



Sulphur Market Outlook

The Outlook for the future Supply and Balance of the Global Sulphur Market

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LONDON | RALEIGH | WASHINGTON | MINNEAPOLIS | BEIJING

This presentation will review:

- Global Overview and Recent Market Developments
 - The Economic Crisis
 - Post-Crash
- The Supply Outlook:
 - Global Market
 - Middle East
 - North America
 - East Asia
 - CIS
- The Balance Outlook
- Conclusions

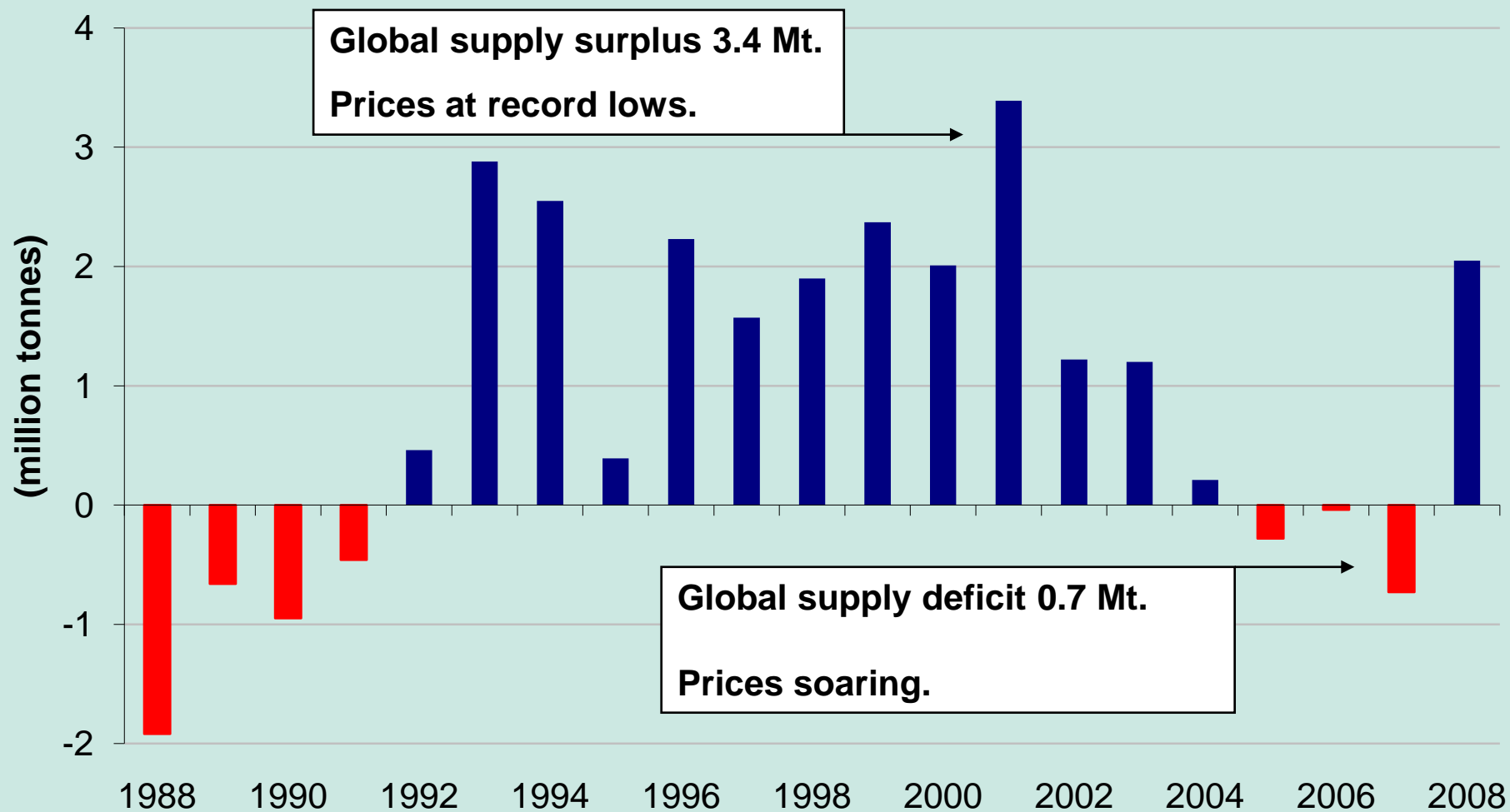


Global Overview and Recent Developments:

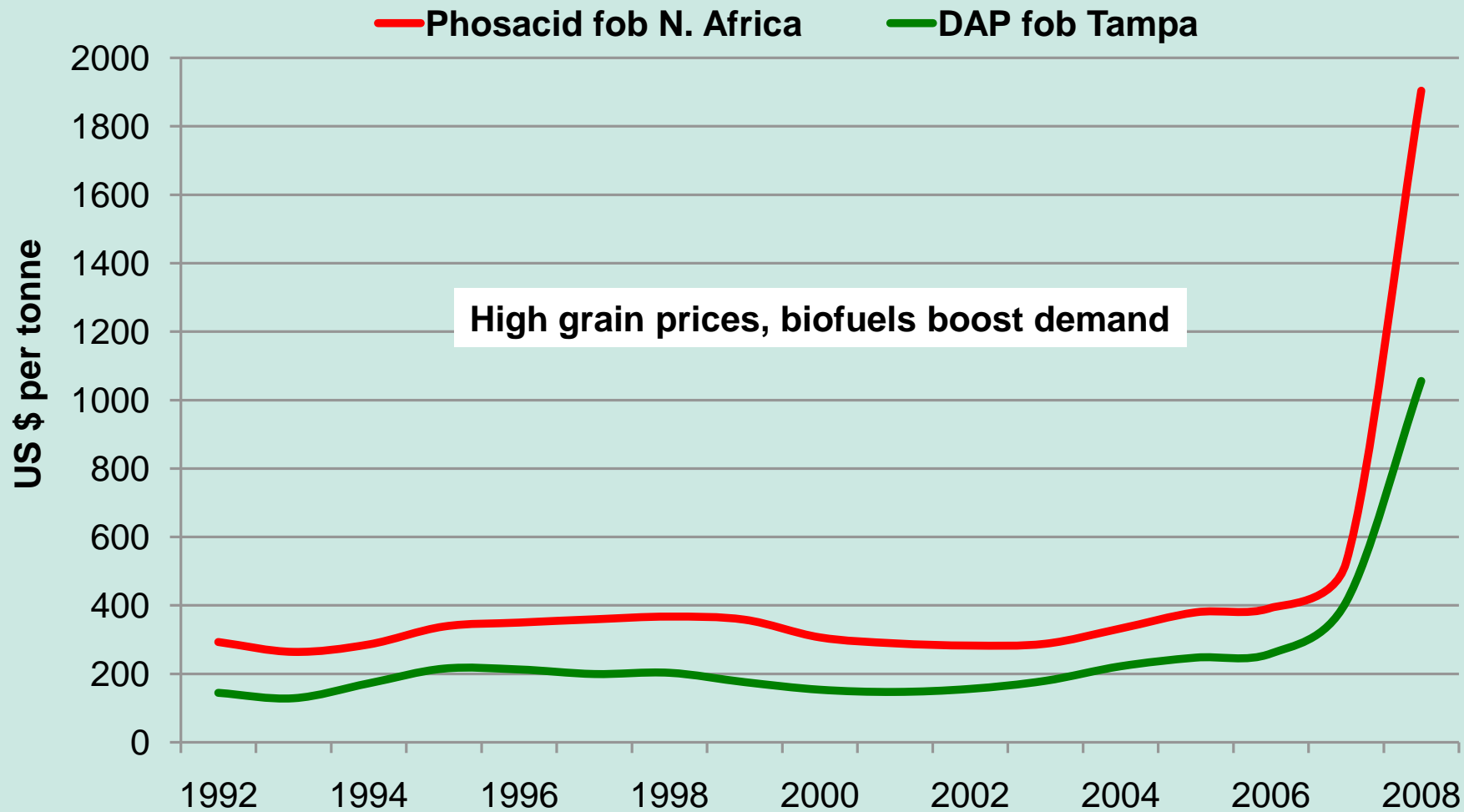
a) The Impact of the Global Financial Crisis



Following a long period of market surplus, global deficits emerged in 2005-2007 as demand for sulphur soared...

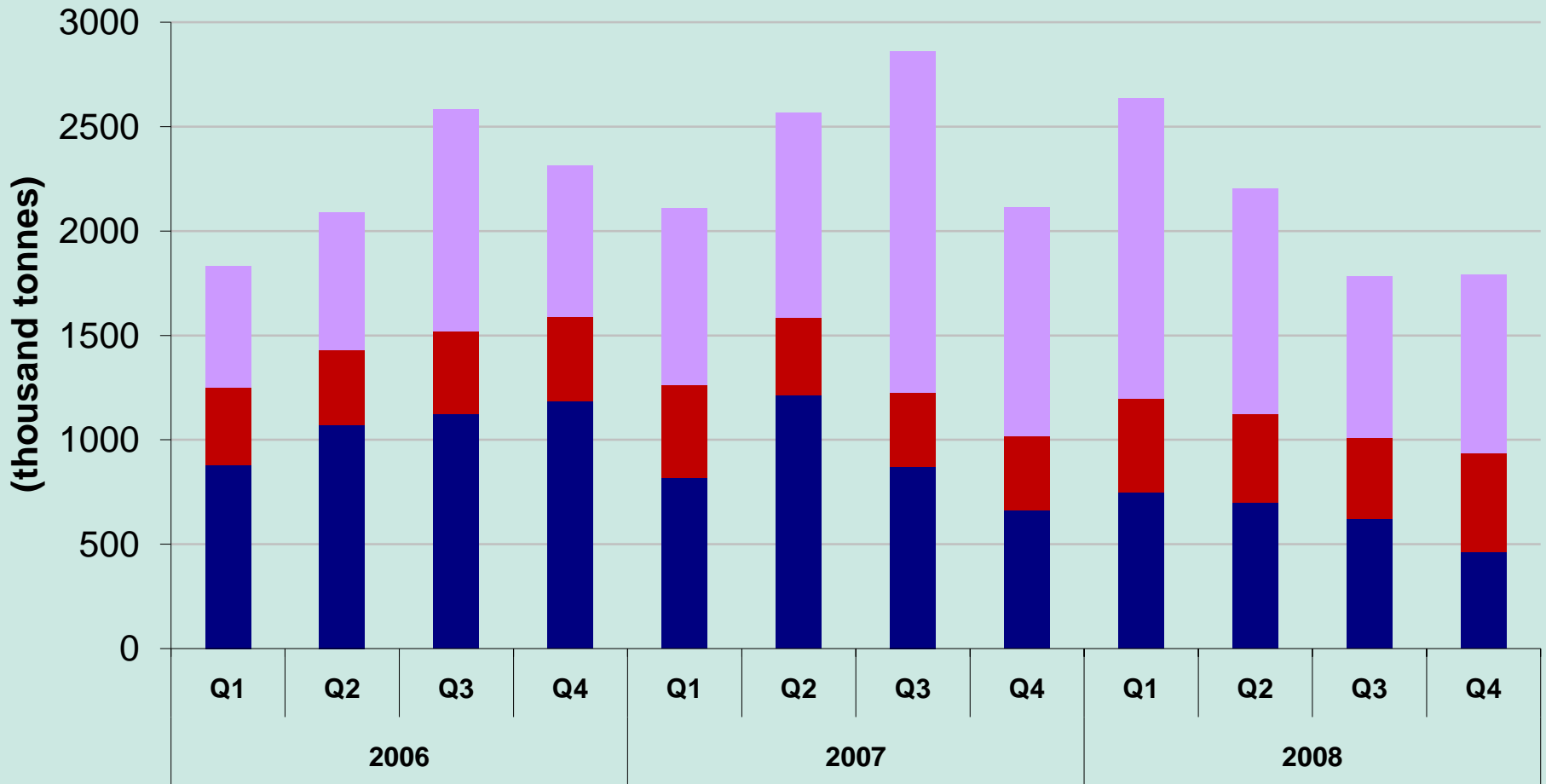


...phosphate fertilizer prices rose...



...and Chinese import demand continued to grow, rising almost 1 million tonnes Y-O-Y, between 2006-2007.

■ North America ■ Far East ■ Middle East/FSU/Other



During H2 2008, the global economic crisis caused demand destruction in the commodity markets...

- Most major economies began to shrink, as demand and confidence plummeted.
- World trade slowed.
- Sulphur prices crashed as the prices of crude oil, metals, grains etc fell sharply.
- Cutbacks were announced by virtually all major phosphate producers.
- Sulphur started to back up in the pipeline.
- Distress sales became common.



...and China and India had problems of their own.



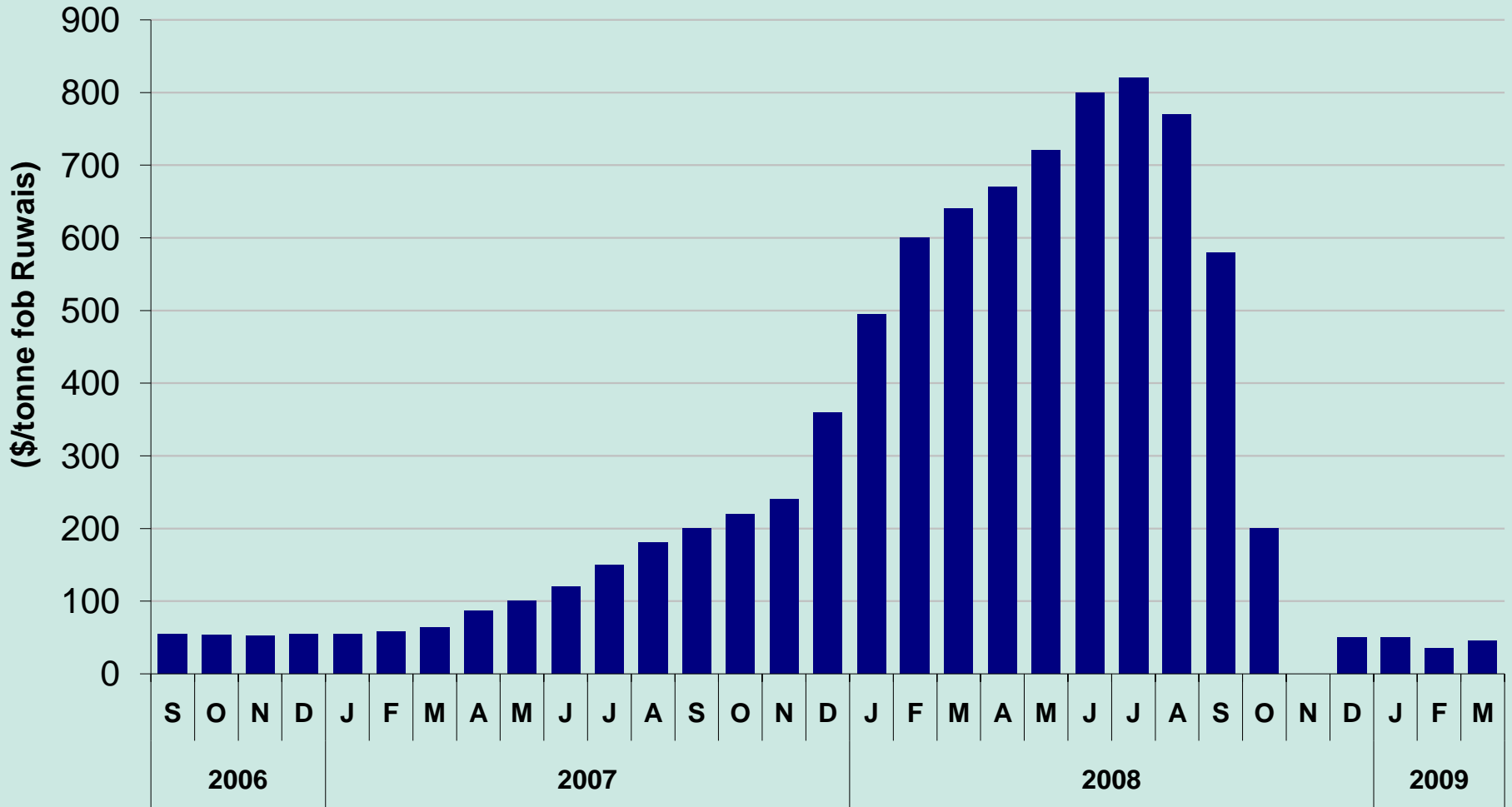
- A special export tax on fertilizer was introduced April-September 2008, and later extended to December 2008.
- The Olympics and the Sichuan earthquake depressed sulphur demand further.
- China became awash with sulphur, sulphuric acid and finished phosphate fertilizers.



- The 2008-09 budget allocation for fertilizer subsidies was Rs 310 bn (\$6.2 bn)...
- ...however, the estimated requirement was Rs 1,200 bn (\$24.2 bn)...
- ...with the MRP for DAP at Rs 9,350/t (\$188.50)...
- ...fertilizer producers were reluctant to commit to raw material purchases at high prices.



The Adnoc monthly contract price fell \$785/t between July 2008 and February 2009

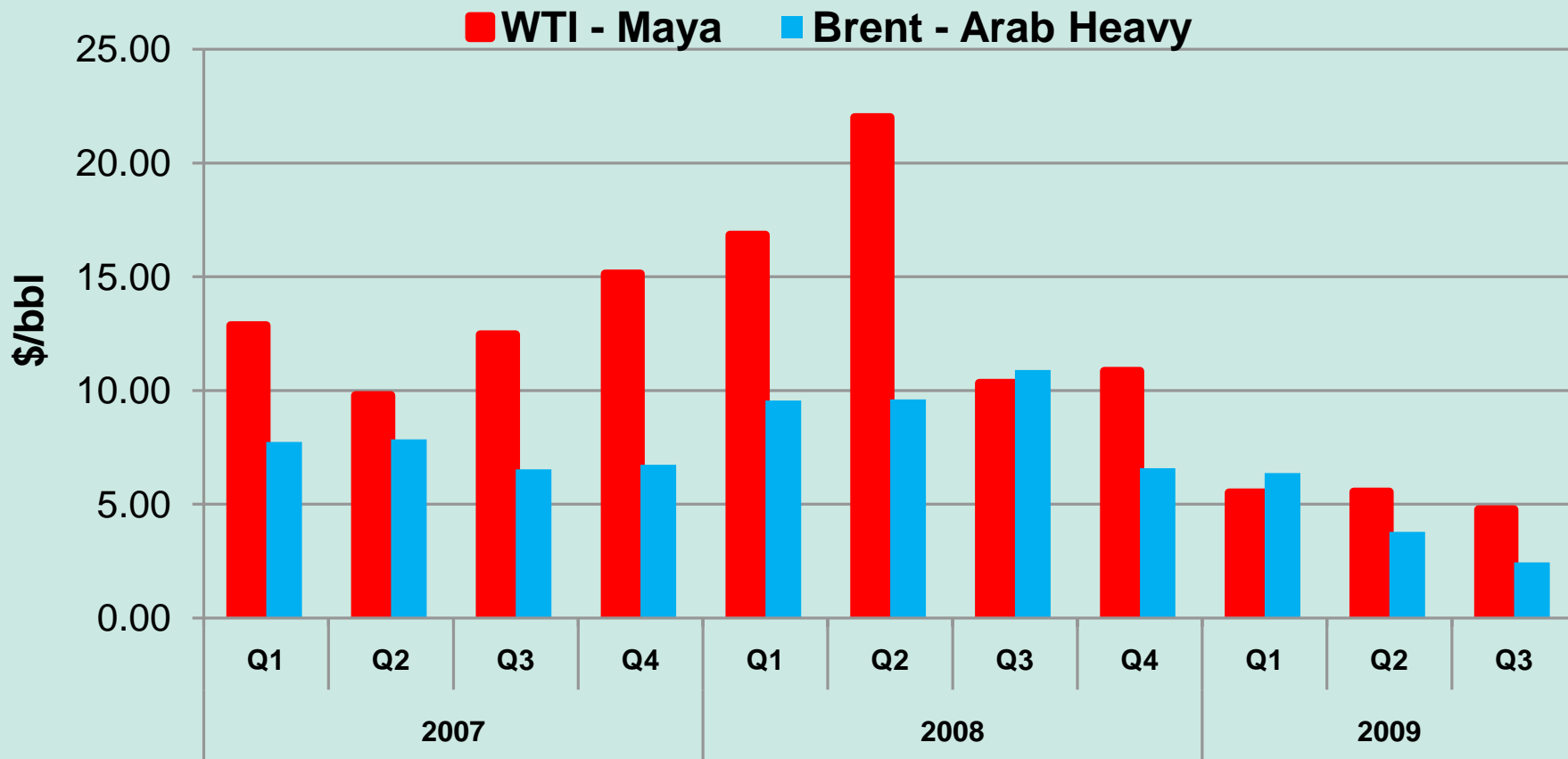


Global Overview and Recent Developments:

b) Post Crash...



Sulphur production has fallen, affected by the drop in crude oil demand, weak refining margins and narrowing sweet:sour price differentials.



Sulphur demand is generally weak, but China saves the day with record-breaking imports.

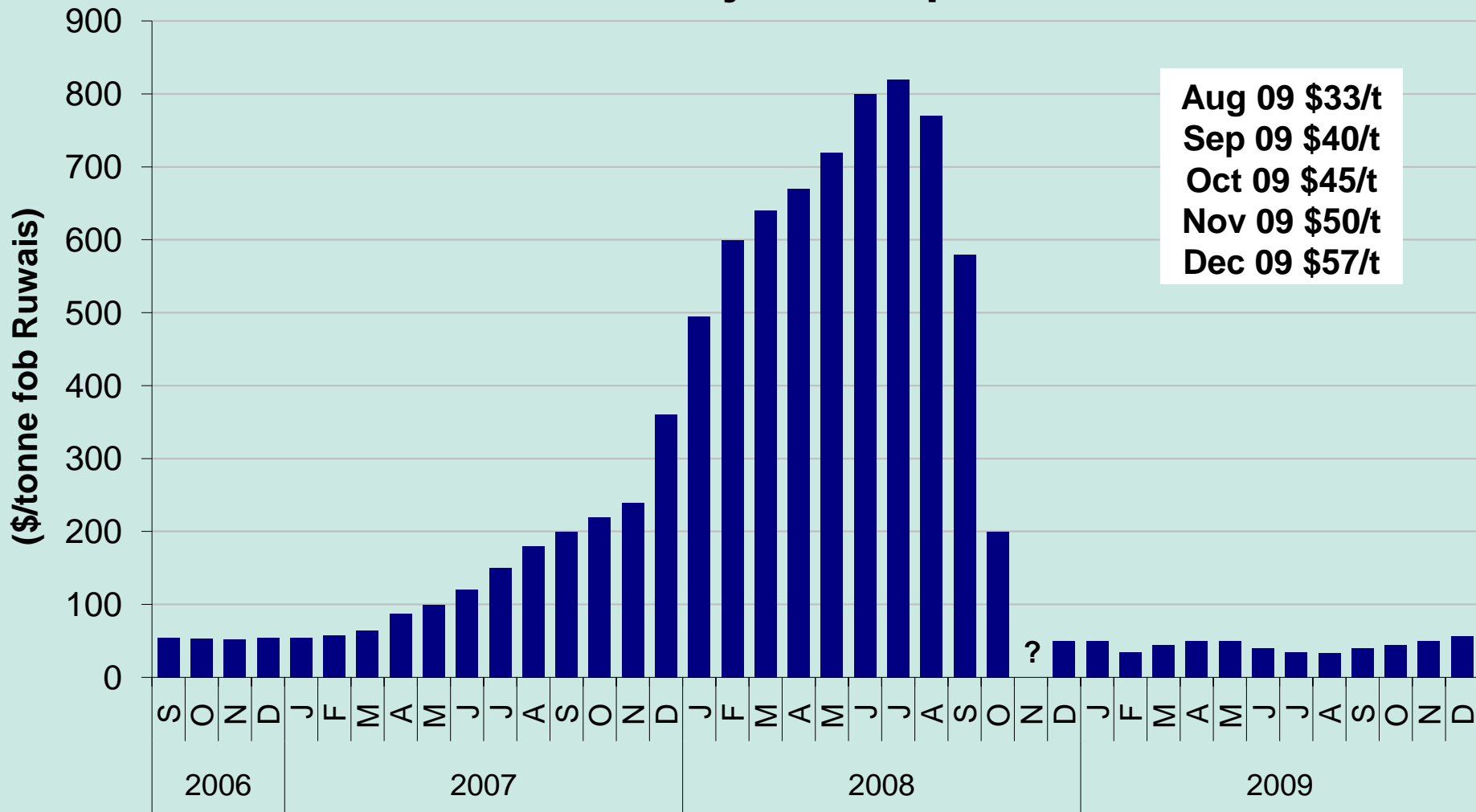
('000 tonnes)

Country	2008	2009	Period	
China	6,858	9,718	Jan-Oct	<div data-bbox="1696 521 1850 582" style="border: 1px solid black; padding: 2px;">+3,662</div> <div data-bbox="1704 811 1850 872" style="border: 1px solid black; padding: 2px;">-2,854</div>
Brazil	1,857	1,224	Jan-Oct	
Morocco	2,328	1,673	Jan-Aug	
United States	1,850	827	Jan-Jul	
Australia	634	371	Jan-Sep	
South Africa	774	494	Jan-Sep	



...and prices have shown some signs of recovery.

ADNOC monthly contract price



Aug 09 \$33/t
Sep 09 \$40/t
Oct 09 \$45/t
Nov 09 \$50/t
Dec 09 \$57/t

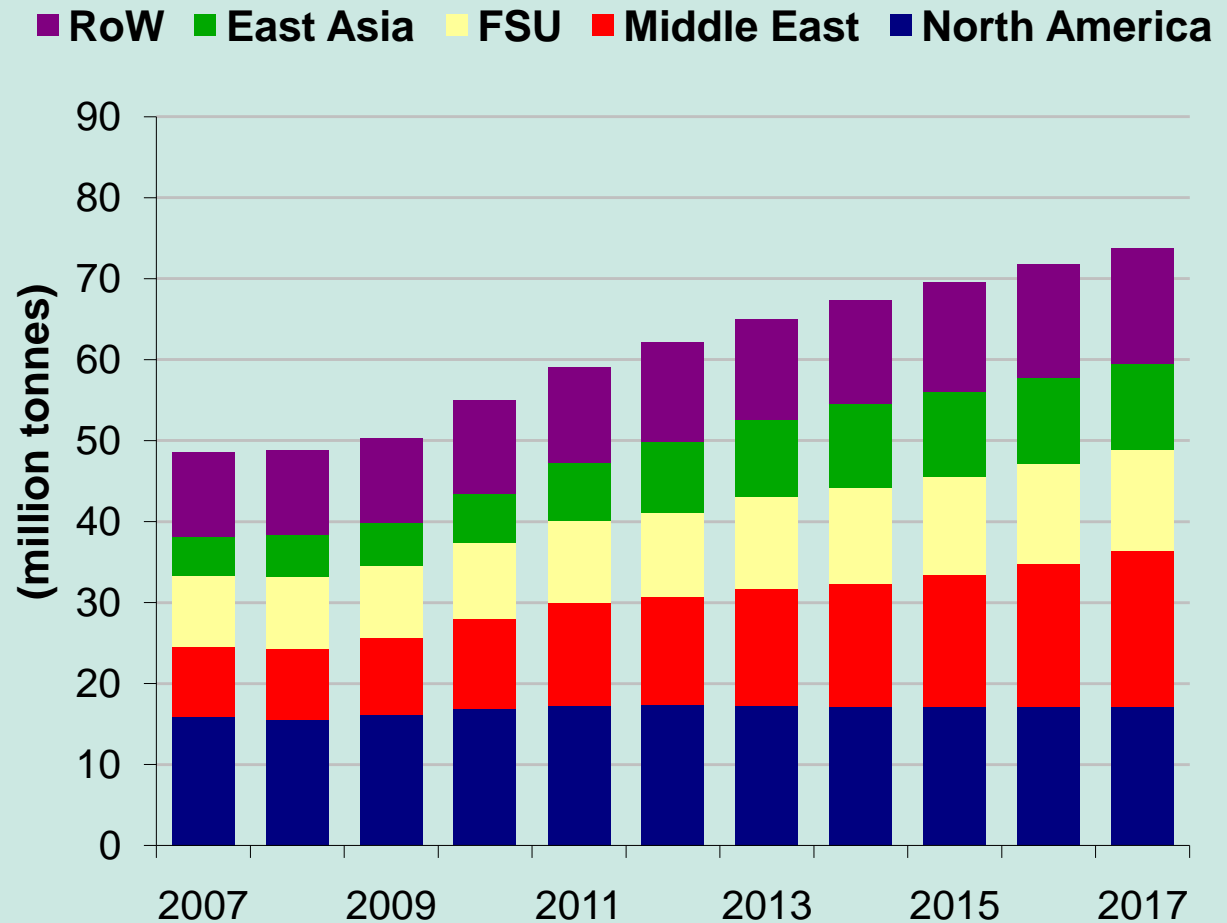


The Outlook for Production



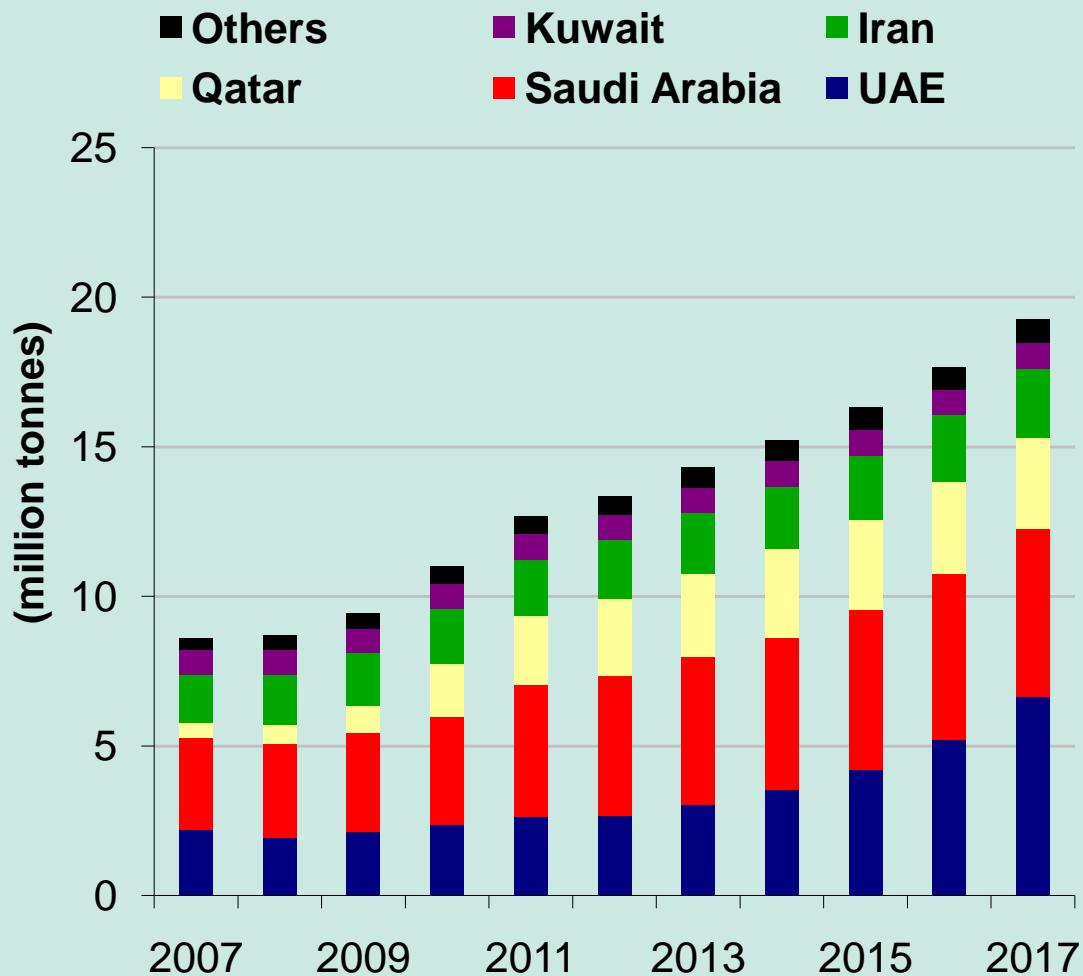
Annual brimstone production grows by 23.6 Mt between 2009-2017, at a CAGR of 3.9%

- Strongest growth is in Middle East, N America, E Asia and FSU.
- All growth is from involuntary production.



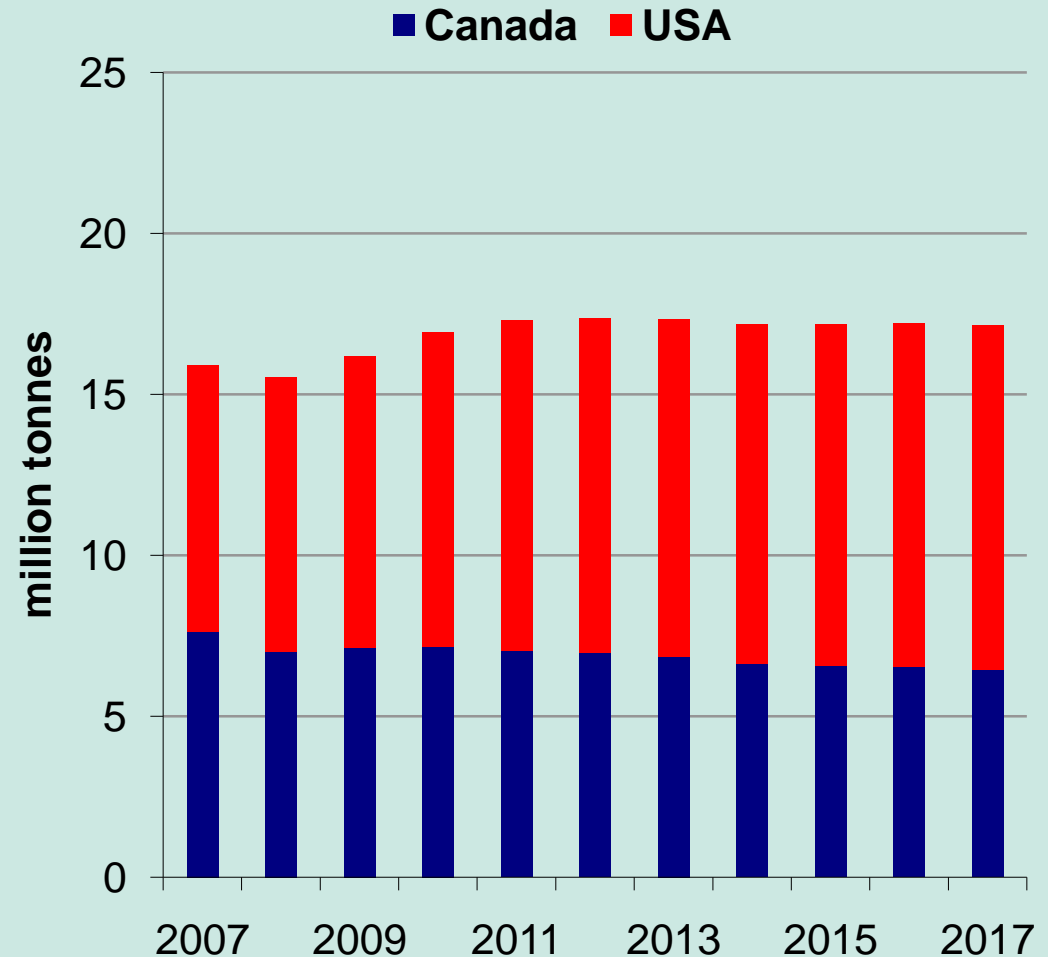
Middle East production grows by 9.8 million tonnes between 2009-2017.

- Major increases in UAE (+4.5 Mt), Qatar (+2.1 Mt) and Saudi Arabia (+2.3 Mt).
- Many projects have suffered delays.
- More non-associated gas is urgently needed, especially in Saudi Arabia and the UAE.



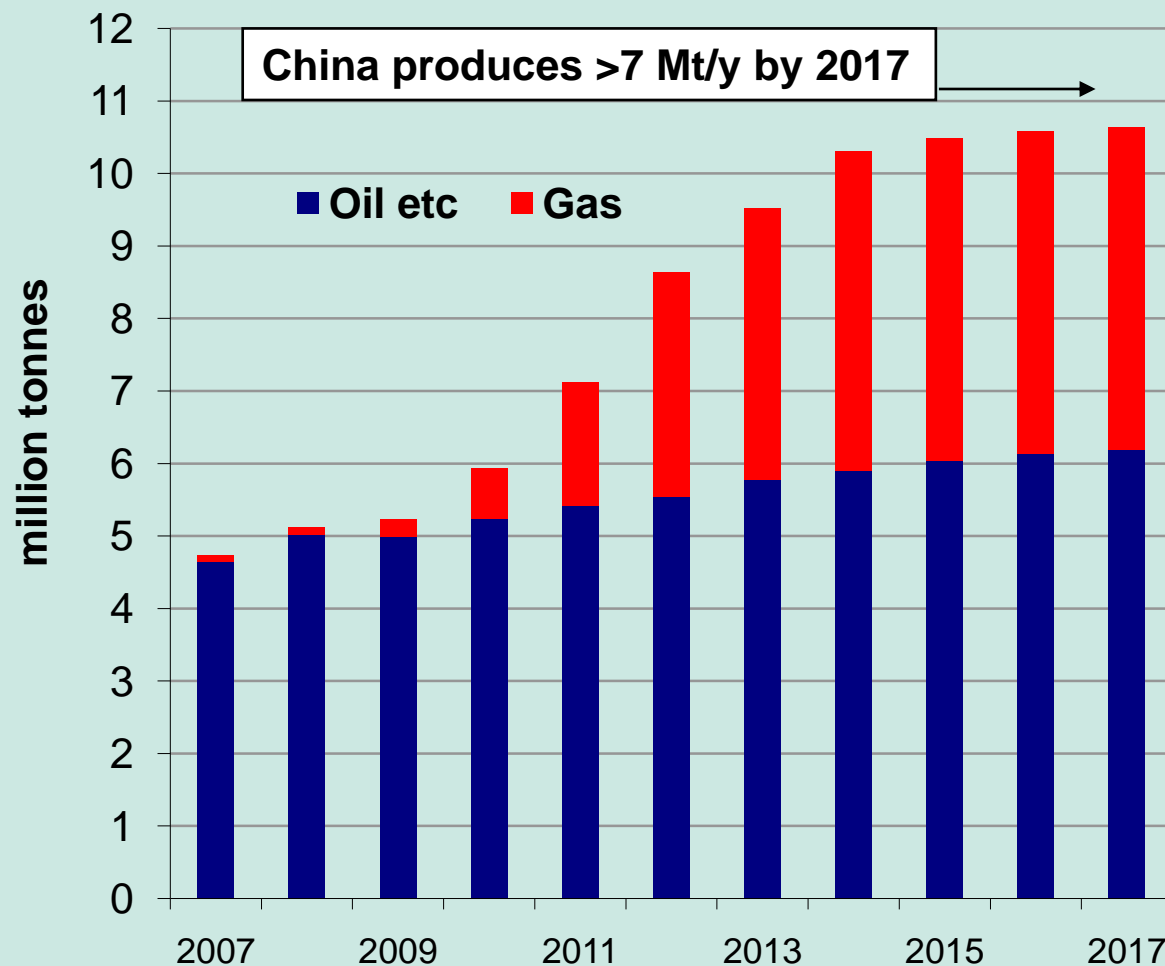
North America: +1.0 million tonnes 2009-2017

- Canadian production from gas declines, offset by growth from oil sands.
- Production in the United States grows at CAGR of 1.7%



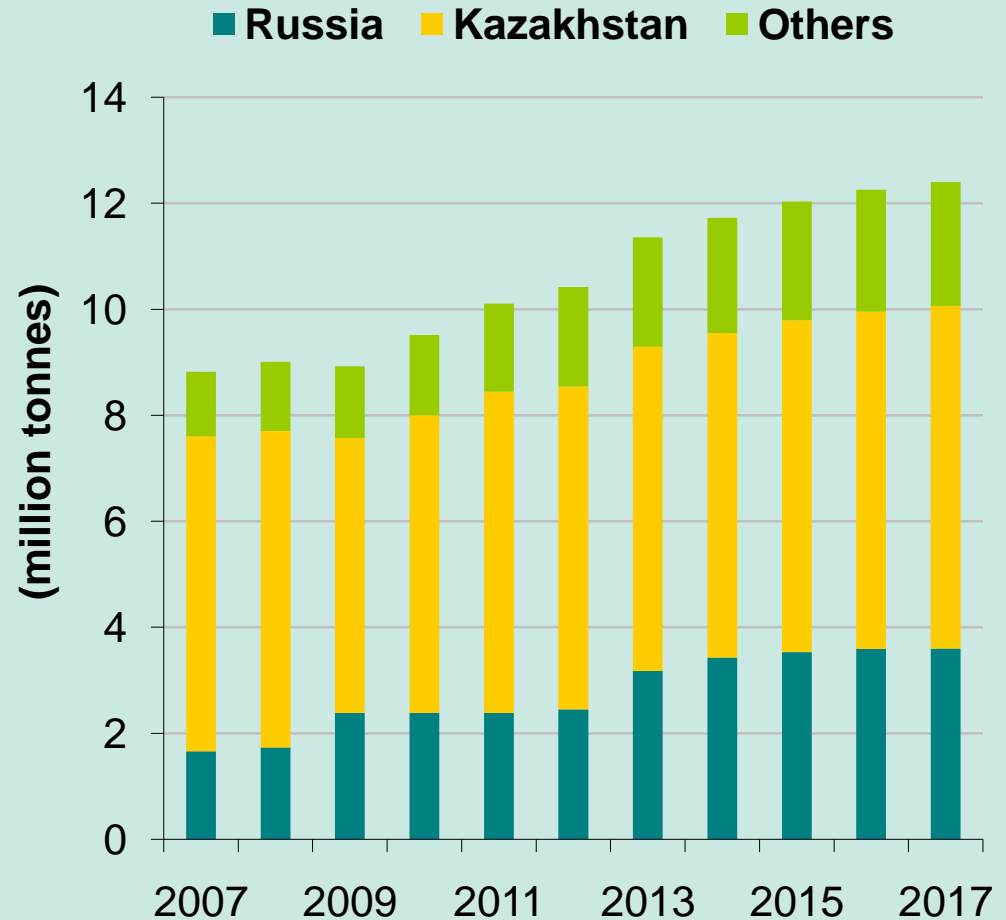
East Asia: +5.4 million tonnes 2009-2017

- Almost all regional growth from China.
- Most growth comes from gas production at a CAGR of 33% between 2009-2017



CIS: +3.5 million tonnes 2009-2017

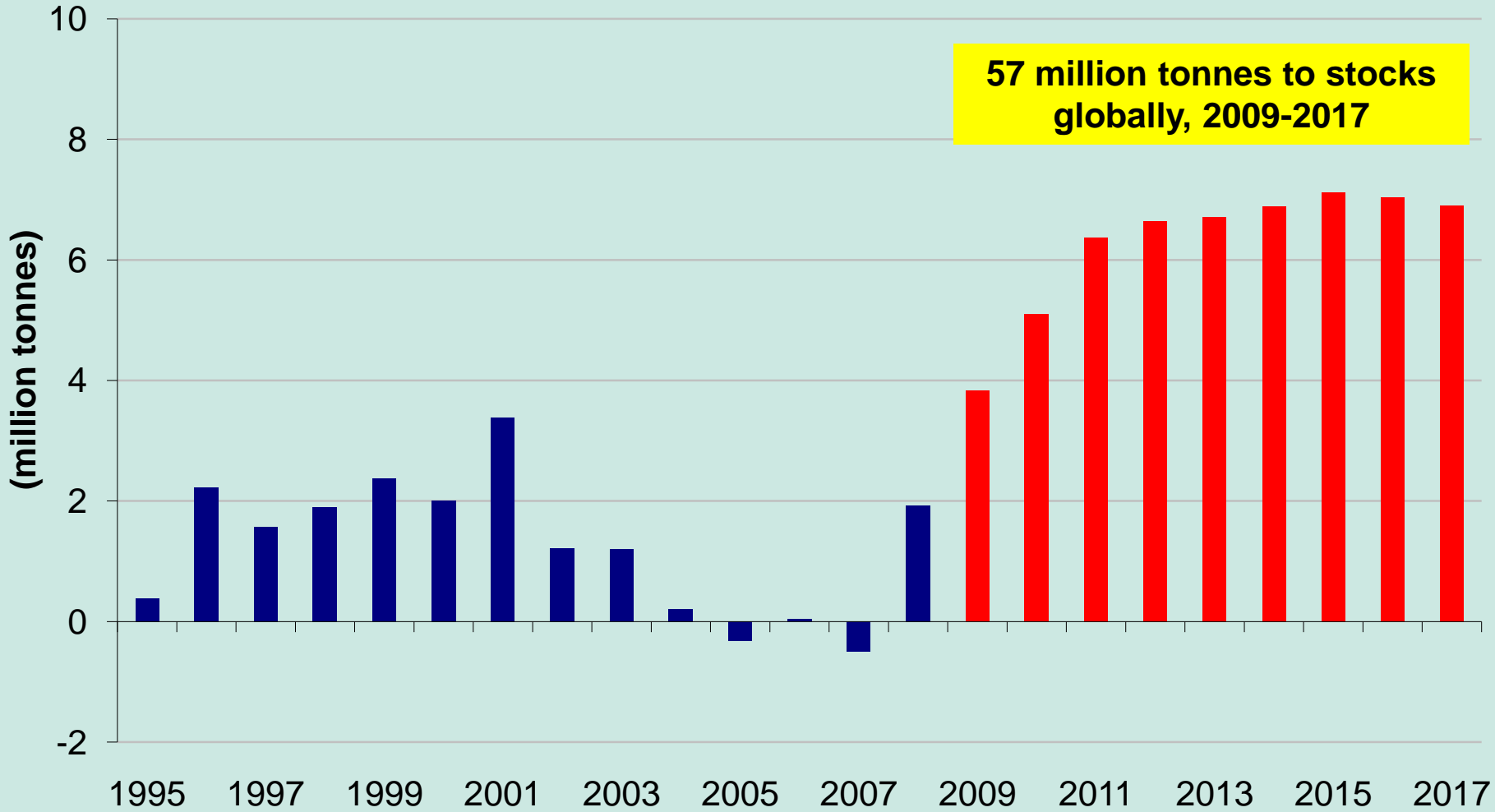
- Tengiz expansion completed Sep 2008.
- Kashagan on stream Q4 2012. Sulphur capped at 3,800 t/d. Storage of 4 Mt sulphur in covered block approved.
- Some growth in Russia (Orenburg). New sour gas plants in Turkmenistan and Uzbekistan.



The Outlook for Balance



The surplus production in the Middle East is the most important influence on the global market balance.



57 million tonnes to stocks globally, 2009-2017



Conclusions



Conclusions

It would seem that our forecasts of production may be too high and/or our projections of demand are too low, but the conclusions drawn from the analysis are valid:

- **There is no new paradigm of sulphur pricing.**
- **We are heading for a period of chronically weak market conditions.**
- **Supply will need to be very carefully managed.**

