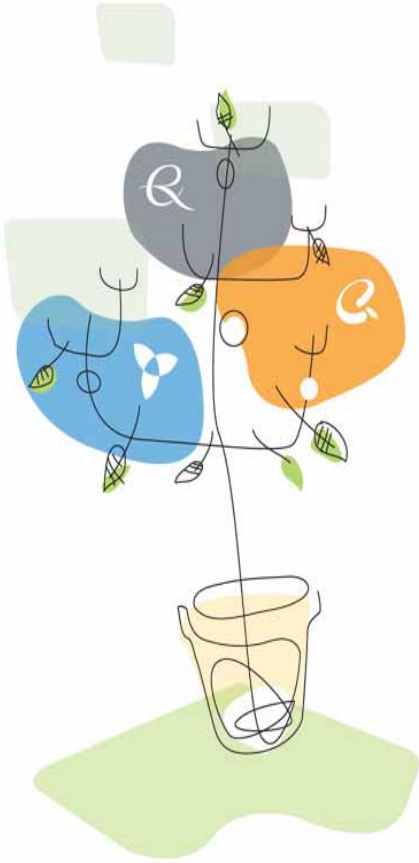
Global Publishing Company

- **ICIS is part of Reed Business Information (RBI), the publisher of more than 100 market-leading publications and online services, as well as the organizer of leading industry conferences and awards.**
- **RBI, a division of Reed Business, is a member of Reed Elsevier plc, which reported revenues of around $8bn in 2004.**



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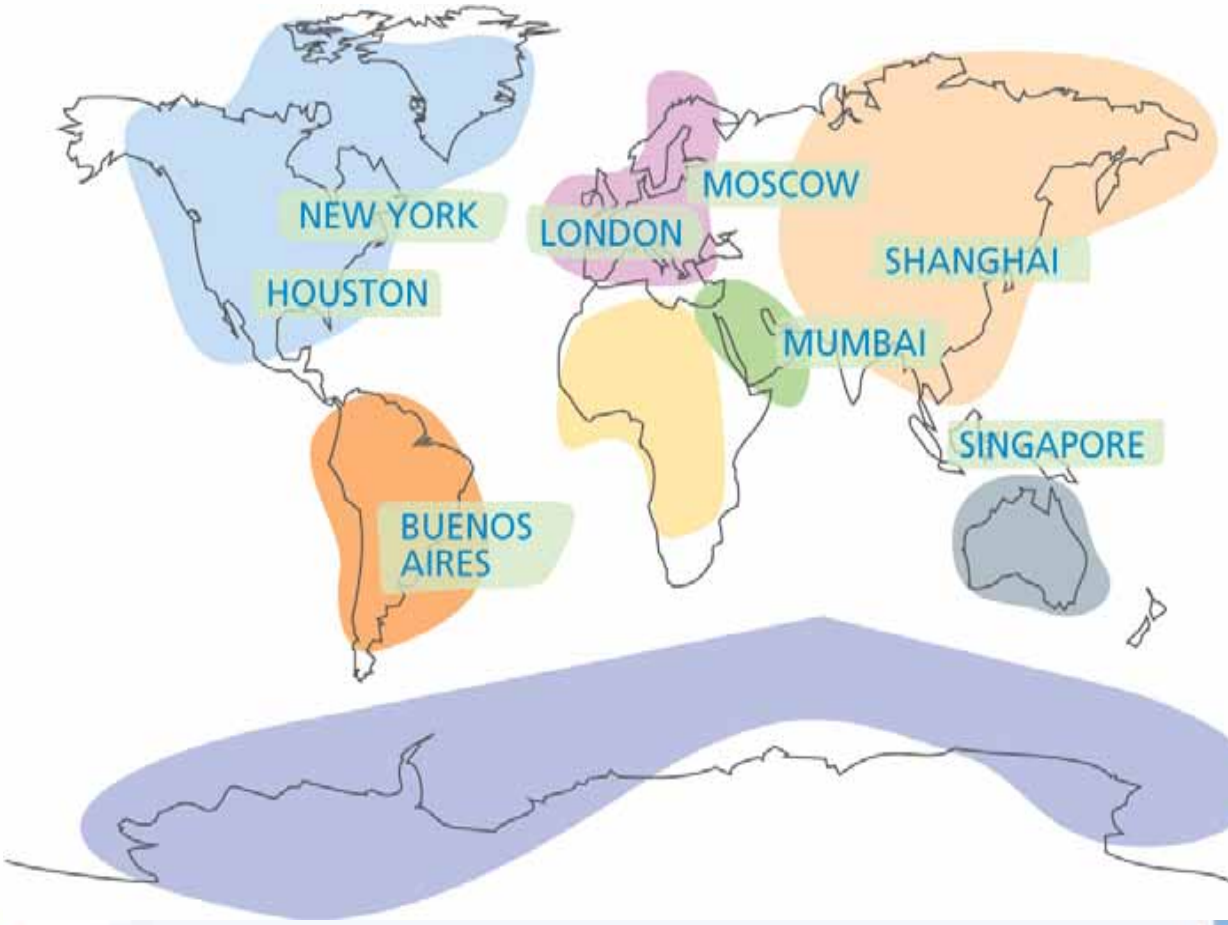
ICIS locations



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Unbiased, independent and reliable pricing information

- **Spot and contract price assessments**

•ICIS pricing - the market's most respected pricing service for more than 100 global commodity markets

- Market commentary on trends and business developments
- Transactions reported and confirmed
- Plant and production news

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ICIS news

- **Comprehensive coverage of emerging markets including China, Russia and Latin America**
- **A global perspective from a global network of correspondents**
- **Regional expertise and market knowledge**
- **Market-moving news, key data and incisive analysis**

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New member of the ICIS reports

ICIS acquires Decyfer In December, 2005, ICIS acquired Decyfer, a leading publisher of price assessments and market analysis for the global fertilizer markets.

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ICIS

Expanding global fertilizer coverage

The Market, the key weekly fertilizer report, gives subscribers the benefits of the best market reporting available, authoritative analysis of the impact of new developments on the fertilizer market and comprehensive price assessments for key products.

The Outlook provides accurate price forecasts for the major fertilizer products for the following 12 months. The forecasts represent predictions based on a full and detailed analysis of the supply/demand outlook for the main products in all major supply areas and markets for the year.

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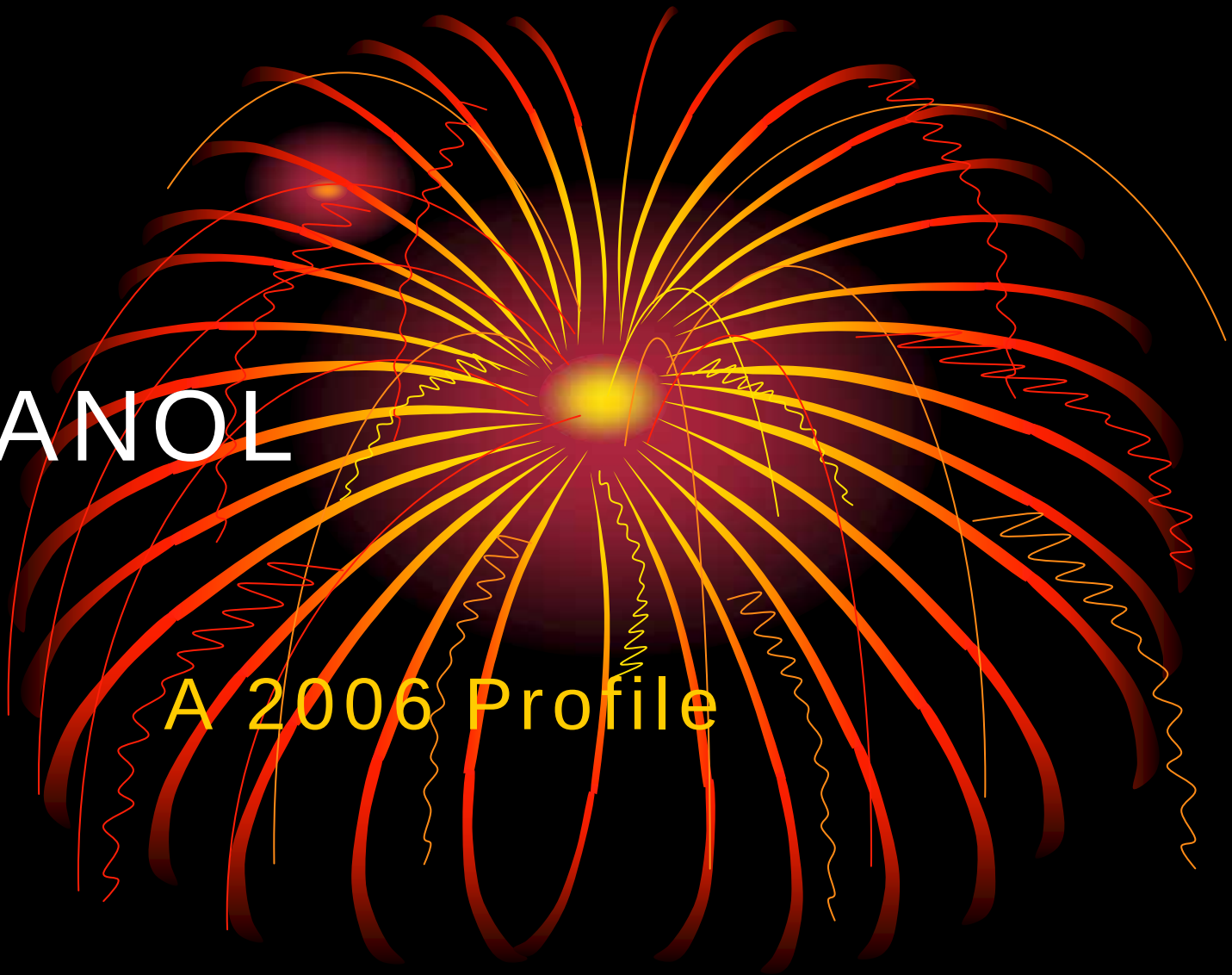
ETHANOL



A 2006 Profile

The Green Push
The Energy Policy Act of 2005 (EPACT)

What is in it:

*mandates 7.5 billion gallons biofuel use by 2012 Renewable Fuel Standard
*energy tax incentives; loan guarantees
*max $3,400 hybrid vehicle tax credit
*increases use alternatives such as wind, coal, ocean
*$50 million biomass grant program funding
*tax break for home energy conservation
*subsidies for oil companies
*requires applicable Federal Fleet vehicles to use alternative fuels only

What is NOT in it
(was in the original bill but got dropped):

*Limited liability for producers of MTBE – these producers got NO federal legal protection
*Drilling for oil in the Arctic National Wildlife Refuge (ANWR)
*Increasing vehicle efficiency standards (CAFE)
*Requirements toward increased use of non-greenhouse gas-emitting energy sources (Kyoto Protocol types)

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Evolution of EPACT
(Energy Policy Act of 2005)

1995 - Implementation of reformulated gasoline requirement.
8 states required to sell gasoline containing min 2% oxygenates (typically MTBE)
1990 - Clean Air Act amended, required use of reformulated gasoline in California, New York, Connecticut, Pennsylvania, Maryland, Texas
1999 - California bans total MTBE by 2002
2000 - Senate committee votes 4-year phase-out of MTBE
favored substitute: ethanol
2002 - Senate passes bill tripling amount of ethanol use over 10 years in cleaner burning fuels
2003 - Senate passes refiner requirements to triple ethanol use
2004 - 108th Congress fails to pass an energy bill. MTBE liability an issue.
2005 - Senate passes reform of US energy laws. MTBE liability denied.
2005 - President Bush signs US Energy Policy Act (EPACT) in August
2% oxygenate rule ends; Renewable Fuels Standard enacted

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EPACT opens the green door

Renewable Fuels Standard- EPA jurisdiction

February 2006-

EPA revokes 2% oxygenate rule effective May 6

US refiners begin to voluntarily phase-out MTBE use

Federal energy officials predict inadequate ethanol supply will foster gasoline shortages and price hikes

March 2006

National Petrochemical & Refiners Assoc (NPRA) predicts US refiners will be pressed to maintain national gasoline supply during transition away from ethanol

April 2006

A few spot shortages of gasoline developed in 4 states- Pennsylvania, New Jersey, Virginia, and Maryland – due to logistics issues.

May 2006

May 6 deadline essentially met

June 2006 – Fuel ethanol spot prices skyrocket up

July 2006 – Fuel ethanol spot prices begin to fall

All forms and templates referred to are available **here**

Key market drivers in 2006

High crude oil prices forced gasoline prices up

Hurricane impact contributed to higher gasoline prices

Core demand up due to oxygenate shift away from MTBE

A whole new ball game for ethanol

All forms and templates referred to are available here

April Fuel Ethanol Supply/Demand

April 2006 Statistics

(mg = million gallons; b/d = barrels per day)
Fuel Ethanol Production 363.5 mg; 289,000 b/d
Fuel Ethanol Use 396.2 mg; 302,000 b/d
Fuel Ethanol Stocks 381.7 mg 31.4 days of reserve
Fuel Ethanol Exports0.0mg^ n/a
Fuel Ethanol Imports 32.6 mg* n/a*

*Source: U.S. International Trade Commission
^Source: Jim Jordan & Assoc.

Currently, 101 ethanol biorefineries nationwide have the capacity to produce more than 4.8 billion gallons annually. There are 34 ethanol refineries and 7 expansions under construction with a combined annual capacity of more than 2.2 billion gallons.*

*Source: Renewable Fuels Assoc

All forms and templates referred to are available **here**

How Much Corn?

2006 – approximately 78 m acres planted

Average yield of corn per acre – 100 bushels
Average yield of ethanol from corn – 2.5 gal/bushel

What if all corn acres planted went to fuel ethanol? About 19.5 bn gals of fuel ethanol would result.

If production capacity is about 7 bn gals/yr by end 2006, doesn't this solve the energy need?

To infinity and beyond on ethanol? Maybe not, and why not

There's more than corn in Kansas!

Renewable Fuel Options Include:

Soybeans for biodiesel

Sugar beets for ethanol

Bio-mass under enzymatic actions to produce cellulosic ethanol

US Dept of Energy to spend about $200m next year toward research for large-scale production of cellulosic ethanol as an economically viable fuel

All forms and templates referred to are available here

Soy, for a moment

Soybean-based renewable fuels more energy efficient than corn-based products – view from some science groups

Soybeans consume less fertilizer than corn

Thus use less natural gas

Soy yields protein as well as oil

Studies show soy produces 93% more in usable energy than required for its production; corn-based ethanol, 25%

One acre of soybeans can produce about 50 gal biodiesel

Food versus Fuel Tension

Discussions arising about how much corn will be needed for ethanol as a fuel

Importance of corn as a national food and export crop

Prognosis: the market will find its balance by utilizing novel ways to make ethanol (especially cellulosic) and the food versus fuel ‘tension’ fails to develop

All forms and templates referred to are available here

Show me the money

Renewables and biofuels offer farmers good capital investment returns

US agricultural secretary for rural development says rural America well capitalized to take advantage of the biofuels push

US government invested about $365bn in renewables research and development and commercialization programs between 2001 and 2005

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What's in store?

Biotechnology in the form of biofuels and other bio-based products offers rural America its largest new opportunity in history

The biotechnology revolution rests upon agricultural feedstocks

Corn, soy, sugar beets, wheat, switchgrass, and others

There are approximately 427 m arable acres in the US

2006 was the beginning……

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Ethanol the oxygenate – here to stay

The oxygenate switch unlikely to revert to other options now that it's in place.

What other options are there for oxygenates: fossil fuel products

Mandates of the Clean Air Act and the Renewable Fuels Standard must be met.

In 2006

Ethanol and other renewable fuels have achieved commodity status in the US marketplace

All forms and templates referred to are available here

The Agro-future is bright

Growing renewables takes fertilizer

Welcome to the green focus on fuels

Thank you!

Judith Taylor
Senior Editor
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All forms and templates referred to are available **here**