

How Tight is World Fertilizer Supply?

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Main world fertilizer demand drivers

SHORT TERM

- Corn-based ethanol production in the US
- 2. Tight food supply and strong agricultural commodity prices

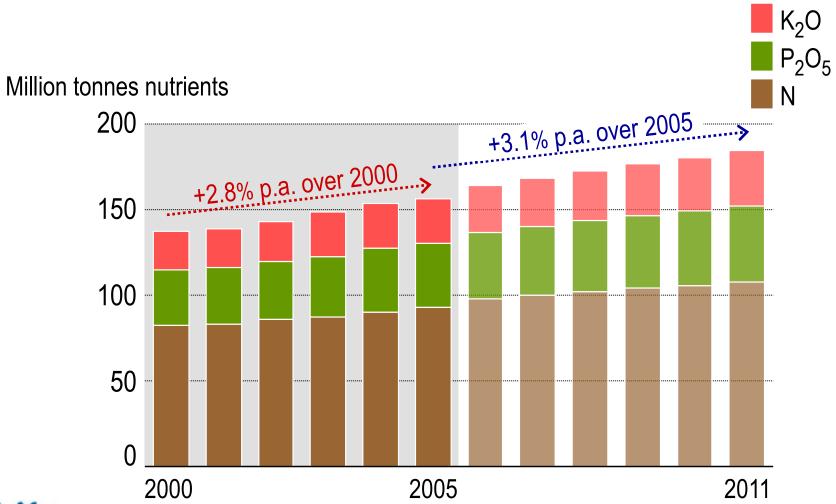
MEDIUM TERM

- Continued world population growth
- Income growth in developing countries, changing dietary preferences
- 3. High energy prices
- 4. Natural resource constraints (land, water)
- 5. Growing environmental concerns
- 6. Improved technologies





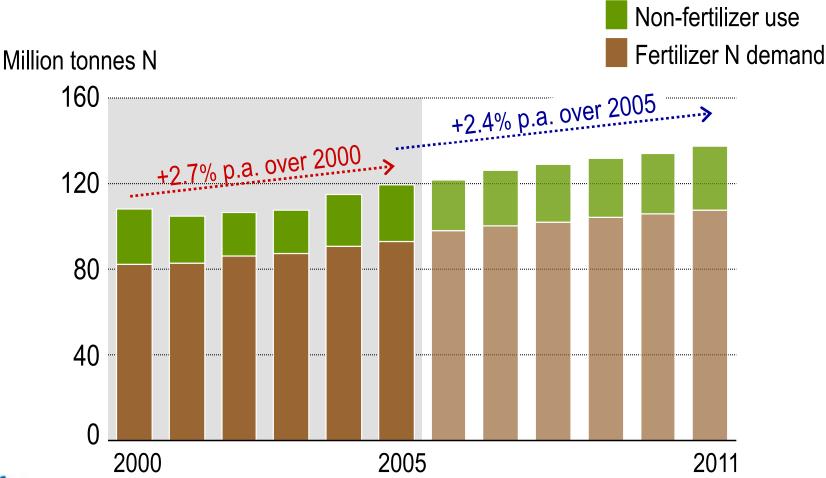
World fertilizer demand: 5-year periods







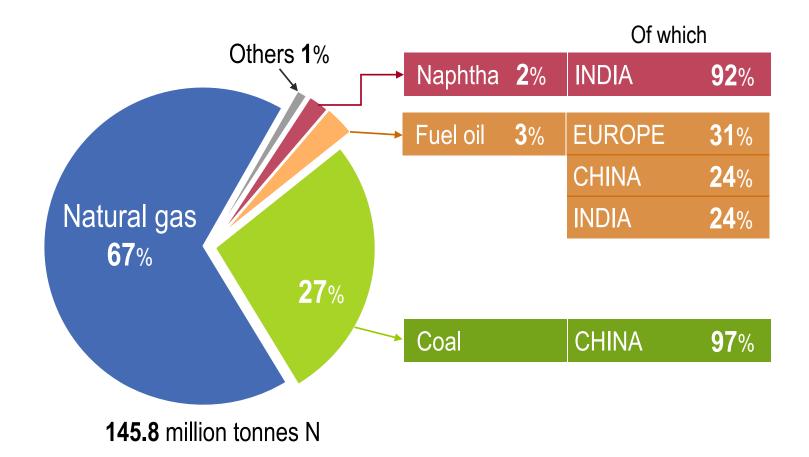
World nitrogen market situation - Ammonia demand







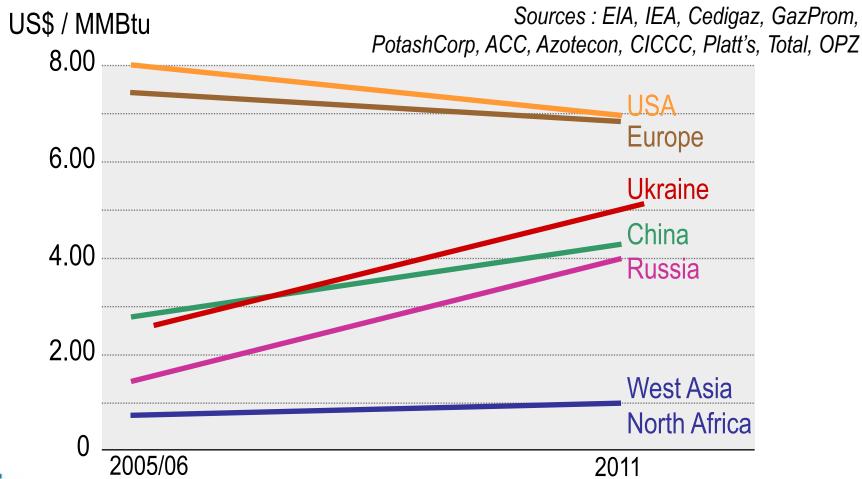
2007 ammonia capacity by feedstock







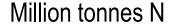
Natural gas price trends

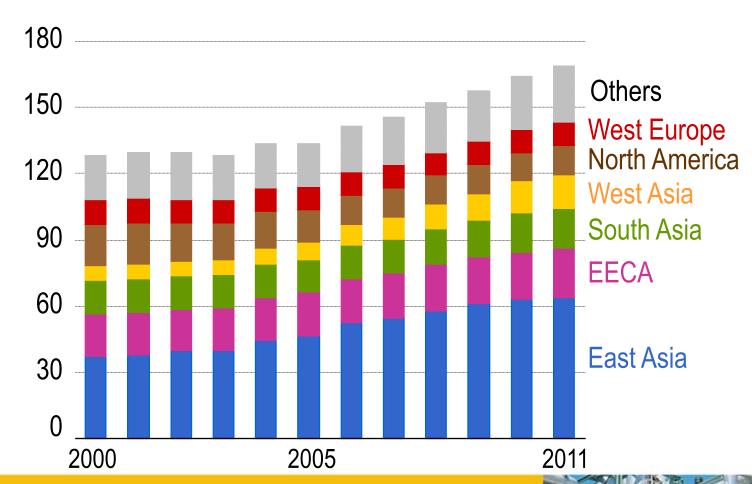






Ammonia capacity trends

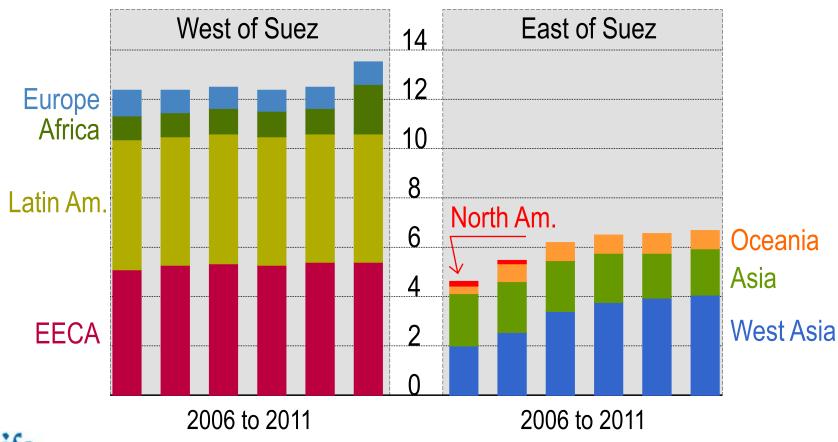






World seaborne ammonia export supply

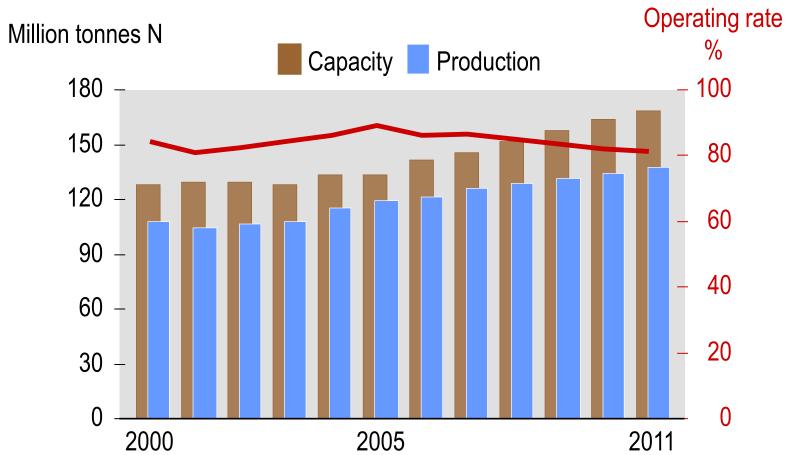








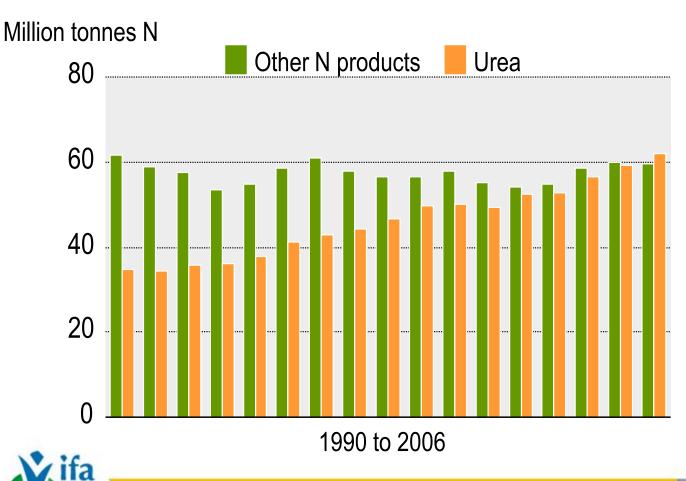
World ammonia market outlook 2000-2011







World nitrogen and urea production

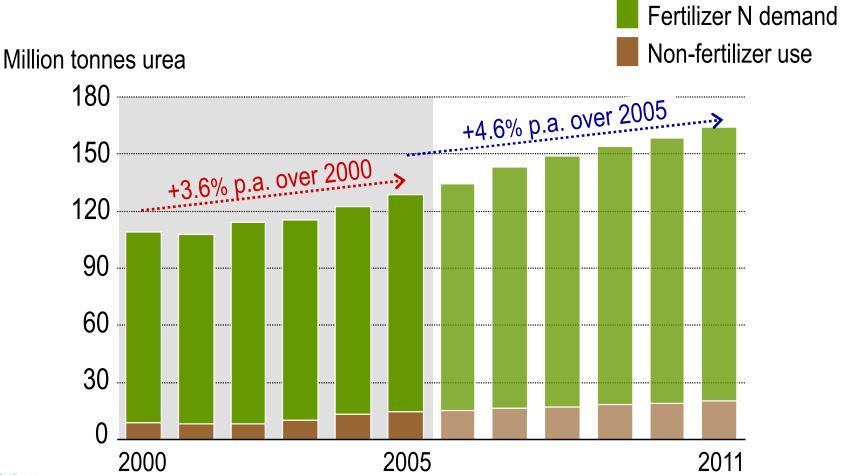


- Urea production share rose from 36% to 51%
- Total growth of urea production: 70% (or 4% per year)
- Total growth of other N products: 0%





World urea demand 2000-2011







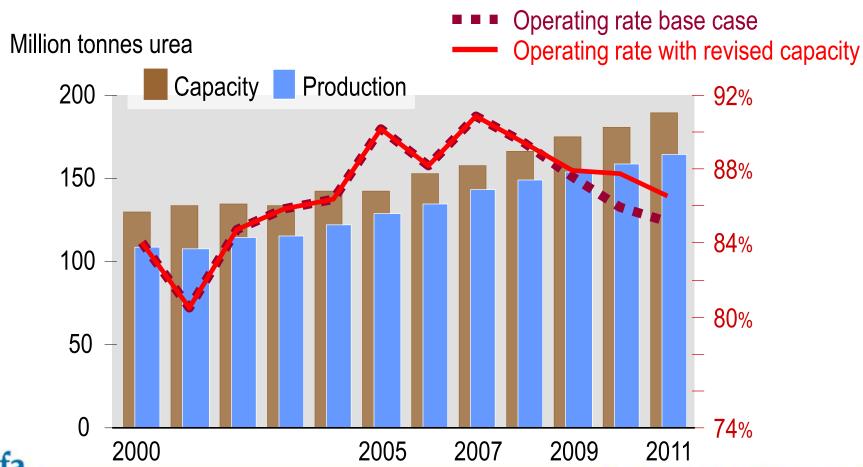
World urea capacity developments

| | 2007 | 2011 |
|---------------|------------------|------|
| East Asia | 31.4 | 38.5 |
| South Asia | 13.0 | 15.2 |
| West Asia | 7.0 | 10.9 |
| EECA | 6.0 | 6.9 |
| North America | 5.1 | 4.9 |
| Europe | 4.6 | 4.7 |
| Africa | 2.6 | 4.3 |
| Latin America | 2.6 | 3.1 |
| Oceania | 0.2 | 0.2 |
| Total | 72.5 | 88.7 |
| | Million tonnes N | |





World Urea Market Outlook 2000-2011 with scenario of delayed projects

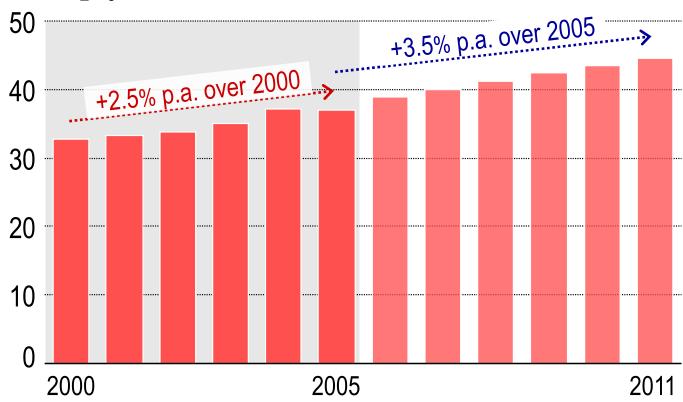






World phosphate fertilizers demand

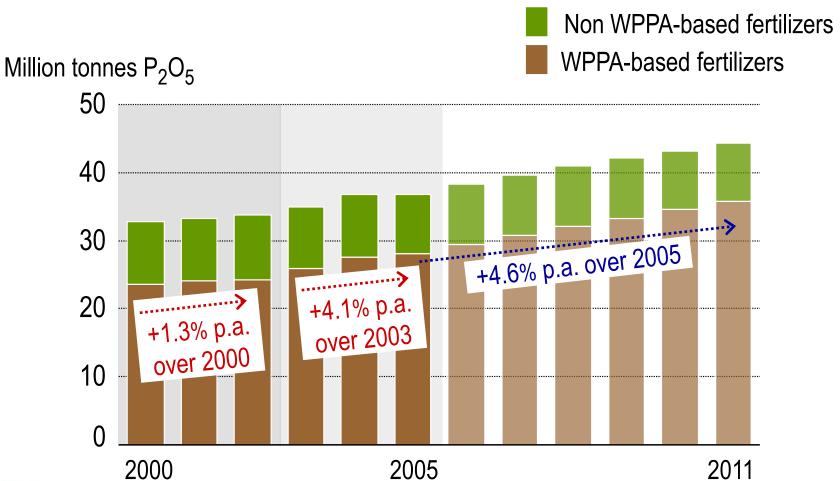
Million tonnes P₂O₅







World demand for phosphoric acid-based fertilizers

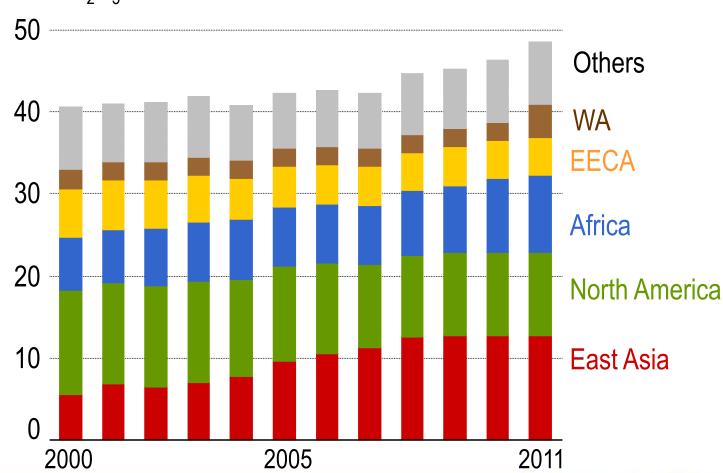






Phosphoric acid capacity developments

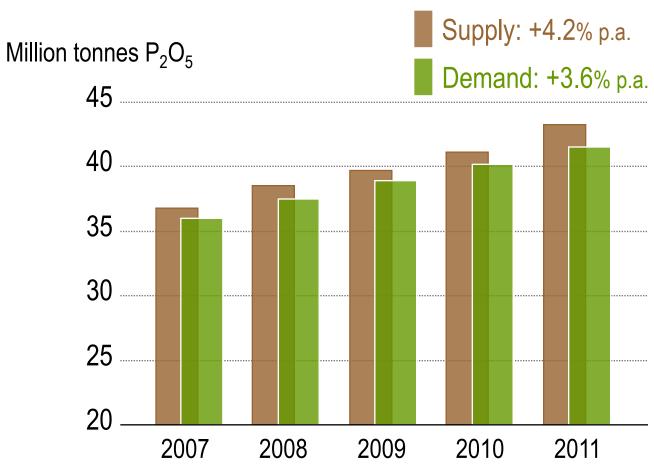
Million tonnes P₂O₅







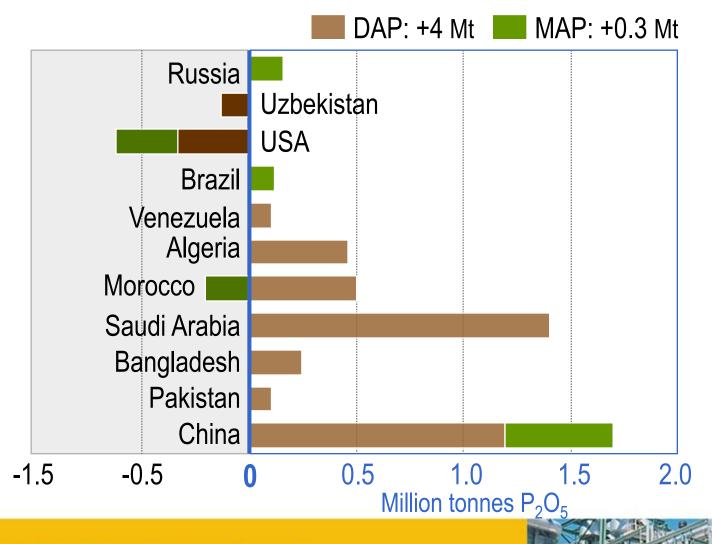
World phosphoric acid outlook





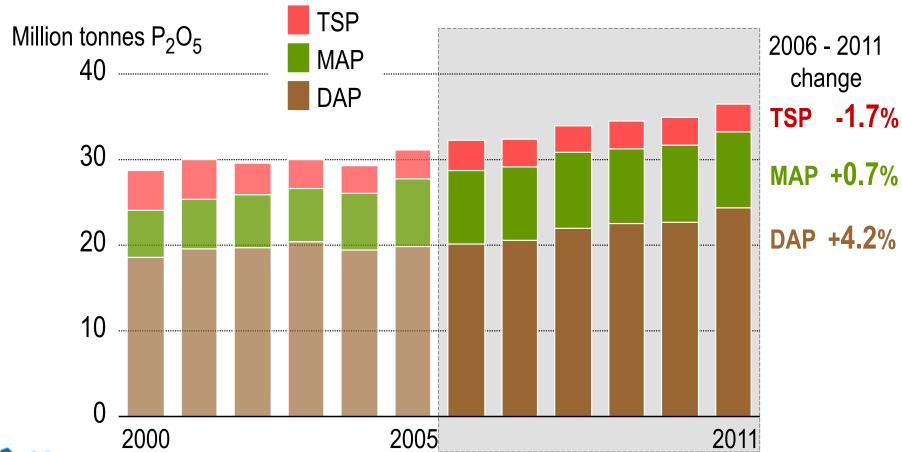


Main DAP-MAP capacity developments, 2006-2011





World DAP-MAP-TSP supply

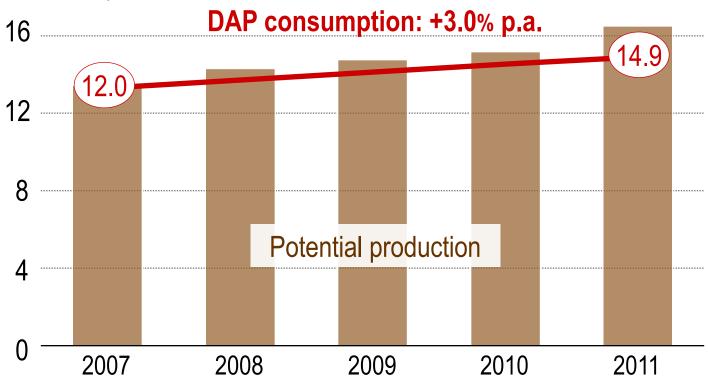






World DAP outlook

Million tonnes P₂O₅

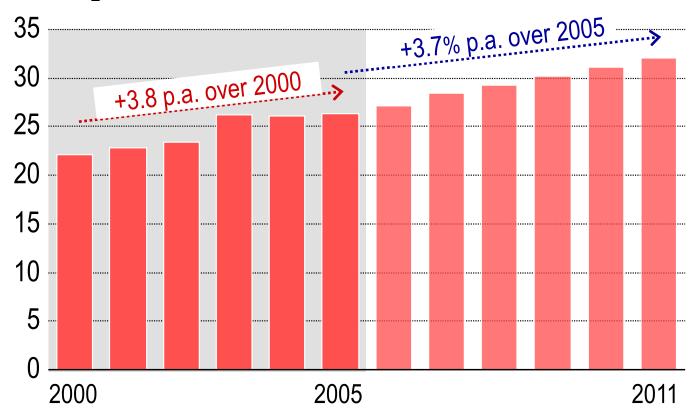






World fertilizer potassium demand

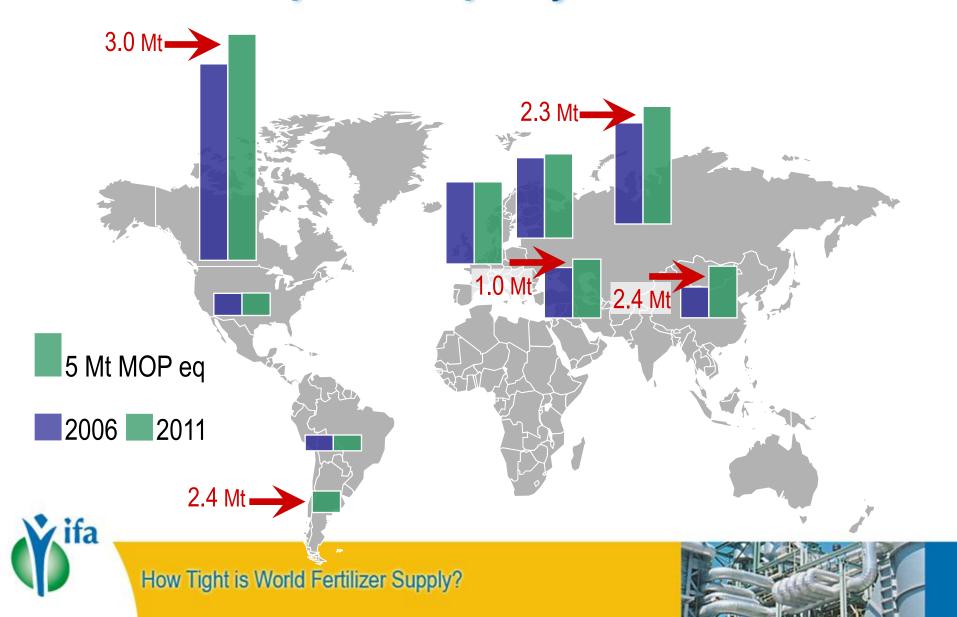
Million tonnes K₂O



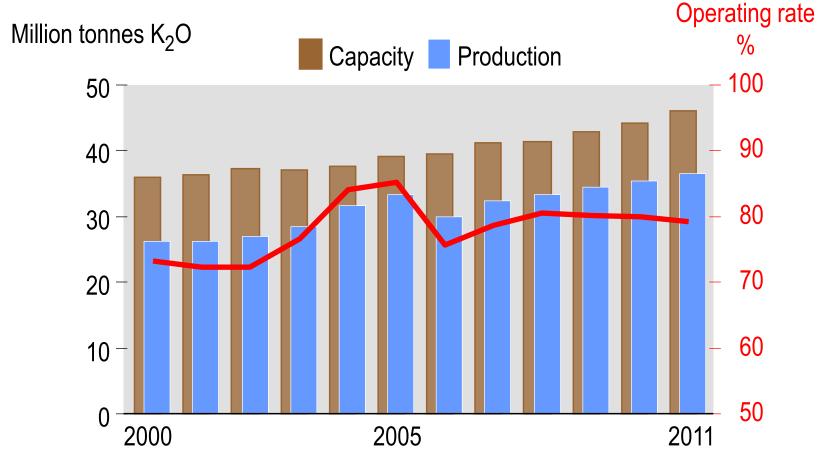




New potash capacity: 2006-2011



World potash market outlook







CONCLUSIONS

- All nutrient markets will be tight until 2009 as demand has expanded more rapidly than was expected a few years ago.
- With regard to merchant ammonia, there will be a sharply different picture east and west of the Suez Canal, with a merchant ammonia deficit to the east.
- While urea supply is projected to grow rapidly, the supply/demand balance will likely remain tight in 2008, easing slightly in 2009. A surplus would emerge during 2010.





CONCLUSIONS

- Exportable phosphoric acid will remain very tight in light of the few projects planned in the short term. Moreover, no new merchant capacity is under construction.
- The DAP, TSP and MAP market will be balanced throughout most of the forecast period. Very few producers have some available swing capacity for export.
- Potash supplies will increase in most exporting countries. Because
 of a shift towards more balanced fertilizer use, no significant potash
 surplus will develop before 2011, at the earliest.



