

# **The Biofuels Promise: Fact or Fiction**

**NPRA Annual Meeting**  
*March 20, 2007*  
*Scott Jensen*

# President's "20 in 10" Plan

- **Goal to reduce hydrocarbon (HC) gasoline consumption by 20% in 10 years**
  - ❖ 15% reduction from use of 35 billion gallons per year (BGY) of renewables (mostly ethanol) by 2017
  - ❖ 5% reduction from raising the Corporate Average Fuel Economy (CAFE) standard
- **Uses 2006 AEO for gasoline demand basis in 2017:**
  - ❖ HC gasoline demand = 10.67 MMB/D
  - ❖ 15% reduction = 1.6 MMB/D HC equiv. = 2.3 MMB/D EtOH = 35 BGY
- **Amounts to 21.1% EtOH in gasoline pool in 2017**
- **All gasoline would contain at least 10% EtOH**
  - ❖ 9.1 MMB/D of E10 (14 BGY EtOH)
  - ❖ 1.7 MMB/D of E85 (21 BGY EtOH)
- **No bill has currently been proposed in House or Senate**

# Current Ethanol Bills in House or Senate

## Billion Gallons per Year Requirement

	<i>2008</i>	<i>2010</i>	<i>2012</i>	<i>2015</i>	<i>2017</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
Existing RFS	5.4	6.8	7.5					
HR 791	5.4	6.8	7.5	11.7	13.5	17.7	25.0	
HR 670 & S 339	5.4	6.8	9.0	15.0				
HR 517	5.5	8.0	12.0					
HR 559 & S 23		10.0				30.0		60.0
President's "20 in 10"					35.0			
HR 349		all E10						
HR 635			all E10					

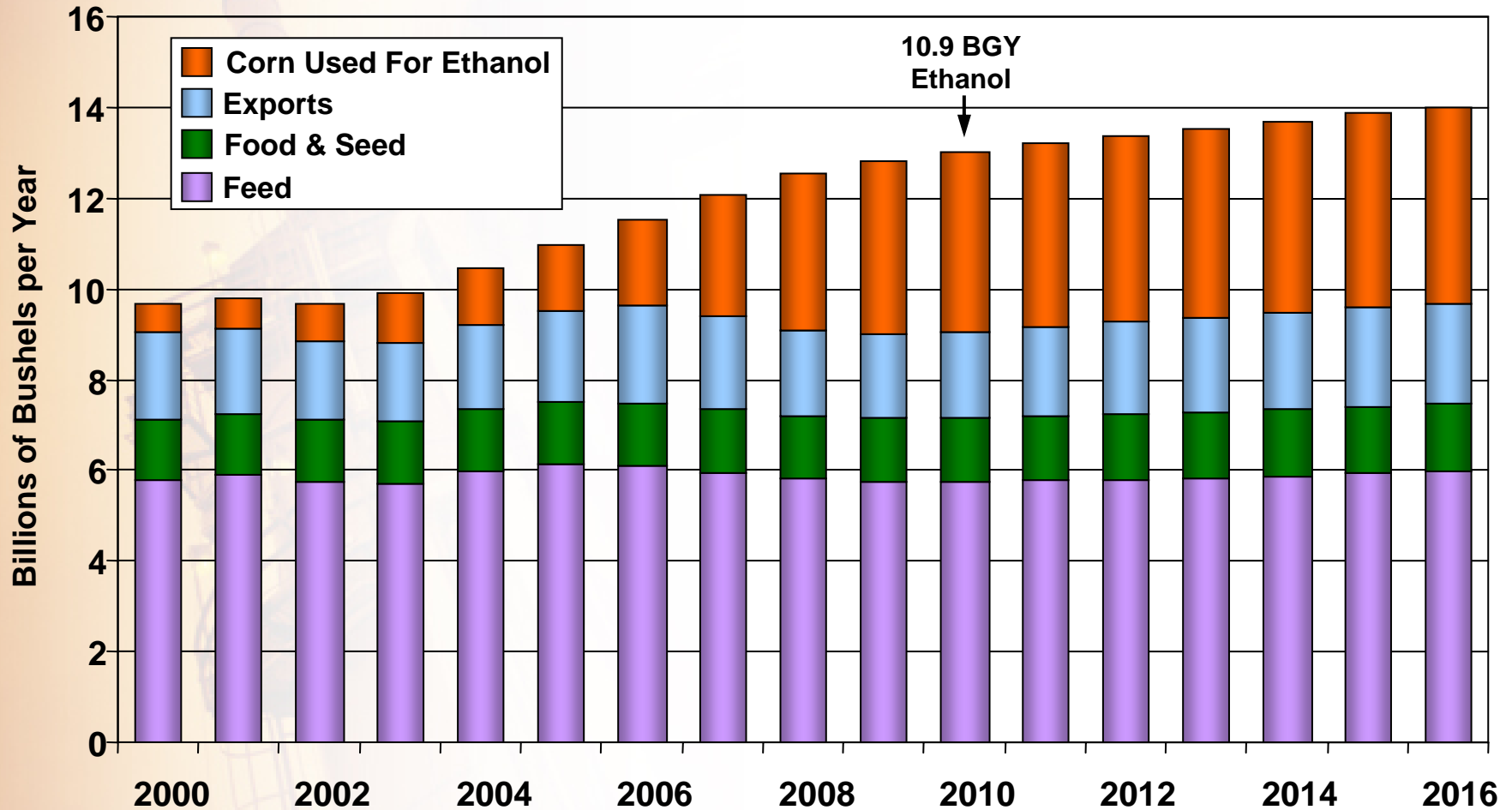
# California Low Carbon Fuel Standard

- **California Global Warming Solutions Act (AB 32) signed into law in September 2006**
- **Low Carbon Fuel Standard (LCFS) established by executive order**
- **No regulation yet – currently under study**
- **LCFS goals to be met by 2020 include:**
  - ❖ 10% reduction in carbon content of vehicle fuels
  - ❖ Replace 20% of gasoline consumption with low carbon fuels
- **Fuel providers must lower green house gas (GHG) emissions on fuel sold**
- **Proposes market-based “cap and trade” system: low carbon credits**
- **Standard measured on “life cycle” basis**
- **Several “Low carbon” strategies are possible**

# Corn is King

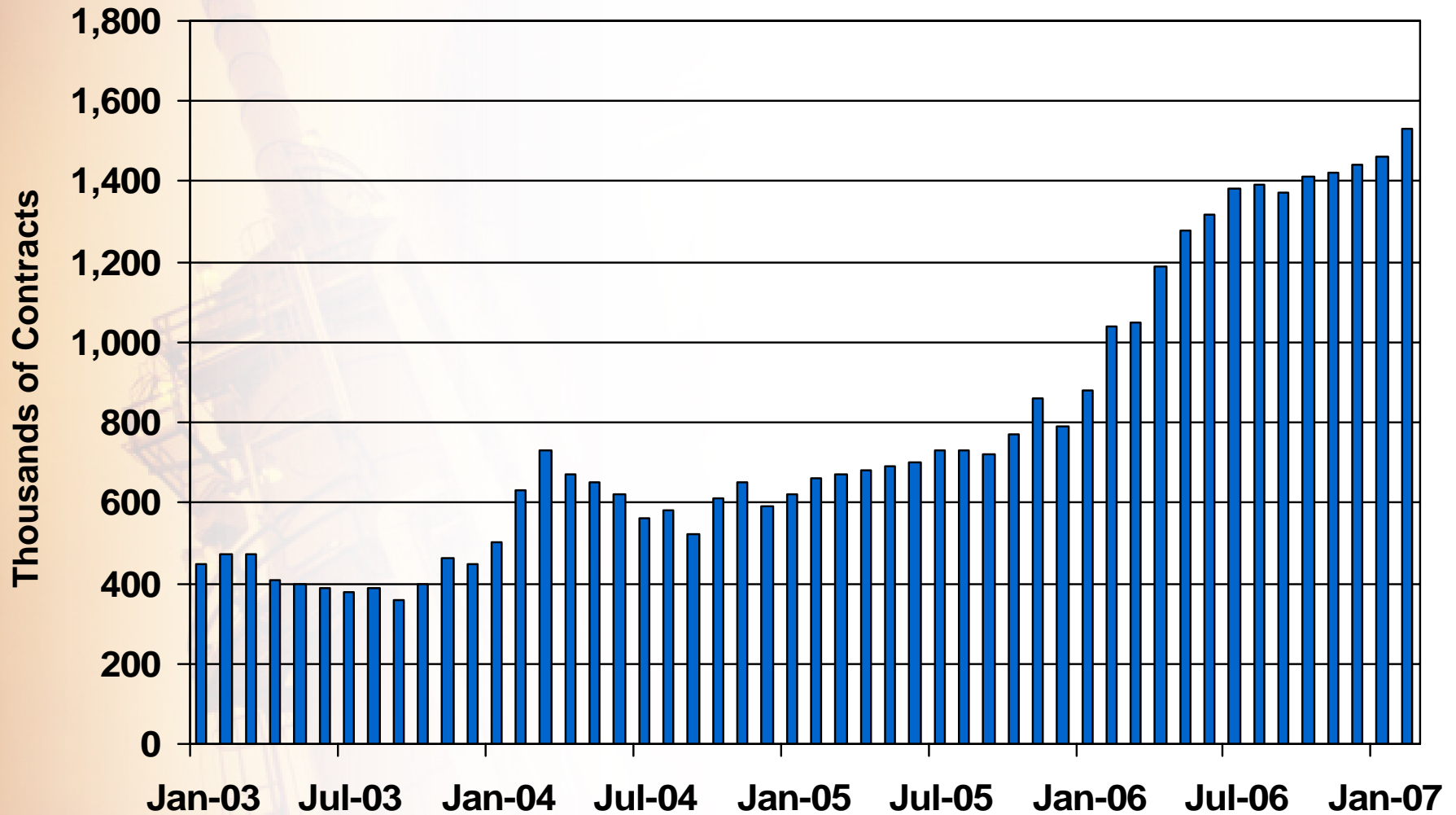


# Corn Used in Ethanol Production

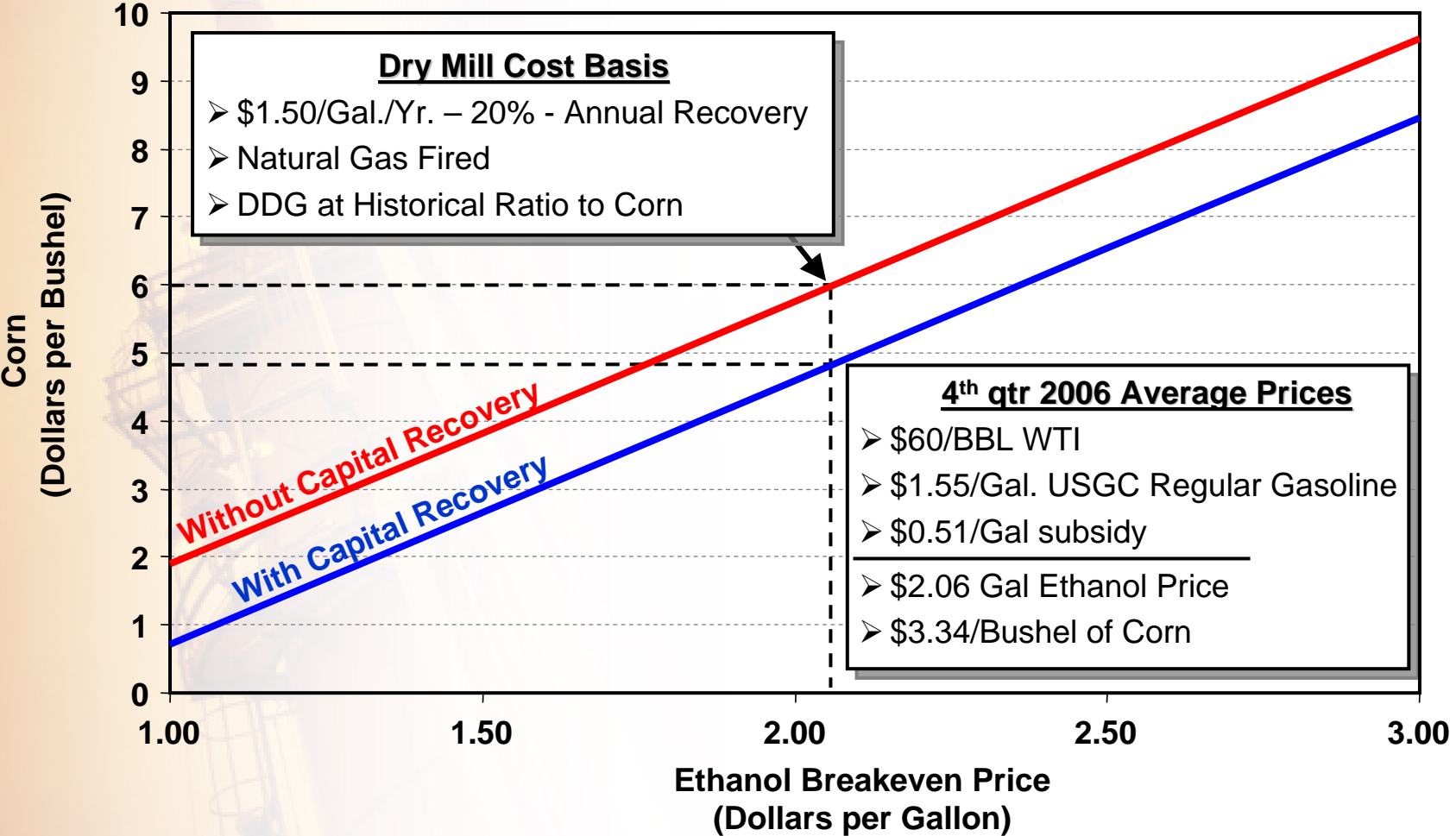


SOURCE: USDA Agricultural Projections to 2016, February 2007 and prior years

# CBOT Corn Futures – Open Interest



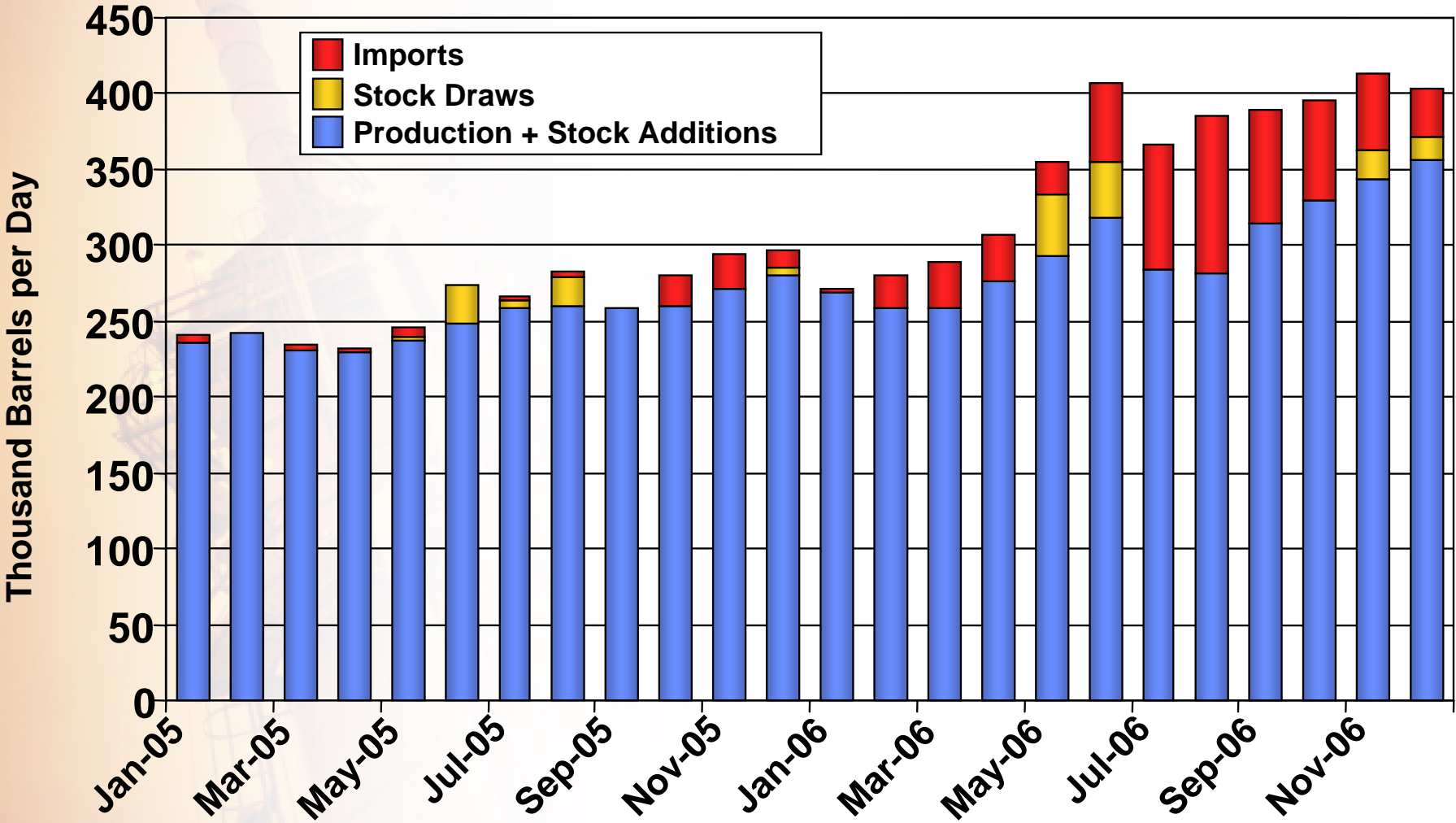
# Ethanol Breakeven Value



SOURCE: Platts; Natural Gas Weekly



# Ethanol Demand



# So What Will Happen?

- **Will Capital Hill increase the RFS? If so, to what level?**
- **Will GHG emissions become a federal cap-and-trade system that favors biofuels?**
- **Will the demand for corn to ethanol drive corn to its breakeven value as a fuel feedstock?**
- **When will cellulosic ethanol become commercially viable?**
- **What are your questions?**