



Nitrogen Outlook

Presented to:

Fertilizer Industry Roundtable

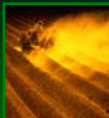
By: Michael Bennett, President and CEO
Terra Industries Inc.

October 28, 2003

Forward-Looking Statements

Information contained in this presentation, other than historical information, may be considered forward-looking. Forward-looking information reflects management's current views of future events and financial performance that involve a number of risks and uncertainties. The factors that could cause actual results to differ materially include, but are not limited to, the following: changes in financial markets, general economic conditions within the agricultural industry, competitive factors and price changes (principally selling prices of nitrogen and methanol products and natural gas costs), changes in product mix, changes in the seasonality of demand patterns, changes in weather conditions, changes in governmental regulations and other risks described in the "Factors That Affect Operating Results" section of Terra's current annual report.

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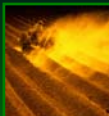
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U.S. Nitrogen Market

- ❖ Natural gas prices: still among the highest and most volatile in the world.
- ❖ FY 2002/2003 ending inventories of NH_3 , UAN, and urea reached or set record low levels.
- ❖ Unless natural gas prices drop below \$3.50 for a consistent period the U.S. will set the floor on NH_3 world prices for the next 2-3 years.
- ❖ U.S. agricultural demand is stable while non-fertilizer nitrogen demand is increasing.
- ❖ Ammonia capacity will continue to diminish in the Gulf Coast area over the next 2-3 years due to natural gas pricing.
- ❖ In FY 2003/2004, records will be set on NH_3 and urea import levels.

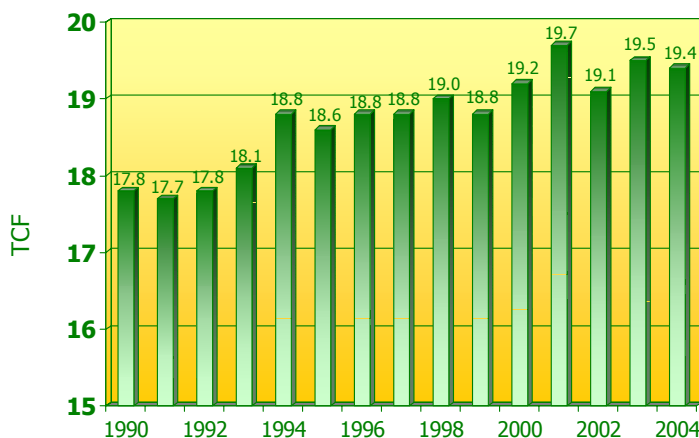
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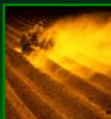
U.S. Gas Production is Expected to Increase in 2003, Remain Flat in 2004



Source: EIA, *Short-Term Energy Outlook*, September 2003

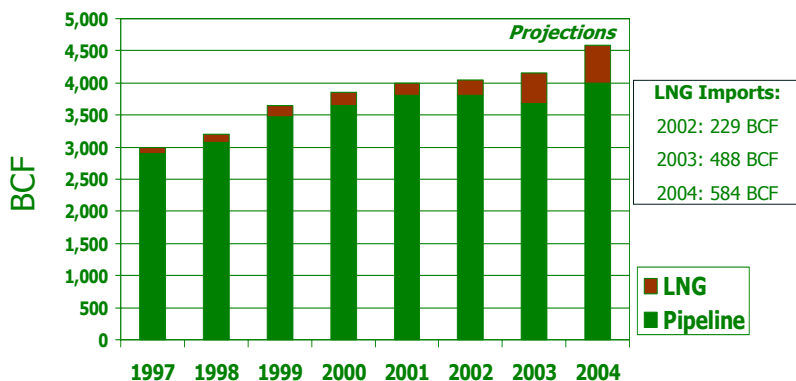
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Natural Gas Import Sources



Sources: History: EIA; Projections: *Short-Term Energy Outlook*, September, 2003.

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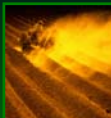
Near-Term Outlook for Natural Gas

- ❖ **Supply:** Cautious optimism because of the following expectations:
 - Production increases in '03 (result of strong drilling)
 - Net imports (including LNG) increases in 2004
 - Storage adequate at start winter 2003 (3 Tcf)
- ❖ **Consumption:** Little change in totals for 2003, 2004
- ❖ **Wellhead price:** \$5 per Mcf in 2003, decreasing \$1 in 2004
- ❖ **Consumer prices:** Higher this winter vs. last; expect relief starting in 2Q 2004
- ❖ **Caveat:** Extremes in market or weather conditions would change this outlook

Source: Energy Information Administration

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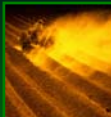
U.S. Total Natural Gas Dry, Proved Reserves (Bcf)

Decade	Year-0	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8	Year-9
1970s								207,413	208,033	200,997
1980s	199,021	201,730	201,512	200,247	197,463	193,369	191,586	187,211	168,024	167,116
1990s	169,346	167,062	165,015	162,415	163,837	165,146	166,474	167,223	164,041	167,406
2000s	177,427	183,460								

Source: Energy Information Administration

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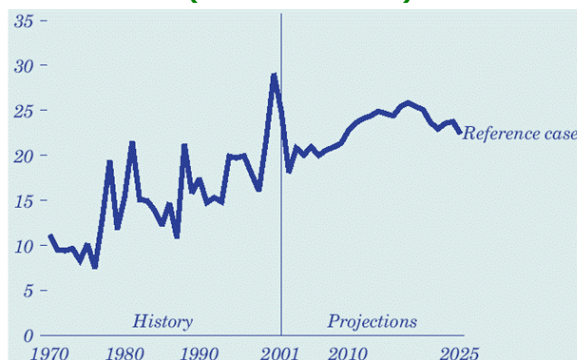
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Annual Energy Outlook 2003 with Projections to 2025

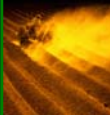
**Lower 48 natural gas reserve additions, 1970-2025
(trillion cubic feet)**



Source: Energy Information Administration

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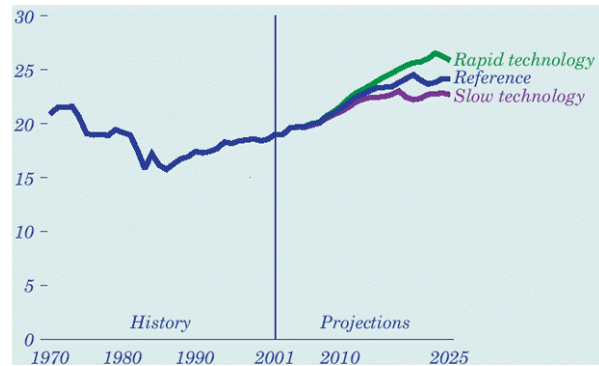
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Annual Energy Outlook 2003 With Projections to 2025

**Lower 48 natural gas production in three cases, 1970-2025
(trillion cubic feet)**



Source: Energy Information Administration

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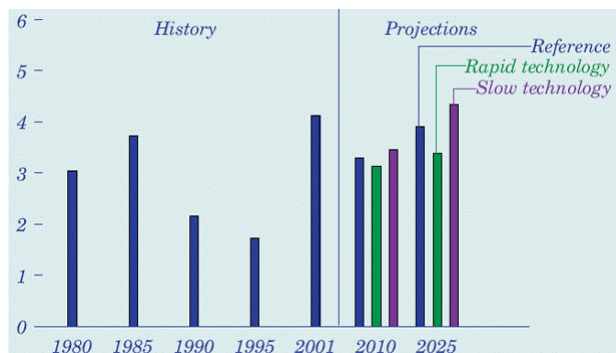
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Annual Energy Outlook 2003 with Projections to 2025

**Projected lower 48 natural gas wellhead prices in three cases,
2010 and 2025 (2001 dollars per thousand cubic feet)**

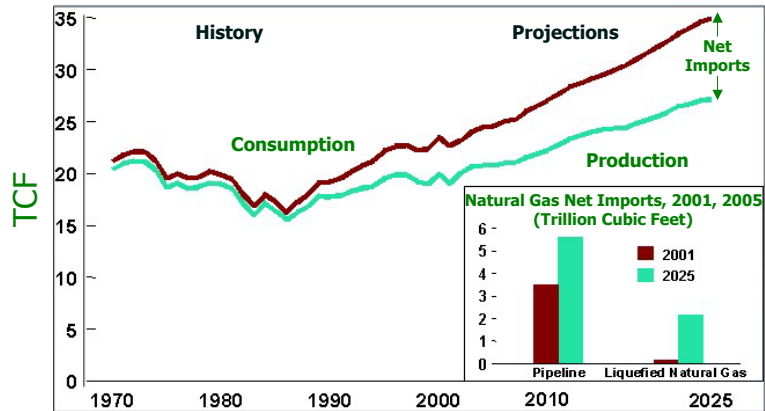


Source: Energy Information Administration

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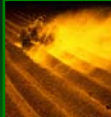
Natural Gas Supply, Consumption, and Imports Projected to Expand through 2025



Source: Energy Information Administration

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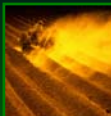
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In the Long Run...

- ❖ Natural gas reserves in North America are adequate to meet production forecasts.
- ❖ LNG and other natural gas imports will increase.
- ❖ The price "fence posts" of natural gas economics may not change significantly.
- ❖ LNG projects will compete with chemical projects for global natural gas supplies.
- ❖ North America will continue to lose chemical production.



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Domestic Demand

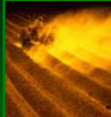
(million short tons)

	Fertilizer Year		Variance
	2003/2004	2002/2003	
Ammonia	19.7	19.7	0
Urea	8.9	8.4	.5
UAN 32%	10.5	10.1	.4

Source: Terra estimates

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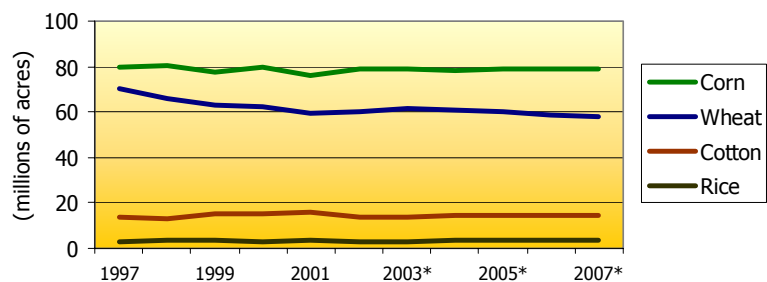
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Domestic Demand – Agricultural

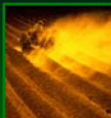
Stable planted acres of
major N-consuming crops



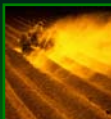
* Forecasted
Source: Doane Ag Services

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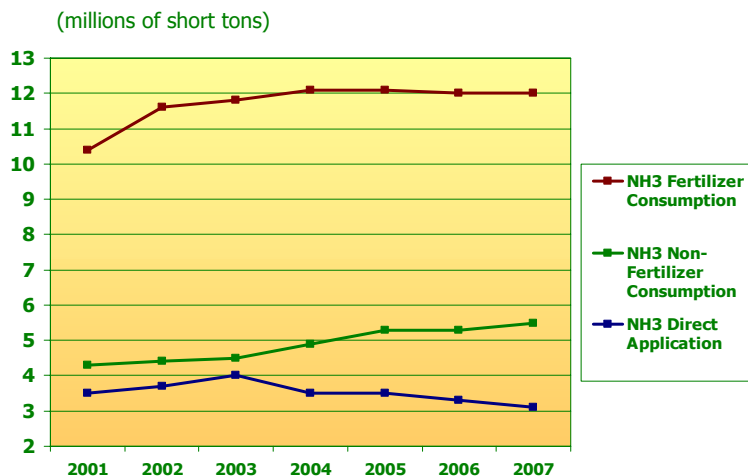
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Domestic Demand – Industrial

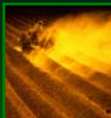
Industrial Demand is Growing



Source: Terra estimates

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Global Nitrogen Drivers

❖ Fertilizer

- World population is forecasted to increase by 2% per year over the next 10 years.
- Per capita income growth in developing countries will drive per capita food consumption.
- Limited real acres to be brought into production, stimulating the need to maximize yields.

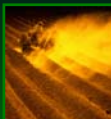
❖ Industrial

- Continual demand for upgrading lifestyles will increase need for caprolactam, acrylonitrile, and urea resins.
- Environmental clean-up across industrialized countries.
- N.A. natural gas prices moderating to allow reasonable values to maintain growth.

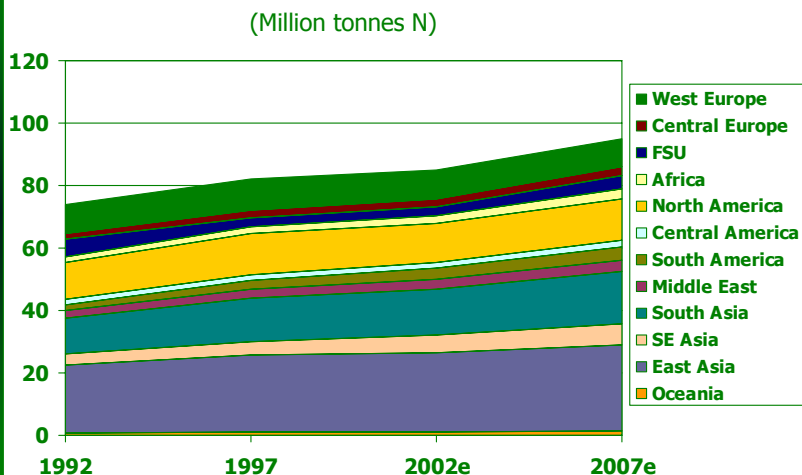
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World Nitrogen Fertilizer Demand: 1992-2007



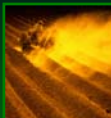
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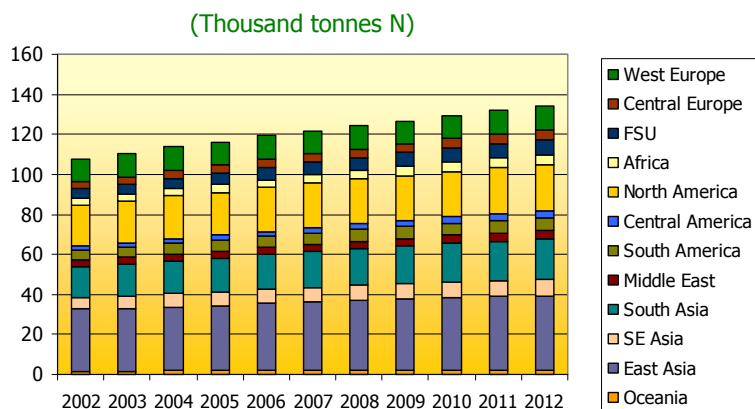
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Fertilizer and Technical Nitrogen Demand Forecast: 2002-2012

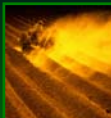


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Ammonia Capacity Forecast by Region

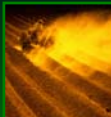
(Million product t/y)

	2002	2007	2012	Change 2002-2012
World Total	161.0	167.1	180.1	19.1
West Europe	13.2	11.5	10.5	-2.7
Central Europe	10.6	9.7	8.1	-2.5
FSU	25.3	25.6	26.9	1.6
Africa	4.7	5.6	8.4	3.7
North America	20.3	18.1	16.8	-3.5
Central America	6.0	7.2	8.5	2.5
South America	4.6	4.7	6.1	1.5
Middle East	8.0	13.8	17.4	9.4
South Asia	18.8	17.5	17.5	-1.3
SE Asia	7.4	8.8	12.0	4.6
East Asia	40.8	42.5	44.2	3.4
Oceania	1.3	2.1	3.7	2.4

Source: British Sulphur Consultants

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World Ammonia Supply/Demand Balance

(Million tonnes N)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Operating Rate (%)	86	88	89	90	91	90	91	91	91	93
Ammonia Capacity	132.1	132.5	134.3	135.9	137.4	141.5	144.1	147.2	148.0	148.1
Total Ammonia Requirement	113.5	116.4	119.3	122.2	124.9	127.7	130.2	132.8	135.2	137.5
Y-on-Y Change in Capacity	-0.3	0.4	1.8	1.6	1.5	4.1	2.6	3.1	0.7	0.2
Y-on-Y Change in Demand	2.8	3.0	2.8	2.9	2.7	2.7	2.5	2.6	2.4	2.4

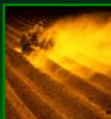
❖ Lowest operating rates:

- Previously FSU
- Changing to North America and Western Europe

Source: British Sulphur Consultants

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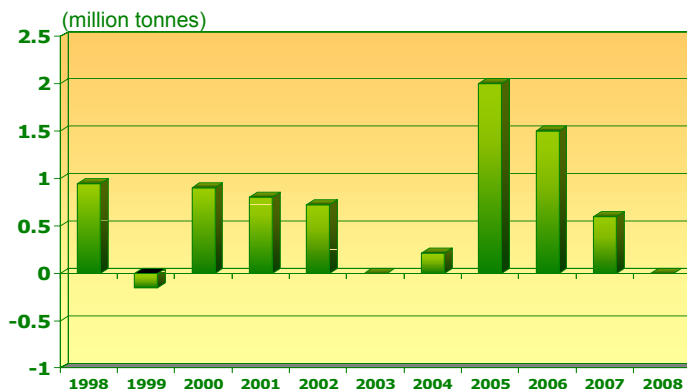
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Construction of Offshore Nitrogen Manufacturing Facilities

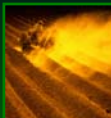
Additions to Ammonia Export Capacity
1998-2008



Source: Fertecon Ammonia Outlook, 2002 (3)

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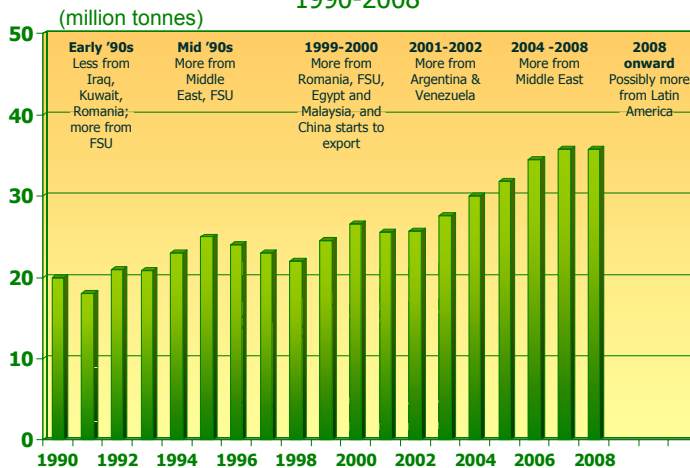
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Construction of Offshore Nitrogen Manufacturing Facilities

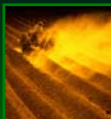
Urea Export Trade
1990-2008



Source: Fertecon Urea Outlook, 2002 (3)

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Conclusions

- ❖ Domestic demand growth will be driven by industrial applications, with agricultural demand stable.
- ❖ Global nitrogen demand should continue to increase about 2%/year.
- ❖ Planned global capacity additions should support but not exceed expected demand growth.
- ❖ North American natural gas supply can support a domestic industry well into the future.
- ❖ LNG will compete with feedstock chemicals for capital and inexpensive natural gas.
- ❖ North American stand-alone ammonia and urea plants directly competing with imports will likely close in the near- to medium-term.
- ❖ Logistically and product-advantaged North American plants likely have a good future.