Fuel Choices: A Petroleum Industry Perspective

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Diesel, gasoline & crude oil prices

<table>
<thead>
<tr>
<th>Date</th>
<th>Diesel (EIA)</th>
<th>Retail Gasoline (EIA)</th>
<th>Crude Oil (NYMEX)</th>
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</thead>
<tbody>
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<td>Apr-02</td>
<td>$0.00</td>
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<td>Apr-03</td>
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<tr>
<td>Apr-04</td>
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<td>Apr-05</td>
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<td>Apr-07</td>
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</tbody>
</table>

2005
(100 Quads)

2030
(131 Quads)

31% Growth

Source: EIA, AEO 2007

Transportation Consumption by Fuel

Source: EIA, AEO 2007
Ethanol Overview

- Oil companies are the leading user of ethanol
  - The industry has invested significantly to meet and exceed the existing federal requirement for the RFS.
- Under the terms of the Energy Policy Act of 2005 (EPACT05) gasoline producers will continue to increase the amount of renewables.
  - By 2012, at least 7.5 billion gallons of biofuels per year will be used.
- Flexibility in the RFS program enacted last year by Congress will help ease ethanol and other biofuels integration soonest into the nation’s gasoline pool.

The limits of ethanol

If all US corn acreage was used for ethanol

U.S. gasoline supply

15%

U.S. Corn Use 2006-2007

E85 Overview

- Products offered for sale must satisfy our customers expectations.
- Ethanol use may be limited until significant technology breakthroughs permit production from cellulosic biomass.
- E85 is not a viable use of ethanol until cellulosic ethanol is economically viable.
- Market forces and consumer preferences should determine where and how ethanol is consumed.

Key Considerations

- Consumer acceptance is key to success of any vehicular system, and industry competition is the fastest means of bringing forward the next generation of transportation options.
- Conversion to advanced vehicles and fuels likely to be evolutionary rather than revolutionary.
- Efficiency and emission comparisons of new fuels and vehicles must be developed with a full understanding of the complete economic, environmental and social consequences of any choice.
- The complete safety, health and environmental consequences of any new fuel and vehicle system must be carefully addressed.
- A cooperative approach among stakeholders will speed the transition to future vehicles and fuels.