A Status Report on Biofuels

Biofuels, Food & Feed Tradeoffs
April 12, 2007
Keith Collins, USDA

Overview

- Current Situation
- Projected Biofuel Growth & Market Implications
- Challenges

Corn Ethanol Production . . .
expect to use 27% of '07 corn crop for nearly 9 bil. gal.

Biodiesel Production . . .
expect to use 17% of '07 soy oil crop for 500 mil. gal.

Global Coarse Grain Stocks

19%—Record corn prices

2006/07: 12%

Corn Acres Planted
### Corn S&D

<table>
<thead>
<tr>
<th>Item</th>
<th>2006/07F</th>
<th>2007/08F*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acres planted (mil.)</td>
<td>78.3</td>
<td>90.5</td>
</tr>
<tr>
<td>2. Yield (bu./ac.)</td>
<td>149.1</td>
<td>152.3</td>
</tr>
<tr>
<td>3. Production (bil. bu.)</td>
<td>10.54</td>
<td>12.68</td>
</tr>
<tr>
<td>4. Carryin (bil. bu.)</td>
<td>1.97</td>
<td>0.88</td>
</tr>
<tr>
<td>5. Ethanol use (bil. bu.)</td>
<td>2.15</td>
<td>3.25</td>
</tr>
<tr>
<td>6. Feed use (bil. bu.)</td>
<td>5.85</td>
<td>5.85</td>
</tr>
<tr>
<td>7. Exports (bil. bu.)</td>
<td>2.25</td>
<td>2.02</td>
</tr>
<tr>
<td>8. Carryover (bil. bu.)</td>
<td>0.88</td>
<td>1.02</td>
</tr>
</tbody>
</table>

*Not official forecasts; based on Prospective Plantings report. First official USDA forecasts for 2007/08 to be issued May 11, 2007.

### Projected Corn Ethanol Production...

*expect 12 bil. gal. in 2016/17 – 30% of corn crop*

### Projected Soy Biodiesel Production...

*expect 700 million gallons in 2016/17 – 23% of soyoil production*

### Ethanol-Corn Price Spread

*weekly data (2.75xPeth-Pcrn)*

### Changes in USDA Long-term Corn Price Projections

*annual data, baseline corn prices, alternative ethanol price scenarios*
Projected CPI for Food

Challenges Facing Biofuel Expansion
- Oil and gasoline prices
- More crop acreage & higher yields
- Commercial cellulosic ethanol
- Demand growth for blends/E85
- Biofuel distribution system
- Livestock feed costs & producer adjustments
- DDG quality and price
- Meat and consumer food prices
- Environmental issues: nitrogen, water quantity & quality, wildlife (CRP), GHGs
- Policy: tax credits, tariff, RFS/AFS, 2007 Farm Bill