

The most trusted source for fertilizer pricing, industry news, and market analysis for over 40 years.





## Global Nitrogen Quarterly Supply & Demand, Production Costs and Pricing



# Access to the Global Nitrogen Quarterly Gives you one full year of intelligence (four reports), including the following elements:

- 1. Supply/Capacities & Inventory
- 2. Demand
- 3. Trade
- 4. Production Costs
- 5. Pricing/Price Forecasts
- 6. Short, Medium, Long Term Outlook (PDF)



# 1. Supply/Capacities & Inventory

### a. World Capacity Overview

Global capacity forecasts for ammonia, urea, ammonium nitrate, and UAN

	Insert Page Lavout Formula	s Data Re		iew	Demand	model_Q	1_2019		Q		sneet		⊡• hare ^
Home				ew							(T)		nare ^
۹.	X Calibri (Body) + 11 + A+	- A-	= =	Gen	eral		-	E Conditi	ional Forma	atting *	• Inse	rt *	0.
	· ·						.00	Grmat	t as Table *		🗮 Dele		~
aste	B I U + ▲ +     ▲ +	A · .	20	\$	* %	) <u>*.</u> 0	00.	Cell St	/les *		Forn	nat *	Editing
											0800		
3	$\frac{1}{2}$ × $\checkmark$ fx												
A	В	с	D	E	F	G	н	1	1	к	L	м	N
	-												
	Green												
			ГК		<b>FS</b>								
	•		0										
	A	Bloombe	erg	omp	any								
			-		-								
	World Capacity Overview												
	world capacity overview												
	We summarize our global capacity assumptions for	a Ammonia Ukaa Ama	nonium Mitrat	a and LIAM									
	we summarize our groual capacity assumptions in	A Animonia, orea, Anii	nomum mitrat	e anu oAn.									
	World Capacity Estimates												
	(Min mt Product Tonnes)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Ammonia	2011	2012	2013	2014	2013	2018	2017	2018	2019	2020	2021	2022
		179.4	187.4	200.1	100.0	212.4	210.5	216.0	218.7	220.7	224.9	118.7	234.5
	Urea												
	UAN	25.4	25.4	28.5	25.2	25.0	28.1	28.7	28.7	28.7	28.7	25.8	
	UAN	25.4	25.4	24.5	25.2	25.0	28.1	28.7	28.7	28.7	28.7	25.8	25.8
	UAN Ammonium Nitrate Source: Green Markets © Bloomberg L.P.; Company reports	25.4	25.4	24.5	25.2	25.0	28.1	28.7	28.7	28.7	28.7	25.8	25.8
	UAN Ammonium Nitrate Source: Green Markets © Bloomberg L.P.; Company reports USA	81.9 61.7	41.7	26.5	26.2 10.4	25.0 51.3	20.0	28.7 52.0	28.7 12.0	28.7	26.7	12.0	11.0
	UAN Ammonium Nitrate Source: Green Markes D Bloomberg LP; Company reports USA (Min mt Product Tonnes)	25.4	2012	24.5	2014	2015	2016	2017	2018	2019	2020	2021	2022
	UAN Armonolium Nitrate Source: Green Markes D Boomberg L.P.; Company reports USA (Min mt Product Tonnes) Armonia	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	UAN Ammonium Nitrate Source Green Markes D Bloomberg LP; Company reports USA (Min mt Product Tonnes) Ammonia Urea	2011	2012	2013	2014 113	2015 5.3	2016	2017	2018	2019	2020	2021	2022
	UAN Ammonium Nitrate Source Gree Munics & Bloomberg LF; Company reports USA (Min nt Product Tonnes) Ammonia Urea Urea	2011	2012	2013 5.3 8.8	2014	2015	2016	2017	2018	2019	2020	2021	2022
	UAN Ammonium Nitrate Source Green Markes D Bloomberg LP; Company reports USA (Min mt Product Tonnes) Ammonia Urea	2011	2012 5.2 7.8	2013	2014 113	2015 5.0 5.0 5.0 8.0	2016	2017	2018	2019	2020	2021	2022
	UAN Ammonium Nitrate Source Gree Munics & Bloomberg LF; Company reports USA (Min nt Product Tonnes) Ammonia Urea Urea	2011	2012 5.7 7.8	2013 5.3 8.8	2014	2015 5.0 5.0 5.0 8.0	2016	2017	2018	2019	2020	2021	2022
	UAN Ammonium Nitrate Source Gree Musics & Bloomberg LP; Company reports USA (Min mt Product Tonnes) Ammonia Urea Urea UNA Ammonium Nitrate	2011	2012 5.7 7.8	2013 5.3 8.8	2014	2015 5.0 5.0 5.0 8.0	2016	2017	2018	2019	2020	2021	2022
	UAN Anmonium Nitrate Source Green Markes O Bioorteg LP; Companymonts USA (Min mR? Poddect Toones) Ammonia Uirea UAN Anmonium Nitrate Canada	2011	2012 5.0 5.0 5.0 5.0	2013 5.0 5.0 5.0	2014 50.0 5.0 5.0	2015 513 513 513 513 513 513 513 513 513 5	2016 2016 2018 2018 2018	2017 2017 2018 2018 2018 2018 2018 2018 2018 2018	2018	2019	2020 98.0 950 950 950 950 950 950	2021	2022
	UAN Anmonium Nitrate Source Green Markes & Beordeg LP, Company monts USA (Min mt Product Toones) Ammonia Urise Canada (Min mt Product Toones) Ammonia Urise	2011 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 2022
	UAN Annonlum Nitrate Source toes Murkes O Bearing LP-Company reports USA Annonales Urea Urea URA Annonales Nitrate Canada (Min ms Product Tooms) (Min ms Product Tooms) URA	2011 2011	2012	2013	2014	2015	2016	2017 2017	2018	2019	2020	2021 2021	2022
	UAN Anmonium Nitrate Source Green Markes & Beordeg LP, Company monts USA (Min mt Product Toones) Ammonia Urise Canada (Min mt Product Toones) Ammonia Urise	2011 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 2022
	UAN Annonlum Nitzte Source teem Marken & Beenteg LP-Company reports USA (Main et Product Toones) Oren also Usa Usa Annonlum Nitzte Annonlum Nitzte Annonlum Nitzte	2011 2011	2012	2013	2014	2015	2016	2017 2017	2018	2019	2020	2021 2021	2022
	UAN Ammolum Nitrate Ammolum Nitrate (Min mt Product Tonnes) Ammolum Nitrate USA Ammolum Nitrate Canada (Min net Product Tonnes) Ammolum Nitrate Ammolum Nitrate Ammolum Nitrate Ammolum Nitrate Min Nitrate North Ammerica	2011	2012	2013	2014	2015	2016	2017	2018	2019 2019 2019	2020	2021	2022 2022
	UAN Annonlum Nitzte Source teem Marken & Beenterg LP-Company reports USA (Min et Product Toones) Annonlum Nitzte Canada (Min ett Product Toones) Ammonia USA Ammonia Min ett Product Toones) (Min ett Product Toones)	2011 2011	2012	2013	2014	2015	2016	2017 2017 2017	2018	2019	2020	2021 2021	2022 2022 2022
	UAN Ammolum Nitrate Ammolum Nitrate (Min mt Product Tonnes) Ammolum Nitrate USA Ammolum Nitrate Canada (Min net Product Tonnes) Ammolum Nitrate Ammolum Nitrate Ammolum Nitrate Ammolum Nitrate Min Nitrate North Ammerica	2011	2012	2013	2014	2015	2016	2017	2018	2019 2019 2019	2020	2021	2022 2022
	UAI Annonlam Nitrate Source fore Markets of Bescherg LP-Company reports UGA (Man Parket Tannee) Ammonia Urea Ammonia Market Tannee) Annonia Urea Urea Urea Urea Urea Urea Urea Ure	2011 2011 2011	2012 2012 2012	2013 2013 2013	2014 2014 2014	2015	2016 2016 2016	2017 2017 2017	2018 2018 2018	2019 2019 2019	2020 2020 2020	2021 2021 2021	2022 2022 2022
	UAN Ammolum Nitrate Source Green Markes & Biosnieg LF-, Congary monts USA (Min mit Product Toones) Ammonium Nitrate Canada (Min mat Product Toones) Ammonium Nitrate UKA Ammonium Nitrate UKA (Min mat Product Toones) Ammonium Nitrate (Min mat Product Toones) Ammonium Nitrate Ammonium Nitrate (Min mat Product Toones) (Min	2011 2011 2011	2012 2012 2012	2013	2014	2015	2016	2017 2017 2017	2018 2018 2018	2019	2020	2021 2021 2021	2022 2022 2022
	UAR Annoulum Nitzte Source toes Marken & Desorreg LP-Company reports USA USA USA Uses Uses Uses Canada (Min met Product Toonss) (Min met Product Toonss) Uses Uses North America (Min met Product Toonss) Uses Uses Uses Uses Uses Uses Uses U	2011 2011 2011	2012 2012 2012 2012	2013 2013 2013	2014	2015	2016	2017 2017 2017	2018 2018 2018 2018 2018	2019 2019 2019 2019	2020 2020 2020	2021 2021 2021	2022 2022 2022

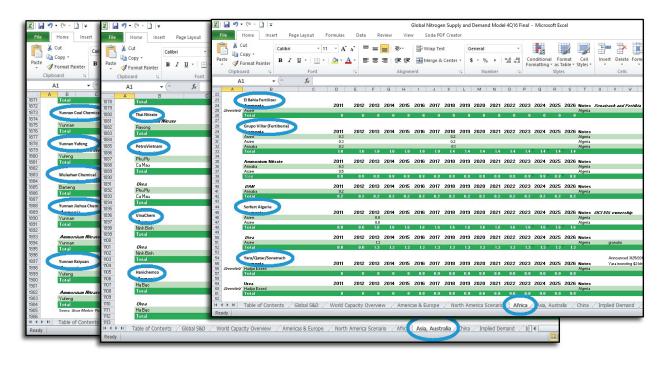
- Americas & Europe
- Africa
- Asia, Australia
- China



# 1. Supply/Capacities & Inventory

## **b. Global Producer Output**

Details on production levels at the individual factory/site and country level. View the list of over 450 nitrogen producers covered in this analysis on a quarterly basis.



- Americas & Europe
- Africa
- Asia, Australia
- China

#### Green Markets A Bloomberg Company

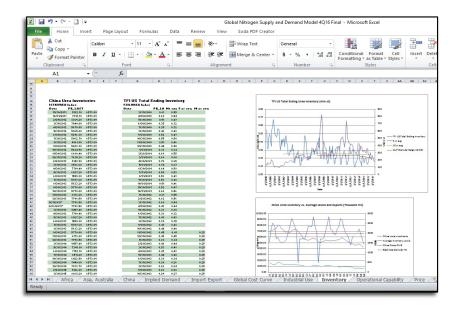
# 1. Supply/Capacities & Inventory

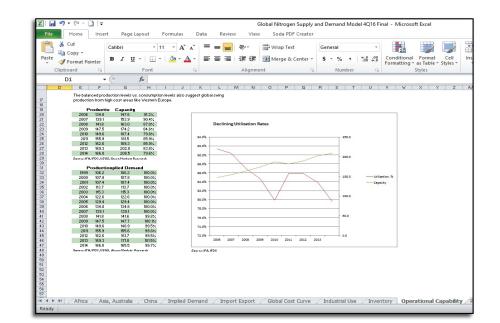
#### c. Nitrogen Fertilizer Inventories

Analysis of U.S. and Chinese inventory levels.

### d. Operational Capability

A look at global production levels in recent history vs. nameplate capacities and implied consumption.





#### Green Markets A Bloomberg Company

## 2. Demand

∦ Cut ≧a Copy + ∛ Format Pa Clipboard		• 9 • A A □ ⊞ • 3 • A Font	· = = = • = = = = •		ີ Wrap Te Merge ລ		General \$ - % Nu	, 5	* 68 \$98 15	Conditiona Formatting	Format as Table Styles	Cell Styles *	Insert	Delete	Format	Σ AutoSun Fill * Clear *	ZI Sort &	Find & Select *		
T60	- (° 1	Source: IFA, Blo	omberg, Green		search @	© Kennedy	Inform	ation, LL	.C, A Bl	oomberg E	NA Busin	less								
A B Source Gree		Information, LLC, A Bloomberg		H 800	ree: Green Ma	J beletr Research ( Tol					O P	Q	н	5	Source	FA, Bloomburg, Gh	on Merfetz Bu	W Postch 0	X Y	
	0.0 10000.0 20000.0 100	000 40000 50000 6000	R <sup>2</sup> =		1	60 140 140 140 140 140 140 140 14	500000.0	1000		_	Consumpti — Log. (Consu Atres) - 2099.3 6									
Source: Blos	nberg, Geor Minter Researc	» rvest vs. GDP (Sh	ort run)		\$e	ource: Bloomberg				Land (sh	ort run)									
680000 680000 620000 610000 610000 600000 580000 580000 570000 560000			Global Harvest vs. G     Unear (Global Harve     y = 6.76x+3     R <sup>2</sup> = 0.94	st vs. GDP) 60733	111111	200 180 140 140 100 100 100 100 100 10	00 6000	0 620000			<ul> <li>Total Fert v Land</li> <li>Linear (Tots Harvested I y = 0.0005 2<sup>2</sup> = 0.</li> </ul>	il Fertivs. and) x - 126.04								

# a. Global Nitrogen Fertilizer Supply & Demand

A global overview of projected nitrogen capacity vs. Green Markets' estimated demand curve to 2020, developed from liner regression models tied to Bloomberg Global GDP forecasts and World Harvested Land



## 2. Demand

### **b. North America Scenario**

An in-depth look at all significant North American nitrogen projects, with an examination of how different levels of greenfield project completions affect the supply/demand balance

- L		libri	× 11	· A	A =	* = =	39	-w	rap Tex	t	Ger	neral	Ŧ	155		
10	Gopy ▼ Format Painter	ΙŪ-	- 11	<u></u>	<u>A</u> - =		1 if if	M effe	erge &	Center	- \$	- % ,	÷.8 ÷.8	Conditional Formatting		- St
Cli	pboard 🕞		Font		5		Alignm	ent			ra -	Number	5		Styles	
	A1 - (*	ſs	e l													
A	В	С	D	E	F	G	н	1	J	K	L	м	N	O P	Q	в
	Greer	A Bloor		_												
	North American Sc															
	We take a deep dive h		American	nitrogen	projects											
	We take a deep dive lo and examine how diffe affect the supply/dem	ook at North Frent levels o	f project	completi	ons											
	and examine how diffe affect the supply/dem With North America movin	ook at North rent levels o and structure g down the glob	e as well a	completi as project	ons ted future abundance											
	and examine how diffe affect the supply/dem	ook at North rent levels o and structure g down the glob	e as well a	completi as project	ons ted future abundance											
	and examine how diffe affect the supply dem With North America movin of lower priced natural gas, While we do not believe tha	pok at North erent levels o and structure g down the glob there has been at every announce	e as well a al cost curv a large nurr sed project	completions as project we due to an ober of anno will be comp	ons ted future abundance sunced pleted; we lay											
	and examine how diffe affect the supply/dem With North America movin of lower priced natural gas,	pok at North erent levels o and structure g down the glob there has been at every announce	e as well a al cost curv a large nurr sed project	completions as project we due to an ober of anno will be comp	ons ted future abundance sunced pleted; we lay											
	and examine how diffe affect the supply dem With North America movin of lower priced natural gas, While we do not believe tha	book at North rent levels o and structure g down the glob there has been at every announce cases for the N at North Americ	of project as well a al cost curs a large num ced project orth Americ	completions project as project we due to an ober of anno will be comp can nitrogen	ons ted future abundance sunced sleted; we lay i market.											
	and examine how diffe affect the supply/dem with North America movin of lower priced natural gas, while we do not believe the out our base, bear and bull Our base case assumes th	bok at North prent levels o and structure g down the glob there has been at every announc cases for the N at North Americ ia and urea.	of project as well a al cost curs a large num ced project orth Americ ca will becom	completi as project ye due to an iber of anno will be comp can nitrogen me a lot clo	ons ted future abundance sunced bleted; we lay market. ser to self-											
	and examine how diff affect the supply/dem With North America movin of lower priced natural gas, While we do not believe tha out our base, bear and buil Our base case assumes th sufficiency of both ammor The reduction in imports w	bok at North prent levels o and structure g down the glob there has been at every announc cases for the N at North Americ ia and urea.	of project as well a al cost curs a large num ced project orth Americ ca will becom	completi as project ye due to an iber of anno will be comp can nitrogen me a lot clo	ons ted future abundance sunced bleted; we lay market. ser to self-	2014	2015=	2016=	2017=	2018e	2019e	2020-				
	and eramine how diff affect the supplidem With North America movin of lower priced natural gas, While we do not believe the out our base, bear and buil Our base case assume th sufficiency of both ammor The reduction in imports or medium term. Base Capacity	ook at North orand structure g down the glob there has been at every announc cases for the N at North Americk and Unea. Ill likely help set 1 Urea	of project e as well a sal cost curs a large num ced project orth Americ ca will becom the stage fo 2011 10.0	completions as project we due to an ober of anno will be complete can nitrogen me a lot clo or a global si 2012 10.0	ons ted future abundance sunced bleted; we lay a market. ser to self- urplus in the 2013 10.0	2014 10.0	11.3	13.6	14.5	2018e 15.6	15.6	17.8				
	and eramine how diff affect the supplydem With North America movin of lower priced natural gas, While we do not believe thus out our base, bear and bull Our base case assumes th sufficiency of both ammor The reduction in imports e medium term. Base Capacity Implied Demand	ook at North orent levels o and structure g down the glob there has been at every announc cases for the N at North Americ is and urea. Il likely help set I Urea Urea	of project e as well a al cost curv a large num sed project orth Americ ca will becom the stage for 2011 10.0 14.1	completions as project we due to an obser of anno will be complete an nitrogen me a lot clo or a global so 2012 10.0 16.2	ons ted future abundance sunced sleted; we lay i market. ser to self- urplus in the 2013 10.0 15.5	2014 10.0 15.8	11.3 15.3	13.6 15.6	14.5 15.7	15.6 15.9	15.6 16.2	17.8				
	and examine how differ diffect the suppliddem Vibh North America mowin of lower priced natural gas. Vuhile we do not beleve this our cuo base, bear and buil Our base as as assument the sufficiency of both ammon The reduction in imports or medium term. Base Ecapacits Implied Demand Import f Export Leve	ook at North renet levels o and structure g down the glob there has been at every announc cases for the N at North Americ is and urea. III likely help set I Urea Urea Urea	of project e as well a laid cost curs a large num sed project oroth Americ sa will become the stage for 2011 10.0 14.1 5.9	completi as project we due to an uber of anno will be comp an nitrogen me a lot clo or a global si con a global si 2012 10.0 16.2 6.9	ons ted future a abundance sunced sleted; we lay ur market. ser to self- urplus in the 2013 10.0 15.5 7.1	2014 10.0 15.8 8.3	11.3 15.3 8.0	13.6 15.6 7.5	14.5 15.7 2.7	15.6 15.9 1.9	15.6 16.2 2.2	17.8 16.6 0.6				
	and examine how differ diffect the suppliddem Vith North America mowin of lower price hartural gas. Vithe use do not believe this out cause bear and bud Dur base abear and bud Dur base abear assument hour bear abear assument bud bear abear and bud Dur base abear abear motion term. Base Capaoits Implied Demand Import / Esport Lever	ook at North orent levels o and structure g down the glob there has been there has been asses for the N at North Americ ia and urea. III likely help set I Urea Urea Urea Urea	of project e as well a sal cost ours a large num cod project ourth Americ ba will becom the stage for 2011 10.0 14.1 5.9 17.0	completi as project ve due to an uber of anno will be comp an nitrogen me a lot clo or a global s 2012 10.0 16.2 6.9 17.1	ons ted future abundance sunced sleted; we lay i market. ser to self- urplus in the 2013 10.0 15.5	2014 10.0 15.8	11.3 15.3 8.0 18.9	13.6 15.6	14.5 15.7 2.7 23.0	15.6 15.9 1.9 23.9	15.6 16.2 2.2 25.2	17.8				
	and examine how differ diffect the suppliddem Vibh North America mowin of lower priced natural gas. Vuhile we do not beleve this our cuo base, bear and buil Our base as as assument the sufficiency of both ammon The reduction in imports or medium term. Base Ecapacits Implied Demand Import / Export Leve	ook at North renet levels o and structure g down the glob there has been at every announc cases for the N at North Americ is and urea. III likely help set I Urea Urea Urea	of project e as well a laid cost curs a large num sed project oroth Americ sa will become the stage for 2011 10.0 14.1 5.9	completi as project we due to an uber of anno will be comp an nitrogen me a lot clo or a global si con a global si 2012 10.0 16.2 6.9	ons ted future a abundance sunced bleted; we lay market. sor to self- urplus in the 2013 10.0 15.5 7.1 17.7	2014 10.0 15.8 8.3 17.7	11.3 15.3 8.0	13.6 15.6 7.5 21.1	14.5 15.7 2.7	15.6 15.9 1.9	15.6 16.2 2.2	17.8 16.6 0.6 27.0				
	and examine how differ diffect the supplidem Vith North America mowin of lower priced natural gas. Vulties et do not believe this out our base, beer and full Our base oace accurrent in sufficiency of both ammoor The reduction in imports a medium term. Base Expand Demand Emport 1 Export Levet Expand	ook at North srent levels o and structure g down the glob there has been at every announc cases for the N at North America and urea. III likely help set i Urea Urea Urea Urea Ammonia	of project e as well a lal cost ours a large num sed project orth Americ ca will become the stage for 2011 10.0 14.1 5.9 17.0 20.3	completi as project as project as project as project as project will be comp an nitrogen me a lot elo or a global si 2012 10.0 16.2 6.9 17.1 20.2	ons : ted future abundance sunced sloted; we lay market. sor to self- urplus in the 2013 10.0 15.5 7.1 20.7	2014 10.0 15.8 8.3 17.7 21.1	11.3 15.3 8.0 18.9 20.6	13.6 15.6 7.5 21.1 20.7	14.5 15.7 2.7 23.0 21.0	15.6 15.9 1.9 23.9 21.3	15.6 16.2 2.2 25.2 21.7	17.8 16.6 0.6 27.0 21.0				

K Cut	ome Insert	Page Layout	Formulas	Data	Reviev	v Vi								-		Σ AutoSum	· A= m	ا 🗠 🚷 د
Col	cali		11 · A	A =	• = =	\$9/	Wrap Text	Genera	ul.			1		+	ar 💷	Fill -	Zr ura	
	rmat Painter B		* 🎱 * •	<u>A</u> · =		律师		- \$ -	%,		Formatting	as Tabl	e * Styles *	Insert	Delete Format	2 Clear *	Sort & Find & Filter * Select *	
Clipboar		Font		51		Align	ment	Gi	Number		3	Styles			Cells	E	diting	
X36	i + (°	f <sub>x</sub>																
A	В	С	D	E	F	G	н	1	J	K	L	м	N	0	P Q	R S	T U	V V
Th	he majority of new urea	o capacity will most l	ikely be granu	ılar														
<		Base * (included in whic	Bear ch of our assu	Bul	rmase a.		>						We assume Common rai	Urea at an	agricultura standa	al Grade . 82% Noo ed of . 46% Noonte up (for the sake of e		rally use .6 ammor
	grifos / Borealis	the second s	NU2	11.0		UAN	Status	Base	Bear	Bull	Start-up	Cost	Notes					
	grifos / Borealis uli Coast Project		0.50					N	0	V	2019		A		a	A	timated based on pe	
60	ull Loast Project		0.50					IN	Y	r	2013		Announced	partnersn	p vim Dorealis in P	169 20 ID; SIZE IS ES	omated based on pe	ers
۵,	arebon																	
	orth Dakota		0.01	0.01				N	Y	N			Project app	ats to be	dormant			
A	grium																	
Co	ombelt		1.00	1.00		0.80	Delayed / Cancelled	N	Y	N	2019							
	edwater			0.17			Delayed / Cancelled	N	Y	Y	2015							
	orger			0.64			Progressing	Y	Y	Y	2016	\$500	Ammonia br					
Ke	enai		0.29	0.66			Potential Re-Skart	Y	Y	Y	2018		Some risk p	ojeotisoa	ncelled on reduce	d E&P exploration;	watching closely	
	M Agrigen Industri ilona	es	0.5				Proposed	A1	0	ы	2020	1204	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1		and American		s are estimated. Late	
	liona		0.5				Proposed	14	Ŧ	rs.	2020	1200	Wond Liass	activy pro	posed. Himnoria a	nd utea capacites	s are essimated. Late	to the game anno
	ustin Powder																	
A	losheim		0.18		0.38		Start-up soon	Y	Y	Y	2016	\$220	Start up					
	io-Nitrogen																	
Ma	lorida			0.16			N	N	N	N					nkrutcy in October			
Ma Bi File				0.61				N	Y	N			Initial plant i	in Florida	at. 124 and the oth	er five plants at .62	21	
Ma Bi File	ouisiana																	
Bi Fic						177	On-Line	V	V	V	2016	\$2,100	Funancione	- anthom	\$3.8 to \$4.2 bin to	al on Rout Moral		
Bi Fic Lo	F Industries		127										Experts Orts	a with more	+0.0 to +4.2 bin to	aron on war		
Mi Bi File Lo Cf De	F Industries onaldsville		127	1.35				Y	Y	Y								
Ma File Lo Ci De Po	F Industries		127 0.85	1.35 1.35			Start-up Soon Potential	YN	Y	Y	2016	\$2,100	CE appound	editwork	evaluate notentia	lucea expansion a	r Medicine Hat. Awa	iting more details

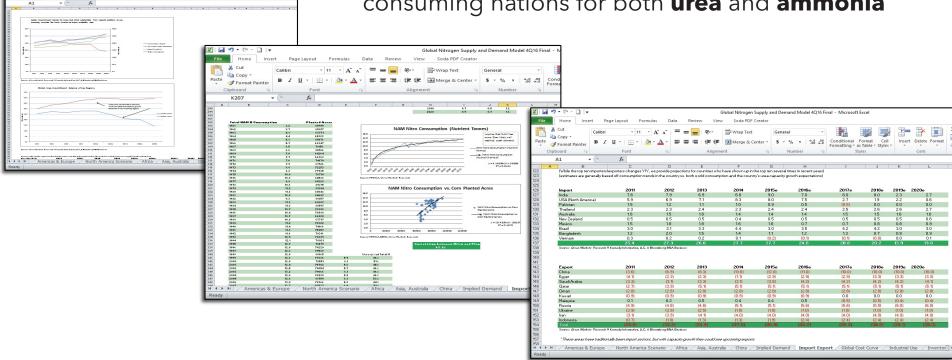
\*This **interactive model** includes easy-touse forecasting algorithms that allow you to customize production scenarios which in turn change the supply/demand balance projections across the forecast period.



## 3. Trade

### a. Nitrogen Fertilizer Import/Export Status

Analysis of country level demand and import/export scenarios for major fertilizer producing and consuming nations for both **urea** and **ammonia** 







#### a. Production Cost Analysis

Comparison of the marginal cost basis at the country and urea manufacturer level

INSERT PAGE LAYOUT FORM	LAS DATA REVIEW VIEW I		y and Demand Model 2Q16 [Read-0	and - Deres		P (E) = 5 Wyatt, Kristian	IIII 5 + C <sup>2</sup> − = FILE HOME INSERT	PAGE LAYOUT FORMULAS DAT	A REVIEW VIEW PI		and Demand Model 2Q16 [Read-On!	/] - txcel			-
8	с	D	E	F	G H I	J K L	A	8	c	D	E	F	G H	1 1	
Gree	A Bloomberg Co								2016 Ammonia Capacity	2016 Urea Capacity	Ammonia Cash Cost	Urea Cash Cost	Benchmark Price PX Last	PX Last	ct
								North America			100				
Global Cost	Curve							US (Henry Hub) USD				-			
								Canada (AECO Alberta) USD		and the second			and the second se		
A detailed anaylsis regional level.	of global ammonia and urea costs estim	sated at both the country and						Source: Green Markets Research @ Ke	ennedy Information, LLC, A Bloor	nberg BNA Business, Industry Repo	rts, EIA, IMF, Bloomberg				
									2016 Ammonia Capacity	2016 Urea Capacity	Ammonia Cash Cost	Urea Cash Cost	Benchmark Price PX Last	PX Last	I.T.
								Latin America	100						
								Argentina							
	Global Urea Cost	Curve May 2016			Ammonia Cost Curve May 2016			Bolivia	and the second second		100				
		currennay 2010			Automa cost curve may 2010			Brazil USD/MWh							
-								Colombia				and a second			
								Chili							
								Costa Rica	and the second se	100					
								Cuba							
							1	Trinidad and Tobago					And Address of Concession, Name		
			And the second second			And the second s		Peru							
			A 100 M			and the second sec		Venezuela	100			1000	succession and the second		
						and the second sec		Mexico (Henry Hub) USD							
· · · · ·			A			100 A		Source: Green Markets Research @ Ke	20	tions for factors, indexing factor	in the RE Stational				
				_		A 1000 - 1000			2	No. or other			Restored Intel No. 10		
				-		ALC: 1		Western Europe	100						
			#****					Austria (CEGH) EUR/mwh							
								Belgium (Zeebrugge) BGP	100		10.00	1000	Statement Street	survey of	
							P	France (PEG Nord) EUR/mwh							
	Constrainty of the second							Germany (Russian Border)	100			1000	and the second second		
								Greece							
source: Green Markets	Research @ Kennedy Information, LLC, A Bloc	omberg bina business, Industry Rep	iorts, LIA, IMP, Bloomberg	source: Green Markets Re	esearch @ Kennedy Information, LLC, A Bloomberg	INA BUSINESS, INDUSTRY REPORTS, EIA, IMF, BIO		lceland	-						
								Italy (PSV) EUR/mwh							
	2016 Ammonia Capacity	2016 Urea Capacity	Ammonia Cash Cost	Urea Cash Cost			L	Netherlands (Dutch TTF) EUR/mw	1.8	100	1000		The second second second second	and the second s	
North America	2010 Antonia Capacity	2016 Orea Capacity	Ammonia Cash Cost	urea cash Cost				Norway (Nord Pool) EUR/mwh							
West Asia								Portugal			1000	and the second se	Statement Statement		
Oceania								Spain (LNG from Egypt) USD							
East Asia (Ex-China)								Switzerland (Zeebrugge)	194	and the second se			manufacture success		
South Asia							P	UK (NBP)		100 million (100 m	00170	2000	NUMBER OF STREET, STRE	and a second second second	
		10	2120-9	2117-0				Source: Green Markets Research @ Ke	ennedy Information, LLC, A Bloom	nberg BNA Business, Industry Repo	rts, EIA, IMF, Bloomberg				



# 5. Pricing/Price Forecasts

## a. Nitrogen Outlook

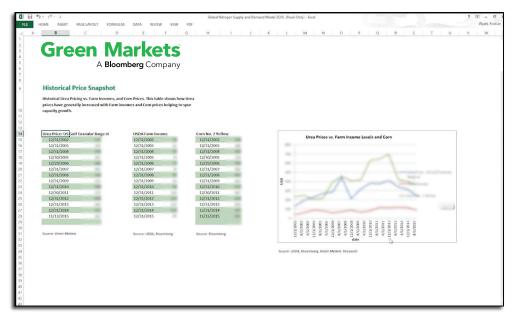
Forecasts for the global Nitrogen market, with a focus on urea and ammonia

## **b. Natural Gas**

Analysis of the North America natural gas market and the area as a low-cost producing region against the global backdrop

## c. Historical Price Snapshot

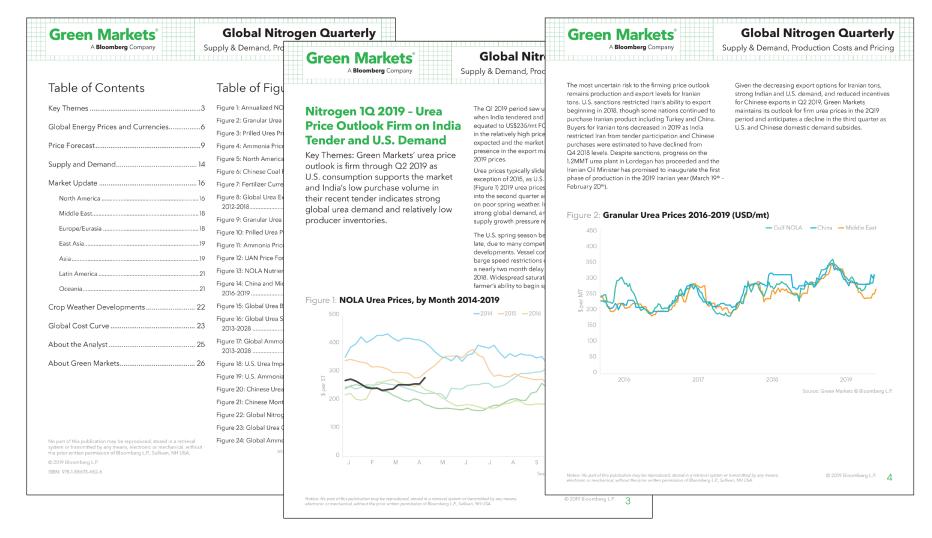
Historical urea pricing vs. farm incomes, and corn prices





## 6. PDF Executive Summary

#### (~25 pages, including Short, Medium & Long Term Pricing and Market Outlook)





Pricing/Deliverables

# Global Nitrogen Quarterly Supply & Demand, Production Costs and Pricing

### \$5,188

Includes one full year of intelligence (four reports)

## **Deliverables:**

## PDF and (unlocked) MS Excel® format

Nitrogen NOT your thing? Global Potash and Global Phosphate Quarterly reports also available, US\$4,102 each.

