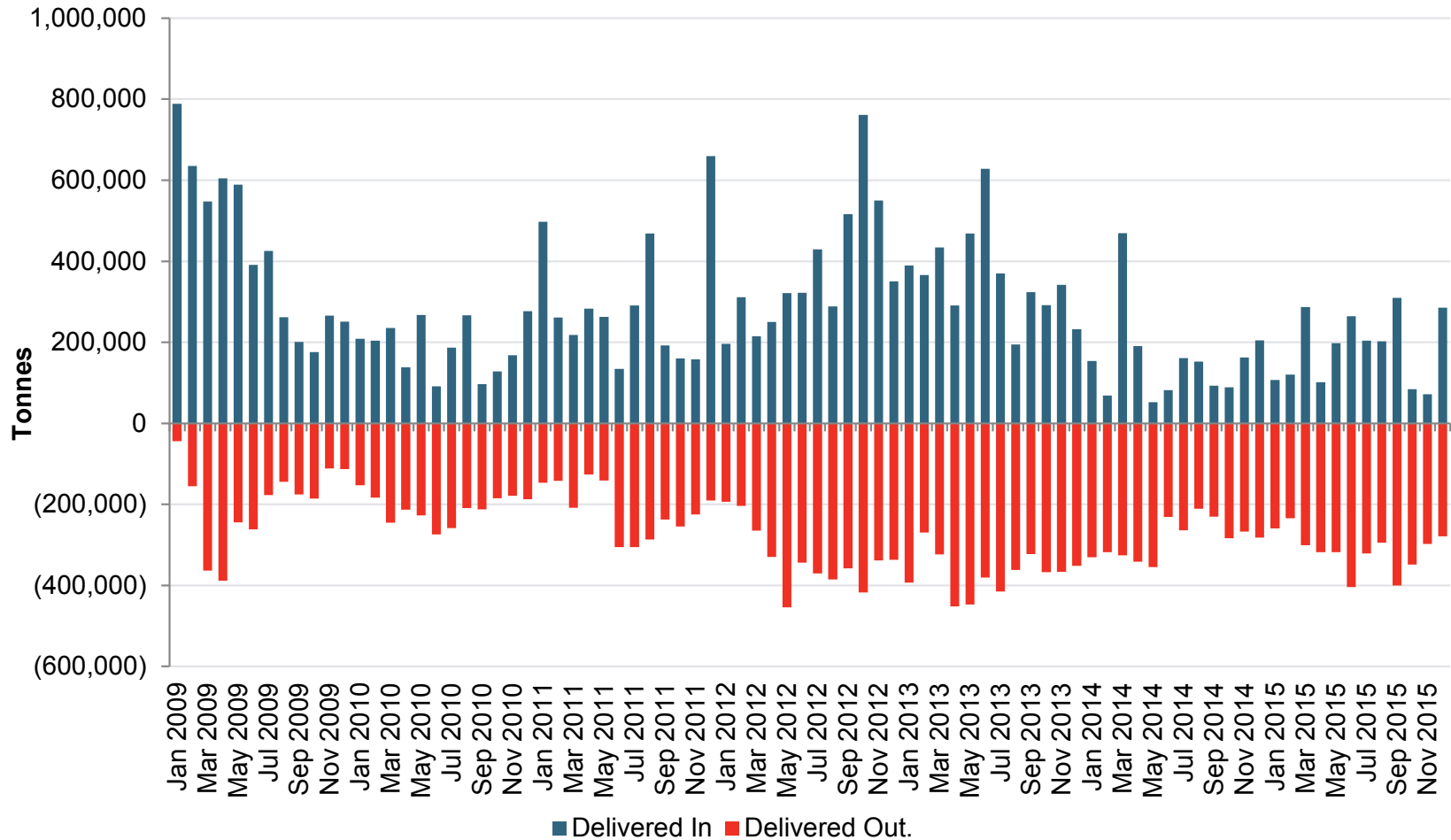


# LME role in storage

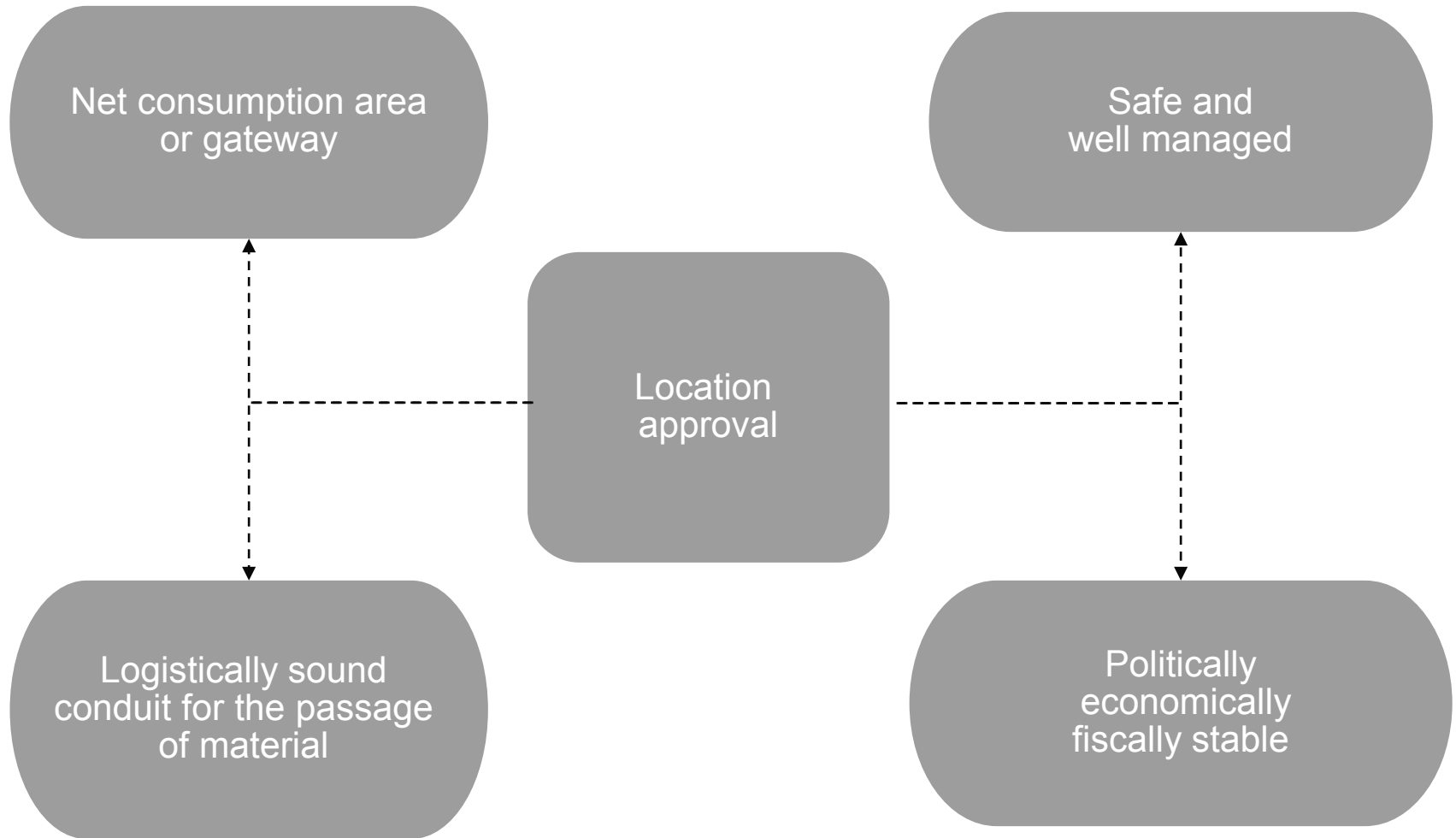


# LME Warehouses - Deliveries

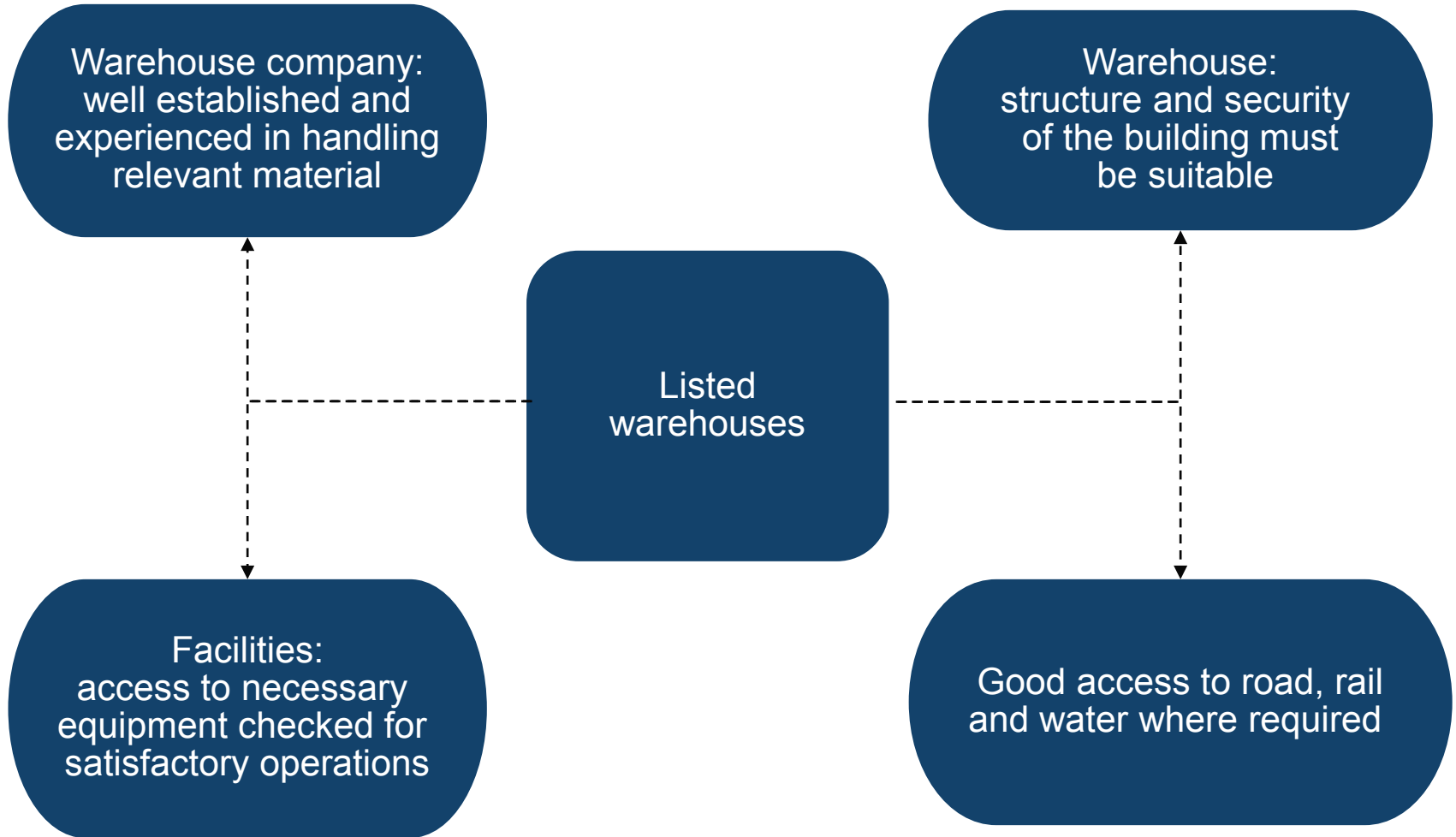
In 2015, 2.23 million tonnes were delivered in and 3.77 million tonnes were delivered out



# LME location approval process



# Warehouse companies approval



# LME warehouse reform programme

## Reaching the conclusion of the delivery pathway

Already delivered

LIFO Rule	Best-practice information barrier policy
Commitments of Traders transparency	Enhanced LME investigation and action powers for artificial queues
Publication of queues and stock data by warehouse	Creation of Physical Market Committee plus ongoing six-monthly reviews
Separate load-out rate for steel	Premium contracts (rule changes to facilitate premium hedging solutions)
Legal review of the LME Warehouse Agreement	Logistical review
Further load-out rate increase	Separate load-out rate for aluminium alloys



Due  
1-May-16

Cap rents in queues

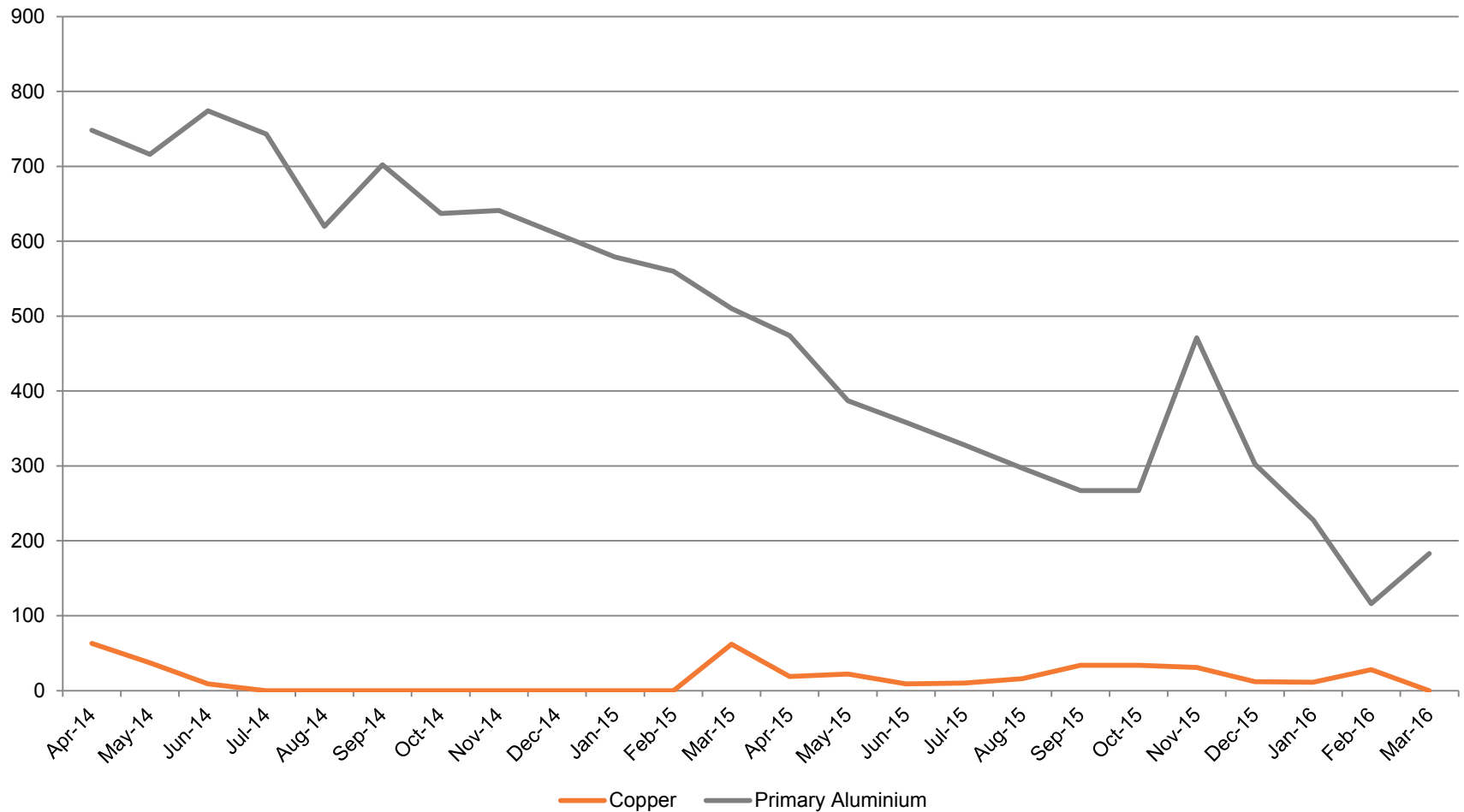
Discussion  
Paper  
released  
6-Apr-16

Assess structural solutions to high charges



# Queue reduction following reform...

Copper queues now believed to be entirely operational, whilst aluminium queues are steadily decreasing



Source: LME data

# Discussion Paper items

FTA	Introduction of Fixed Term Warehouse Agreements	Converting the LME Warehouse Agreement from an “in perpetuity” model to a “fixed term” model, with annual or biennial reviews, with charge levels as a key parameter
CC	Charge-Capping	Implementing a rule limiting Headline Warehousing Charges (either for rent and FOTs, or just FOTs)
CTG	Charge Threshold Guidance	Publishing, in respect of Headline Warehousing Charges, thresholds or “shadow caps” as guidance
CBIG	Charge-Based Incentive Guidance	Monitoring Headline Warehousing Charges through the use of the LME’s powers in respect of incentive reporting and monitoring, likely against a published maximum charge schedule
FOTC	FOT Conversion	Conversion of the LME contract from an “in-warehouse” contract (buyer pays FOT) to an “FOT-paid” contract (seller pays FOT) – incentivises metal depositor to negotiate a competitive FOT



Options which impose a limitation on Headline Warehousing Charges



Options which modify the LME ecosystem to reduce the drivers of high charges



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5 LME Liquidity Roadmap

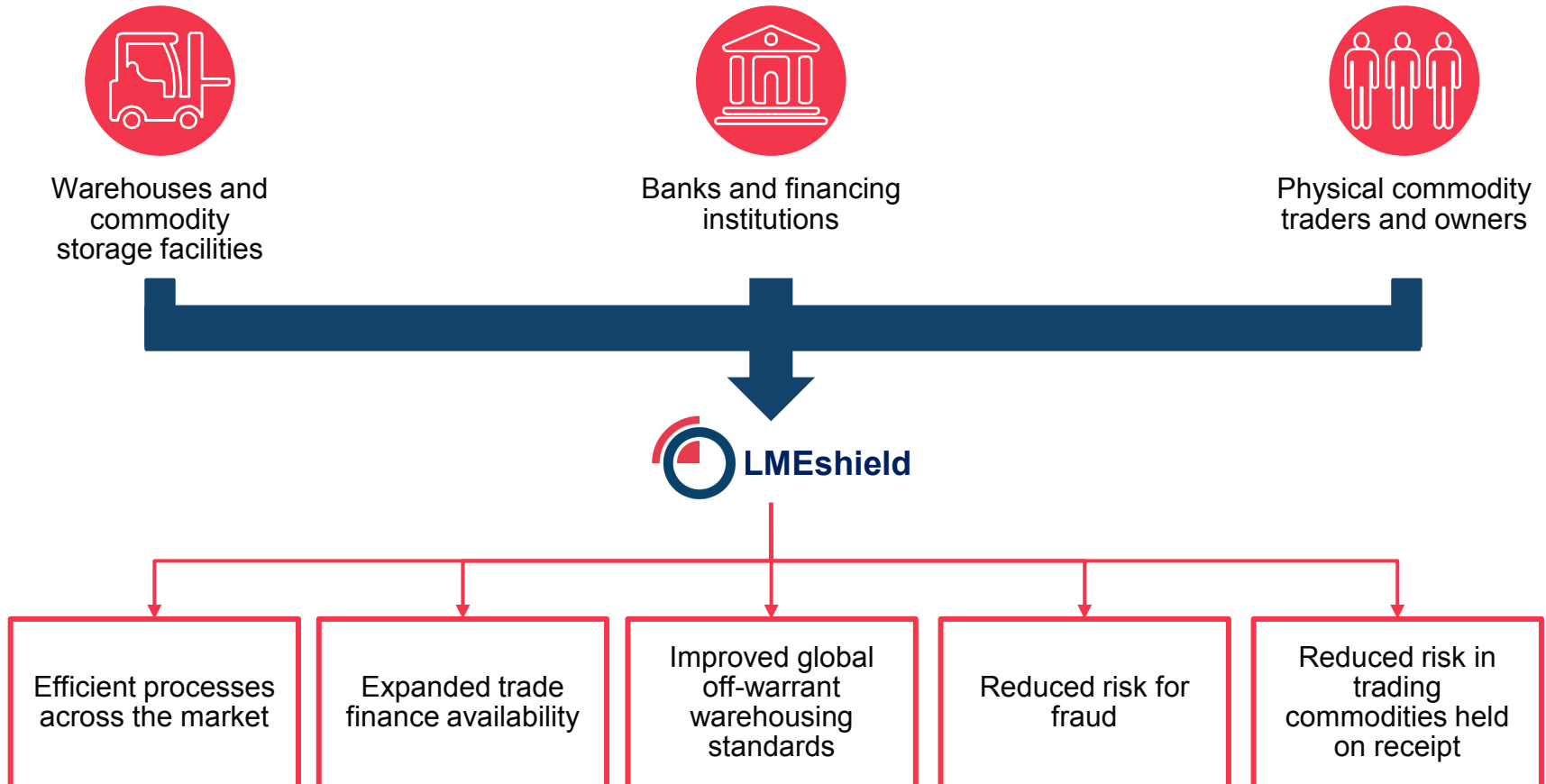
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# LMEshield

A new service for all metal receipt users



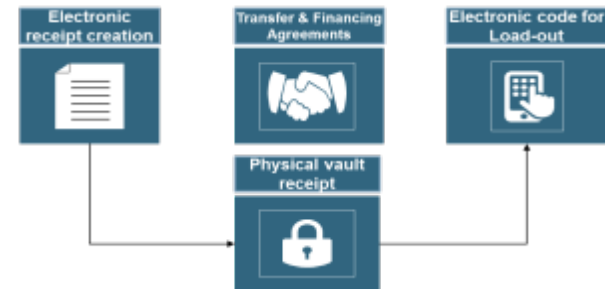
# LMEshield – secure and effective commodity receipting

## Rationale for LMEshield

- **2001** – LME develops electronic system for warranted-metals, 'LMEsword', with c. 5 million tonnes of metal delivered in and out annually
- **2014** – Post-Qingdao, leading banks request LME to extend services and expertise to off-warrant market
- **2016** – Using experience gained from LMEsword and with support from commodity trading institutions LME will launch LMEshield

## What is LMEshield?

- Secure global electronic register for efficient creation, management and transfer of off-warrant warehouse receipts



## How can LMEshield help



### Warehouses

- Enhanced risk management, improved customer confidence, operational savings



### Banks financing institutions

- Reduced risk of fraud and standardisation of receipt structure



### Physical commodity traders and owners

- Transparent financing and efficient ownership transfer

## Recent developments

1. Ongoing engagement with working group of up to 20 warehouses, banks and trading firms
2. MOU signed 21<sup>st</sup> March with Henry Bath, CMST and Mercuria to list LMEshield warehouses along China's 'The Belt and Road' routes
3. April 2016 launch of LMEshield service
4. Fee-free usage until September 2016, with accrual of further credits for usage in period



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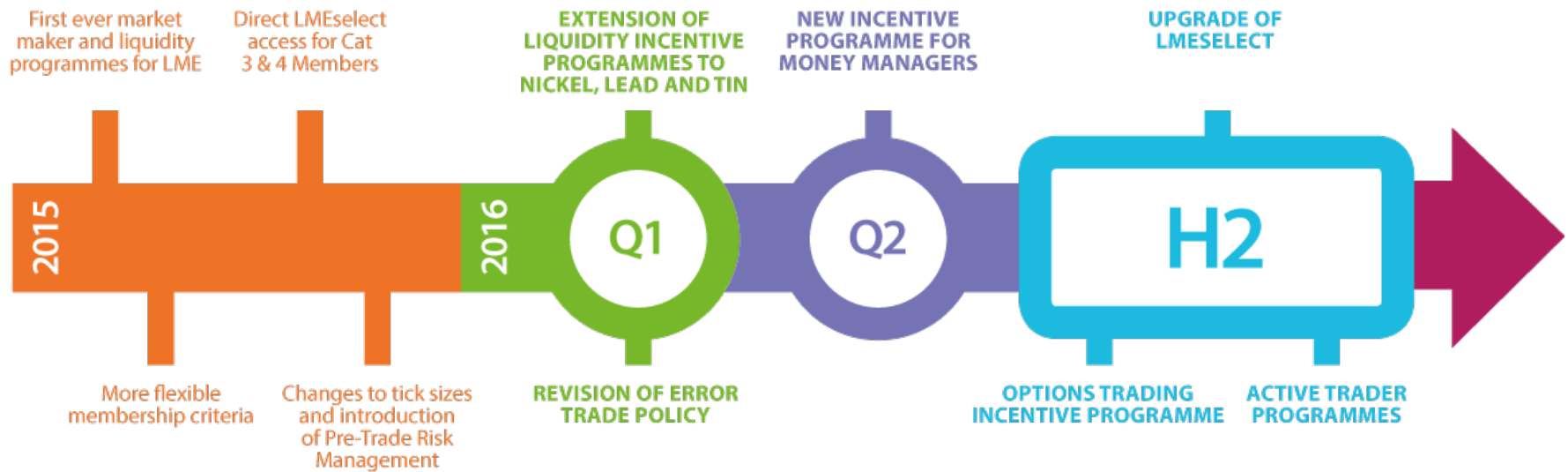
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# Liquidity Roadmap 2016

The Roadmap draws together the LME's initiatives for enhanced market access and participation



# Simplified access

Different access options depending on users' preferred mode of execution

## Direct Market Access

- Multiple solutions available
- Small operational overhead
- Full control over execution
- As client or member

## Enhanced liquidity

- Market making and other programmes to add liquidity across the curve

## Membership

- 5 membership categories
- From full Ring trading privileges to non-clearing membership
- No need for UK domicile
- Tailored to the operational capacities and trading needs of users



# LMESelect

Number of trades per hour



Asian market opens

European market opens

US market opens



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# How Clearing Works

## Futures contracts without a clearing house



## Futures contracts with a clearing house



# LME member default provisions

Companies Act has unique provisions for exchange traded contracts

LME and LME Clear act ahead of liquidator

- LME Clear manages Exchange Contracts
- LME manages Client Contracts
  - Client Contracts closed out at market price
  - Profits and losses netted
  - Positions transferred to other brokers

These provisions do not apply to OTC contracts



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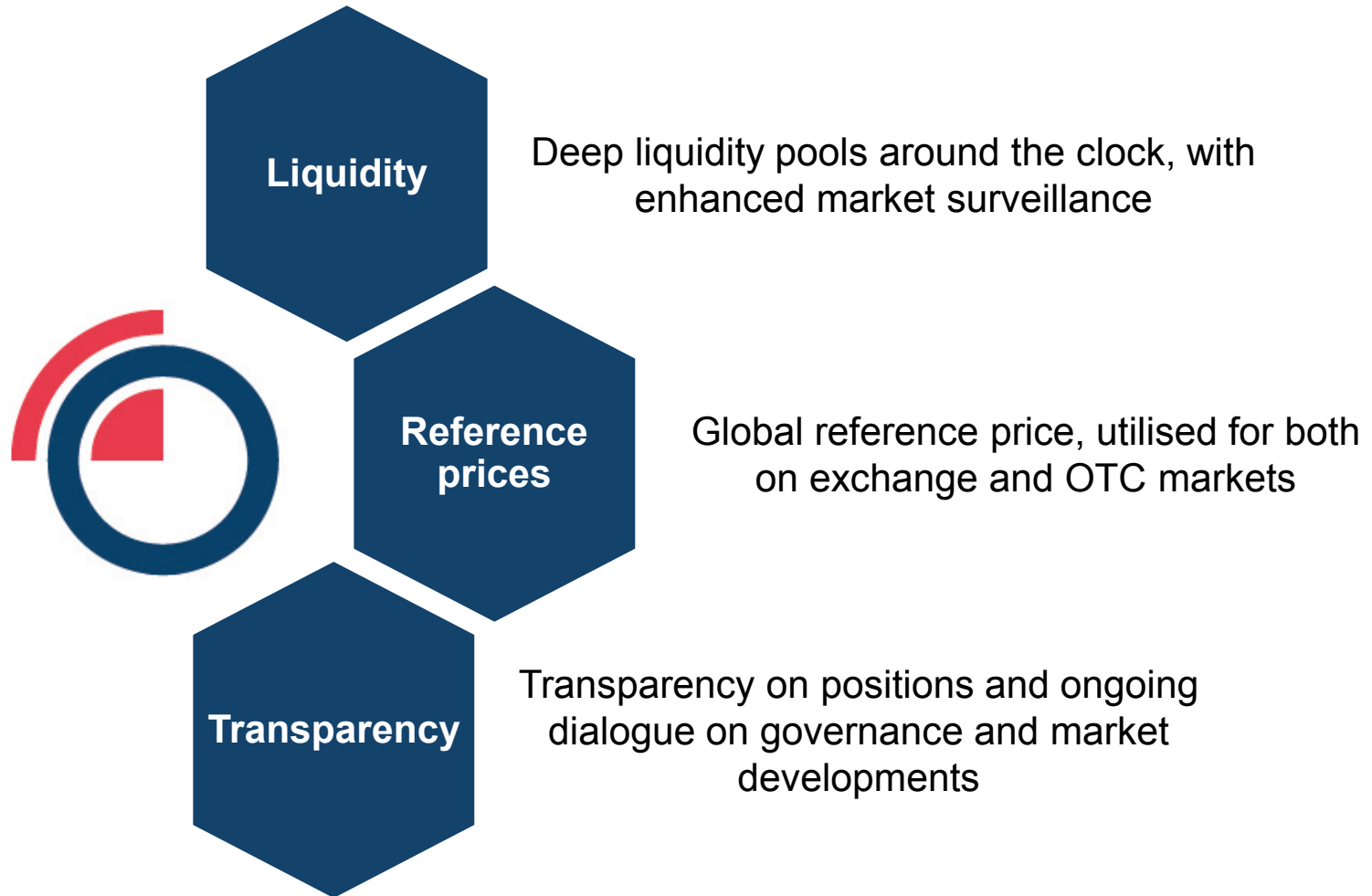
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# LME: the world's leading liquidity pool

Part of a leading global, vertically integrated multi-asset class exchange group





# Questions & Answers

