

Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update



September 10, 2009

Subcommittee Members and Goals

Members

- ❑ Betsy Monseu, Alpha Coal Sales, Subcommittee Chair
- ❑ Steve Bobb, BNSF Railway
- ❑ Paul Hammes, UP Railroad
- ❑ Dan Kuehn, Lower Colorado River Authority
- ❑ Darin Selby, Kansas City Southern Railway
- ❑ Alan Shaw, Norfolk Southern Railway
- ❑ Darrell Wallace, Bunge North America

Susan Arigoni, Chair of Best Practices, continues to participate

Goals – provide information relative to supply chain metrics

- 1) To support fact-based RETAC meeting discussions on issues relating to the rail transportation of energy resources
- 2) To support efforts of other RETAC subcommittees

Subcommittee recent activities

Focused on development of dashboards to convey trends relative to previously-identified coal supply chain metrics:

- ✓ Dashboard design
- ✓ EIA data for coal and AAR data for rail through Q2 2009
- ✓ Planned two-step process for utilizing dashboards:
 - Provide dashboards to RETAC prior to meetings
 - Subcommittee caucus prior to RETAC meetings to discuss data and dashboards and come to consensus on key points

Subcommittee recent activities cont.

Five dashboards organized as follows:

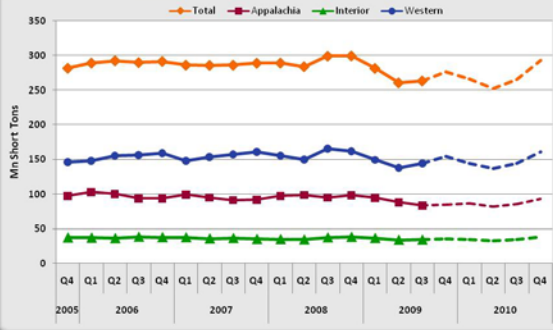
- 1.Coal Production, Consumption, and Inventories Dashboard
- 2.Coal Exports Dashboard
- 3.Western Rail Coal Carloads Dashboard
- 4.Eastern Rail Coal Carloads Dashboard
- 5.Railroad Coal Train Speed Dashboard

Each dashboard has three sections:

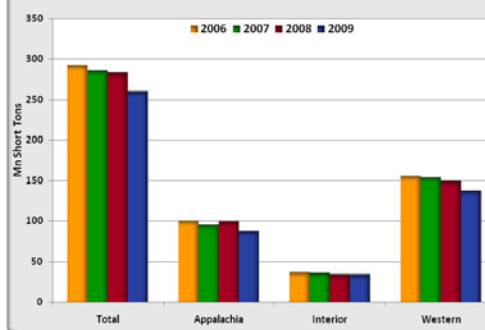
- a.Left - historical and forecasted data. (no forecasts of rail metrics)
- b.Middle - comparison for the most recent quarter (in this case Q2)
- c.Right - YTD comparison versus the 3-year range

U. S. COAL PRODUCTION, CONSUMPTION AND INVENTORIES DASHBOARD

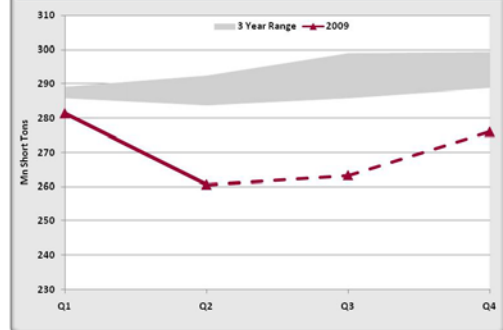
HISTORICAL AND FORECASTED PRODUCTION



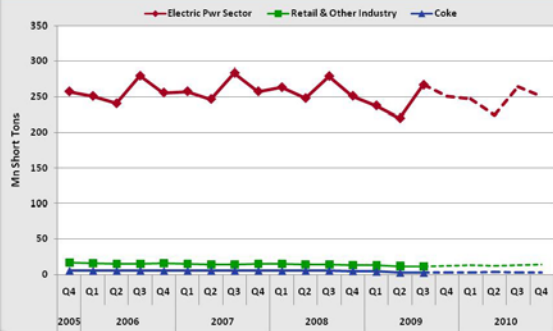
Q2 PRODUCTION COMPARISON



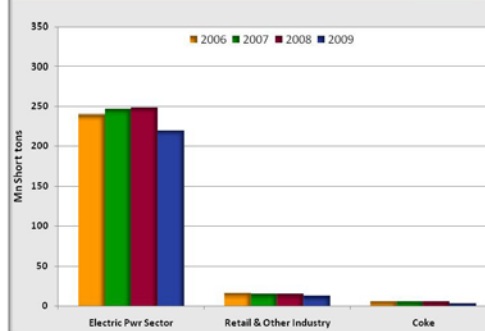
YTD COAL PRODUCTION VS 3-YEAR RANGE



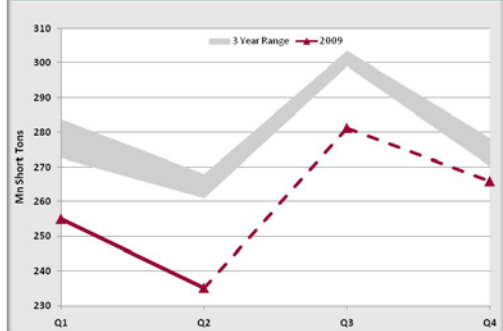
CONSUMPTION



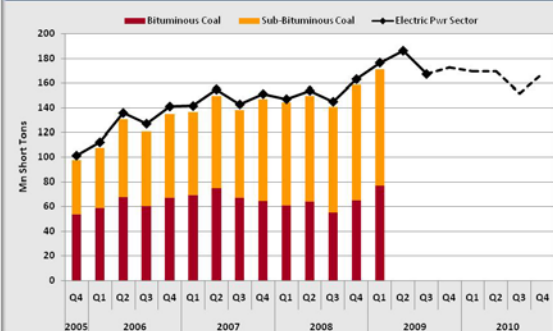
Q2 CONSUMPTION COMPARISON



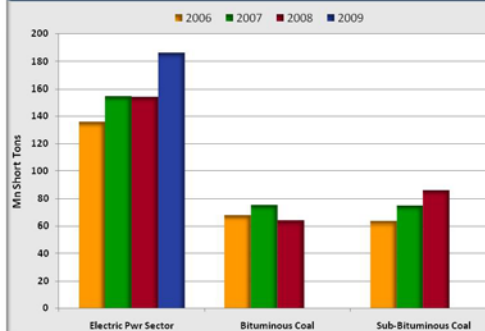
YTD CONSUMPTION VS 3-YEAR RANGE



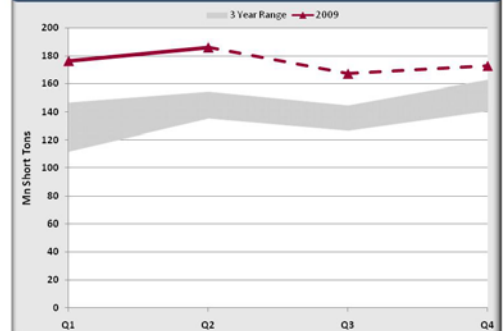
END-OF-PERIOD INVENTORIES



Q2 END-OF-PERIOD INVENTORIES COMPARISON



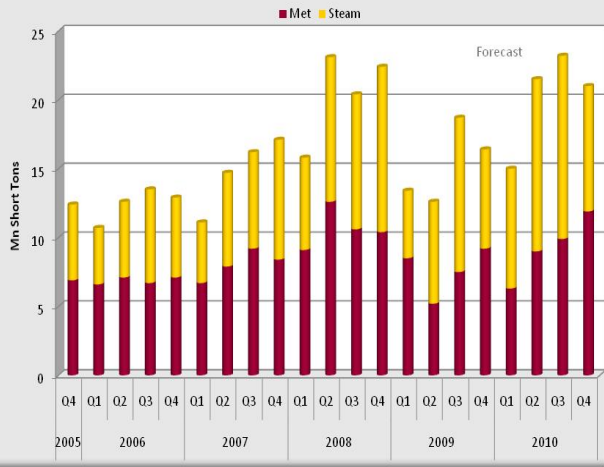
YTD END-OF-PERIOD INVENTORIES VS 3-YEAR RANGE



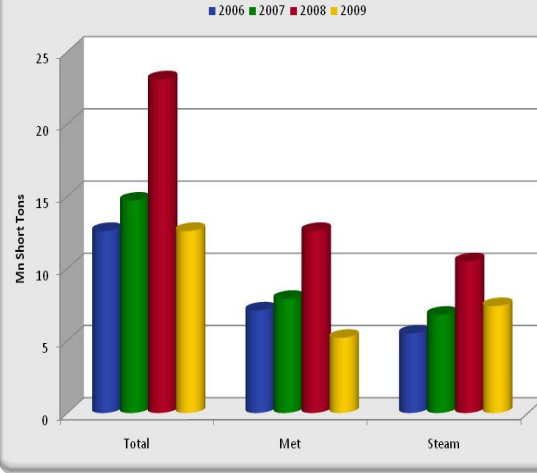
Source data: EIA

U. S. COAL EXPORTS DASHBOARD

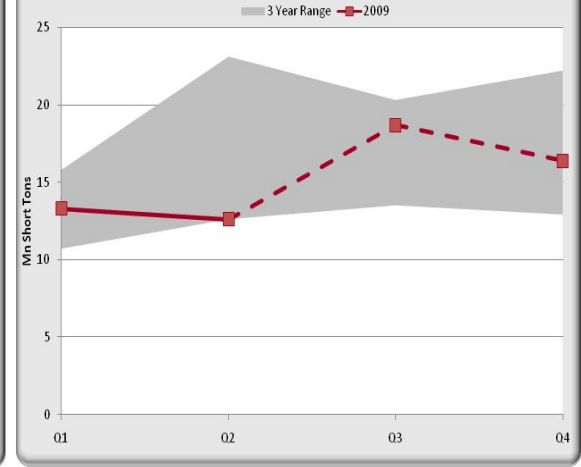
HISTORICAL AND FORECASTED EXPORTS



Q2 EXPORTS COMPARISON



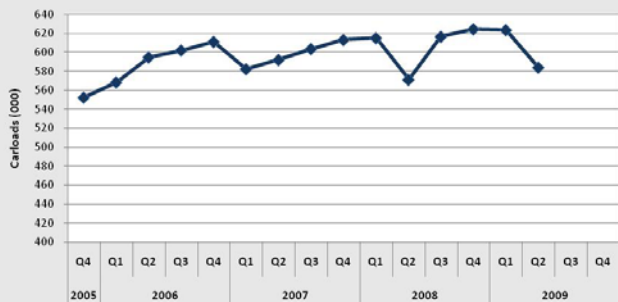
YTD EXPORTS VS 3-YEAR RANGE



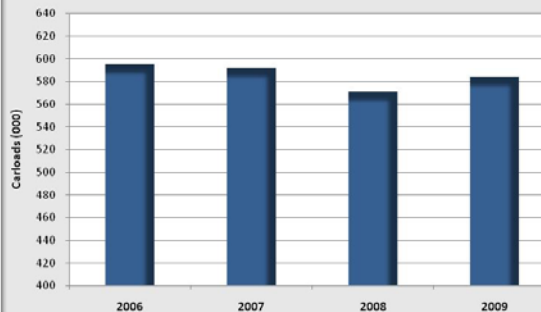
Source data: EIA

WESTERN RAILROAD COAL CARLOADS DASHBOARD

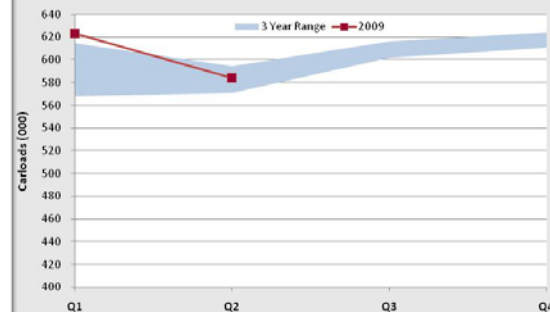
BNSF HISTORICAL COAL ORIGIATIONS



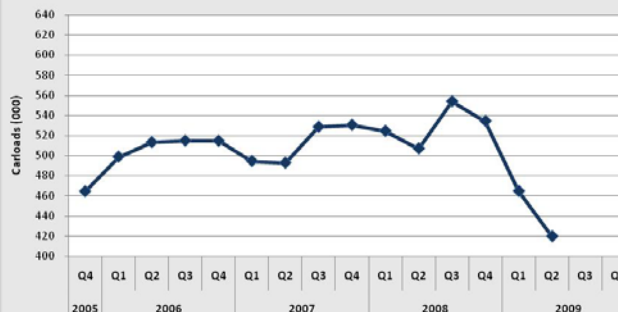
BNSF Q2 ORIGINATIONS COMPARISON



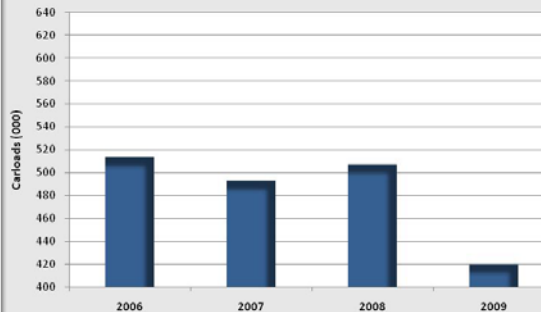
BNSF YTD ORIGINATIONS VS 3-YEAR RANGE



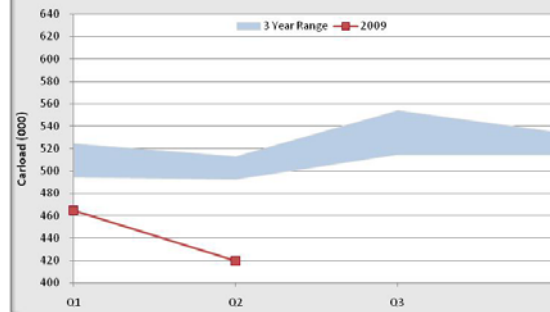
UP HISTORICAL COAL ORIGIATIONS



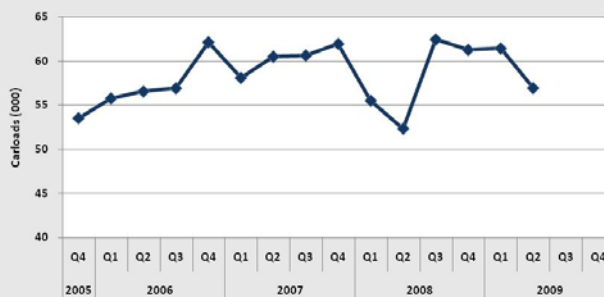
UP Q2 ORIGINATIONS COMPARISON



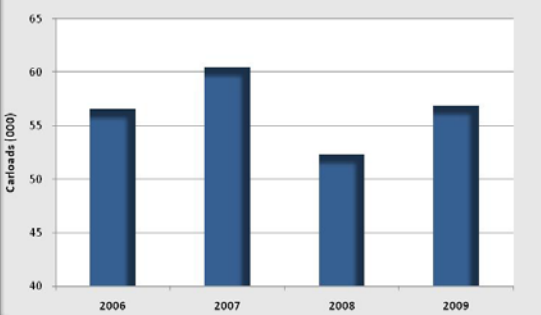
UP YTD ORIGINATIONS VS 3-YEAR RANGE



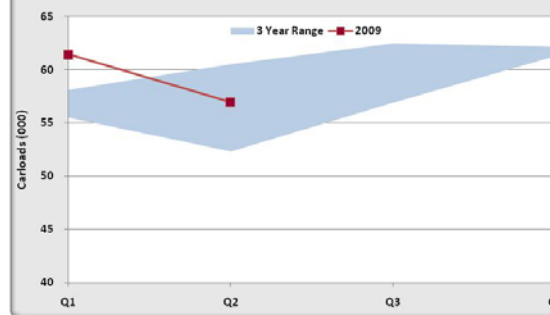
KCS HISTORICAL COAL CARLOADS RECEIVED



KCS Q2 RECEIPTS COMPARISON



KCS YTD RECEIPTS VS 3-YEAR RANGE



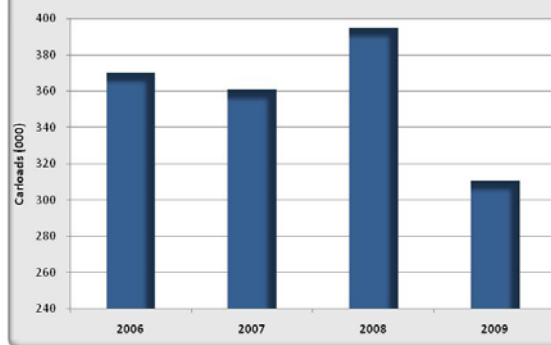
Source data: AAR, BNSF, UP, KCS

EASTERN RAILROAD COAL CARLOADS DASHBOARD

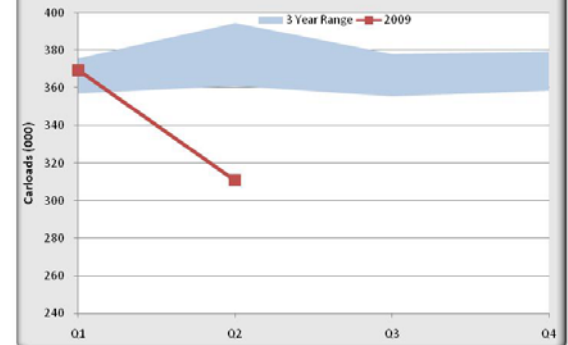
CSX HISTORICAL ORIGINATIONS



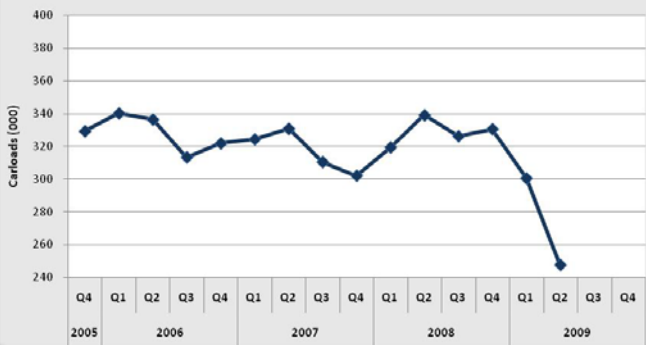
CSX Q2 ORIGINATIONS COMPARISON



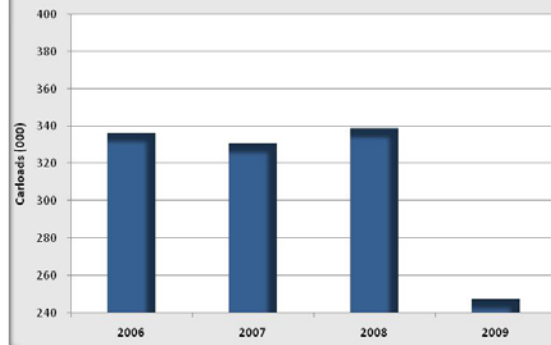
CSX YTD ORIGINATIONS VS 3-YEAR RANGE



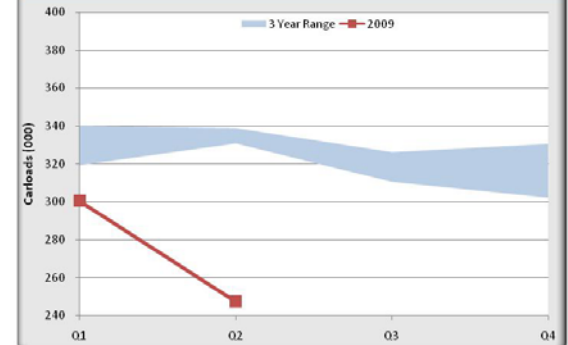
NS HISTORICAL ORIGINATIONS



NS Q2 ORIGINATIONS COMPARISON



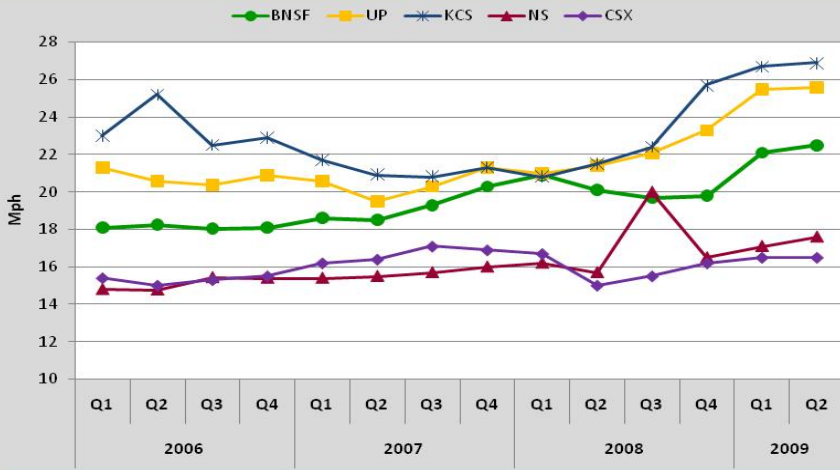
NS YTD ORIGINATIONS VS 3-YEAR RANGE



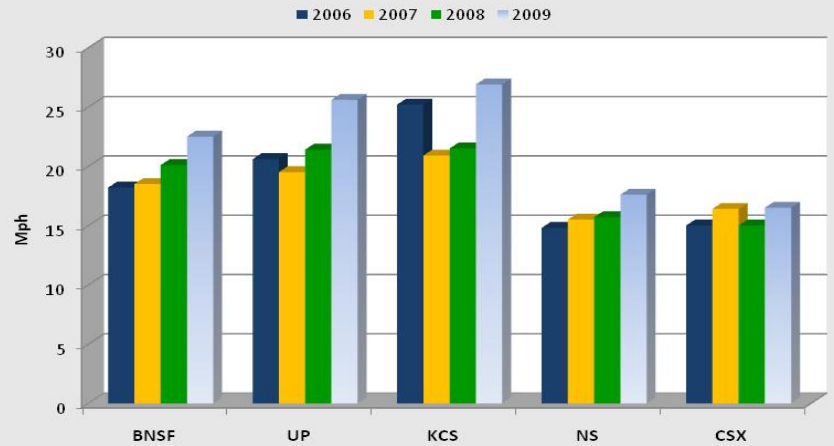
Source data: AAR, CSX, NS

RAILROAD COAL TRAIN SPEED DASHBOARD

Historical Coal Train Speed



Q2 Coal Train Speed Comparison



Source data: AAR, BNSF, CSX, KCS, NS, UP

Subcommittee recent activities cont.

Caucus on key points from data and dashboard review




- ❑ Coal supply chain challenged in managing impacts of continuing weakness in coal demand and consumption
- ❑ EIA coal forecast as of 9-09-09:
 - **2009 electric power coal consumption** - first half fell 11%. Full year forecast 956 mn tons, down 8%. First time since 2002 consumption lower than 1 bn tons.
 - **2009 coal production** - first half fell 5%. Full year forecast 1.08 bn tons, down 93 mn tons or 7%
 - **Electric power coal inventories** - forecast to end 2009 at 183 mn tons, up 20 mn tons or 12%
 - **2010** - electric power sector increases coal consumption and reduces inventories, and coal production declines

Subcommittee recent activities cont.

Caucus on key points from data and dashboard review

- ❑ **COAL CARLOADS:** through week 34 of 2009, AAR's originated rail carloads down 9% for coal and 19% total
 - First half 2009 YOY coal comparisons:
 - BNSF originations: +21,000 carloads
 - UP originations: -147,000 carloads
 - CSX originations : -90,000 carloads
 - NS originations: -111,000 carloads
 - KCS received: +11,000 carloads
- ❑ **COAL TRAIN SPEED** YOY improvements during first half 2009:
 - BNSF: 9%
 - UP: 21%
 - CSX: 4%
 - NS: 9%
 - KCS: 27%

Subcommittee next steps

-  Feedback from RETAC on coal dashboard design
-  Final review of ethanol-biofuels data availability and process for providing information on this sector to RETAC
-  Work on white paper

Ethanol – Demand Trends

- Current blend economics encourage increases in ethanol blending.
- Infrastructure to handle blend demand continues to be built.
- Probable increases to blend limits to be passed in the near future.
- Protein demand is increasing demand for DDGS inclusion in feed rations.
- California becomes significant advanced fuel buyer as state regulation increase demand of non-corn ethanol.
- US Corn carryout levels expected to be high enough to limit demand rationing risk.

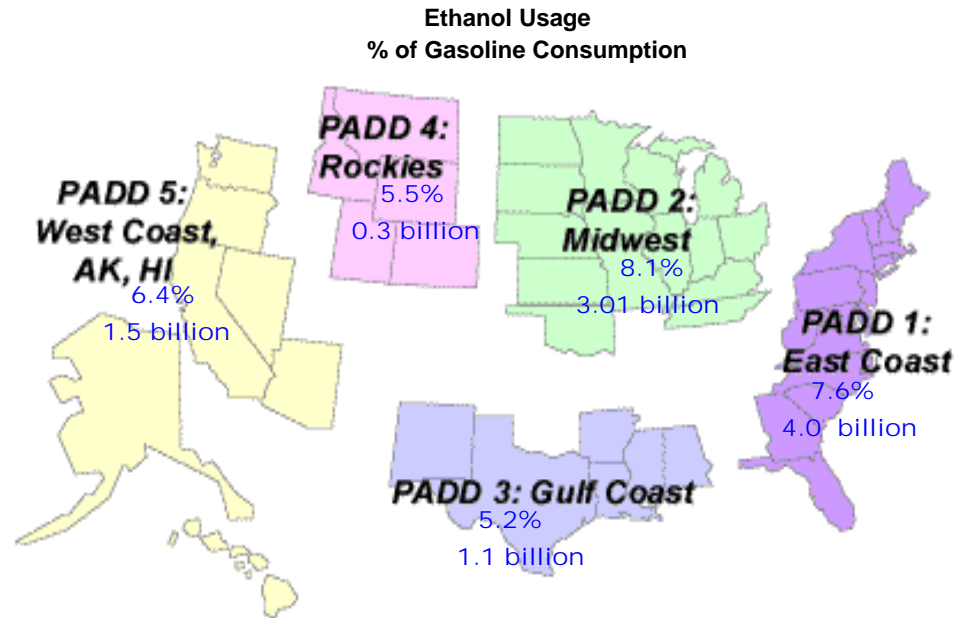
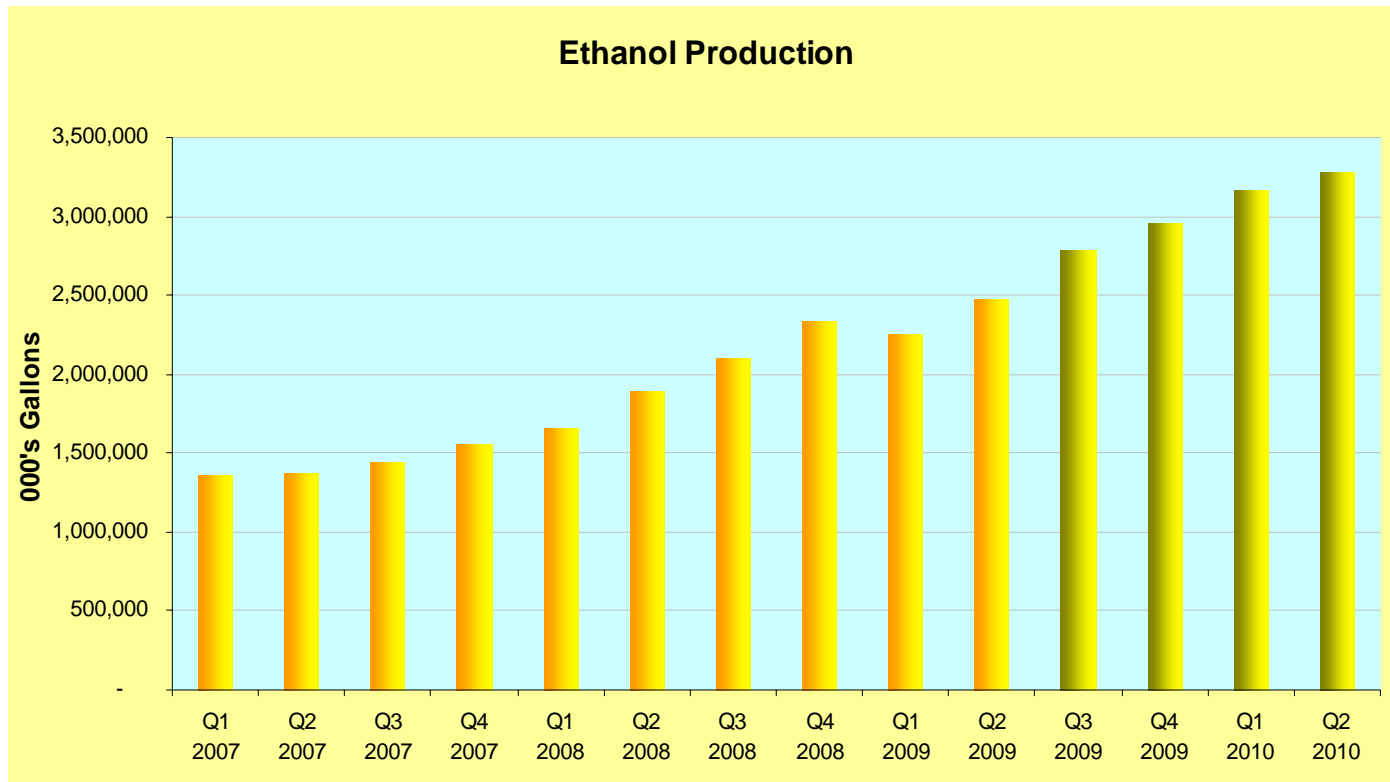


Chart Data Source: EIA
Comment Source Bunge

Ethanol Production



- Q4 2009 – 200 million gallons of idled capacity expected to come back on line
- Q1 2010 – 300 million gallons of new capacity expected to come on line
- Jan 1, 2010 expected capacity = 11.8 billion gallons
- 2010 mandated levels = 12.0 billion gallons

Chart Data Source: EIA
Comment Source Bunge

DDGS Production

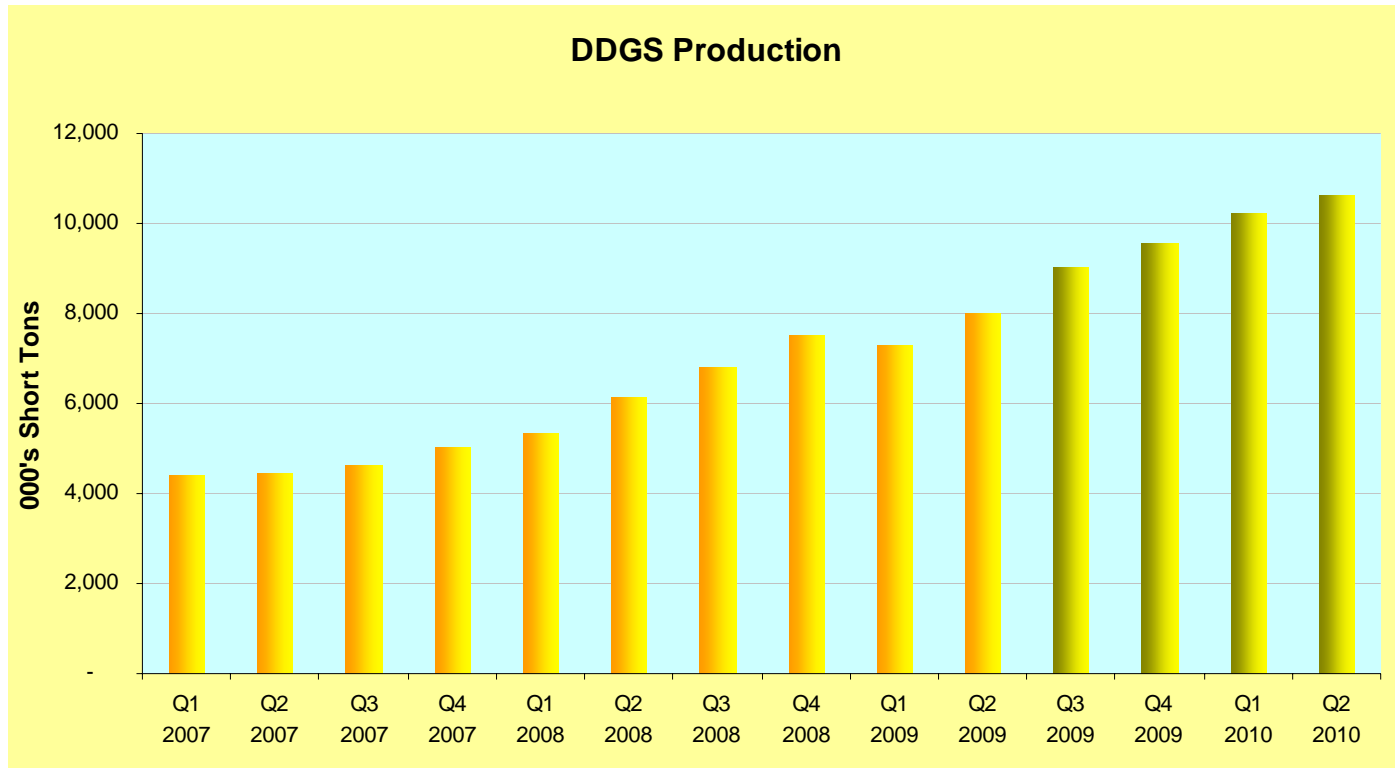


Chart Data Source: EIA

Combined Ethanol and DDGS

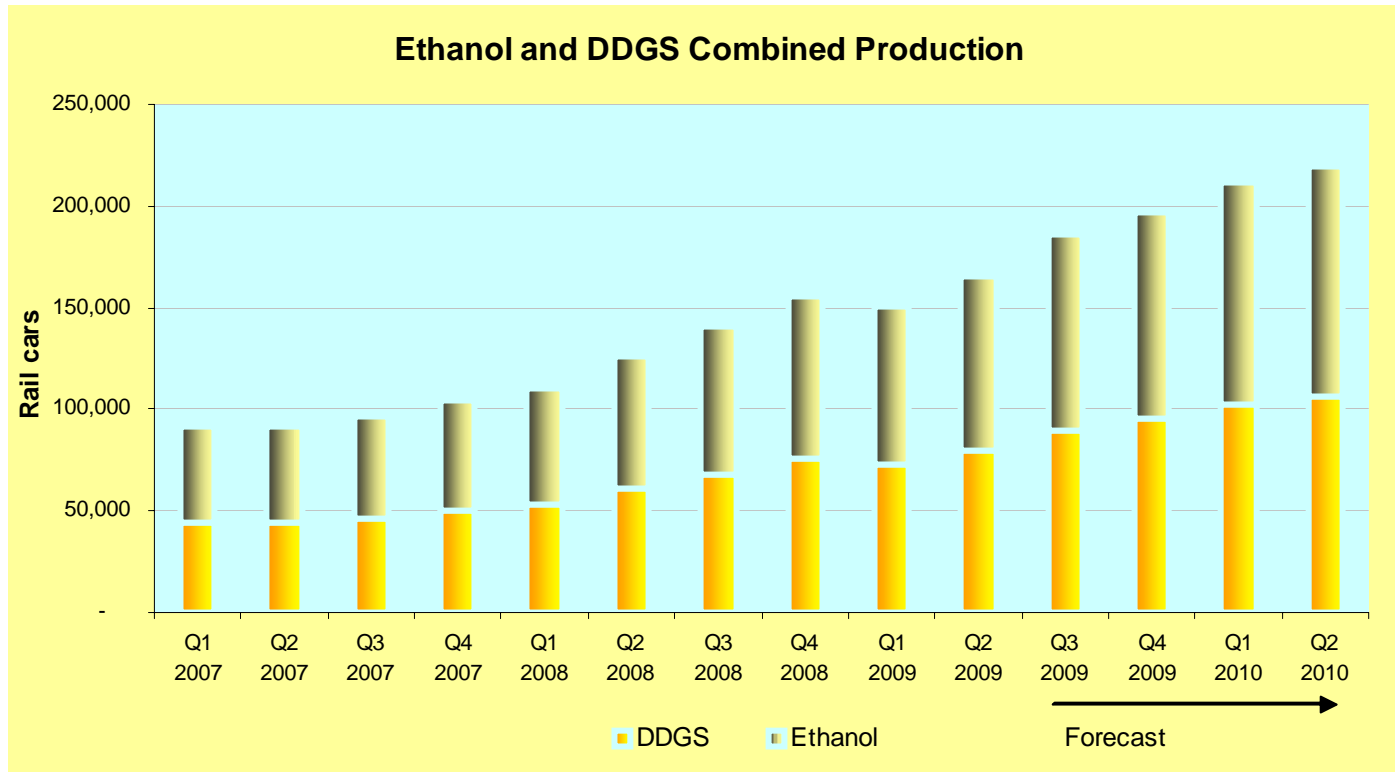


Chart Data Source: EIA

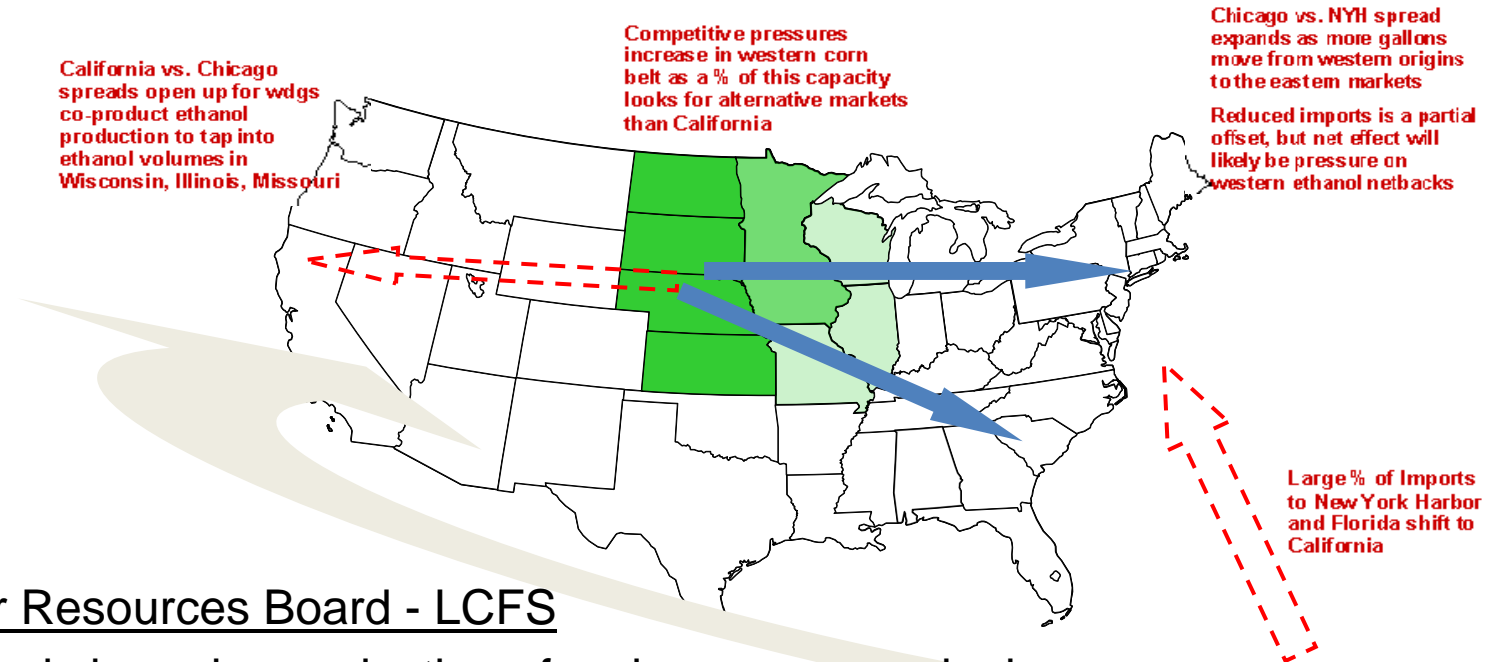
EPA Ethanol Blending Limit Ruling

Ethanol Blend Limit

- Proposal to EPA to increase blend limits of ethanol in gasoline from 10% to 15% introduced by Growth Energy.
 - Expect ruling by Dec. 1, 2009
 - Potentially could add 600-700 million gallons of ethanol demand instantly through existing blending infrastructure
 - Most expected likely result will be an increase to 12% blend.
 - An increase in blend limits is bullish for domestic corn ethanol production margins.

Blend credit and import tariff expire on Dec 31, 2010, and expectation is that both are extended with the import tariff lowered to match the 45 cents/gallon blend credit

California Low Carbon Fuel Standard – Ethanol Flows - 2011



**BRAZIL /
CBI**

- California Air Resources Board - LCFS

- Program is based on reduction of carbon per mega joule.
 - Separate reduction schedules for gasoline and diesel.
- Includes a GHG component that looks at the product lifecycle.
- Restrictive for US corn based ethanol production.
- Bullish for Brazilian sugarcane ethanol production requiring increasingly higher blends to meet carbon standard.
- Interest from other non-farm states to adopt similar features of California’s program. Oregon announced it’s following California’s lead.