World Fertilizer Supply and Demand Medium-term Outlook, and A Special Emphasis On Europe

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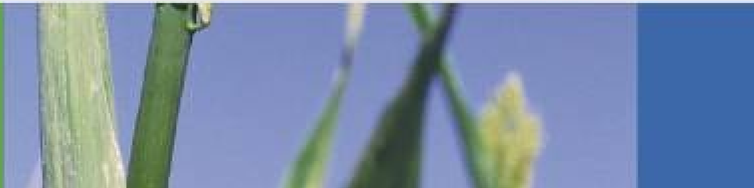
International Fertilizer Industry Association (IFA)

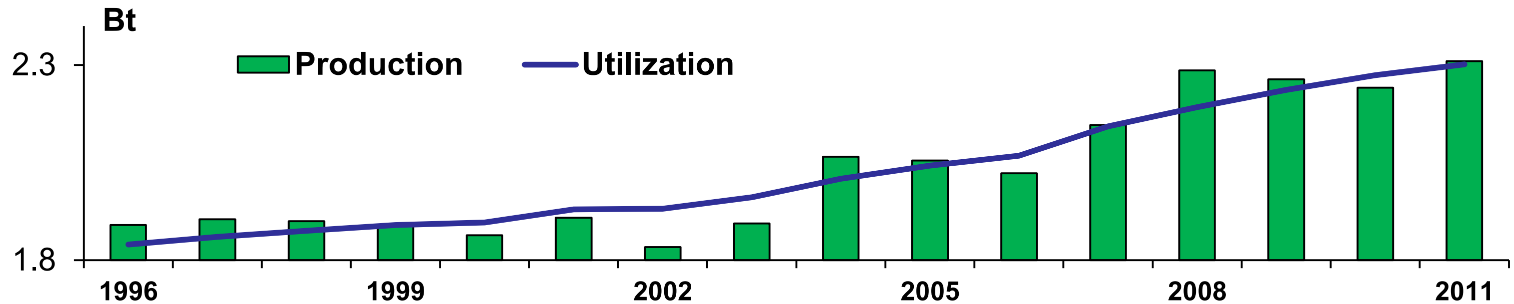
AFCOME - 12èmes Rencontres Internationales
Toulouse – October 2011



FERTILIZER DEMAND OUTLOOK

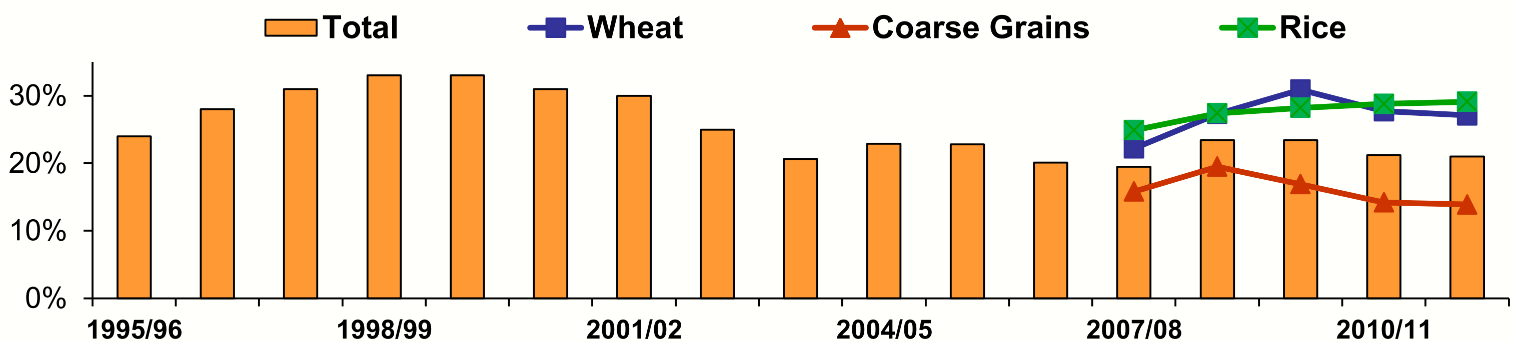
Global Fertilizer Demand : Main Drivers

Grain production and use



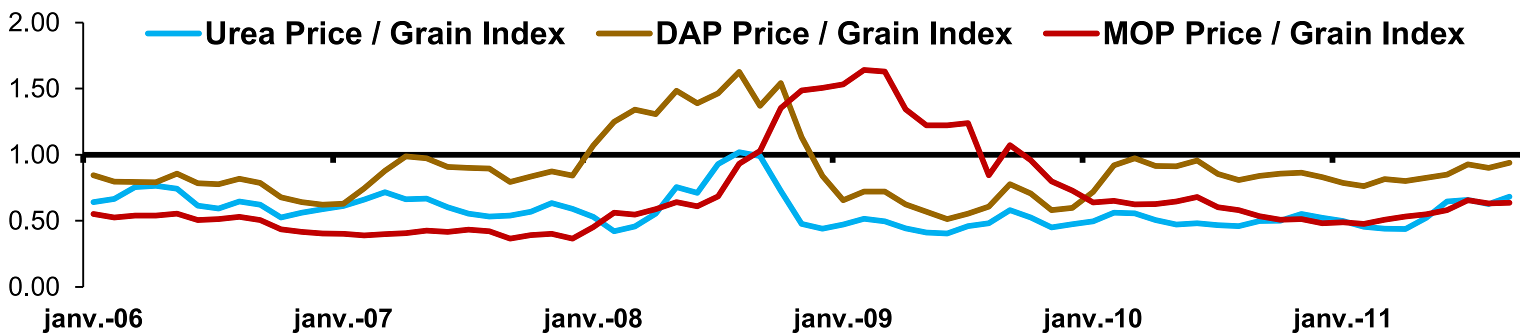
Source: FAO Crop Prospects and Food Situation, October 2011

Stock to Use ratios



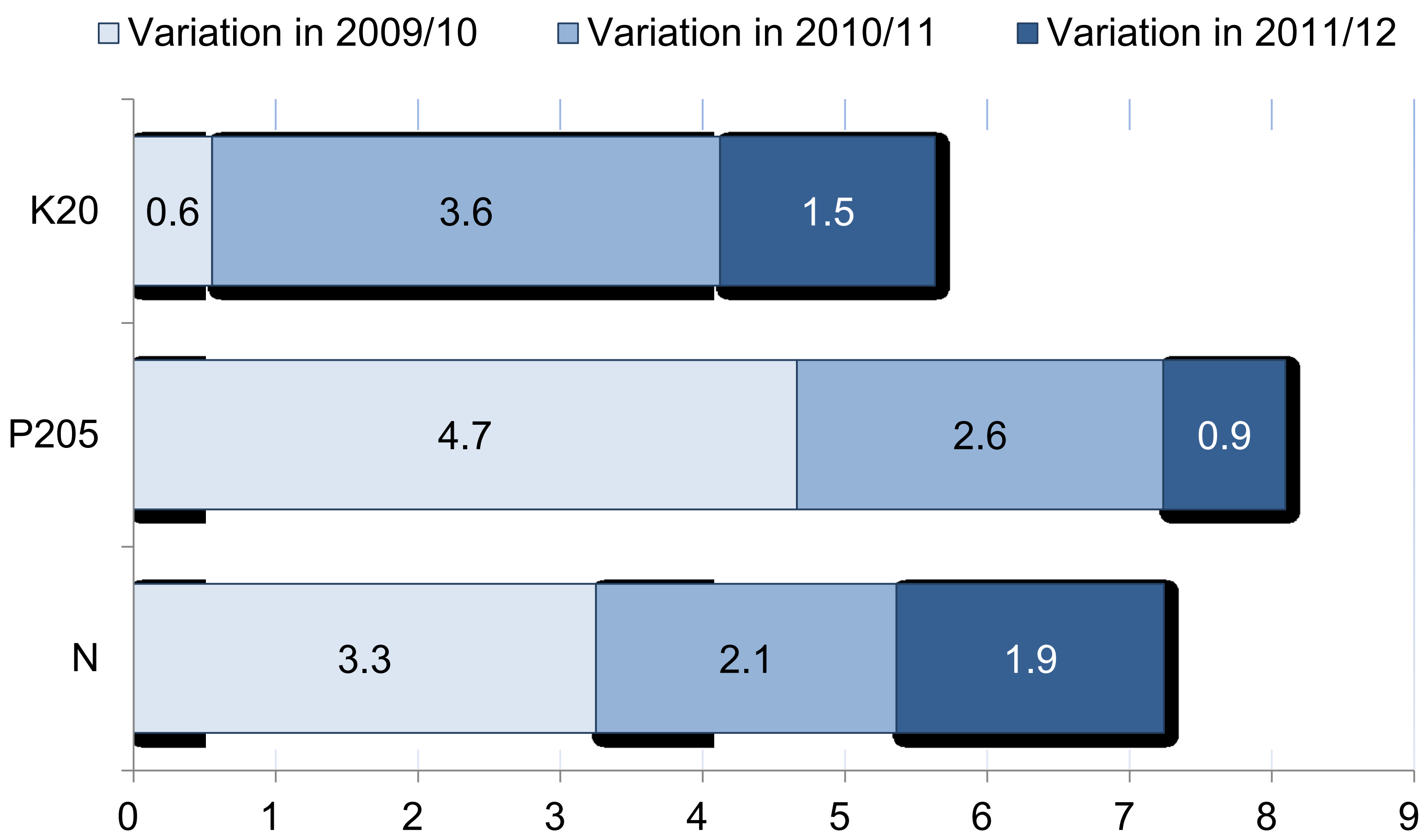
Source: FAO Food Outlook, June 2011

Index of grain prices relative to fertilizer prices



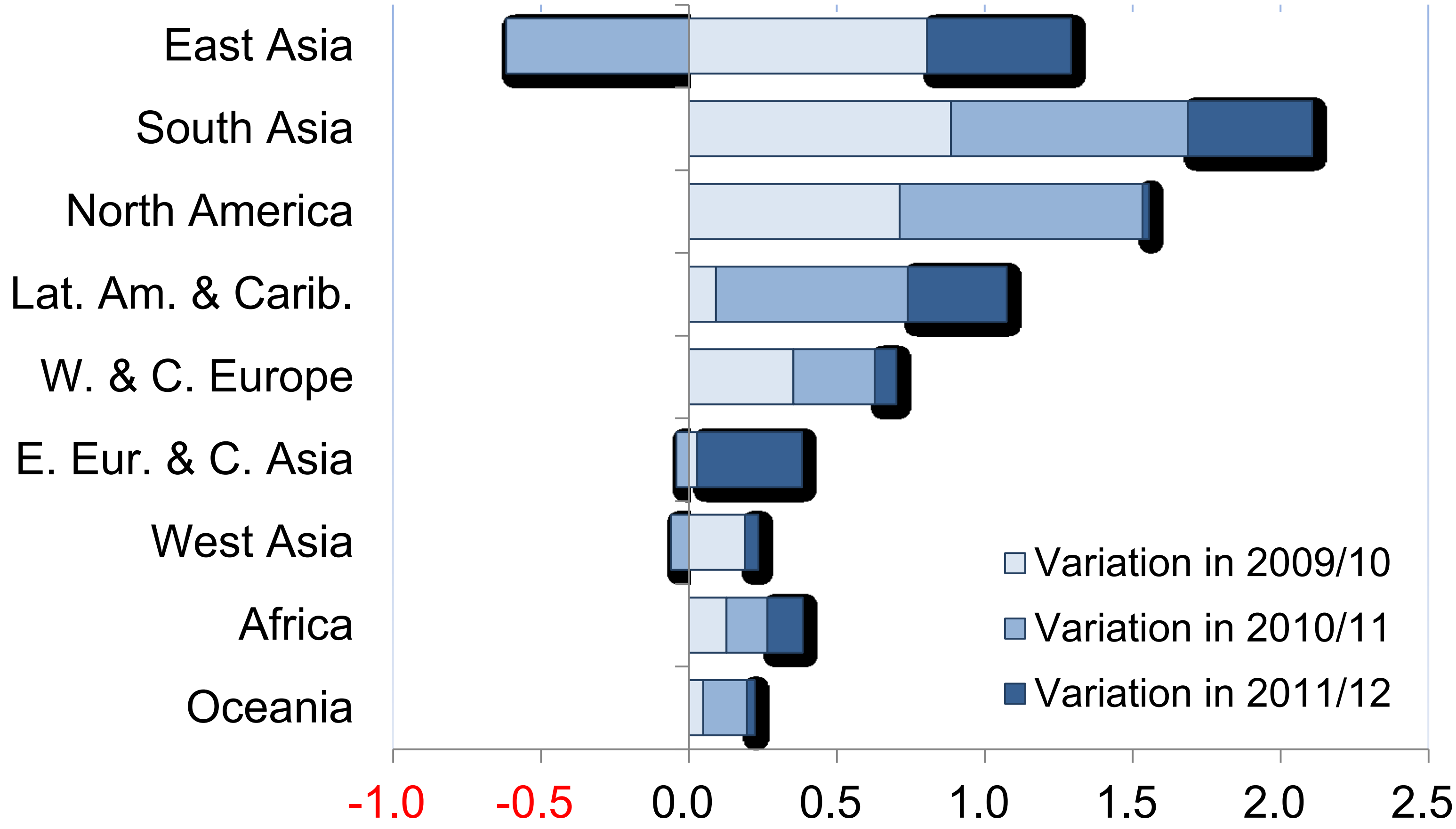
Sources: British Sulphur, Financial Times and IMF

Global Fertilizer Demand - Short-term Forecasts (Mt nutrients)



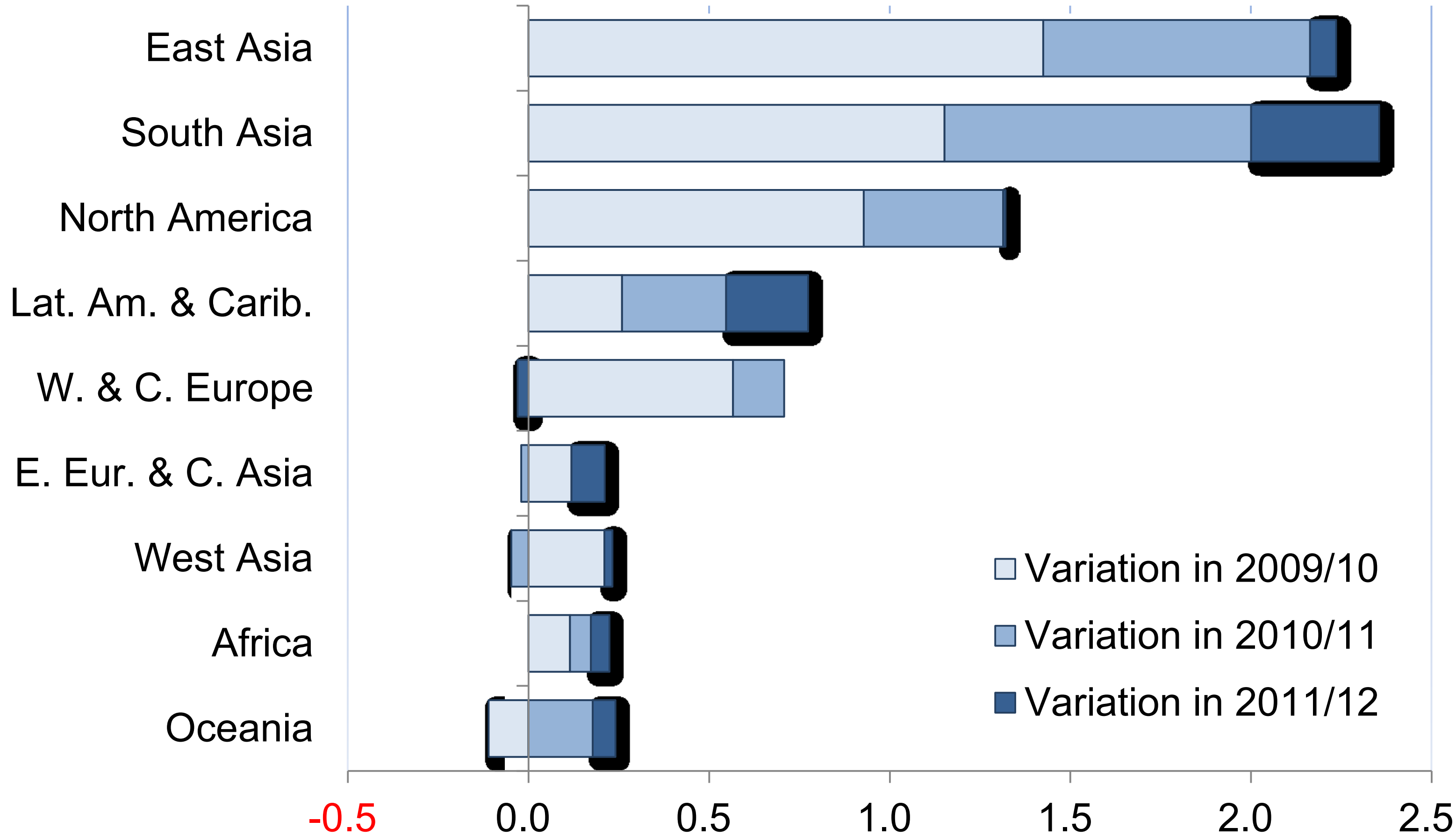
Source: IFA Agriculture, May 2011

Regional N Fertilizer Demand : Short-term Forecast (Mt N)



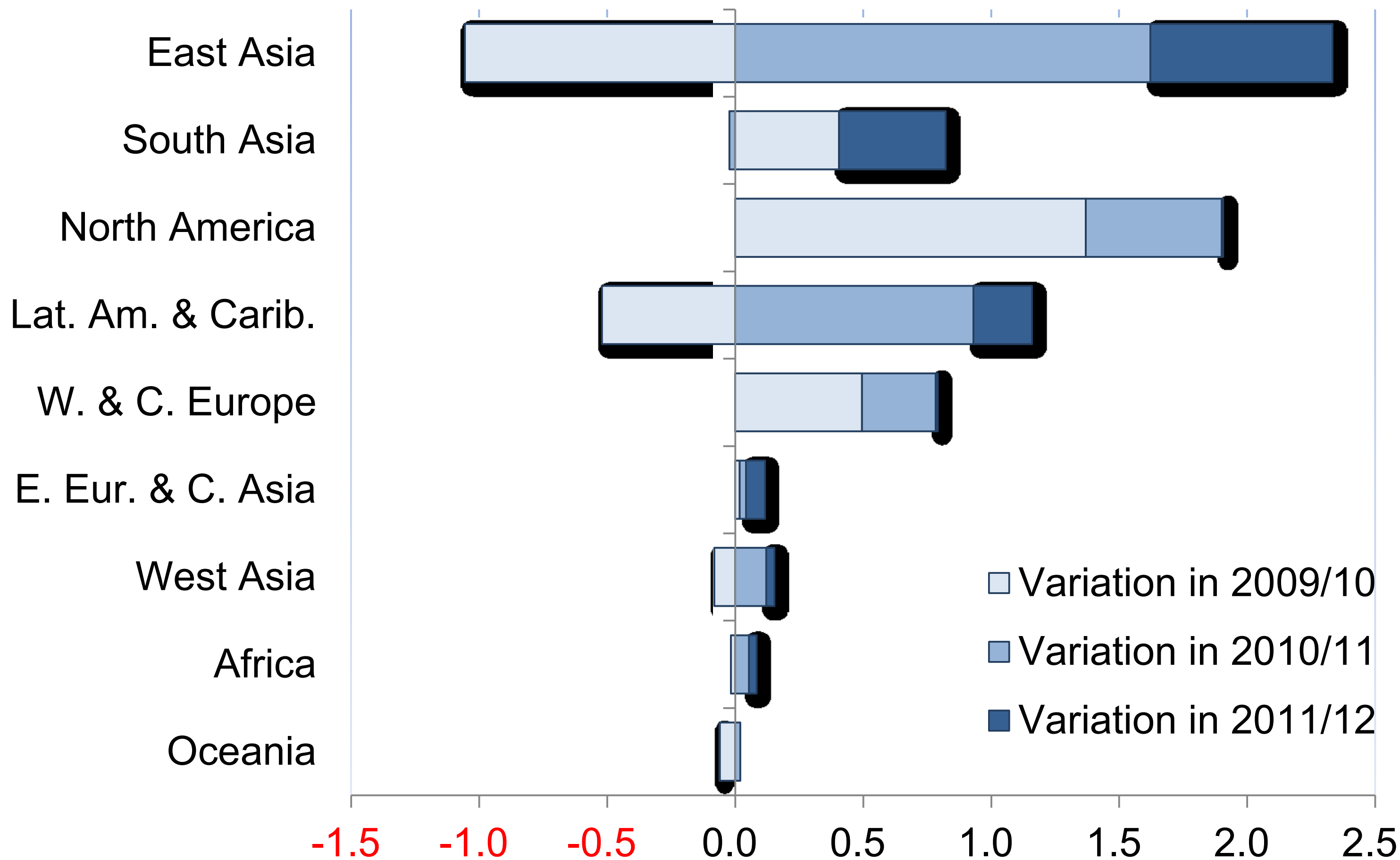
Source: IFA Agriculture, May 2011

Regional P Fertilizer Demand : Short-term Forecast (Mt P2O5)



Source: IFA Agriculture, May 2011

Regional K Fertilizer Demand : Short-term Forecast (Mt K2O)



Source: IFA Agriculture, May 2011

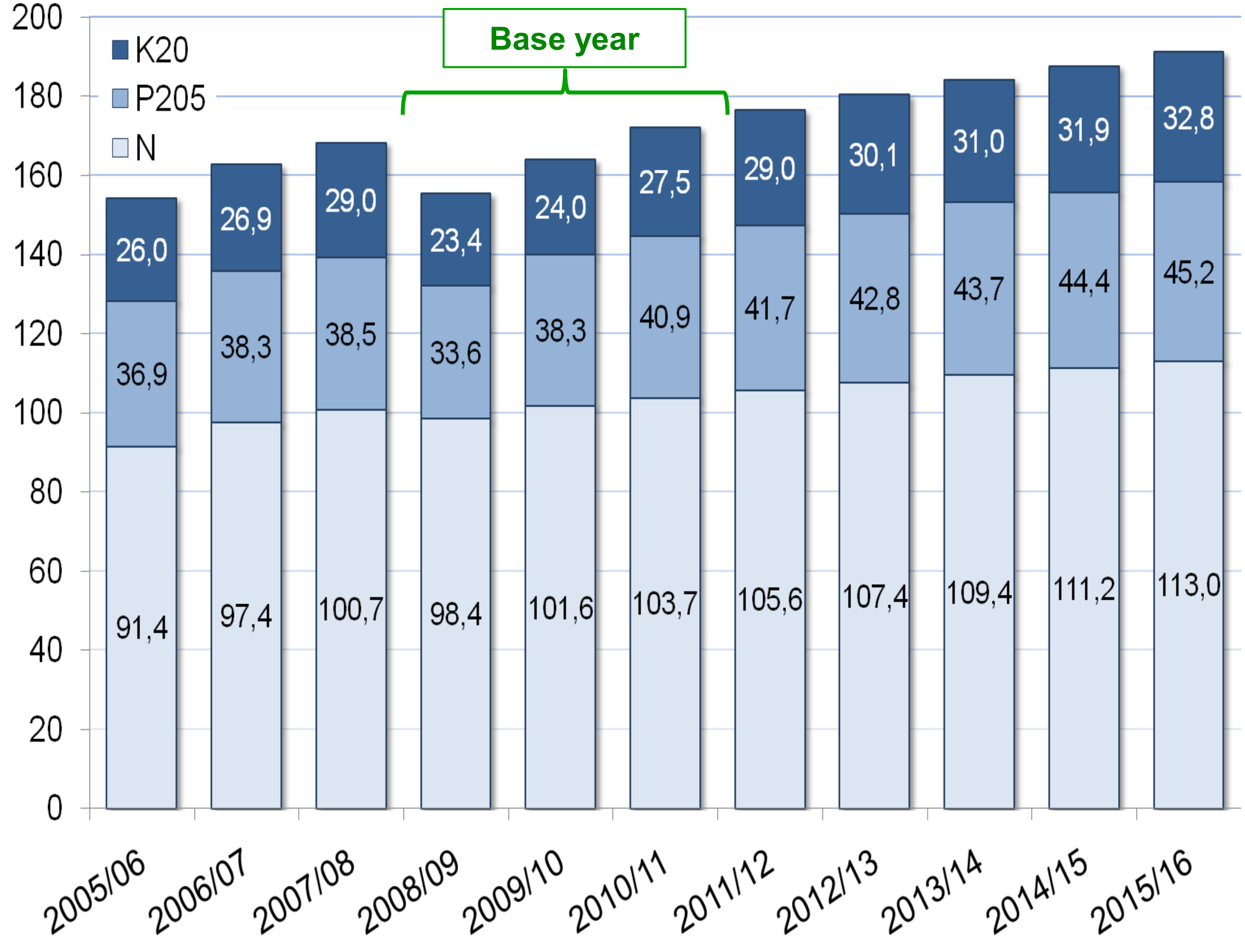
Global Fertilizer Demand : Forecast in Calendar Years (Mt nutrients)

	2008	2009	2010 (e)	*Change*	2011 (f)	*Change*	2015 (f)	*Change*
N	98.7	100.7	102.6	*+1.9%*	105.2	*+2.5%*	112.4	*+1.9% p.a.*
P_2O_5	34.1	36.8	39.9	*+8.4%*	41.4	*+3.8%*	44.9	*+3.3% p.a.*
K_2O	24.4	22.9	27.2	*+18.6%*	28.7	*+5.6%*	32.6	*+4.6% p.a.*
Total	157.2	160.5	169.7	*+5.8%*	175.3	*+3.3%*	189.9	*+2.6% p.a.*

Back to 2007 level

Source: IFA Agriculture, May 2011

Global Fertilizer Demand : Medium-term Outlook (Mt nutrients)

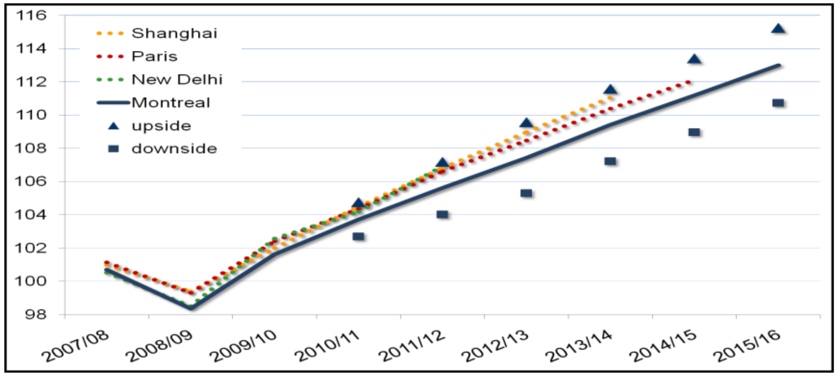


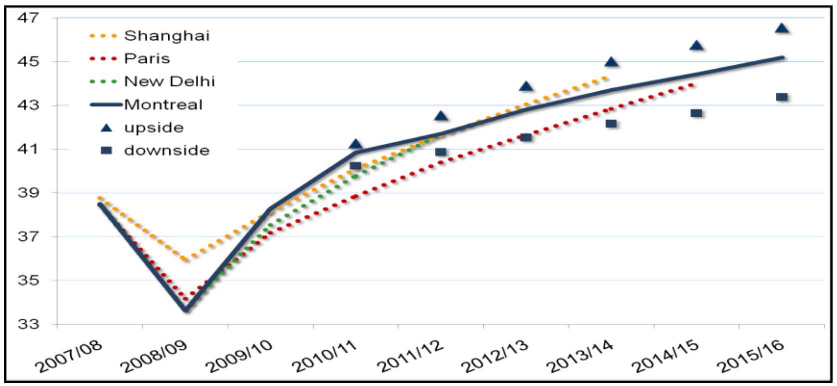
Average Annual Change

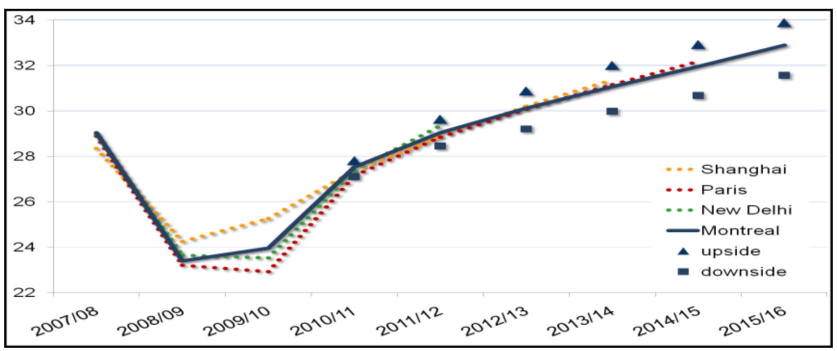
Base Year → 2015/16	
N	***+1.9% p.a.***
P_2O_5	***+3.1% p.a.***
K_2O	***+4.7% p.a.***
Total	***+2.6% p.a.***

Source: IFA Agriculture, May 2011

Long-Term Fertilizer Demand Scenarii







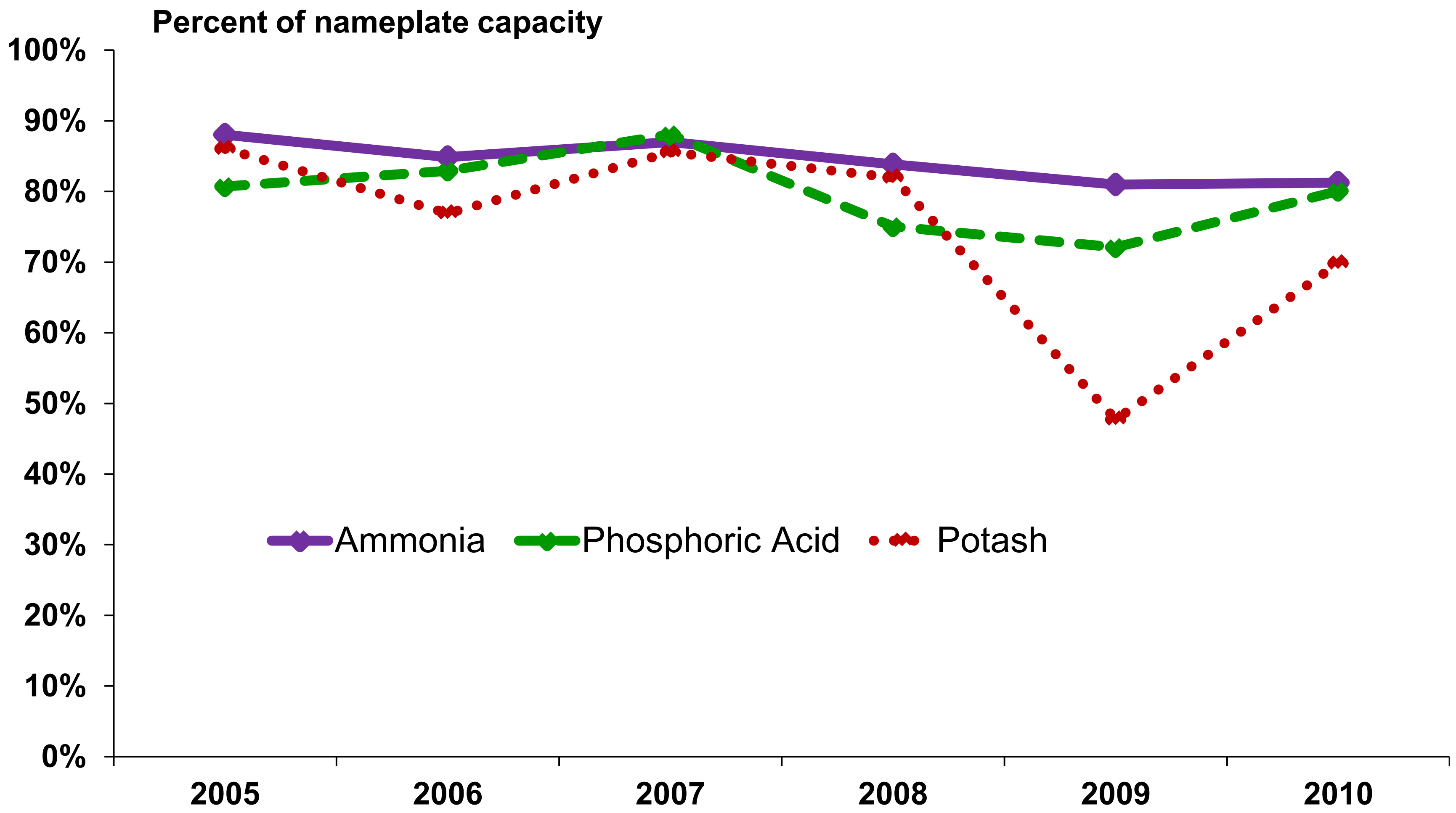
Source: IFA Agriculture, May 2011

Upside Scenario:	• Stronger economic growth • No change to current biofuel mandates • Tight agricultural markets and attractive commodity prices • No major change to policy priorities in China and India
Downside Scenario:	• Weaker economic growth • Downward revision of current biofuel mandates • Rebuilding of grain inventories and declining commodity prices • Evolution of policy priorities in China and India calling for more efficient use of fertilizers and greater recycling of organic nutrient sources.

2010/11 and 2011/12:	• Risk to the upside and downside seen of similar magnitude
From 2012/13:	• Upside and downside risks seen equivalent for N • Downside risk seen higher for P and K • Risks proportionally higher for P and K than for N • Risk levels for P and K seen similar

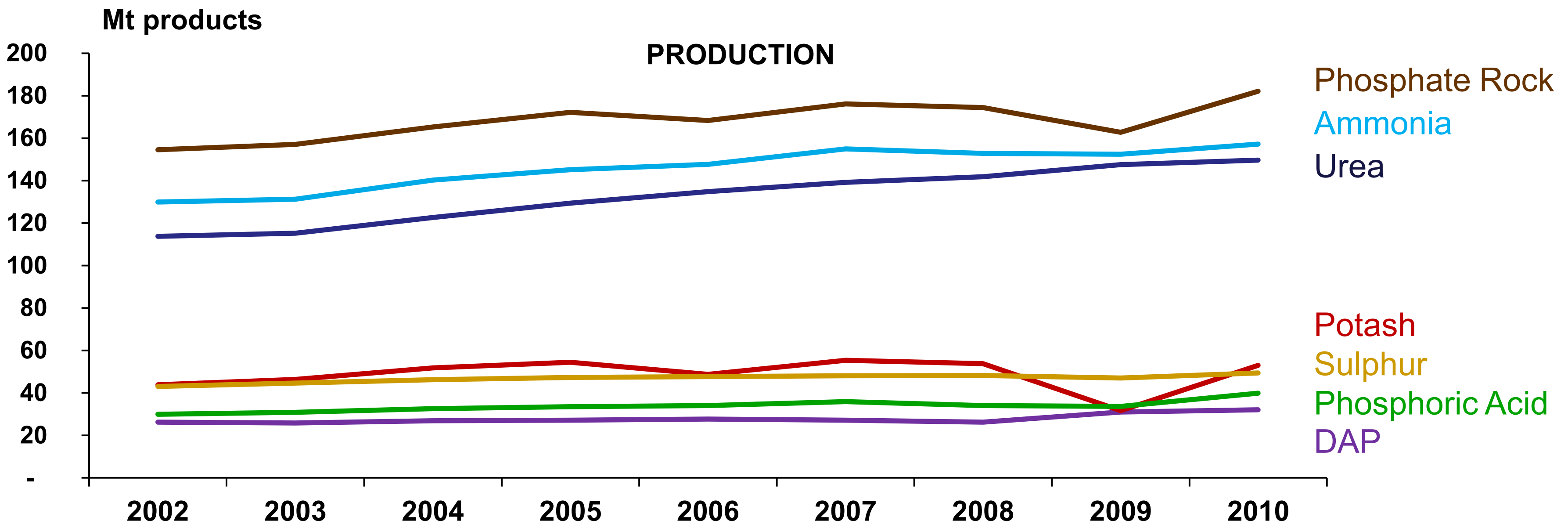
FERTILIZER SUPPLY OUTLOOK

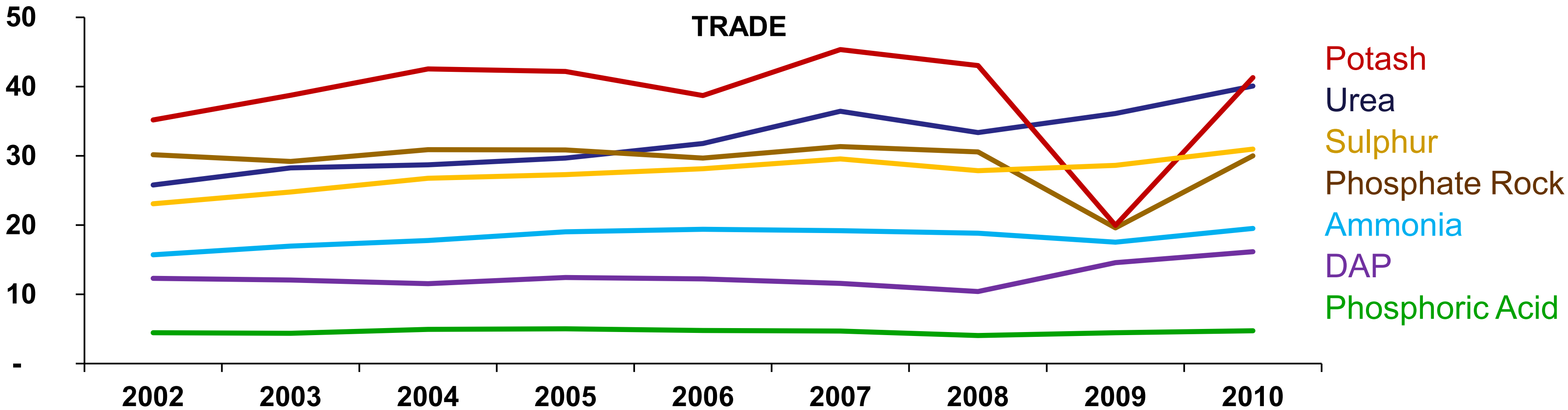
World Nutrient Supply and Demand Recent Trends



Source: IFA PIT Committee, May 2011

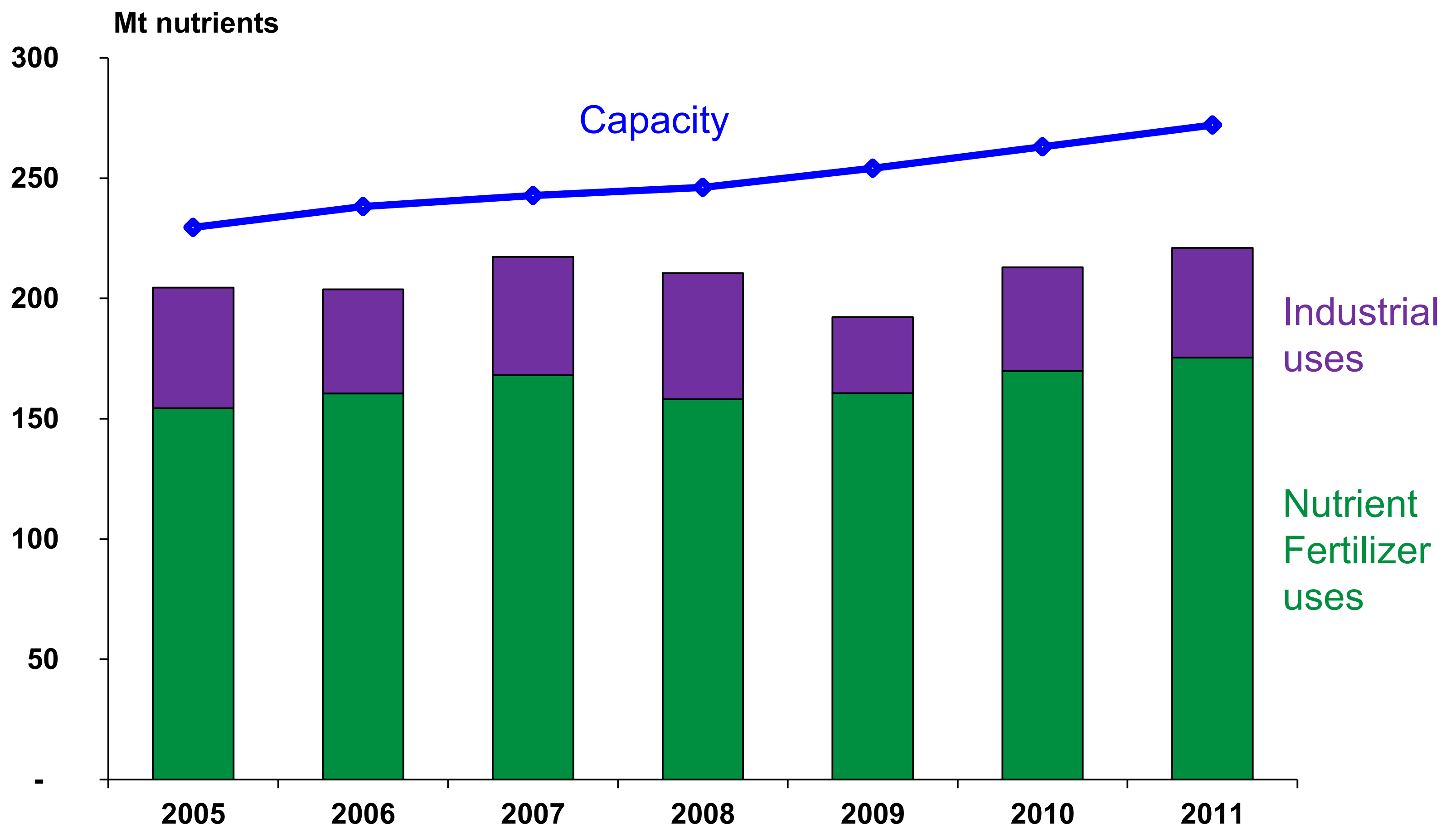
World Production and Trade of Main Products





Source: IFA PIT Committee, October 2011

World Nutrient Supply and Demand Recent Trends



Source: IFA PIT Committee, May 2011

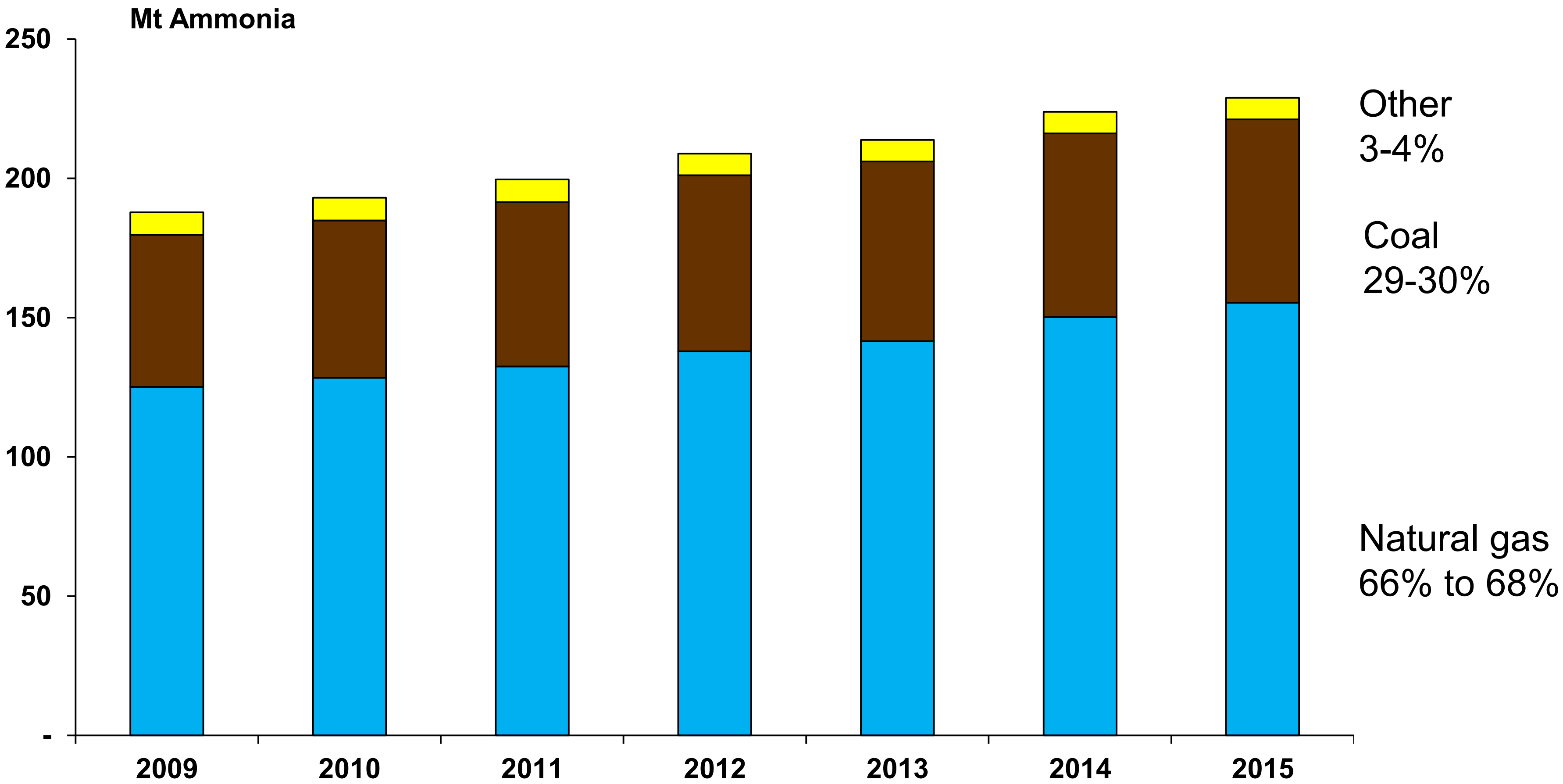
World Production and Trade of Main Products : 1H2011

Mt products		1H2009	1H2010	1H2011	Var 1H11/1H10
Ammonia	Export	7,1	8,4	9,1	8%
	Production	61,6	66,3	67,0	1%
Urea	Export	14,3	14,7	15,1	3%
	Production	61,7	65,9	66,5	1%
P Rock	Export	8,3	13,5	13,4	-1%
	Production	69,0	83,0	87,6	6%
P Acid	Export	1,8	2,3	2,1	-8%
	Production	13,0	16,1	16,7	4%
DAP	Export	6,2	6,1	5,2	-16%
	Production	11,6	13,2	13,0	-1%
Potash	Export	6,6	21,8	23,8	10%
	Production	15,2	26,5	28,8	9%

Source: IFA PIT Committee, October 2011

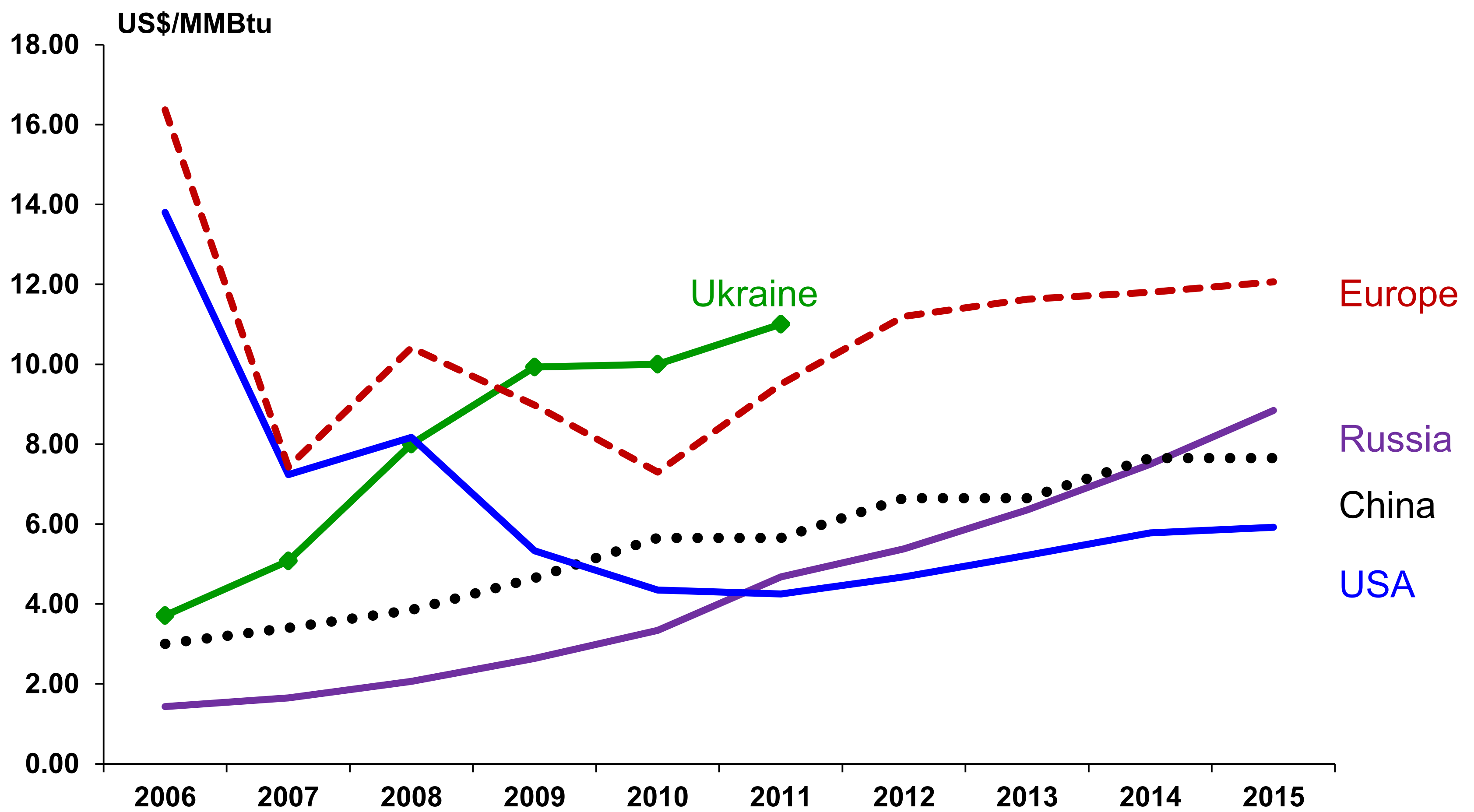
NITROGEN SUPPLY OUTLOOK

World Ammonia Feedstock Medium-Term Trends



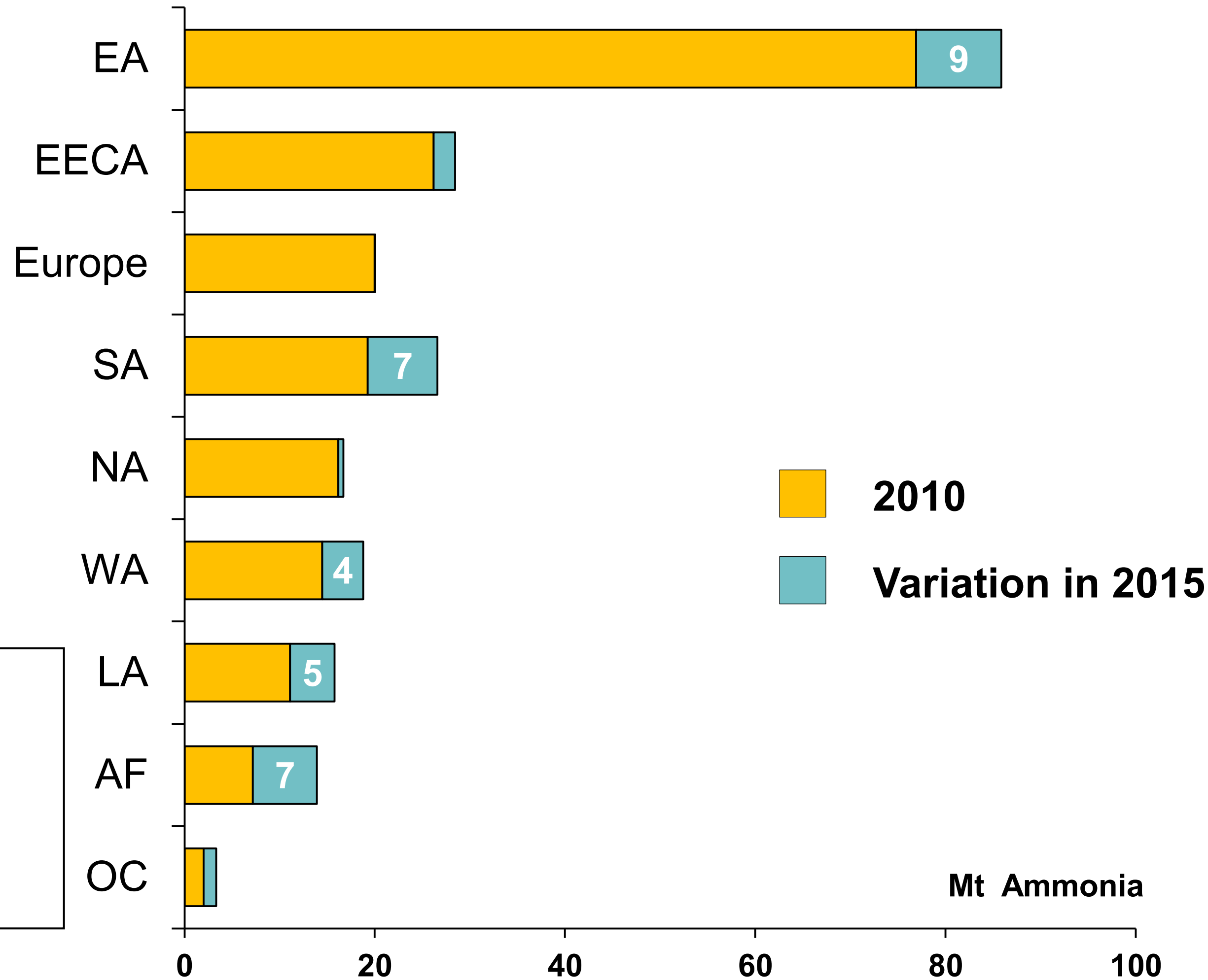
Source: IFA PIT Committee, May 2011

Natural Gas Prices Short- to Medium-Term Trends



Sources: Endex, FirstEnergy, FutureSource, Azotecon, CPCIIC, EIA USA, IFA members; May 2011

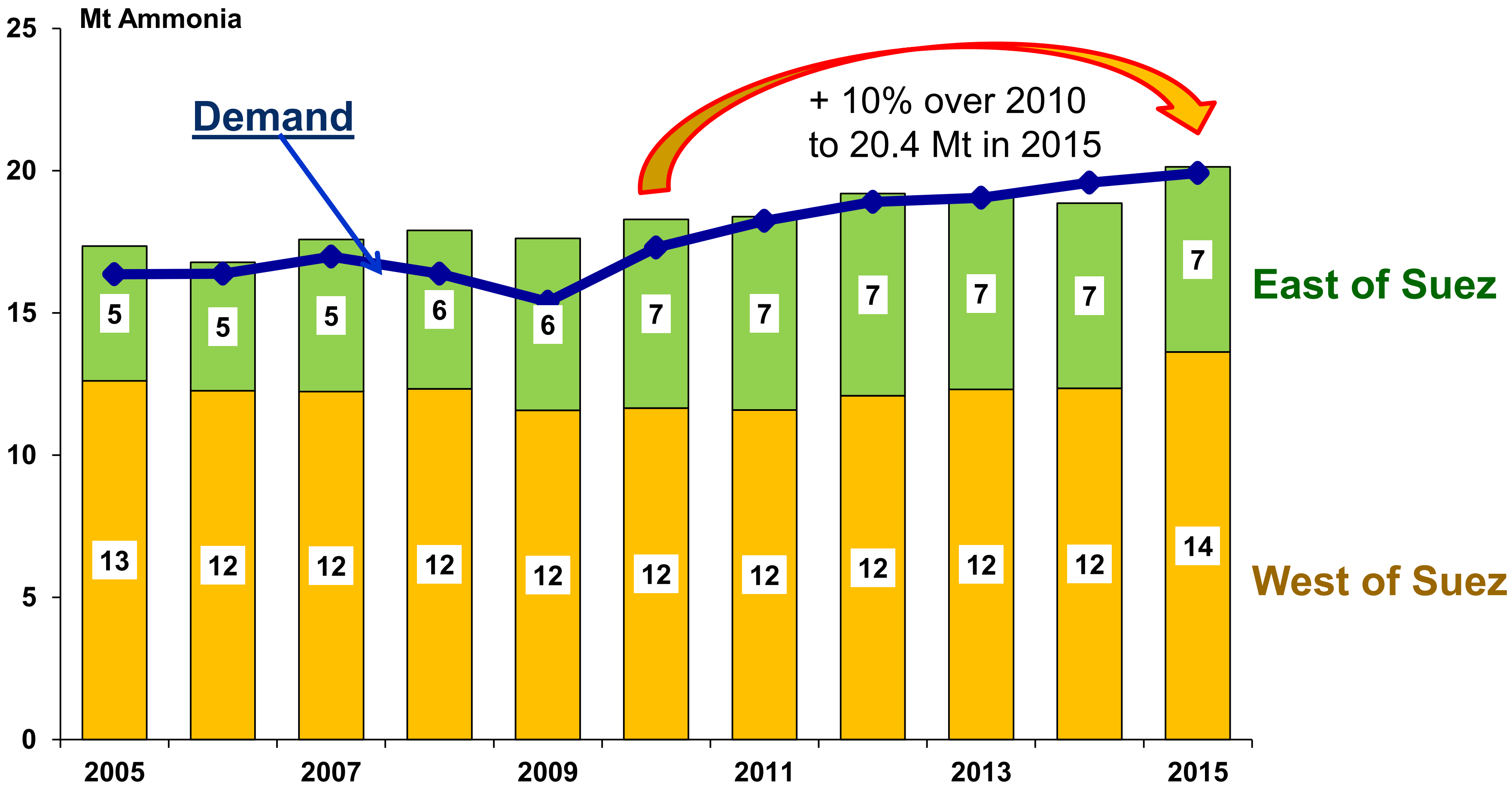
World Ammonia Capacity Developments : 2010 - 2015



- 67 new units
- 22 in China
- 10 stand-alone plants
- 36 Mt or +19% increase from 184 to 229 Mt

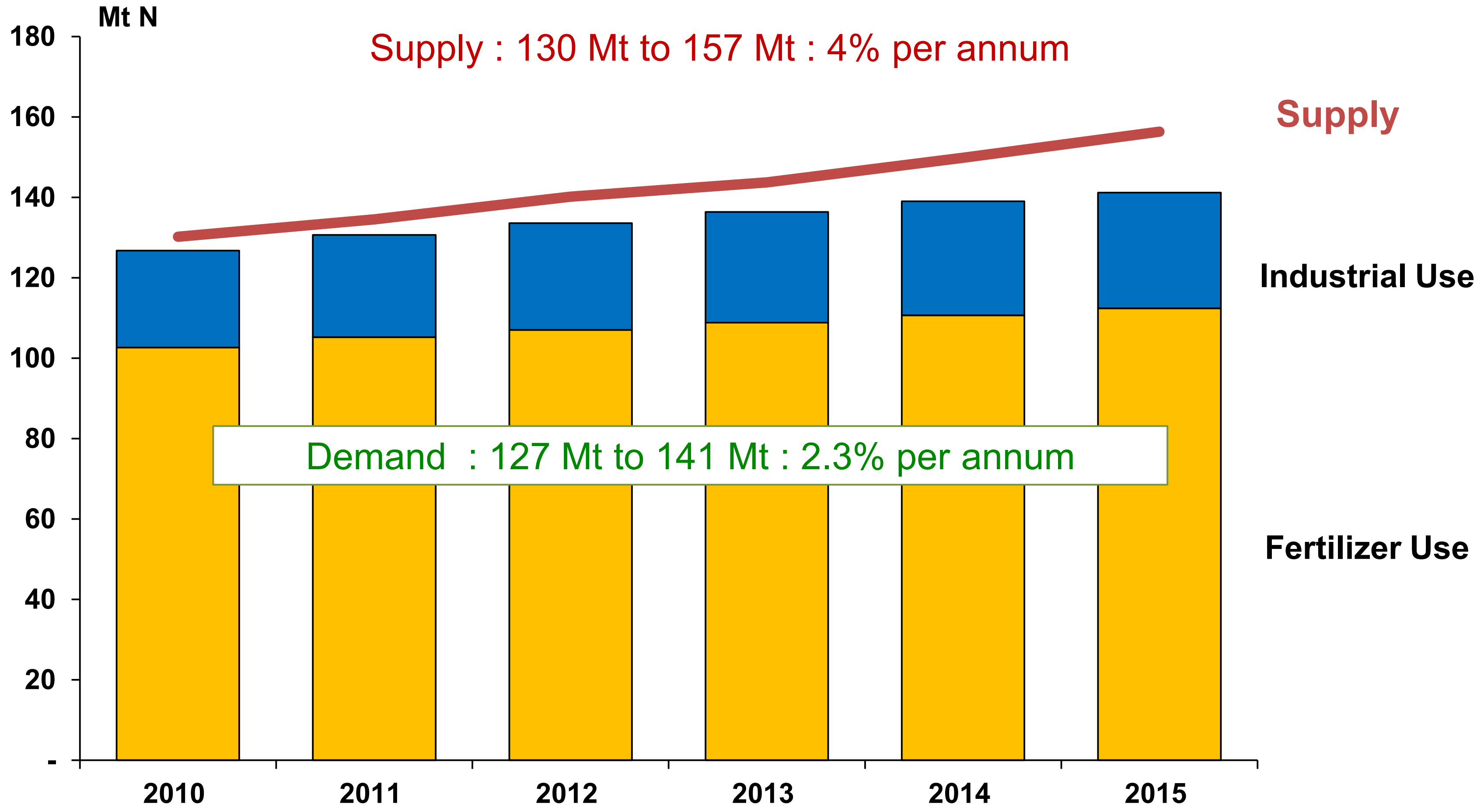
Source: IFA PIT Committee, May 2011

Seaborne Ammonia Supply / Demand Forecasts



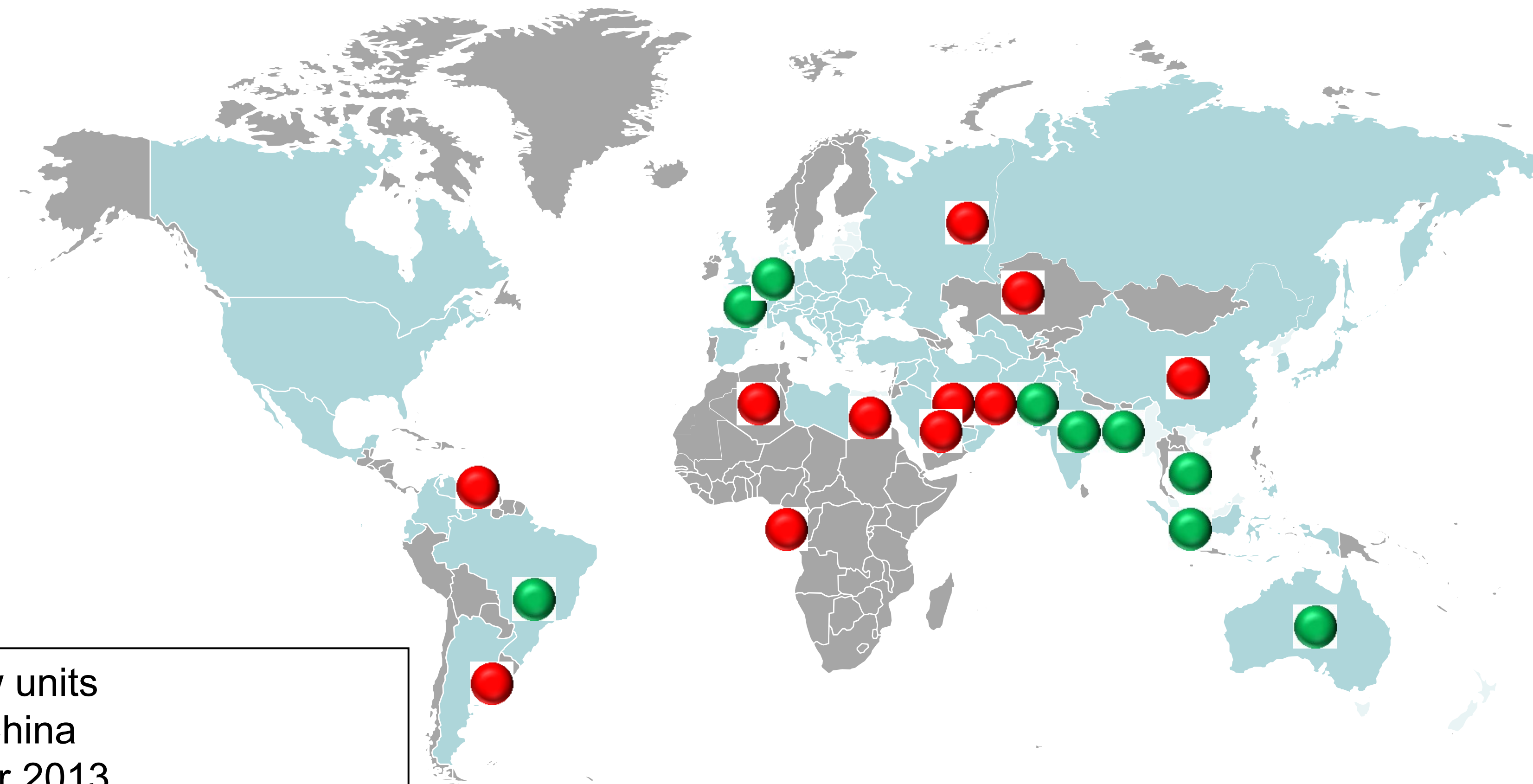
Source: IFA PIT Committee, May 2011

World Nitrogen Supply / Demand Balance : 2010 - 2015



Source: IFA PIT Committee, May 2011

Urea Capacity Developments : 2011 - 2015



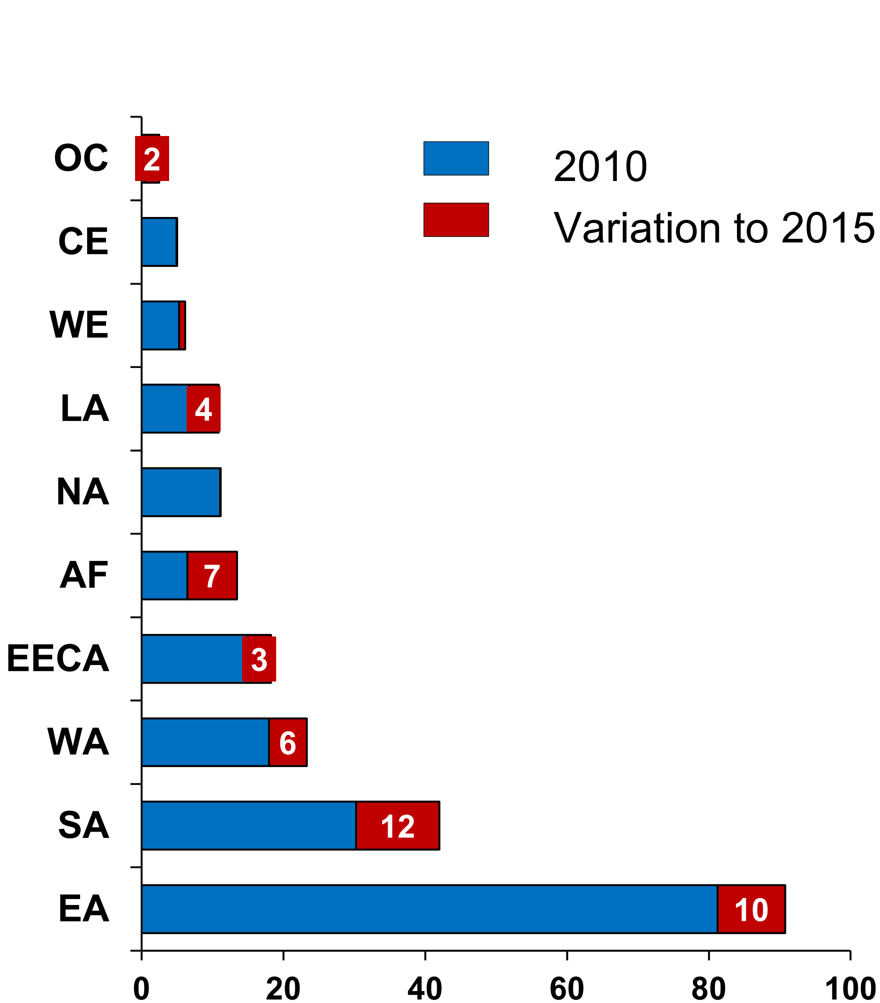
• 60 new units
• 17 in China
• 21 after 2013
• 45 Mt or +25% increase over 2010, from 184 to 224 Mt

Developments in producing countries

Export-oriented developments

Source: IFA PIT Committee, May 2011

World Urea Capacity Developments

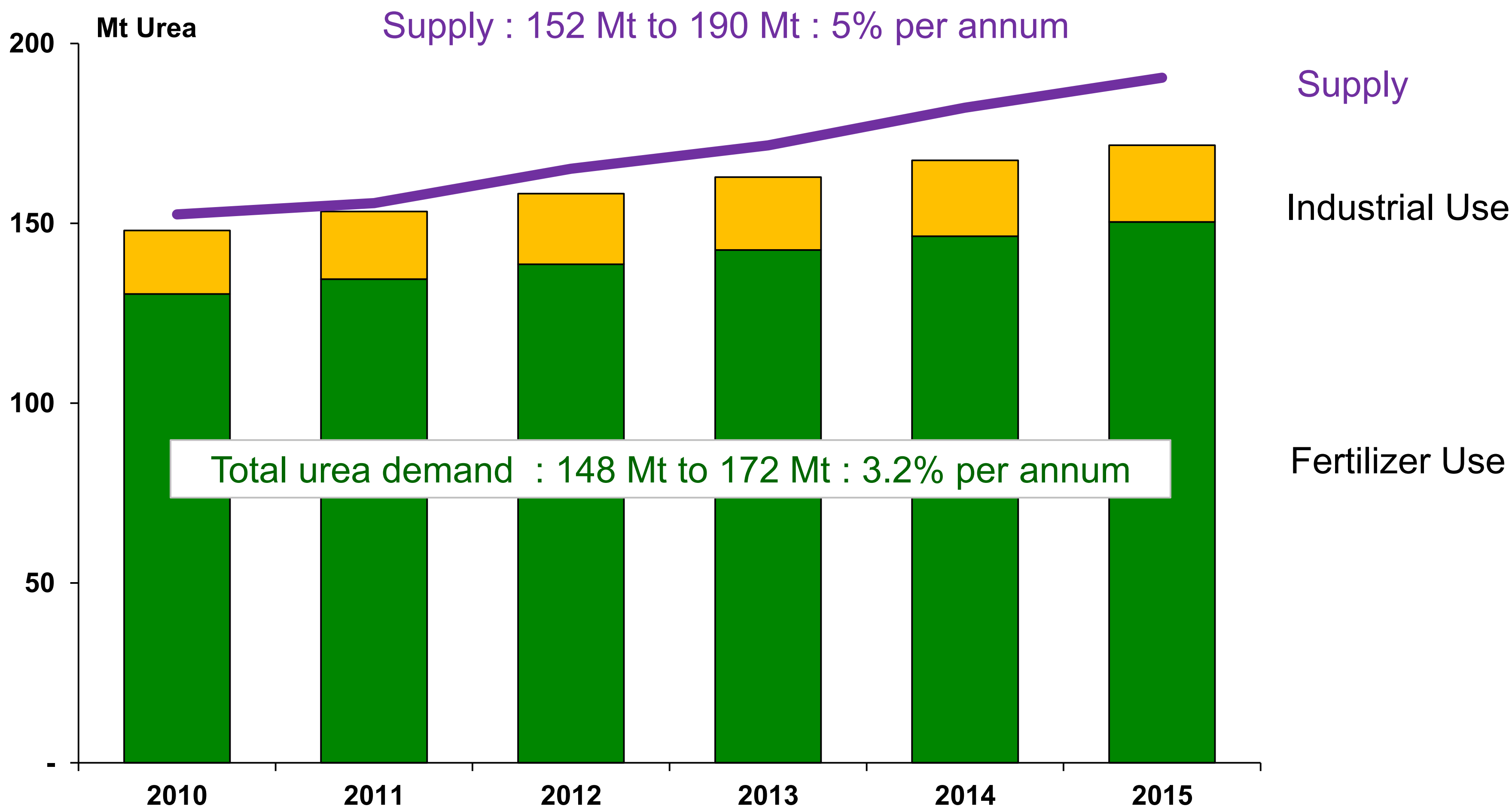


Variations over 2010

Country	2011	2015
Qatar	2.5	2.5
Algeria	1.2	3.5
China (Large plants)	1.9	9.3
South Asia	1.3	9.9
SE Asia	0.6	4.3
Argentina & Brazil		2.0
EECA		2.2
Venezuela		2.2
Australia		2.0
Egypt		1.9
Gabon		1.3
Abu Dhabi		1.2
Saudi Arabia		1.2
Net Supply Position	+ 7.5	+ 43.5

Source: IFA PIT Committee, May 2011

World Urea Supply / Demand Balance : 2010 - 2015

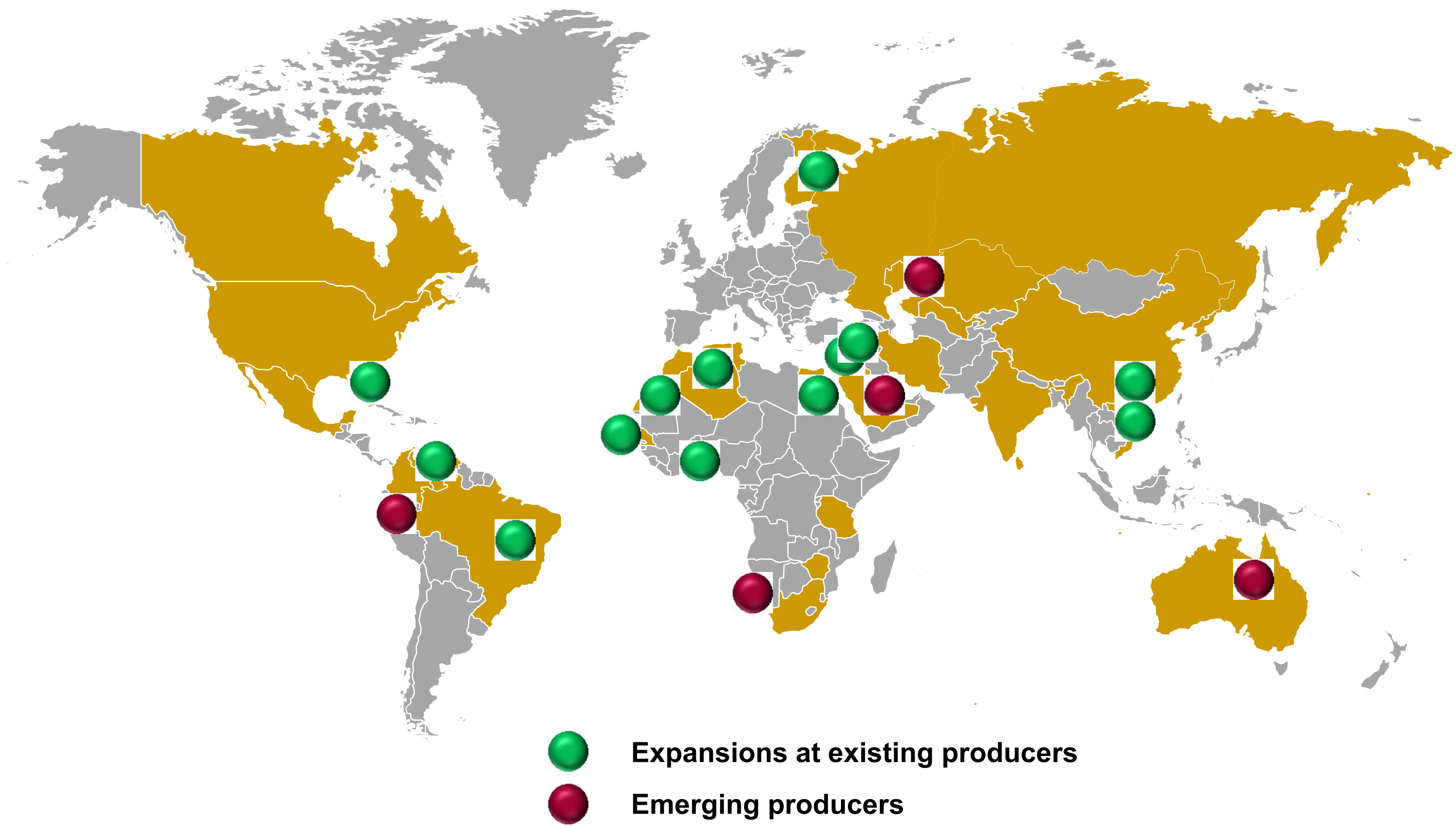


Source: IFA PIT Committee, May 2011

PHOSPHATE SUPPLY OUTLOOK

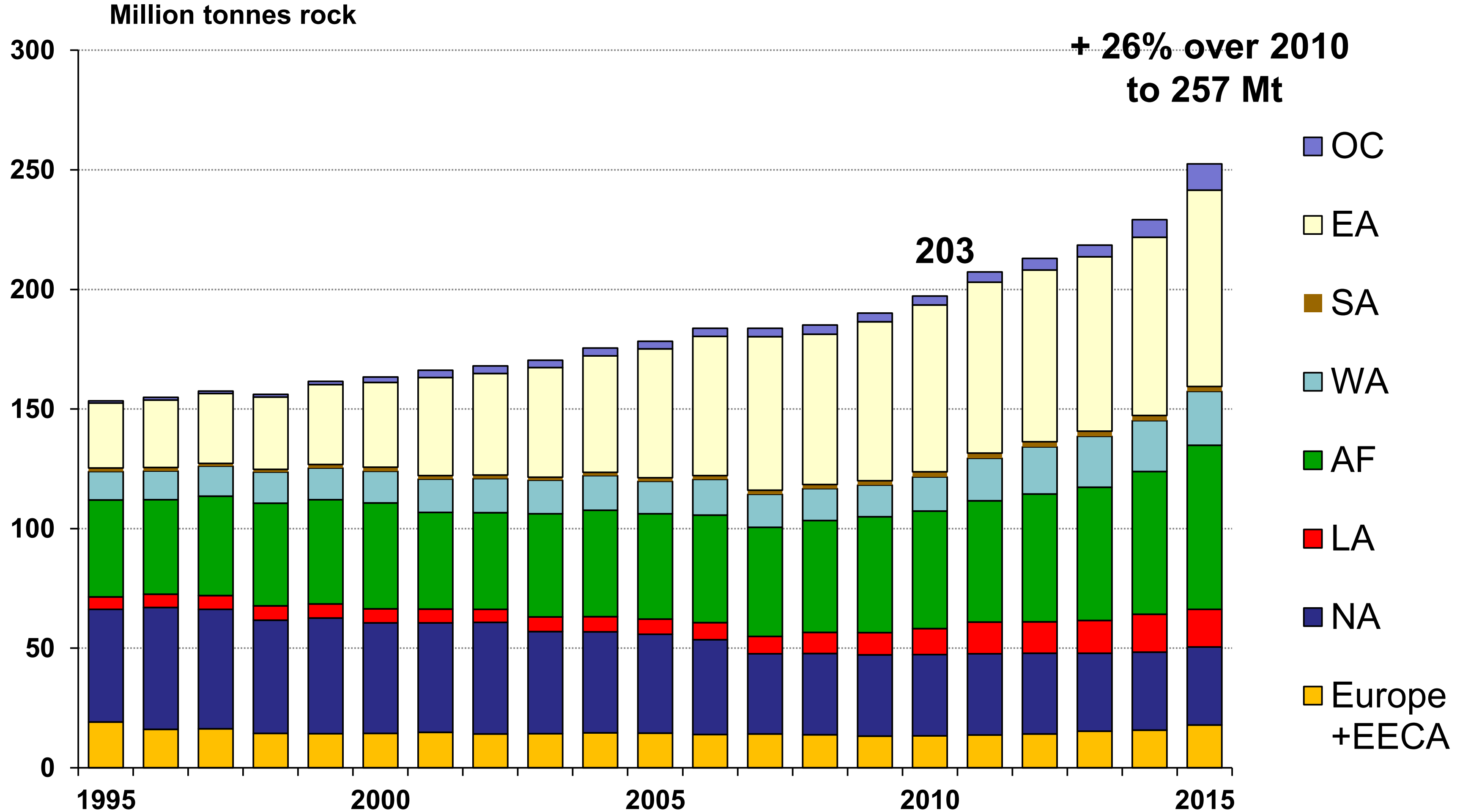
Phosphate Rock Capacity Developments : 2011-2015

Million tonnes rock



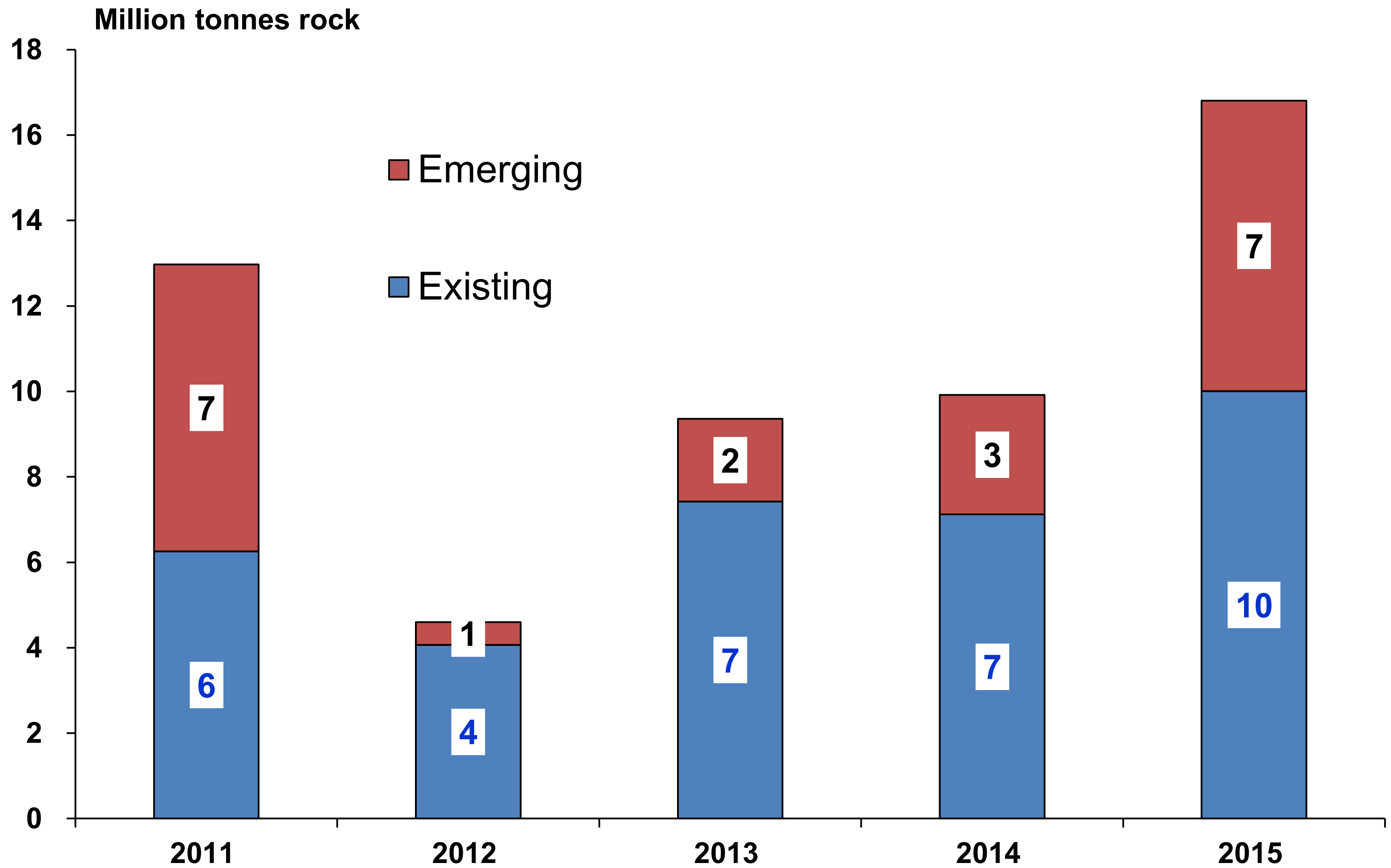
Source: IFA PIT Committee, May 2011

Phosphate Rock Supply : 1995 - 2015e



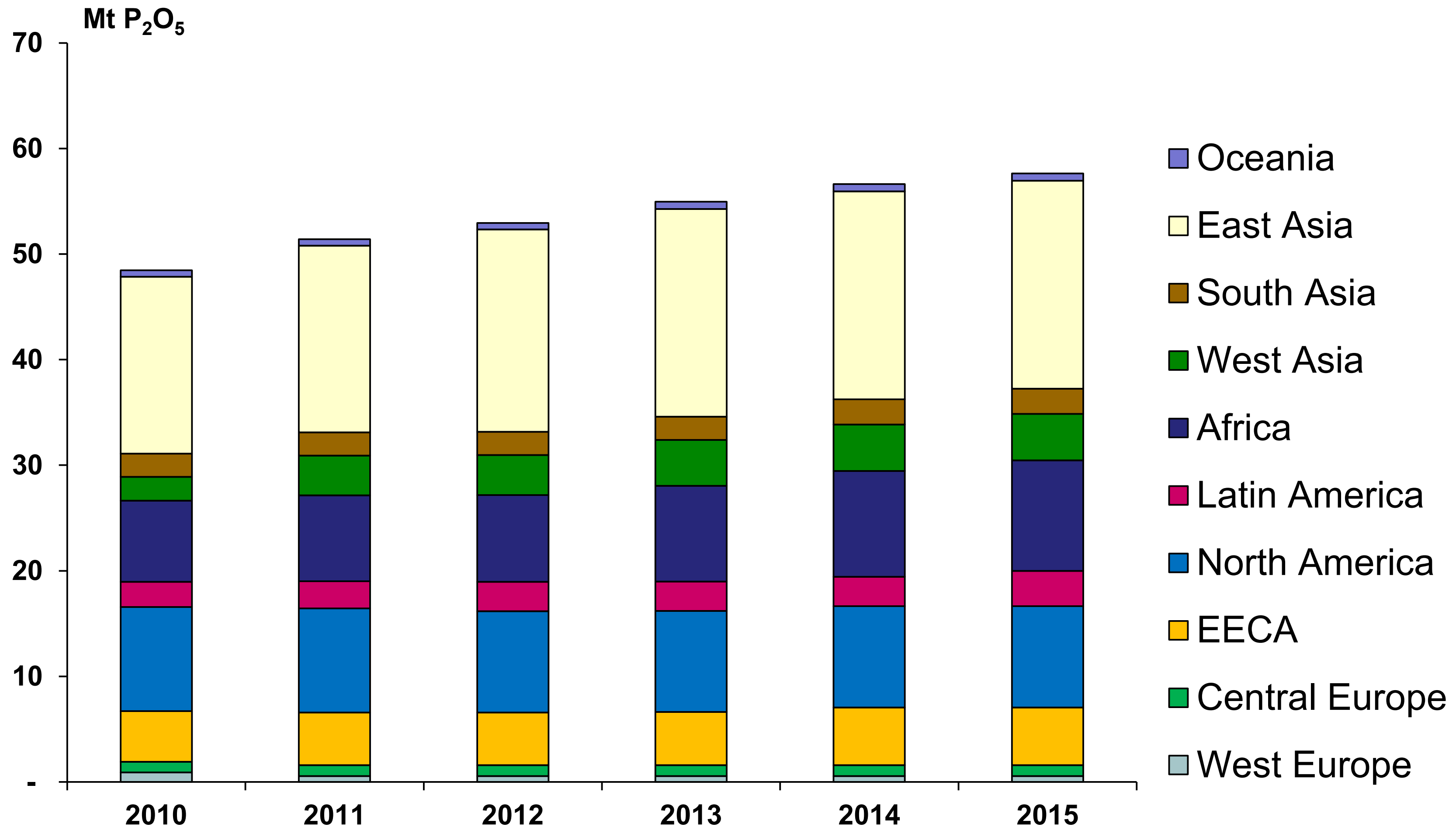
Source: IFA PIT Committee, May 2011

World Phosphate Rock : Potential Supply 2011-2015



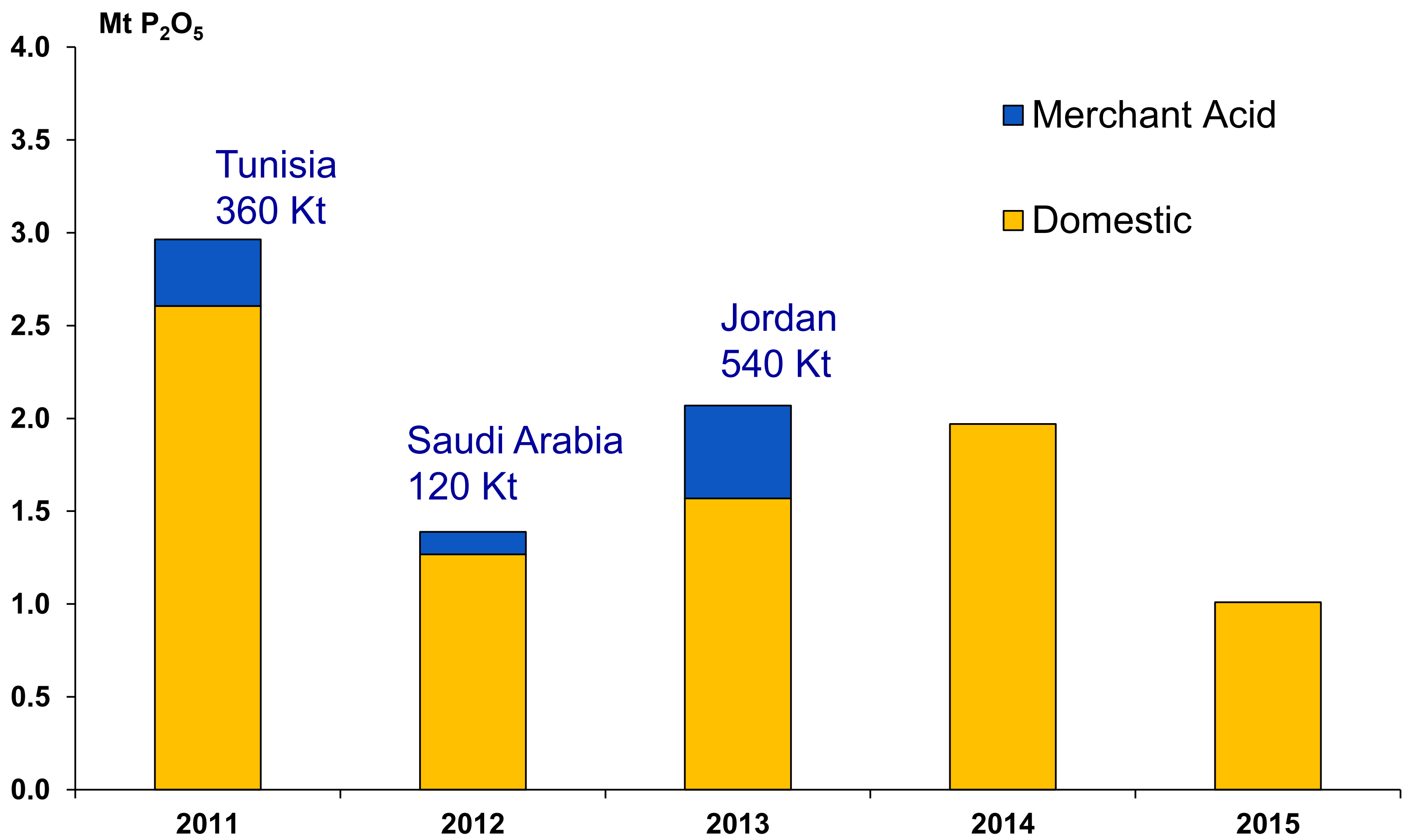
Source: IFA PIT Committee, May 2011

World Capacity of Phosphoric Acid : 2010 - 2015



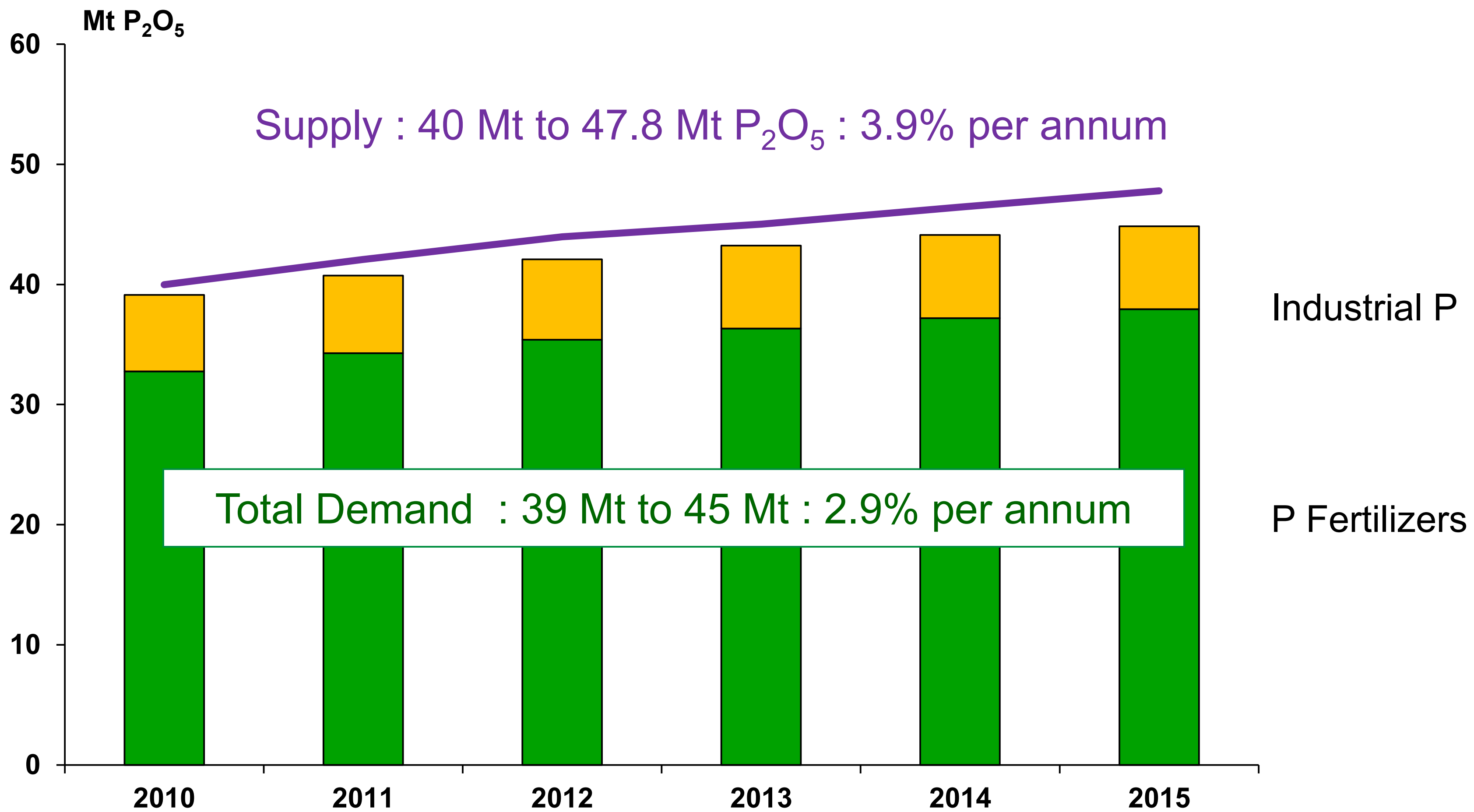
Source: IFA PIT Committee, May 2011

Annual Phosphoric Acid Capacity Changes : 2010 - 2015



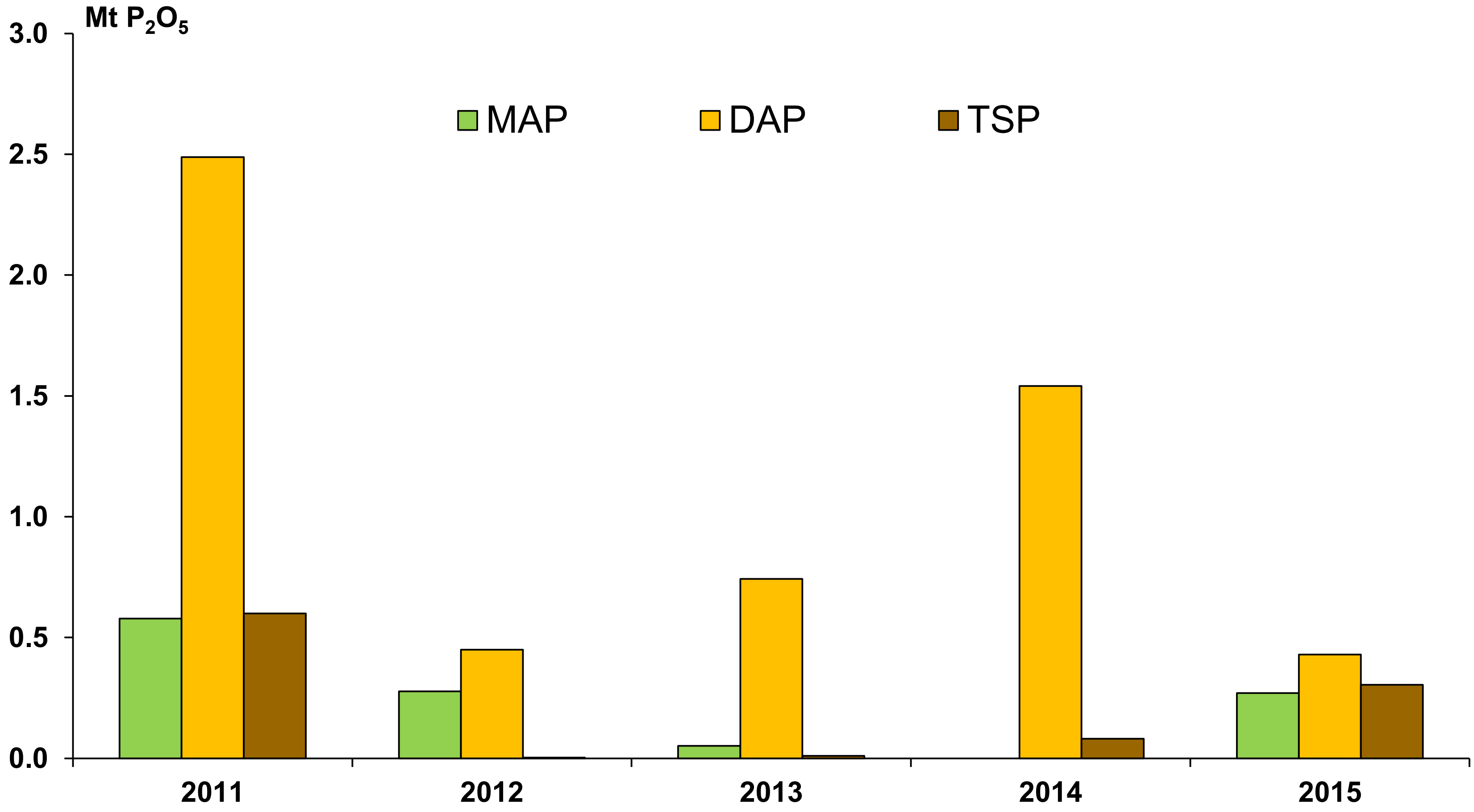
Source: IFA PIT Committee, May 2011

World Phosphoric Acid Supply/Demand Balance: 2010-2015



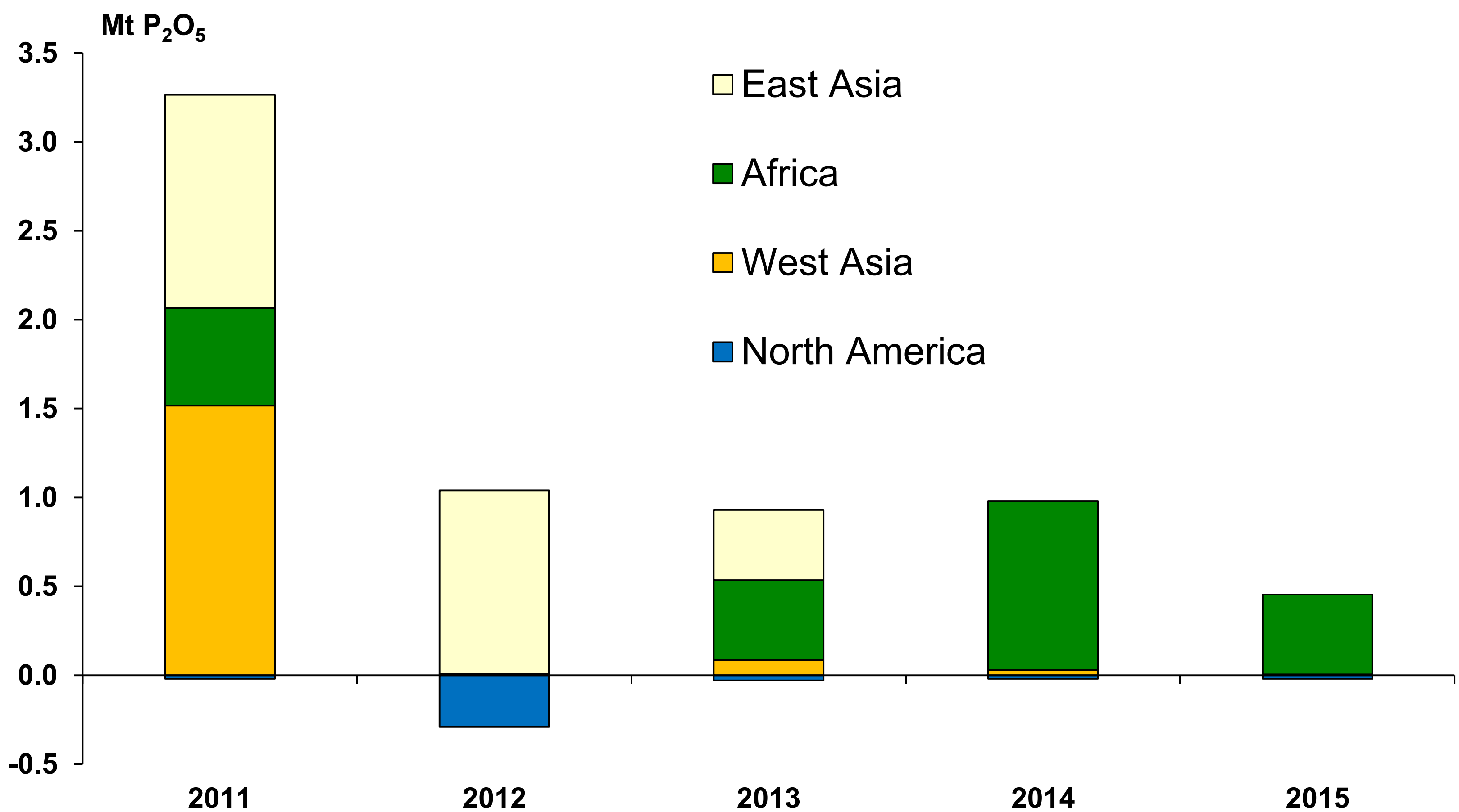
Source: IFA PIT Committee, May 2011

World Processed Phosphates Capacity : 2010 - 2015



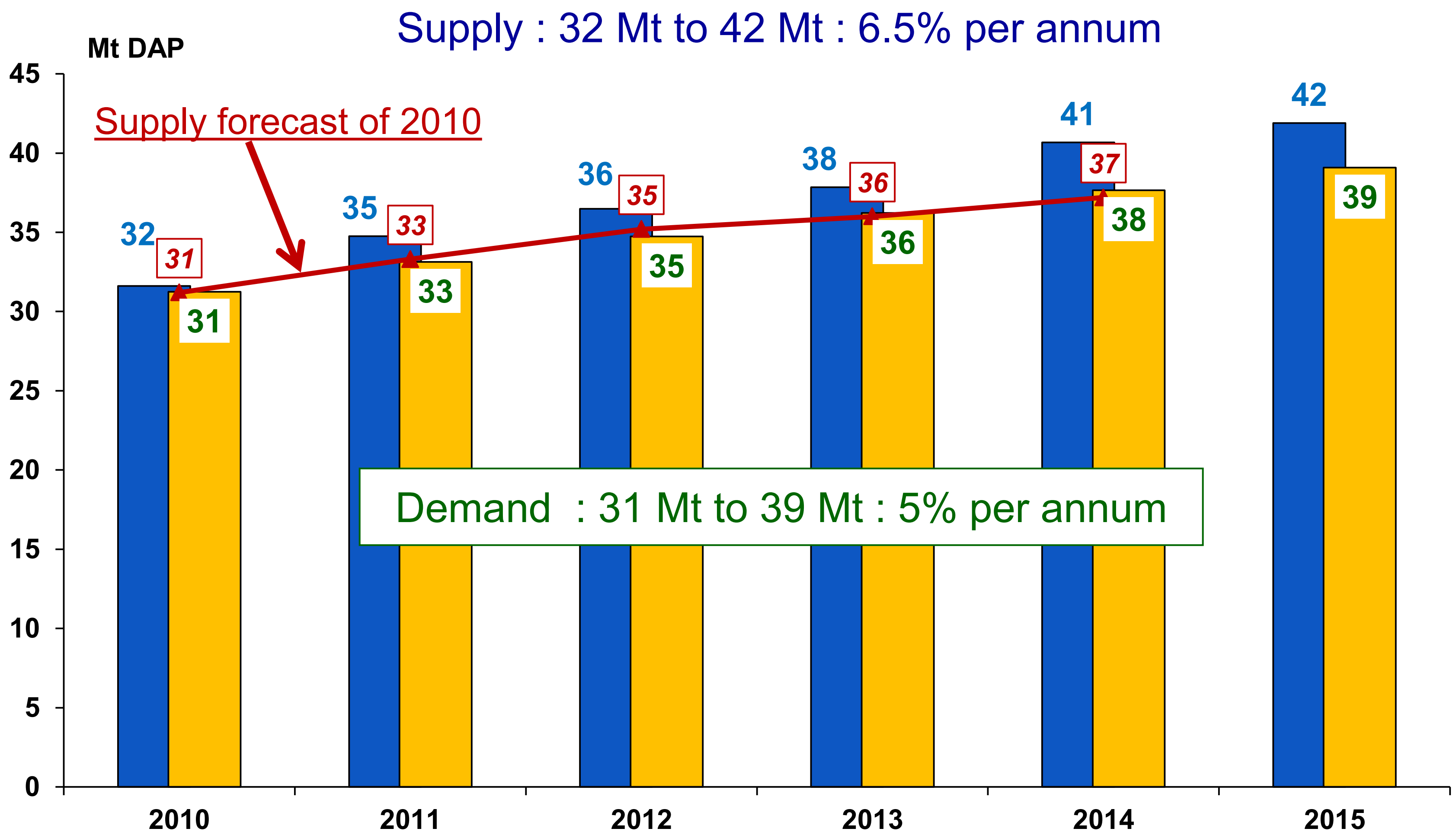
Source: IFA PIT Committee, May 2011

Regional Evolution of Processed Phosphates Capacity 2010 - 2015



Source: IFA PIT Committee, May 2011

World DAP Supply and Demand Balance : 2010 - 2015



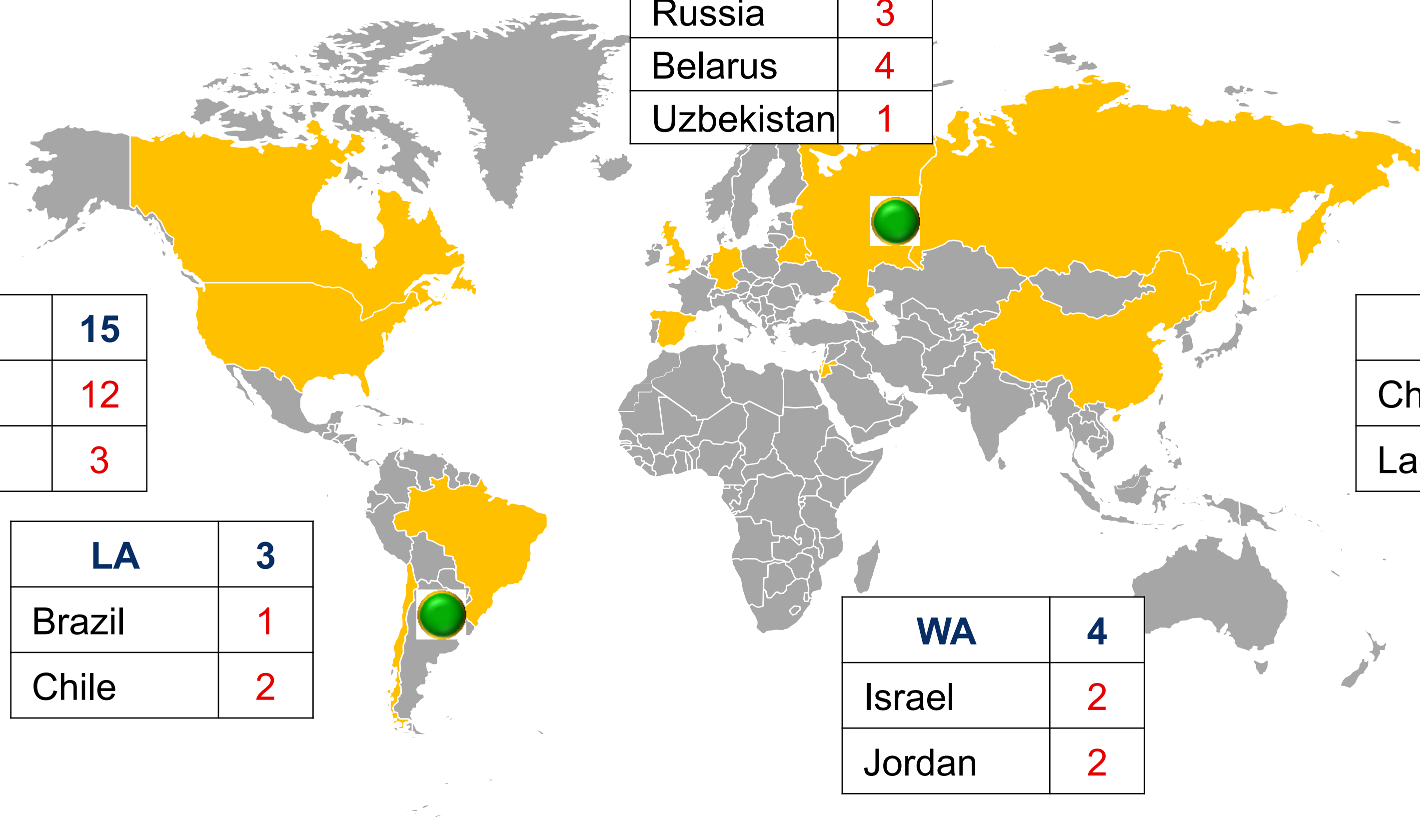
Source: IFA PIT Committee, May 2011

POTASH
SUPPLY OUTLOOK

Potash Expansions Projects : 2010 - 2018

44 projects worldwide in producing countries

Greenfield mines



EECA	8
Russia	3
Belarus	4
Uzbekistan	1

NA	15
Canada	12
USA	3

Asia	14
China	10
Laos	4

LA	3
Brazil	1
Chile	2

WA	4
Israel	2
Jordan	2

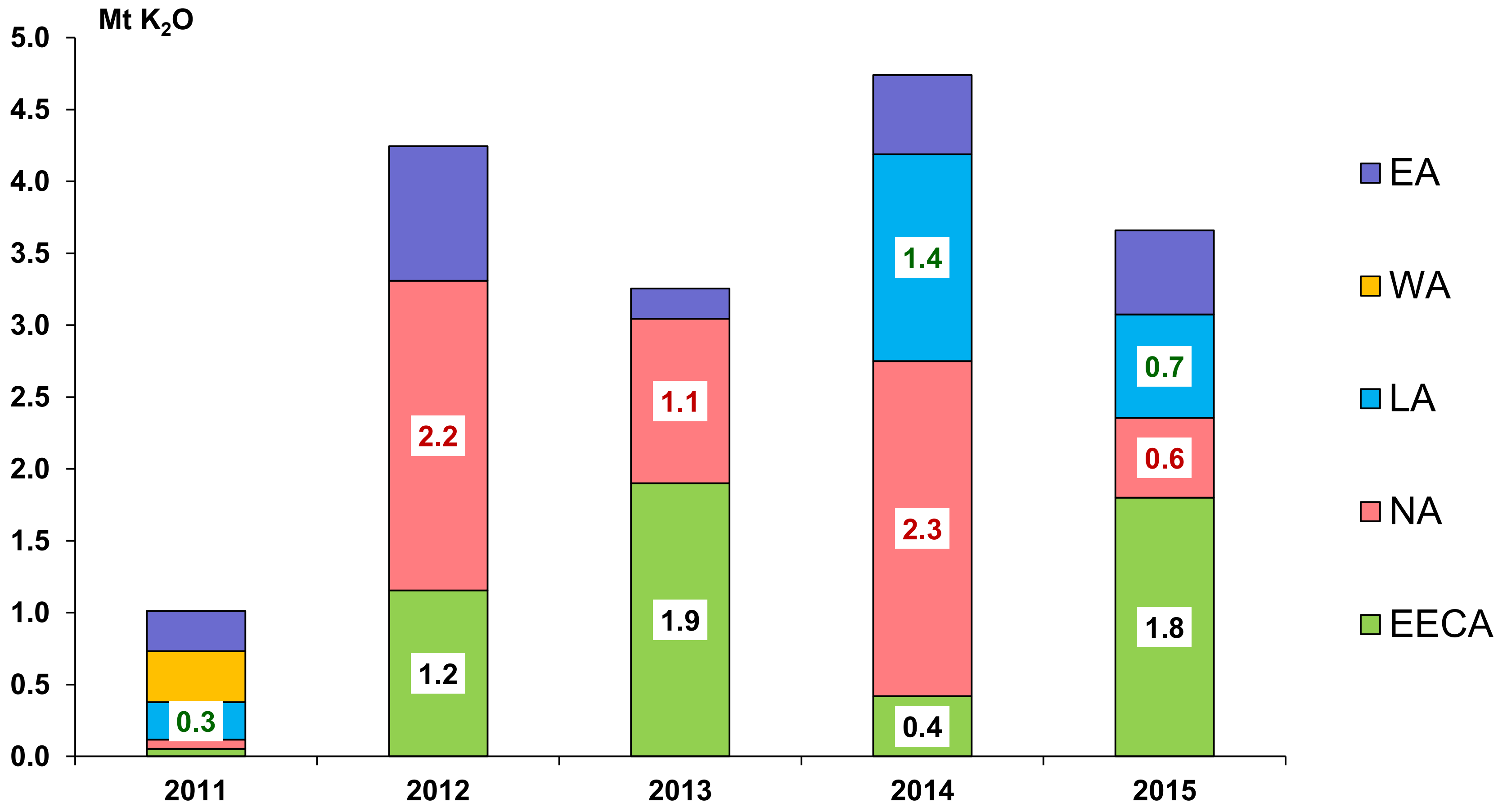
Source: IFA PIT Committee, May 2011

Short to Medium-Term Capacity Projections

Mt MOP eq	2007	2011	2015
West Europe	9,3	9,3	9,3
EECA	19,2	20,4	27,6
North America	26,0	27,1	39,3
Latin America	1,8	2,7	5,4
Africa	0,0	0,0	1,2
West Asia	5,7	6,7	6,7
East Asia	3,9	5,9	9,6
World	**66,3**	**72,5**	**99,7**

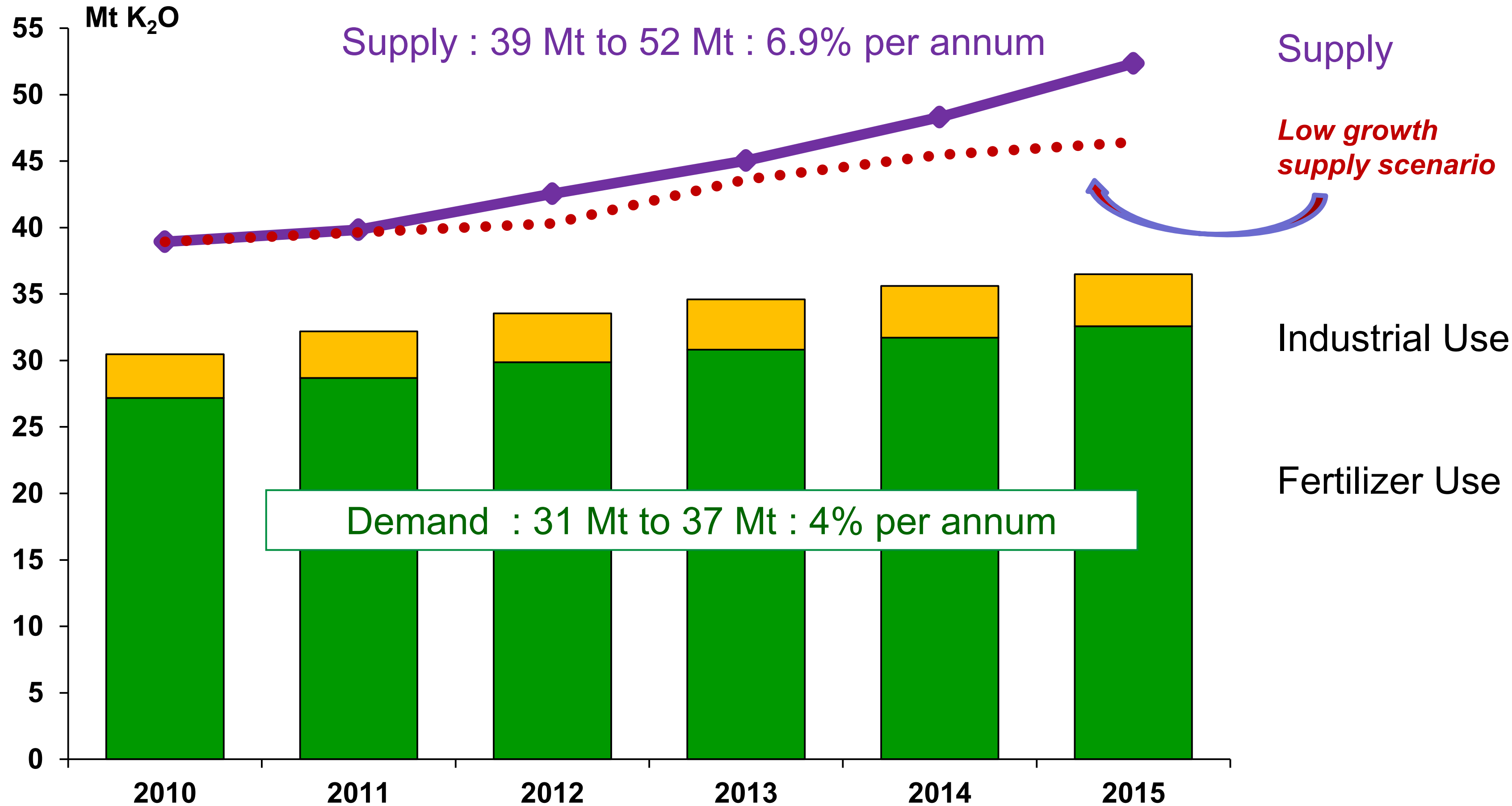
Source: IFA PIT Committee, May 2011

World Potash Capacity Annual Variations : 2011 - 2015



Source: IFA PIT Committee, May 2011

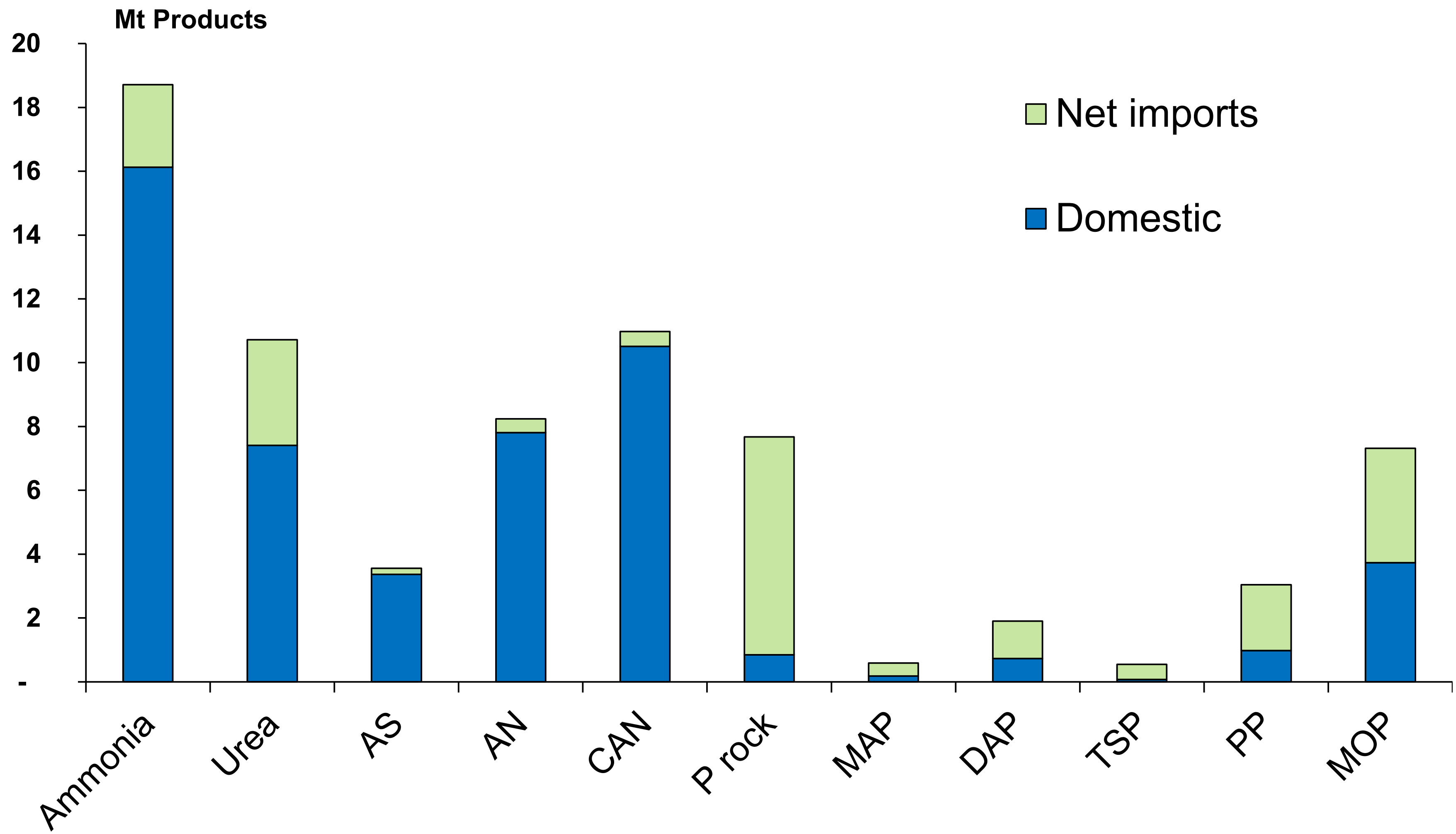
World Potassium Supply/Demand Balance : 2010 - 2015



Source: IFA PIT Committee, May 2011

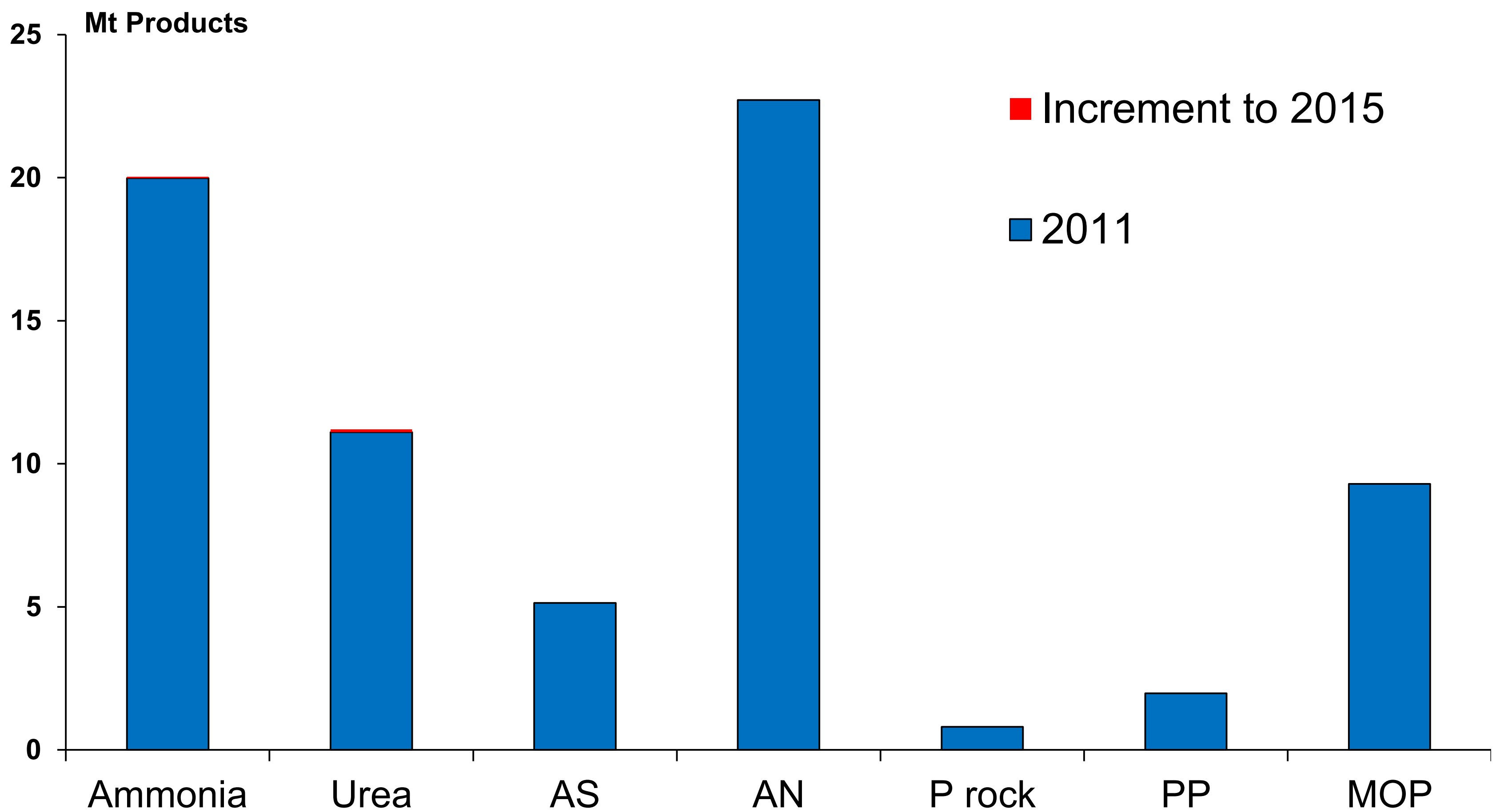
EUROPEAN CONTEXT
SUPPLY OUTLOOK

Main Products: Supply and Demand in Europe : 2010



Source: IFA PIT Committee, October 2011

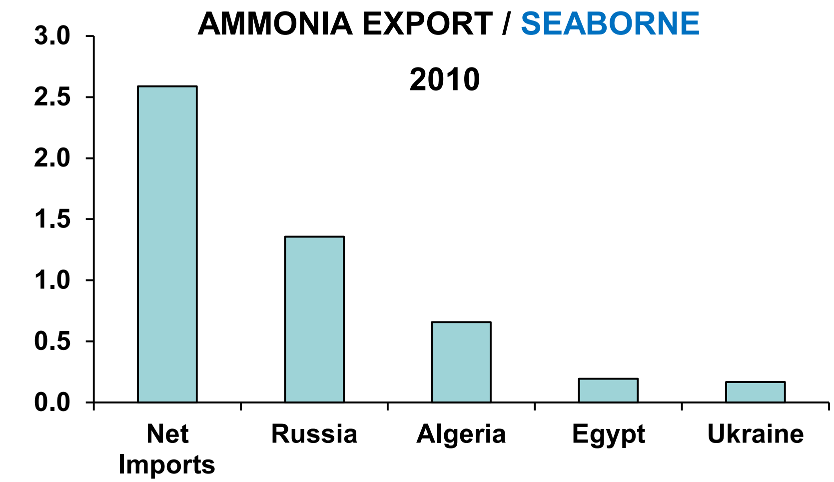
European Capacity Developments : 2011 to 2015

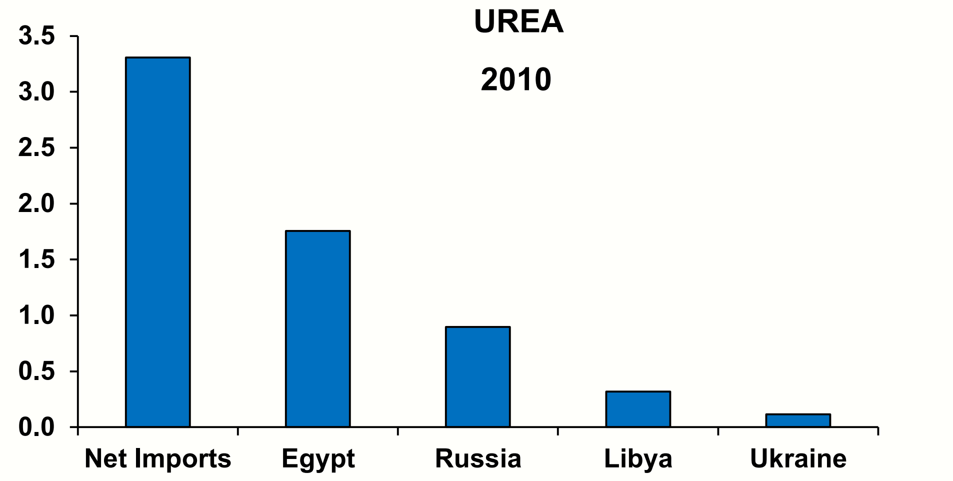


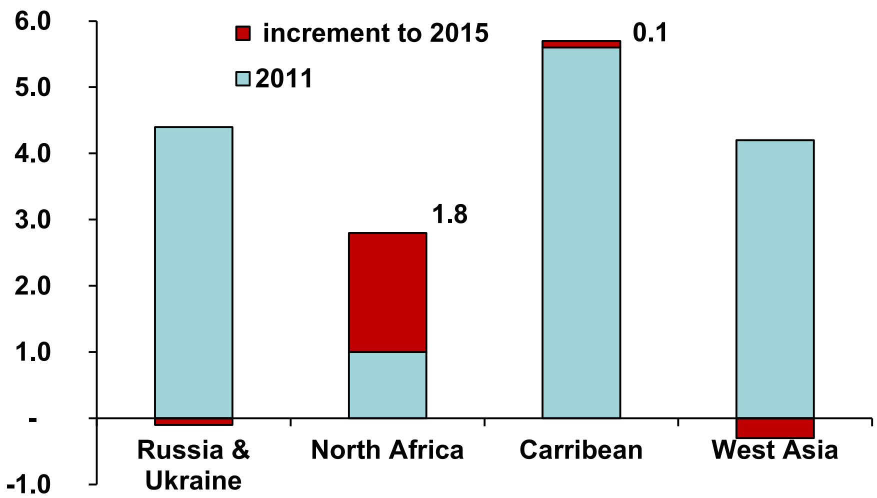
Source: IFA PIT Committee, October 2011

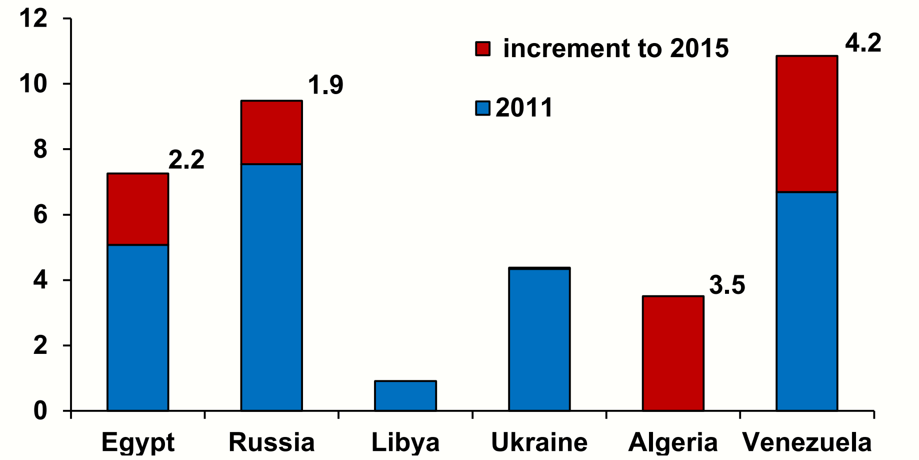
Ammonia and Urea Imports in Europe and Potential Supply

Mt Products





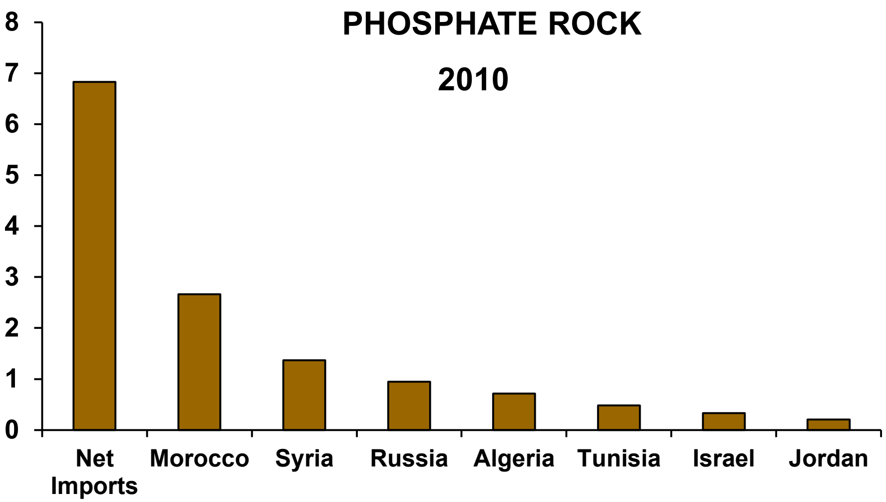


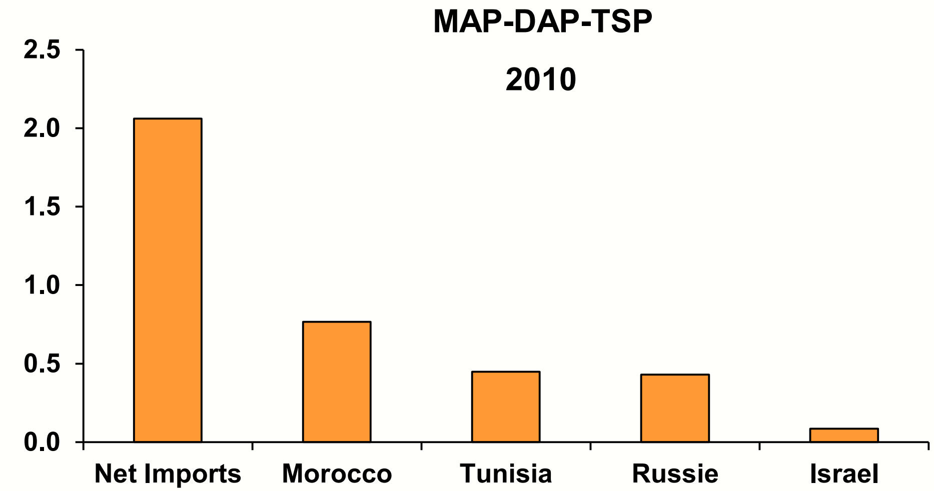


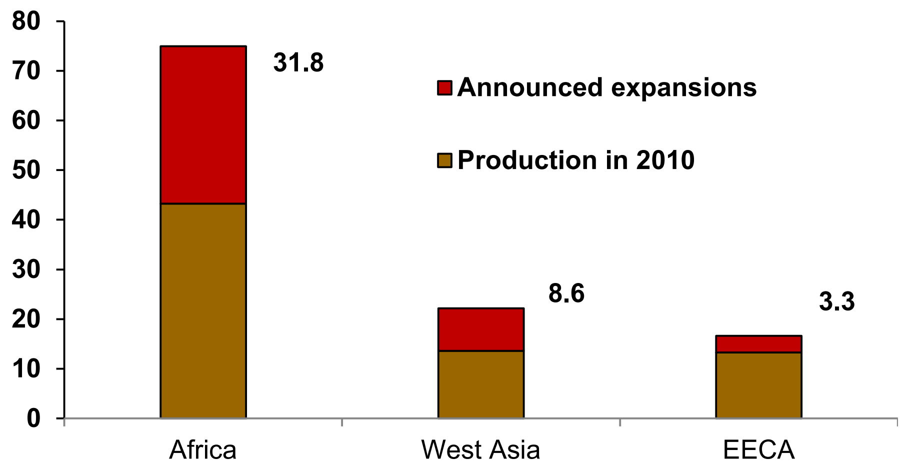
Source: IFA PIT Committee, October 2011

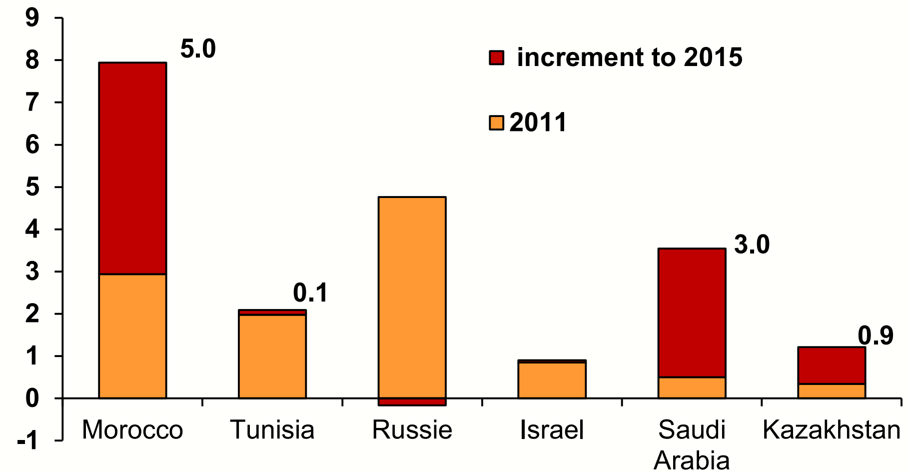
Phosphates Imports in Europe and Potential Supply

Mt Products



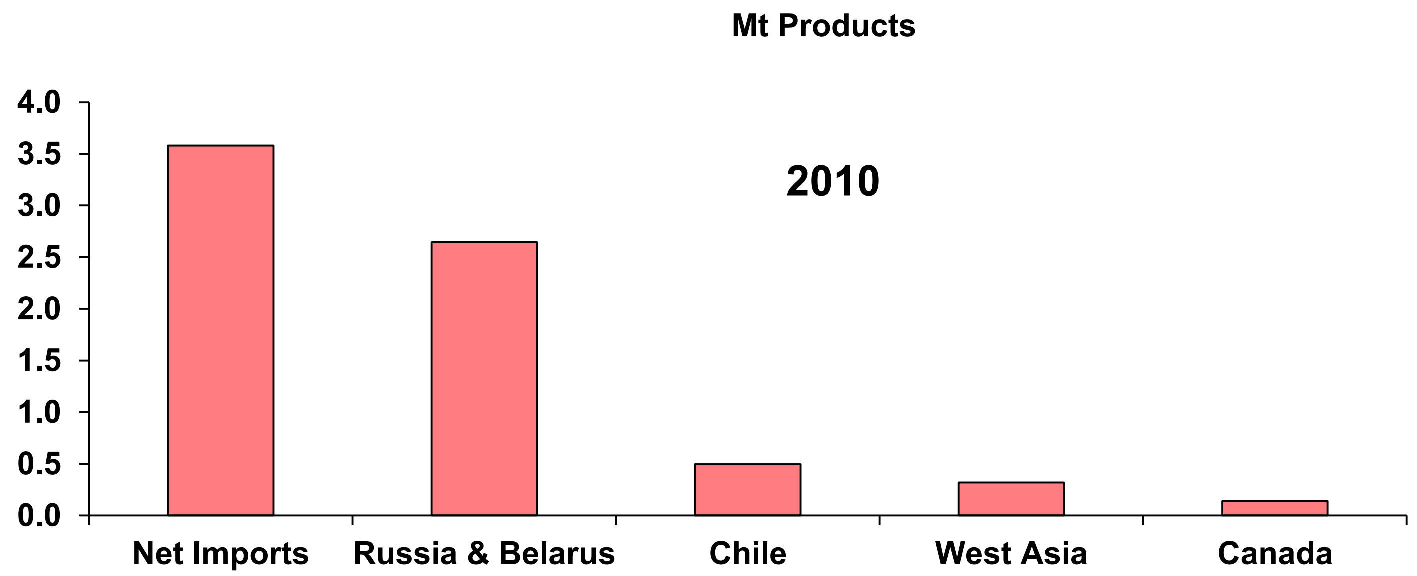


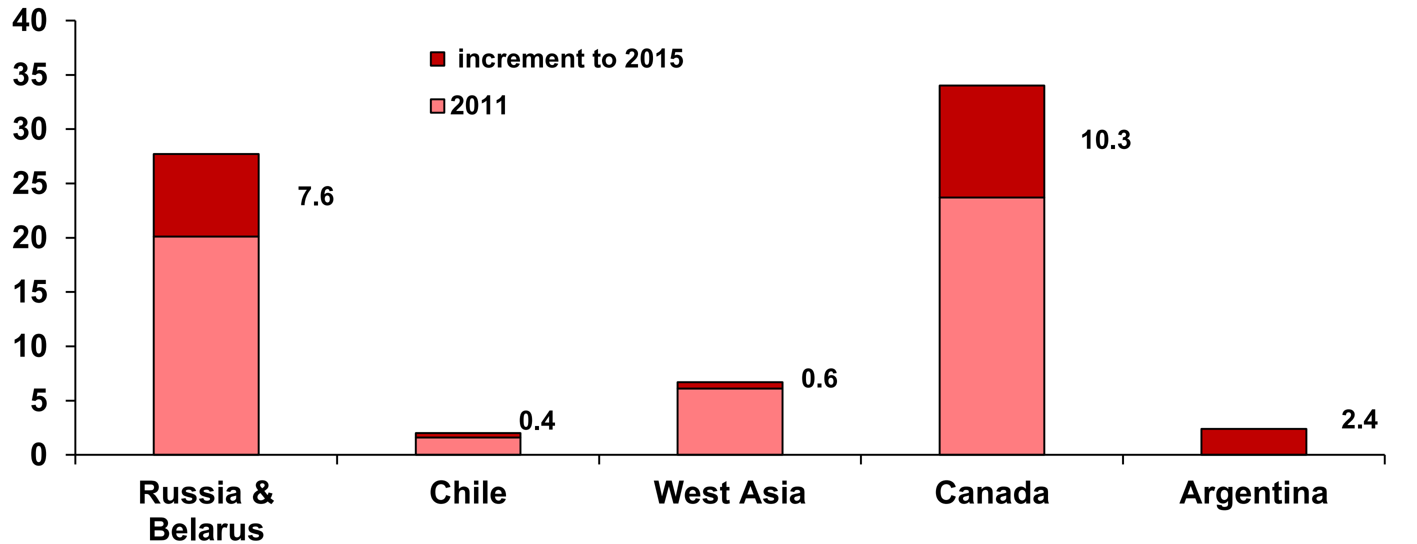




Source: IFA PIT Committee, October 2011

Potash Imports in Europe and Potential Supply





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