

## **Sulphur Market Outlook**

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### Founded in 2002, Integer Research is a leading consultancy in the fertilizer sector

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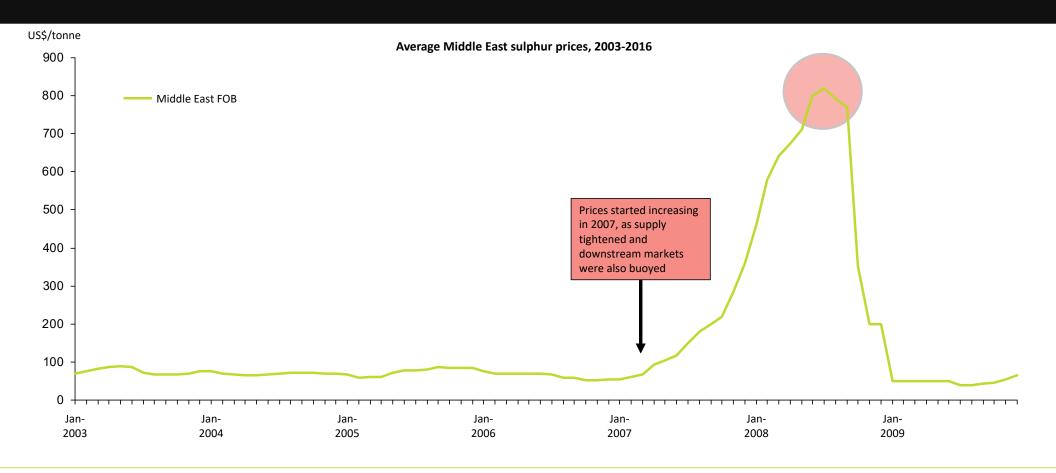
## **Sulphur market overview**



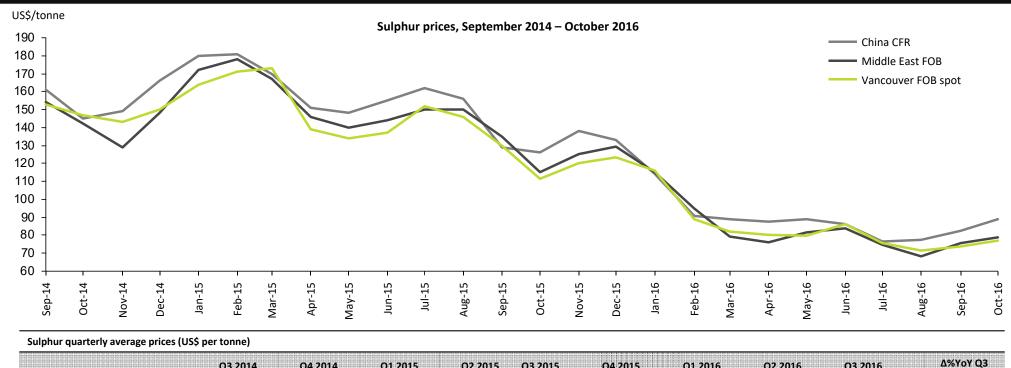
## Sulphur: changing market sentiment from by-product to 'yellow gold'



Sulphur prices historically remained below US\$100/tonne across major benchmarks, but the commodity bubble in 2007/2008 changed this

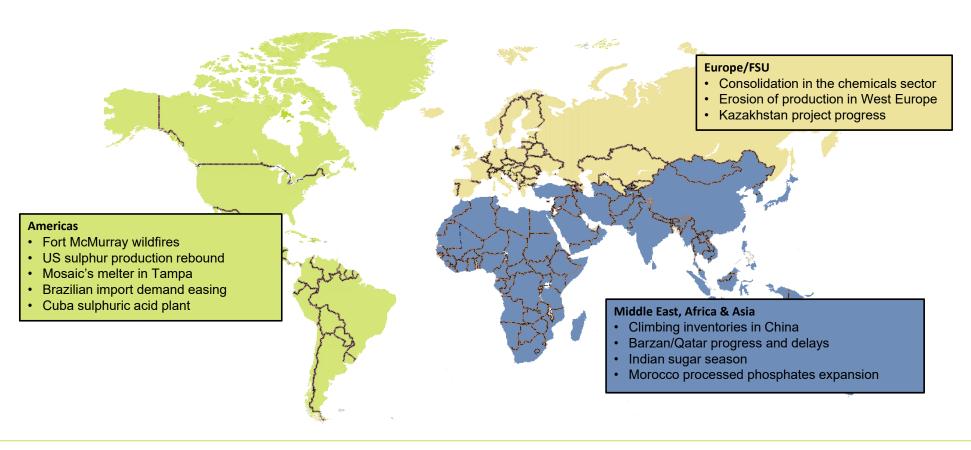


### Recent trends in global sulphur pricing



	Q3 2014 Q	4 2014 Q	1 2015 Q2	2015 Q3 2015	Q4 20:	15 Q1 2016	Q2 2016	Q3 2016	Δ%	YoY Q3
China CFR	168	153	177	151	150	131	99	87	79	-47%
Middle East FOB	161	140	172	144	144	124	97	80	73	-49%
Vancouver FOB spot	155	146	169	137	143	120	96	82	74	-48%

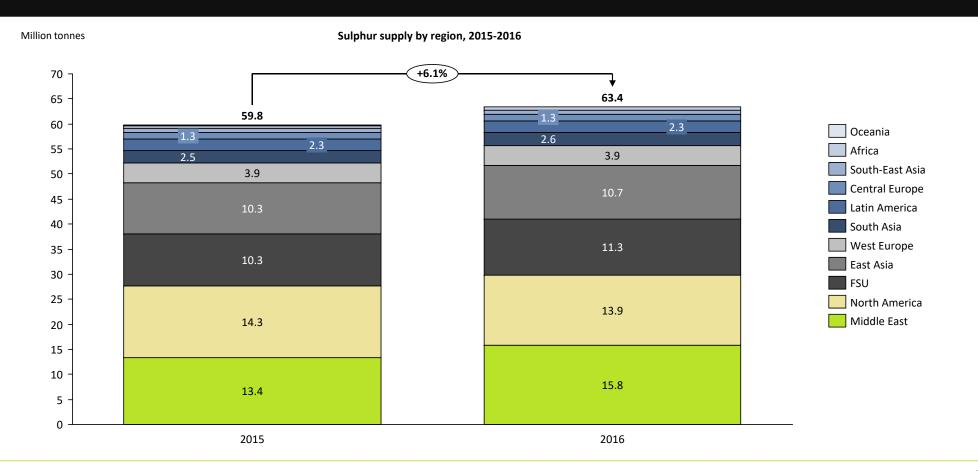
### **Recent market developments**



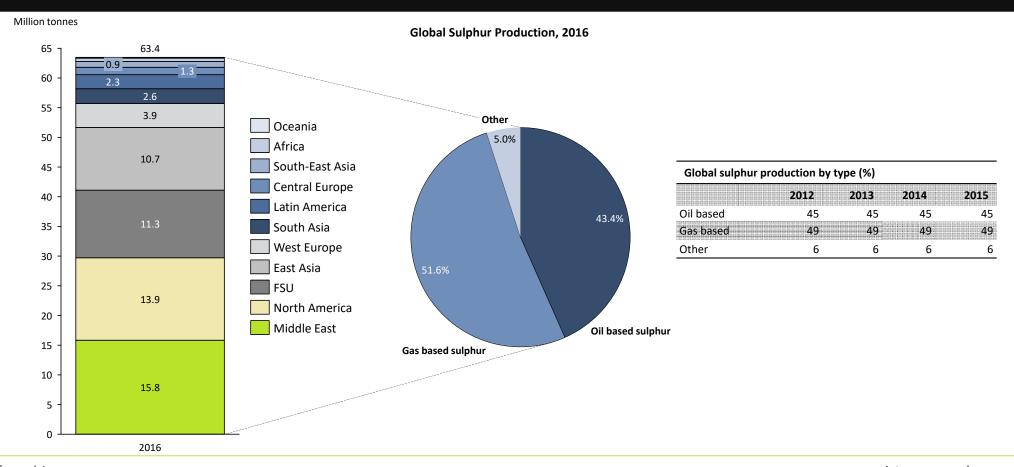


## Supply

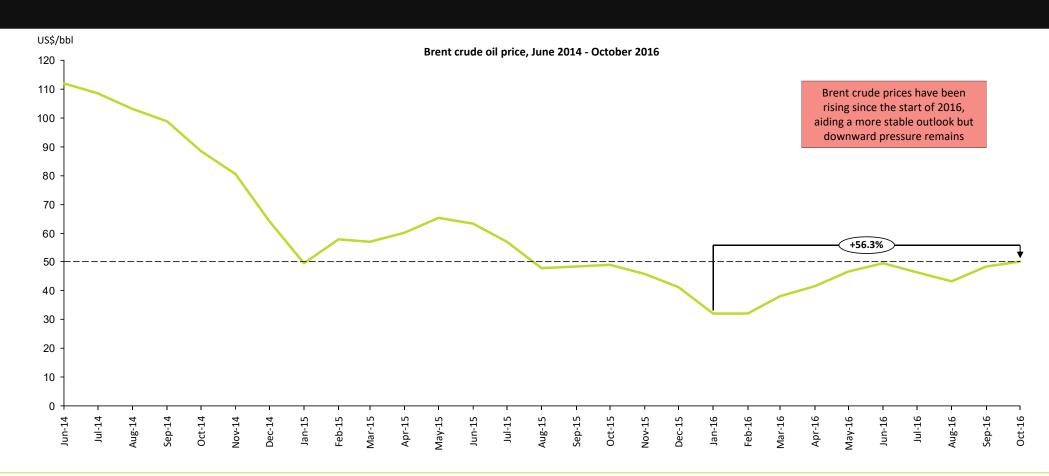
#### The rise in Middle East sulphur production has materialised in 2016, to bring the region to the top global ranking



Gas based sulphur production has continued to grow through the year, forecast to represent over 50% of global output

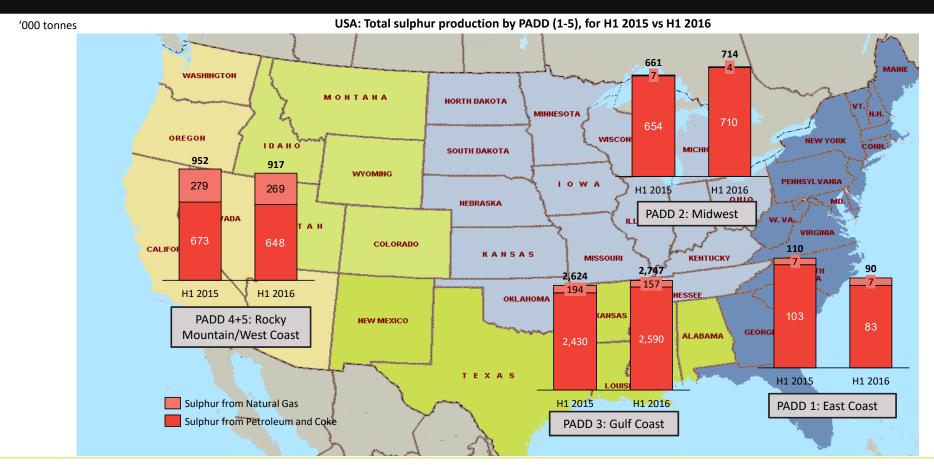


### What does the low oil price environment mean for the sulphur industry?

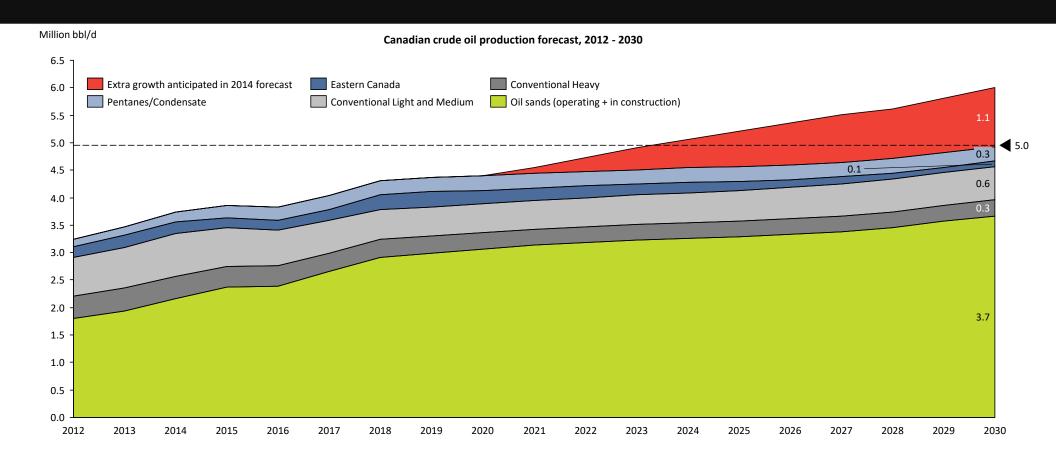


Source: Integer, Bloomberg

Sulphur production in the Midwest and Gulf Coast continues to recover, leading to a net increase in US sulphur output



As many oil sands projects have become unfeasible in the low oil price environment, the outlook for Canadian energy has shifted

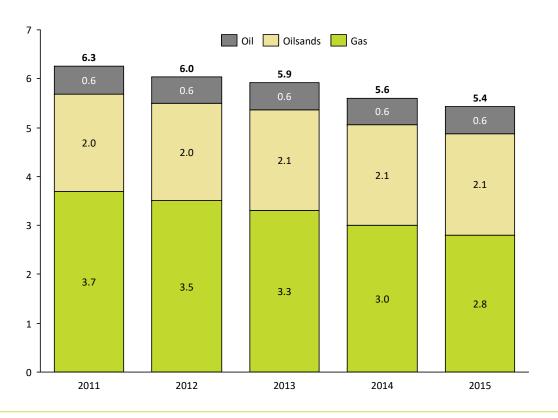


Source: Integer, CAPP (June 2016) www.integer-research.com

## Canadian gas production is expected to continue to decrease, leading to a net decline in sulphur output for North America in the outlook

Million tonnes

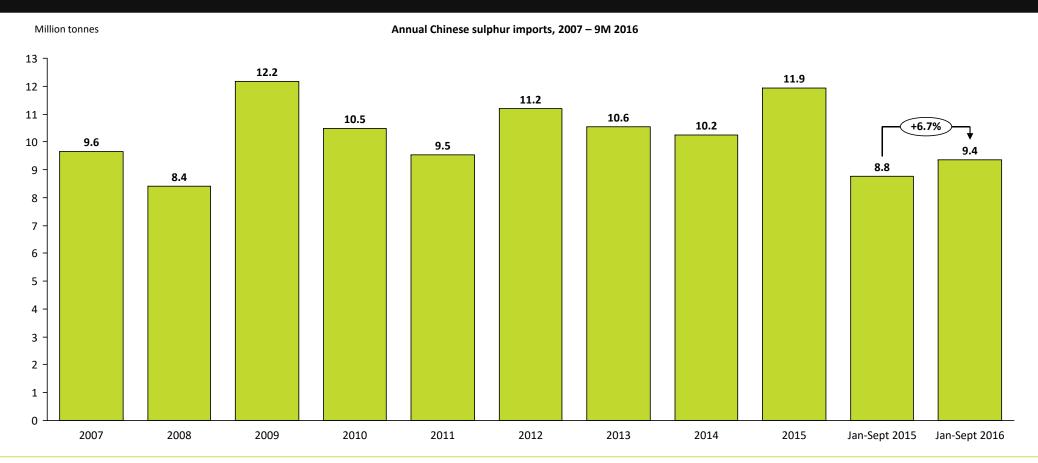
#### Canadian sulphur production, 2011 - 2015



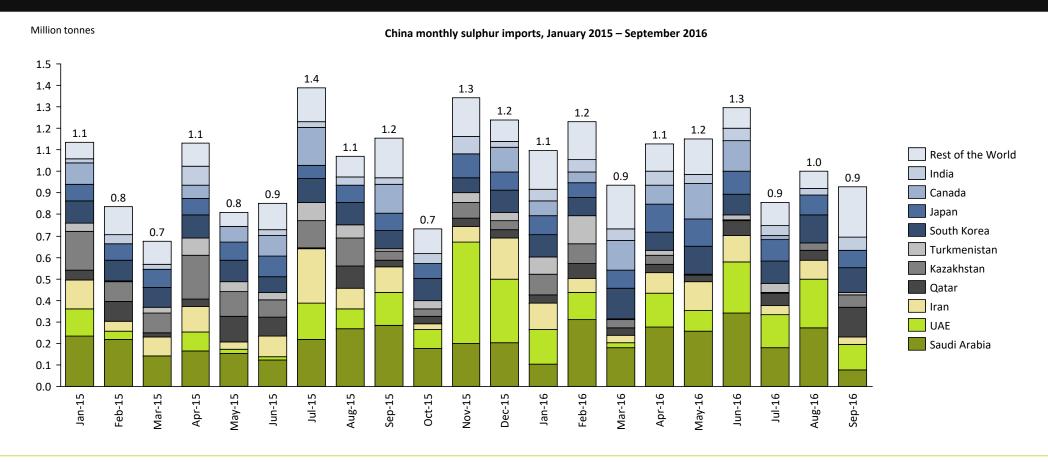
- Limited growth from the oilsands sector
- Depletion of wells and challenging economics
- Impact on sulphur exports from Vancouver
- Utilization of long term sulphur storage
- Increase in forming facilities

## **Trade: changing dynamics**

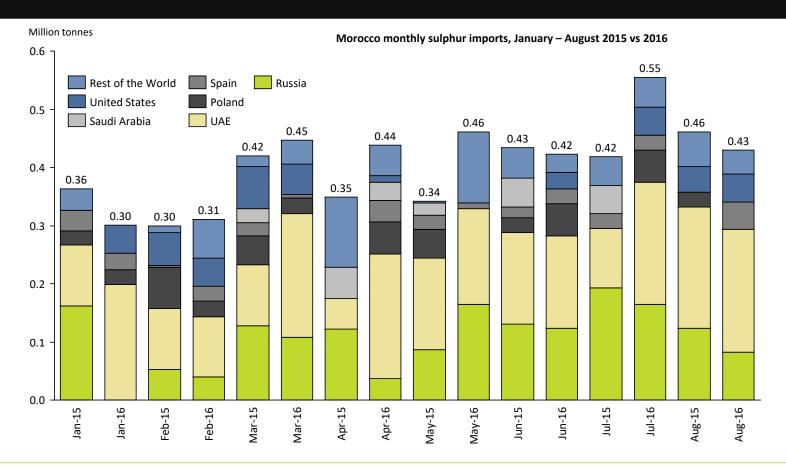
### China remains a central focus for sulphur trade



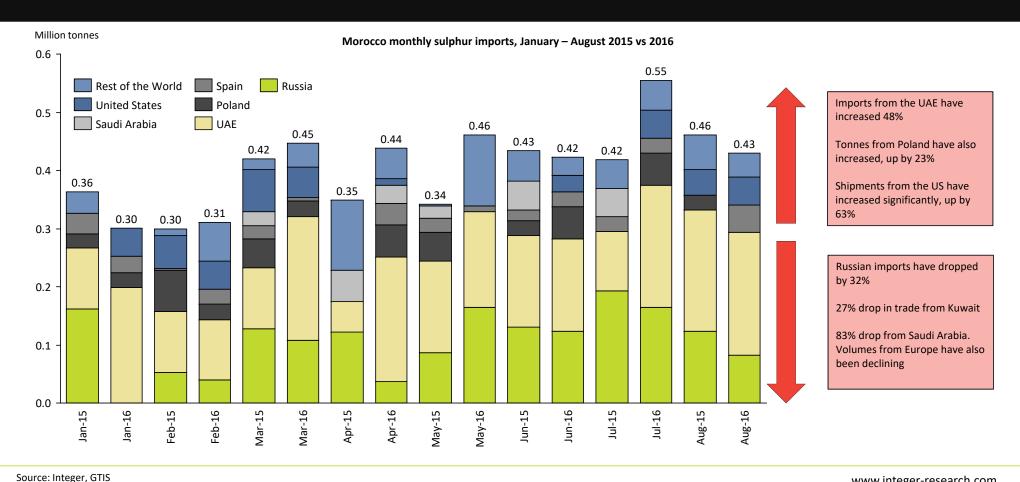
China supply sources continue to shift through 2016. Saudi Arabia remains the number one supplier while molten sulphur supply from Japan and South Korea increased by over 30%



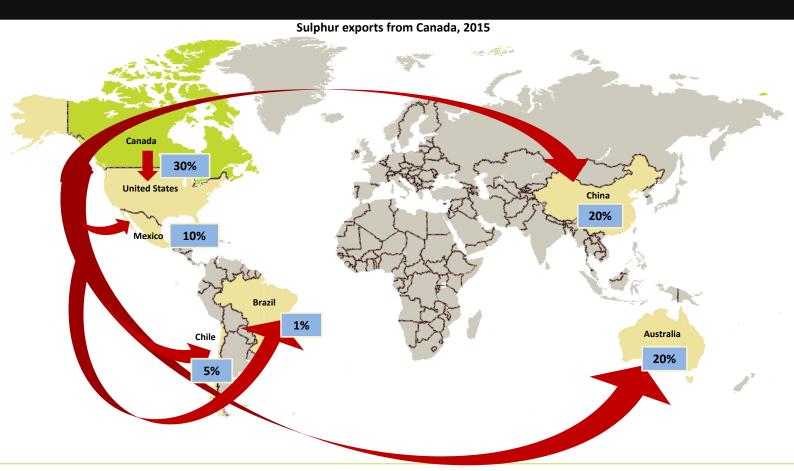
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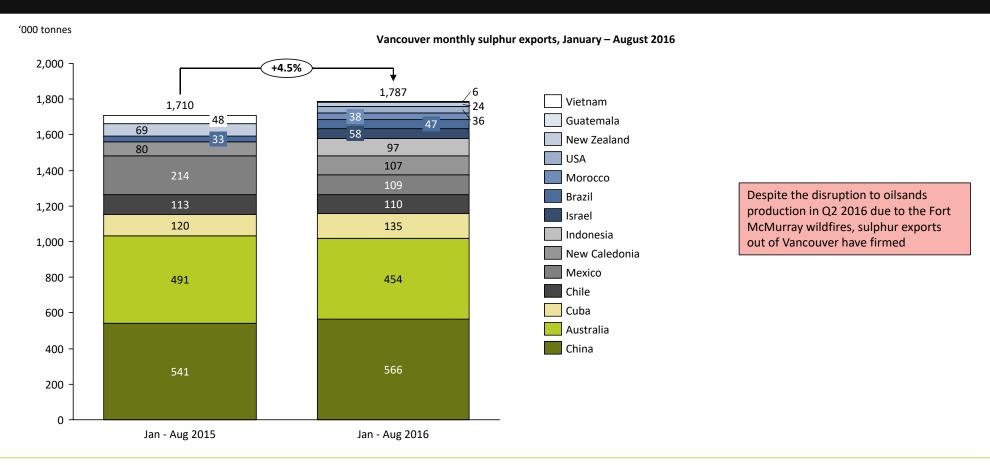


### We expect the US share of Canadian sulphur trade to decline in the outlook



Source: Integer, Port Metro

Vancouver exports have improved following the production disruption earlier in the year. Exports to China have gained ground through 2016



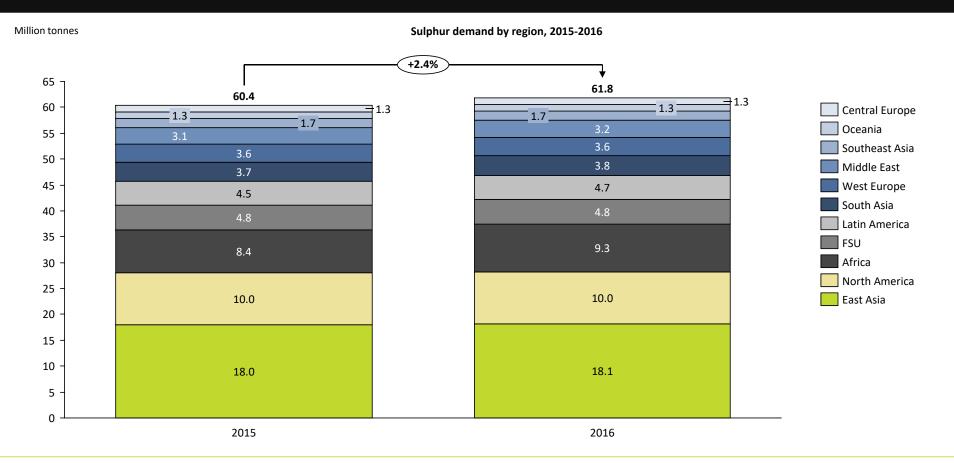
Source: Integer, Port Metro, Company Sources

www.integer-research.com

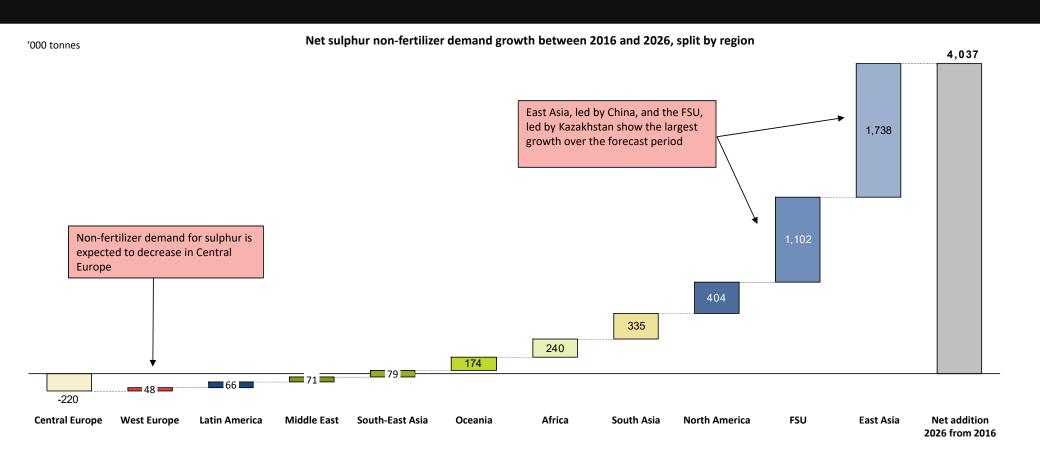


## **Demand**

### Sulphur demand is set to grow by over 2% year on year in 2016, led by developments in Africa



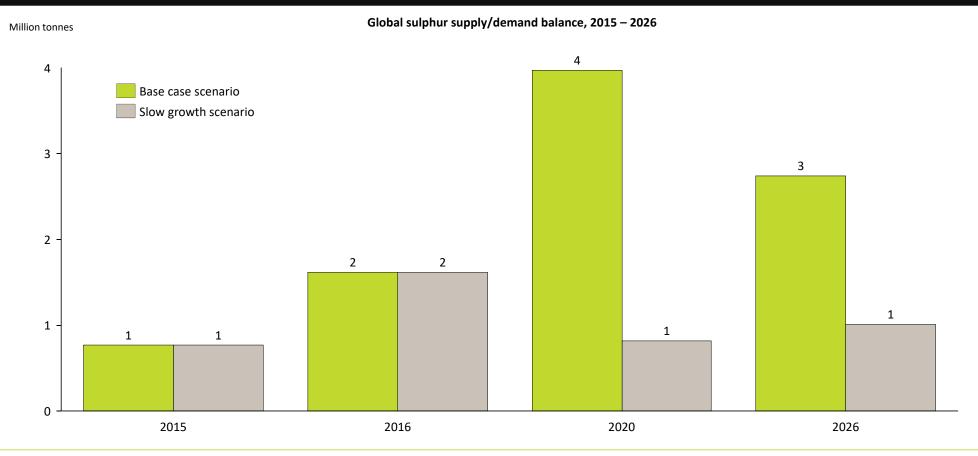
Integer forecasts around 4 million tonnes of sulphur demand will emerge over the next ten years in the non-fertilizer sector





## Global sulphur balance

The market remains largely balanced in our upside scenario, while the base case surplus hovers around 3-4 million tonnes through the medium term forecast period





## Conclusions

### Key factors influencing long term sulphur market trends

- Utilization of long term sulphur storage
- Investment in energy sector shifts in oil prices to impact
- Development in processed phosphates markets
- End user ability to switch between sulphur and sulphuric acid
- Metals markets and commodity pricing for non-fertilizer demand
- Continued rise of new Middle East supply
- Domestic sulphur production in China

# Thank you for your attention Any questions?

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All data in the presentation is taken from Integer's Sulphur Market Dynamics Service





