



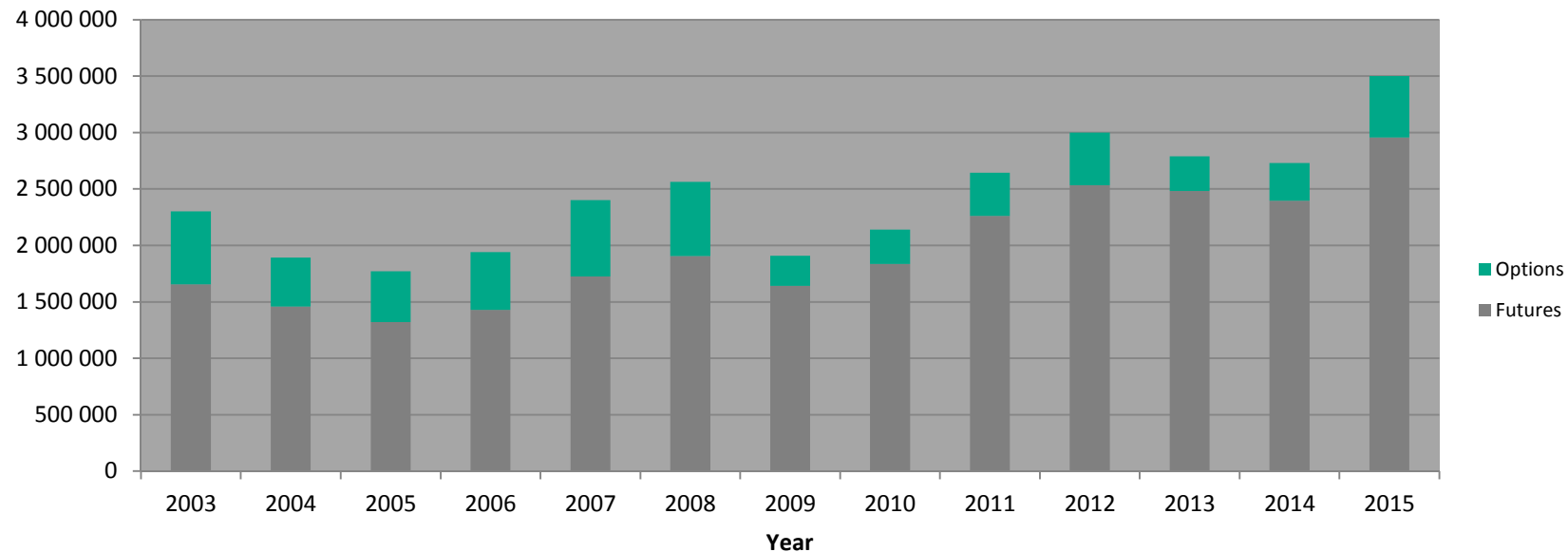
Impact of storage and delivery infrastructure on Commodity Derivative Markets.

Chris Sturgess, JSE
10 August 2016



JSE Commodity Derivatives –looking back 12 years

Total Contracts Traded From 2003-2015



The focus remains on providing a well regulated platform that assists with price discovery and has the necessary liquidity to assist with price risk management and where all transactions are guaranteed !

Derivative Instruments



Futures contracts:

- **a standardised** contract for a future date that will allow a market participant to hedge their underlying exposure in the physical market
- 100 tons, WM1 maize basis Randfontein for DEC 2016 expiry

Options contracts:

- **Put Options** provide the buyer **the right but not the obligation** to sell grain at a specific floor price. Sellers of put options are obligated to buy grain at the floor price
- **Call Options** provide the buyer **the right but not the obligation** to buy grain at a specific ceiling price. Sellers of call options are obligated to sell grain at the ceiling price

Why is physical delivery required in a derivatives market ?



- Where no transparent spot market is available to reference, futures markets rely on deliverable contracts
- Physical delivery and storage infrastructure can have a profound impact on the economics of the futures markets:
 - such as the cost of carrying the derivatives contract,
 - convergence between the derivative and the physical market prices,
 - and the premiums for each of the contract's delivery points.
- Price convergence is facilitated when the commodity derivatives contract's terms and conditions accurately reflect the characteristics and operations of the underlying physical market.

JSE registered storage capacity



Physically deliverable agricultural products:

- White and yellow maize
- Wheat
- Soya beans
- Sunflower seeds
- Sorghum

Registered capacity with the JSE:

- 16 registered storage operators
- 256 registered delivery sites
- 16,228,992 tons total registered storage capacity for delivery in completion of a futures contract
- Partnered with ESC to facilitate delivery via electronic silo certificate

Physical delivery process crucial to the integrity of the derivatives market

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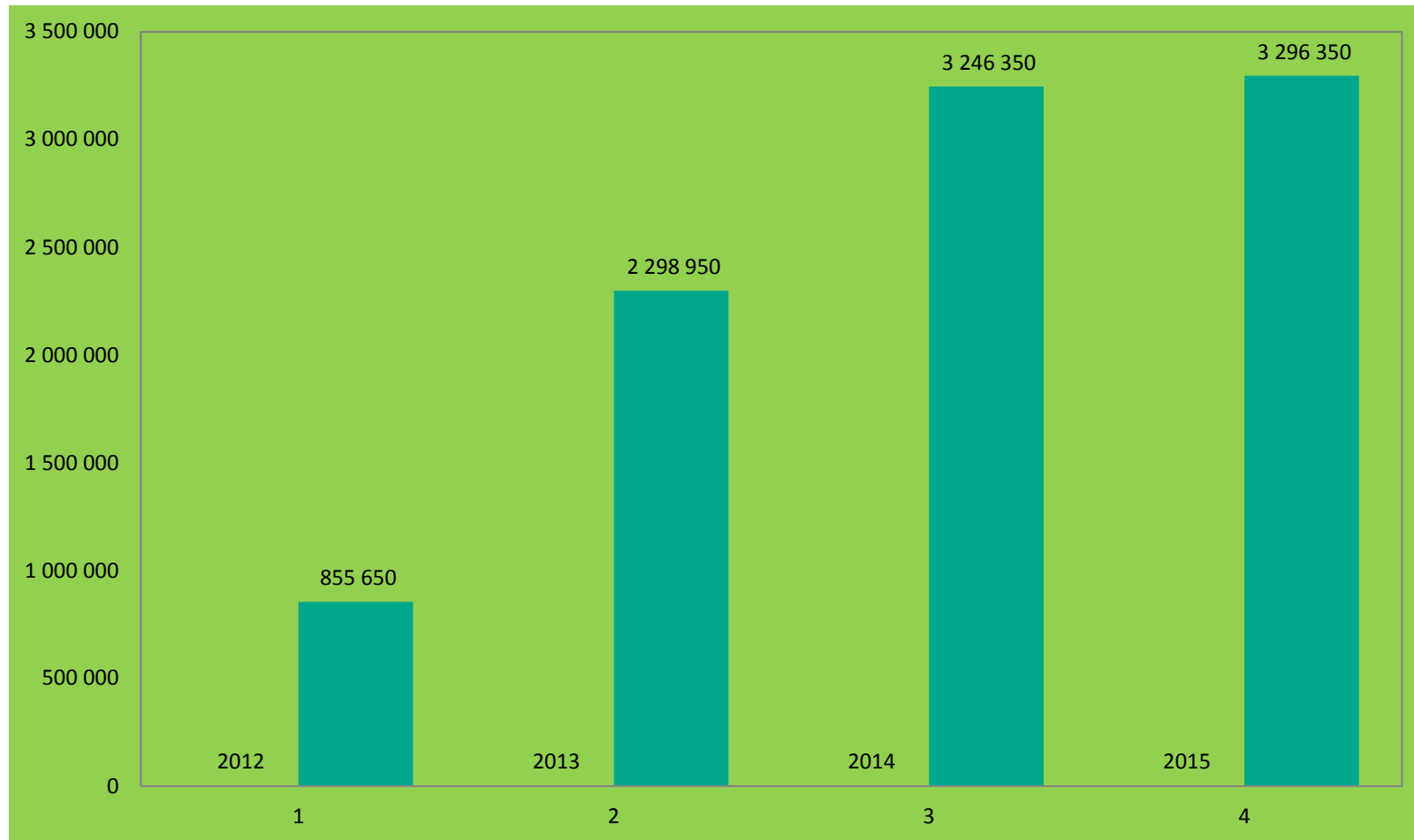


Enabling criteria for secure delivery mechanism

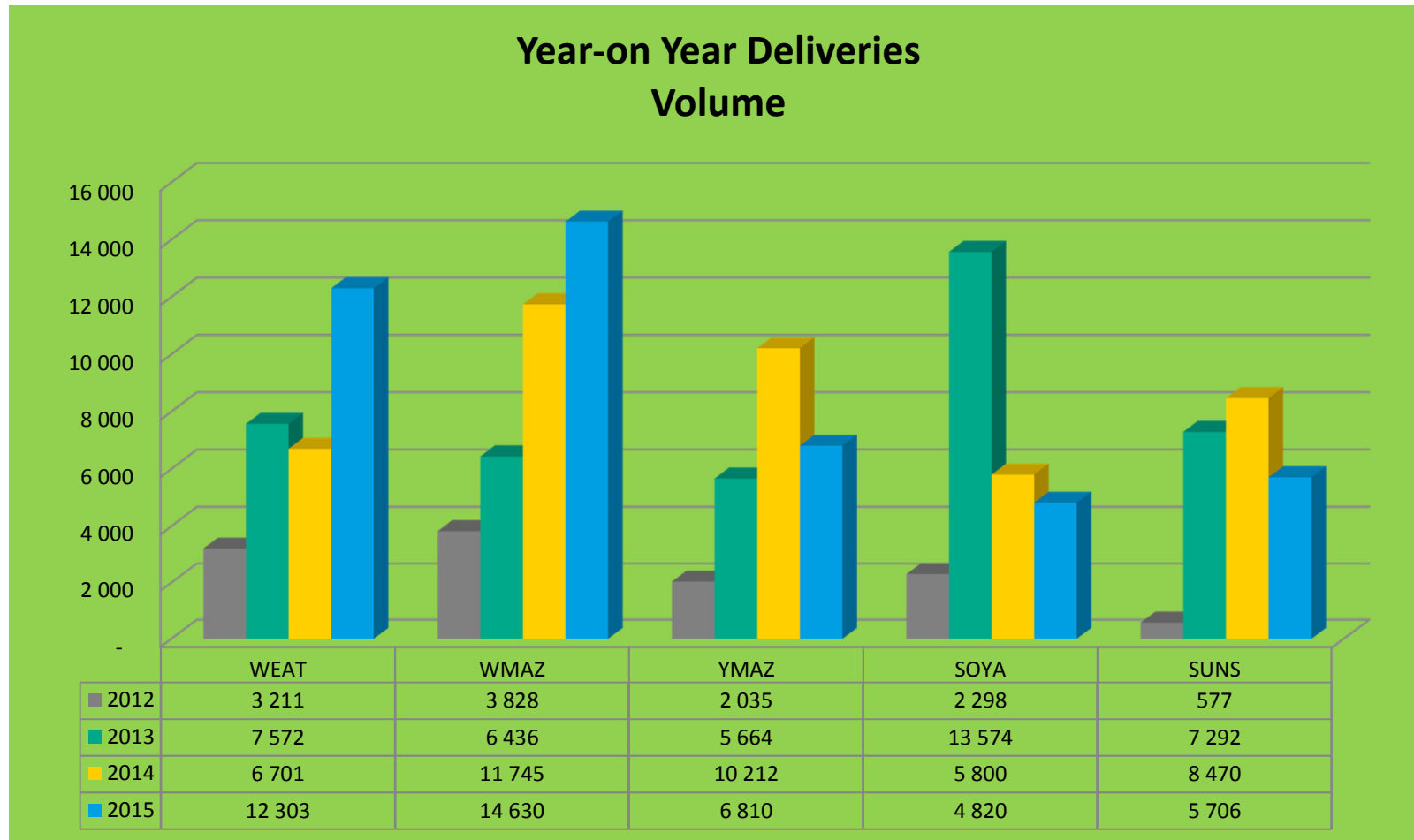


- Supporting legislative environment – good legal framework from which to operate
- Defined grading/quality standards recognised by industry
- Robust storage operator agreements committed to honouring storage obligations
- Clearly defined requirements for storage operators and exchange registered delivery points
- Efficient and secure settlement systems to effect transfer of ownership of the commodities
- Consistent government policy around movement of commodities (export/import)

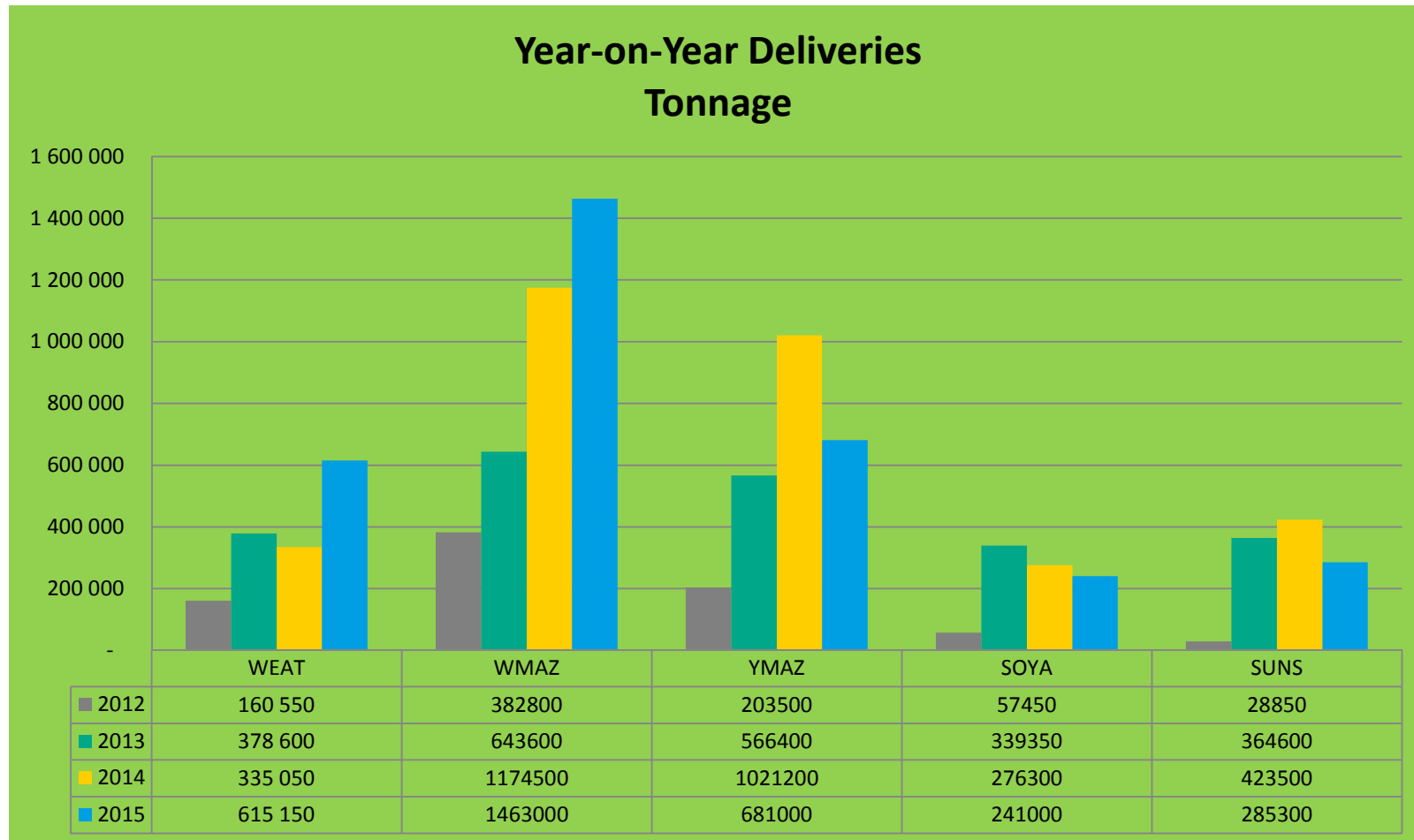
Total Deliveries Year-on-Year (Tonnage)



Total Deliveries Year-on-Year (Volume)

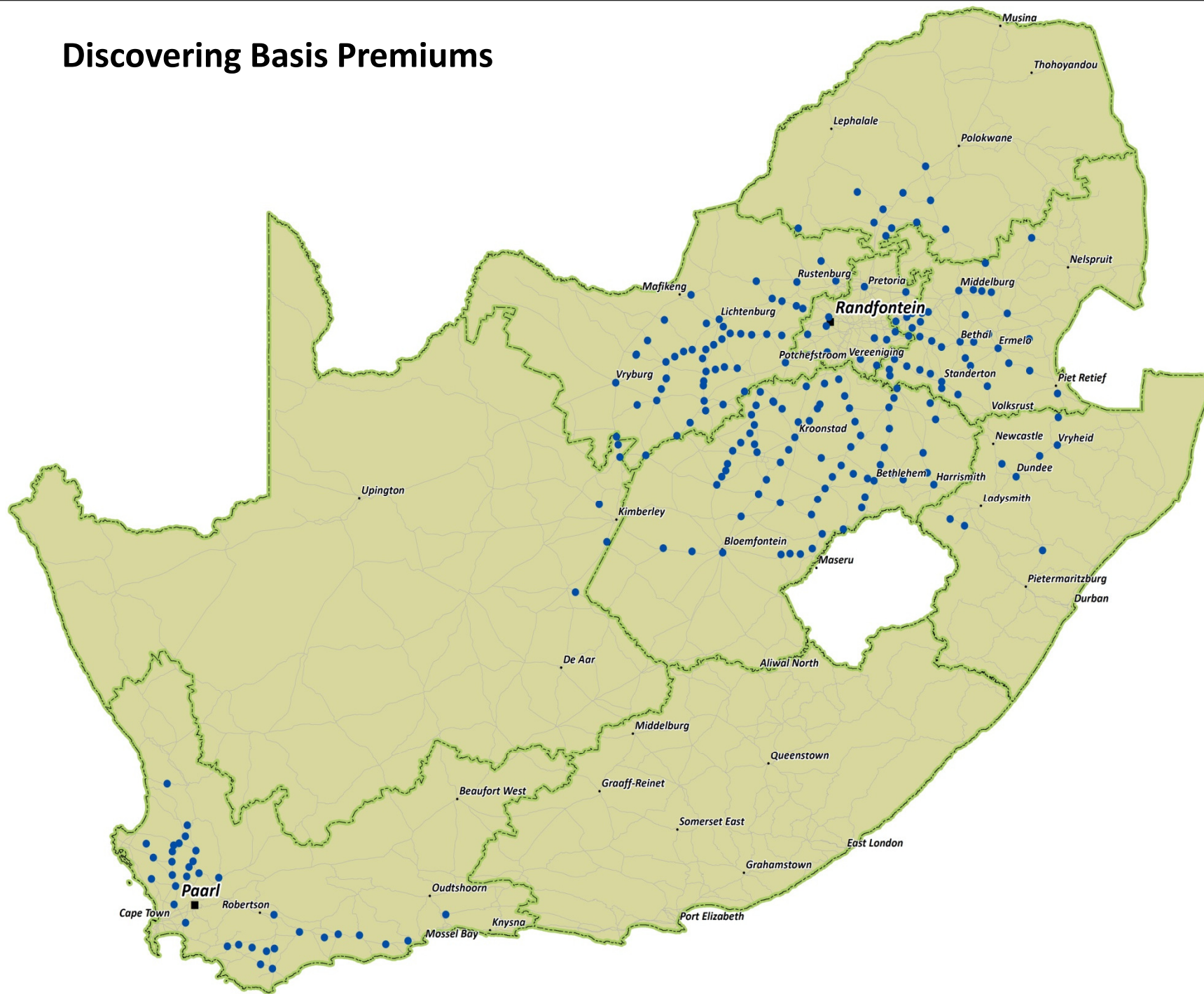


Total Deliveries Year-on-Year (Metric Tons)





Discovering Basis Premiums





IOSCO report published in May 2016



This report (Report) sets out the findings and conclusions of the review by the International Organisation of Securities Commissions' (IOSCO) Committee 7 on Commodity Derivatives Markets (Committee) of the impact of storage infrastructures on the integrity of the price formation process of physically-delivered commodity derivatives contracts traded on regulated exchanges. The Report concludes that, based on the Committee's research review, an industry survey, and a public roundtable, IOSCO's Principles for the Regulation and Supervision of Commodity Derivatives Markets¹ (September 2011) (IOSCO Principles) **provide an adequate framework for implementing effective oversight, governance and operational controls of storage infrastructure**, and did not require additional principles or revision of the existing principles.

However, the Report identified certain practices surrounding storage infrastructure that have the potential, if not addressed by appropriate policies and procedures, to affect derivatives pricing and affect efficient market operation.

Selected area's reviewed



- **Regulatory issues:** types of delivery mechanisms and duration of load out/storage, oversight, transparency, relationship with the physical market, contract design process
- **Operations:** interaction between market infrastructures, storage fees, load in and out rates, segregation of goods, premiums
- **Governance and conflicts of interest**
- **Information access**

IOSCO report conclusions



- Good or Sound Practices already developed should take this range of practices into account rather than devising a one-size-fits-all solution
- Exchanges may set maximum fees and rents that warehouses can charge for storing commodities. However, warehouses often give discounts or incentives to their customers and, as a result, customers may pay rents and fees that are significantly different from any standard price. Exchanges usually do not have detailed information or insight into the various discounts and inducements offered by warehouses.

As warehouse discounts and incentives can influence customer behaviour regarding storage that may affect physical delivery and hence the overall market, this lack of information means there is a risk that exchanges may not be able to anticipate and discern emerging problems arising from storage arrangements in a timely manner.

IOSCO report conclusions



- In some instances, warehouse operators, derivative traders and exchange members are corporate affiliates belonging to the same corporate parent and undertake business related to the physical delivery of commodities traded on exchange. *Some exchanges address this by requiring, for example, third party audits of governance and corporate structures at each warehouse. Good or sound practices could address the risk that conflicts of interest at warehouses raise the potential for one trader to have an unfair advantage (for example, preferential treatment or access to information) over others, thus harming the overall integrity of markets.*
- In some instances, information about warehouse operational parameters (for example, stocks and queue length) is not readily available to traders, regulators, or even exchanges. *This paucity of information may hinder exchanges' and regulators' ability to discern emerging problems and react to them in a timely manner.*

For the detailed report visit: www.iosco.org

Thank you for this opportunity to participate

JSE

- JSE remains committed to providing a secure and transparent price risk management platform for the local grain industry
- This is made possible with the support of sound storage operators honouring their storage commitments to the sector





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