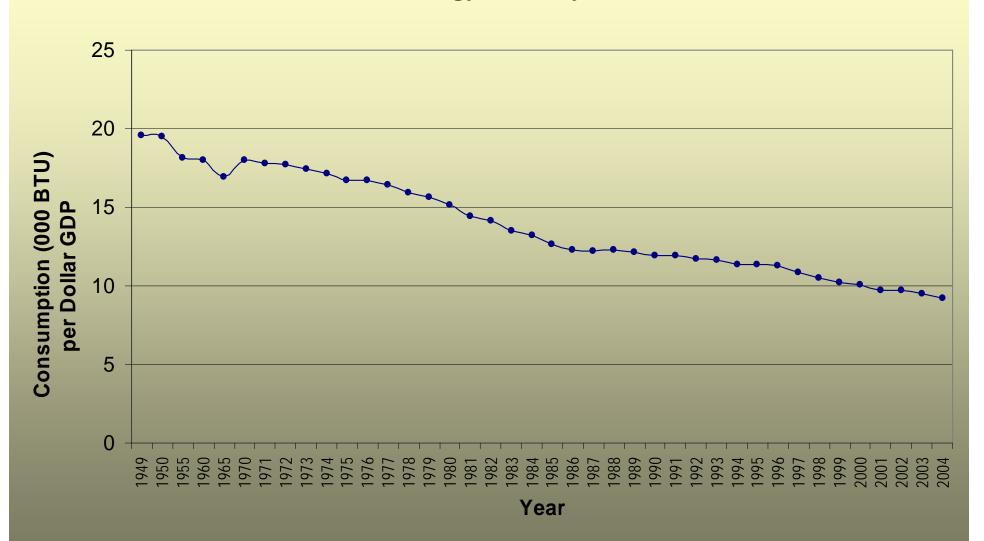
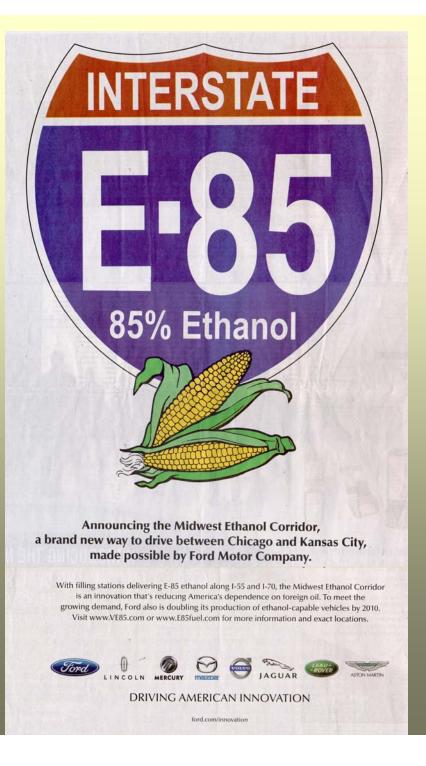
The Answer is Letter "E" All of the Above

Robert Baumann Center for Energy Studies Louisiana State University SLC Energy Committee July 31, 2006

Energy Security



Source: EIA



Report: Ethanol no cure-all

Sugar ethanol profits in doubt

Ethanol supply may exceed demand soon

Shell Mars Tension Leg Platform



Source: Shell.com

Shell Mars Tension Leg Platform



© LSU Center for Energy Studies

Source: Shell.com

Venice Port, Supply & Crew Bases



Chevron Refinery Pascagoula, MS



© LSU Center for Energy Studies

Source: Chevron

Air Products Facility – Normal Day New Orleans, Louisiana (Intracoastal Drive)



© LSU Center for Energy Studies

Source: Air Products

Air Products Facility – During Hurricane Katrina New Orleans, Louisiana



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Source: Air Products

Power Outages Generating Stations – Entergy Patterson



Source: Entergy

Henry Hub, September 25, 2005



© LSU Center for Energy Studies

Source: LIOGA

Entergy Transmission

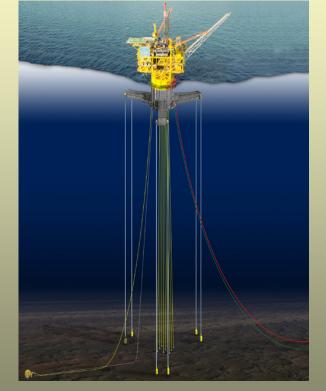


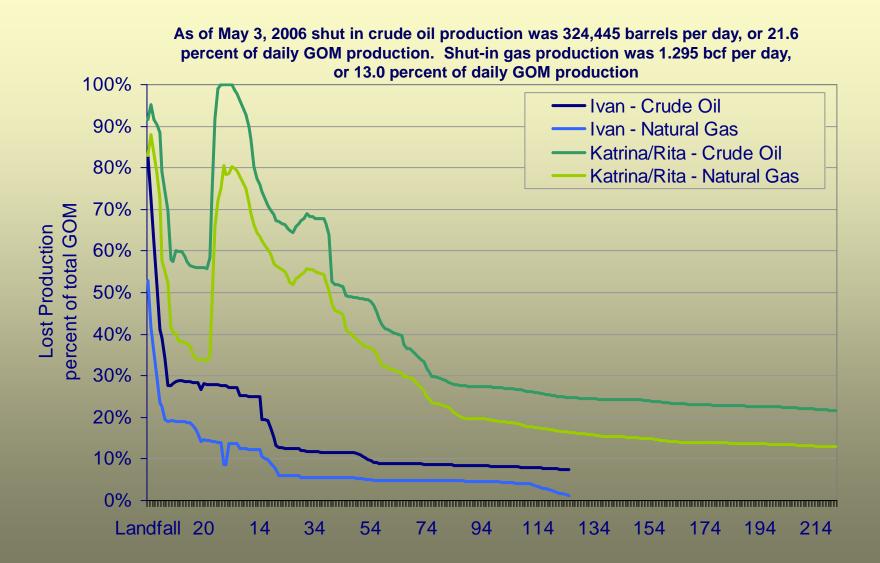
Source: Entergy.com

Chevron Typhoon TLP









Note: Shut-in statistics for Ivan were no longer reported after 150 days. The last shut-in statistics for Katrina and Rita were published on May 3, 2006 (the 221st day after Katrina made landfall). Source: Minerals Management Service © LSU Center for Energy Studies

Total Immediate Refinery Impact from 2005 Hurricanes

Hurricane Katrina

LA/MS/AL Gulf Coast Refiners (reduced runs and shutdowns) 2,528 mbbl/day 15% of US operating capacity

> Port Arthur/Lake Charles (reduced runs and supply loss) 775 mbbl/day 5% of US operating capacity

Remaining US Operating Capacity 12,075 mbbl/day 70% of US operating capacity Midwest (reduced runs – supplied by Capline Pipeline) 1,628 mbbl/day 10% of US operating capacity

Hurricane Rita

Port Arthur/Lake Charles (shutdowns and damaged facilities) 1,715 mbbl/day 10% of US operating capacity **Houston/Texas City** (shutdowns and damaged facilities) 2.292 mbbl/d 13.5% of US operating capacity **Corpus Christi** (shutdown and reduced runs) 706 mbbl/day 4% of US operating capacity **Remaining US Operating Capacity** 11,954 mbbl/day **Midwest** (reduced runs from 70% of US operating capacity supply loss) 338 mbbl/day 2% of US operating capacity **Total Refinery Impact**

5,052 mbbl/day 30% of US operating capacity

Total Refinery Impact 4,931 mbbl/day 30% of US operating capacity

Source: Energy Information Administration, Department of Energy

Status of Refineries Significantly Damaged by 2005 Hurricanes

| Company | Location | Capacity (Bbl/d) | Status (as of June 2006) |
|------------------------------------|--|-------------------------------|--|
| Murphy Oil ConocoPhillips BP | Meraux, LA Belle Chasse, LA Texas City, TX | 125,000 247,000 437,000 | operating at 100,000 Bbl/d, should be back at full rates by end of month returned to normal operation in mid-April running at half capacity |