VALERO ENERGY CORPORATION

Lehman Brothers Energy Conference

Bill Klesse, CEO

September 7, 2006

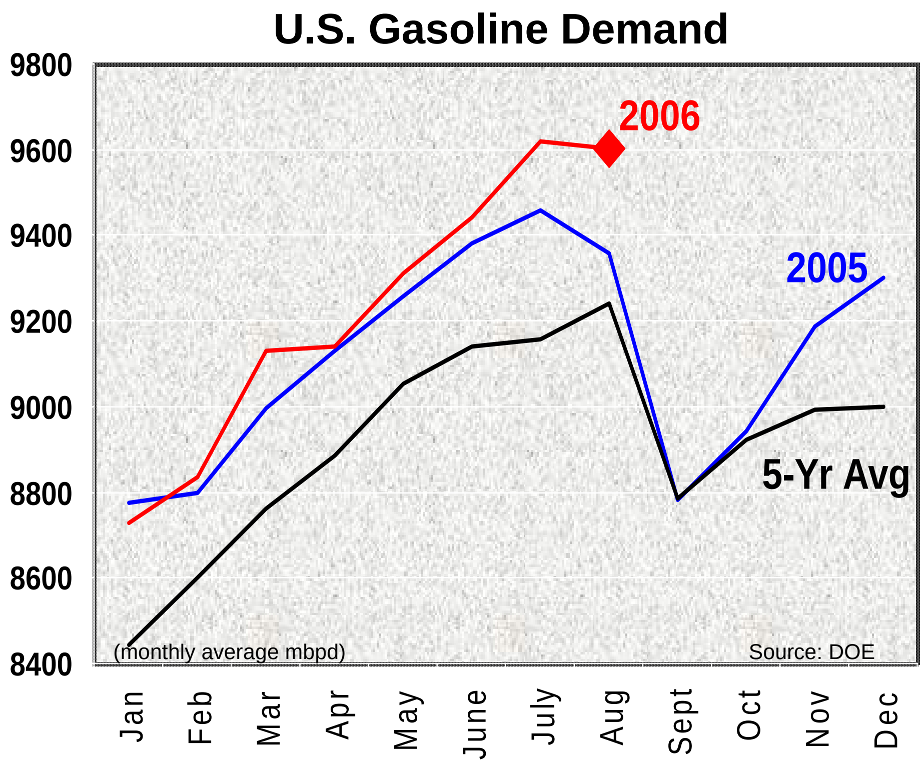
Safe Harbor Statement

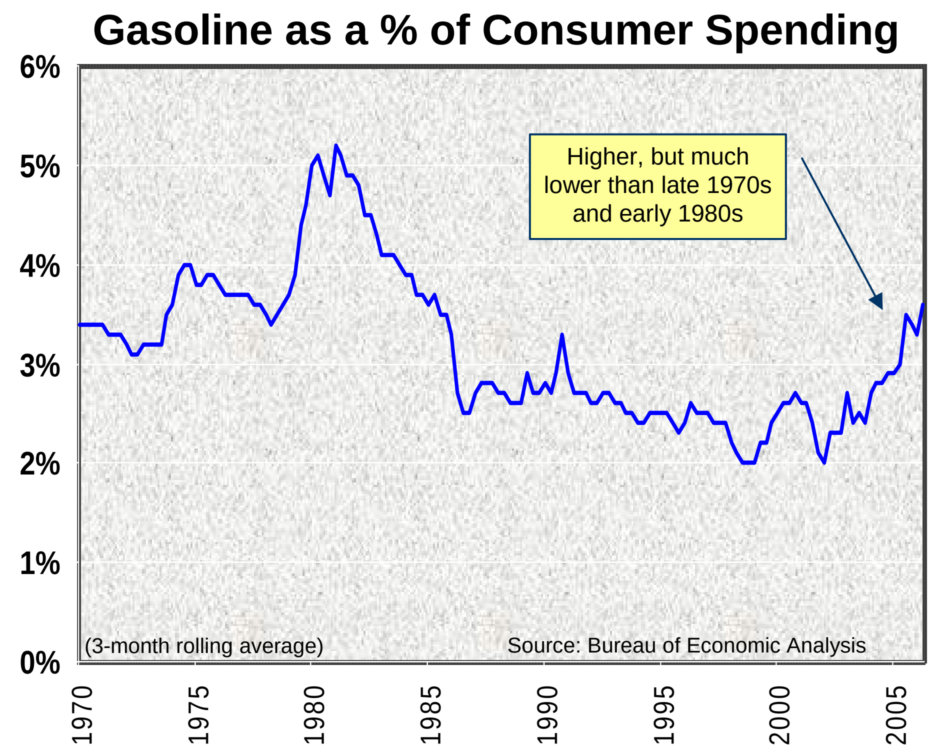
Statements contained in this presentation that state the Company's or management's expectations or predictions of the future are forward-looking statements intended to be covered by the safe harbor provisions of the Securities Act of 1933 and the Securities Exchange Act of 1934. The words "believe," "expect," "should," "estimates," and other similar expressions identify forward-looking statements. It is important to note that actual results could differ materially from those projected in such forward-looking statements. For more information concerning factors that could cause actual results to differ from those expressed or forecasted, see Valero's annual reports on Form 10-K and quarterly reports on Form 10-Q, filed with the Securities and Exchange Commission, and available on Valero's website at www.valero.com.

Overview

- What's our view on industry fundamentals?
- What are we planning to do with the free cash flow we are generating?
- What are we doing to improve returns on capital?
- How long will the New Era for Refining last?

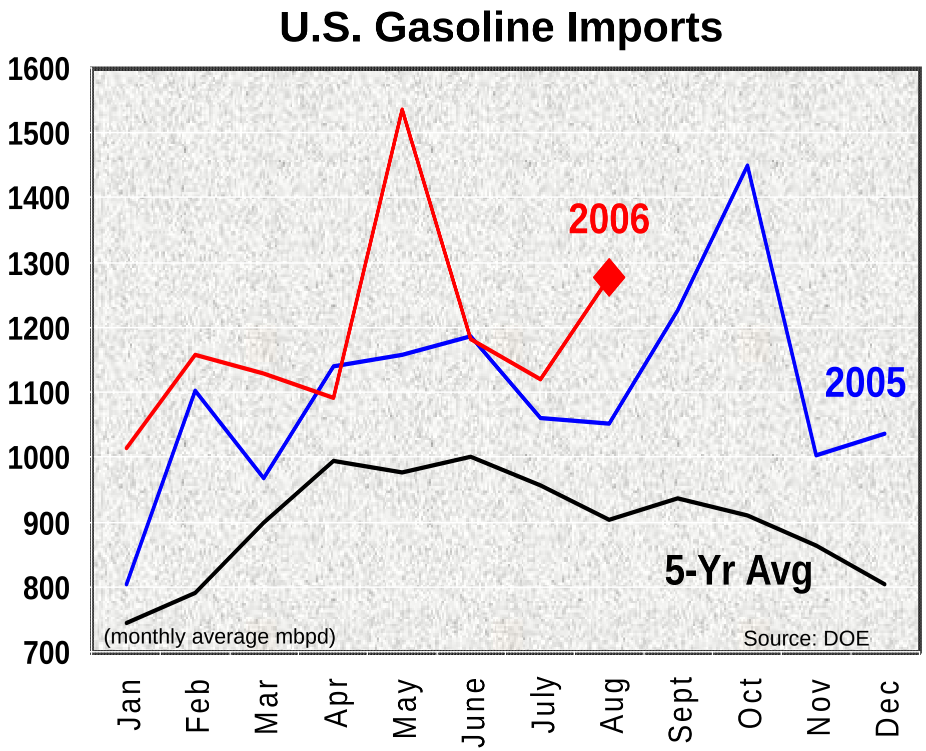
Gasoline Fundamentals

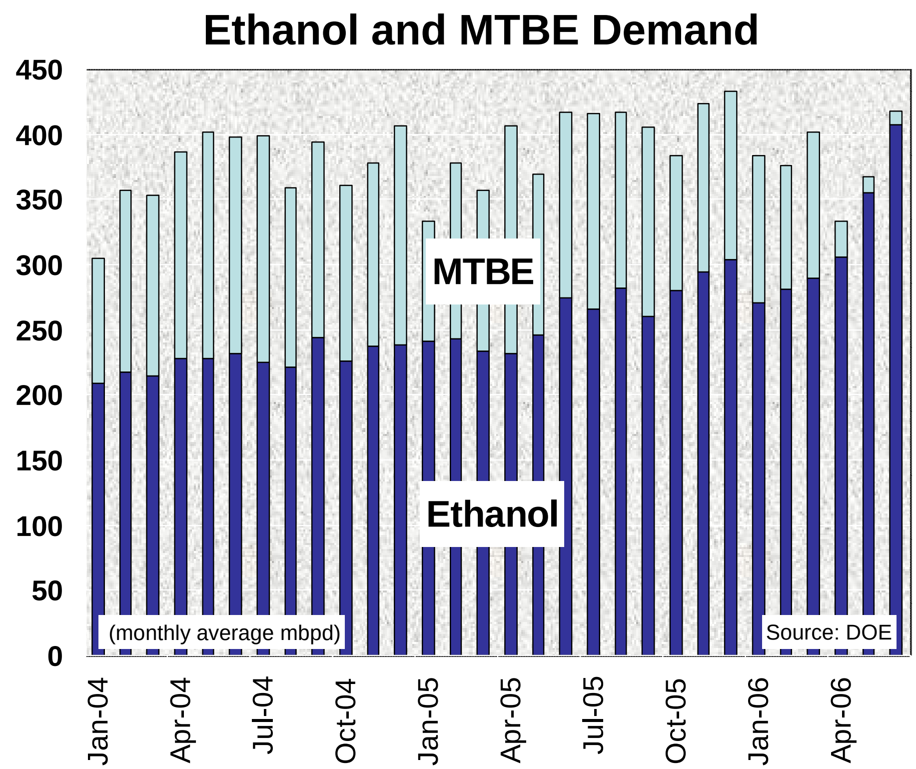




- **Despite higher prices, gasoline demand has been up this year**
  - **August demand up 1.6% over last year; YTD up .7%**
  - **Gasoline demand proving to be very resilient**
- **Recent decline in pump prices positive**

High Imports and Ethanol Needed to Meet Demand

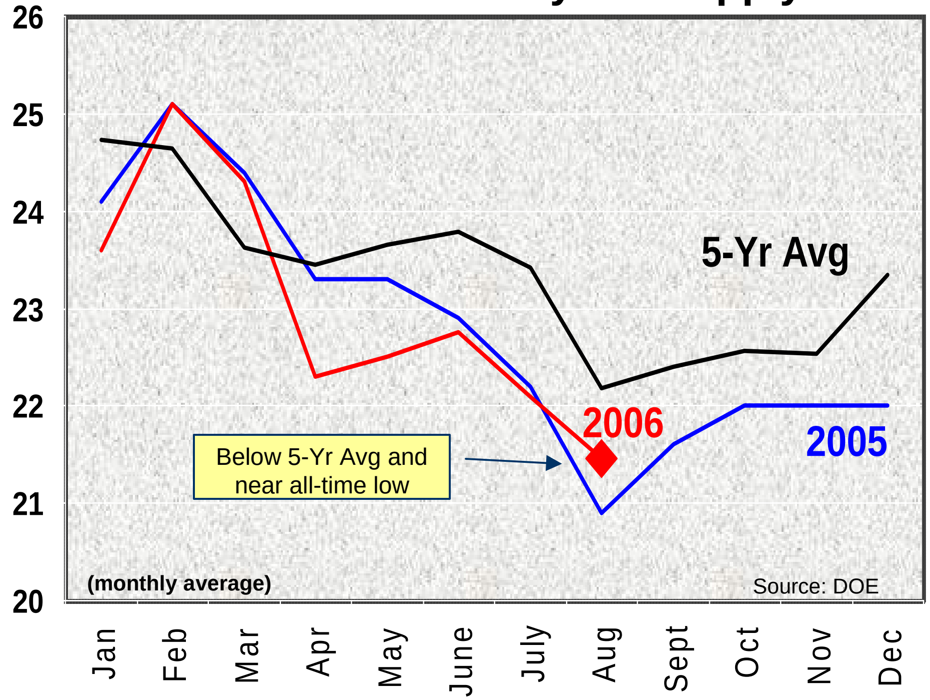




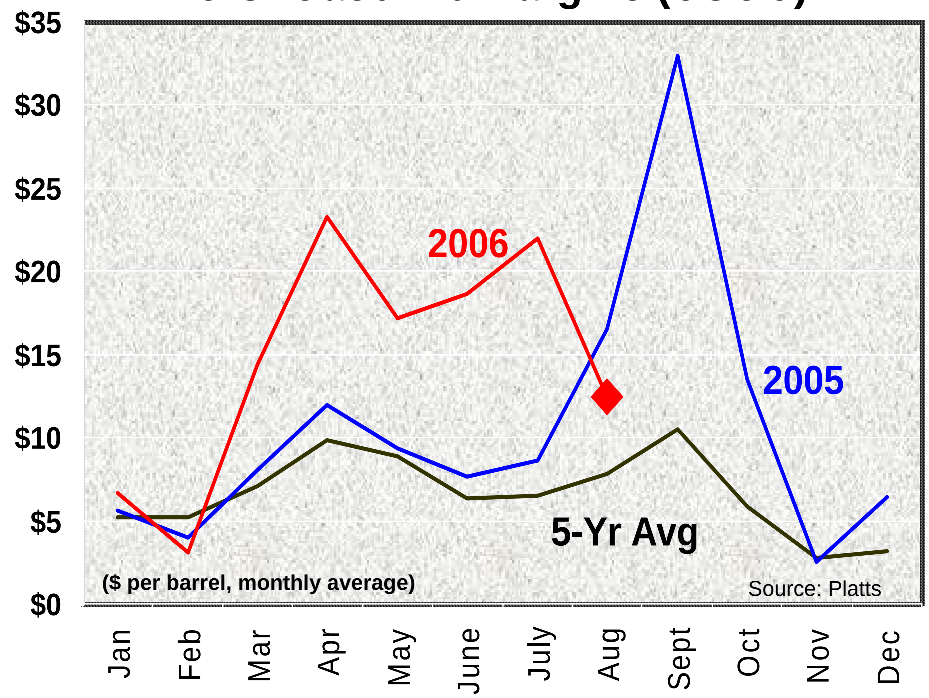
- Global conversion units running at capacity
- High prices in U.S. have attracted high imports
- Ethanol supply offsetting removal of MTBE
- Have needed both high imports and more ethanol to keep up with demand and octane requirements

Gasoline Fundamentals

U.S. Gasoline Days of Supply

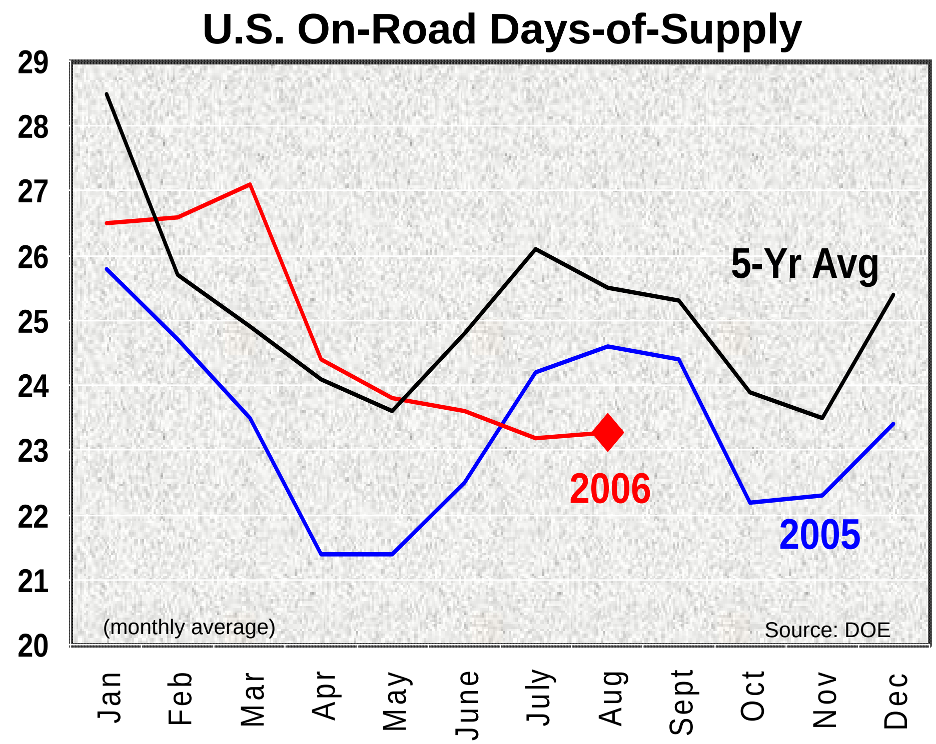


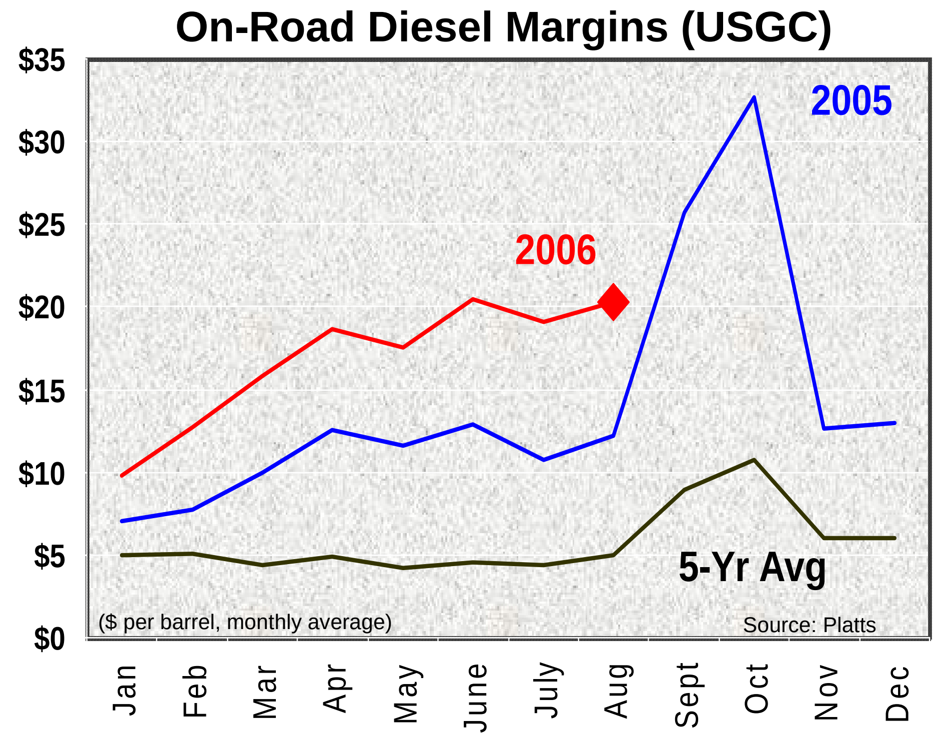
U.S. Gasoline Margins (USGC)



- Persistent low days-of-supply has supported high margins
- Move out of driving season has lead to normal, seasonal decline in margins
- Imports still needed to supply market year-round

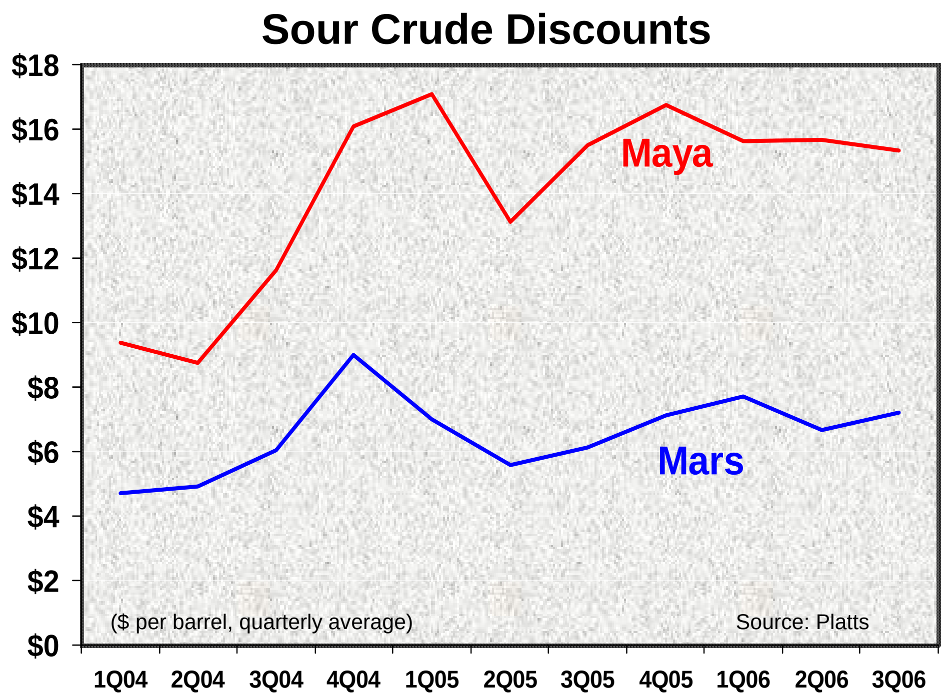
Distillate Fundamentals

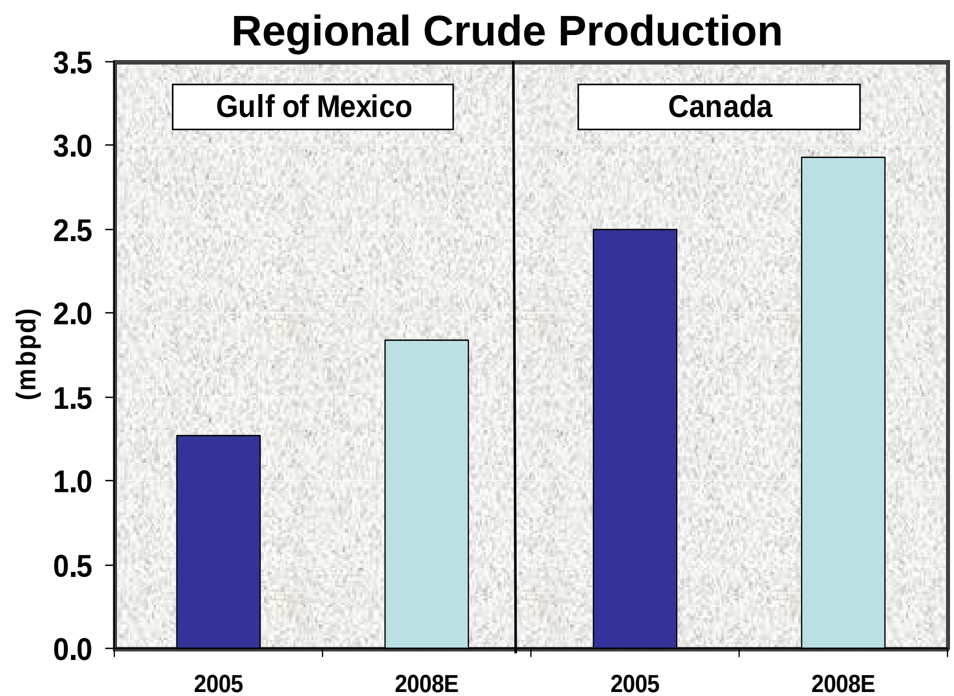




- **Continue to see strong on-road diesel demand/low days of supply**
  - **$5 to $10/barrel premiums for on-road vs. off-road diesel**
  - **Expect high on-road diesel margins to continue**
- **Oct. 15 deadline for ULSD plus winter should tighten distillate further**
- **Important to watch on-road diesel margins, not just heat cracks**
  - Over 75% of Valero's distillate production sells at premiums to heating oil

Crude Supply Outlook





- Expect WTI to remain in $60 to $70/bbl range for foreseeable future
- Incremental sweet crude production is in unstable regions
- More Canadian and Gulf of Mexico crudes
- World incremental crude supply is medium sour
- Excess residual fuel oil being produced globally/inventories high
- Exploration costs continue to increase rapidly
- Sour crude discounts to remain very attractive

Complex refineries more valuable than ever!

Outlook for Rest of 2006 and 2007

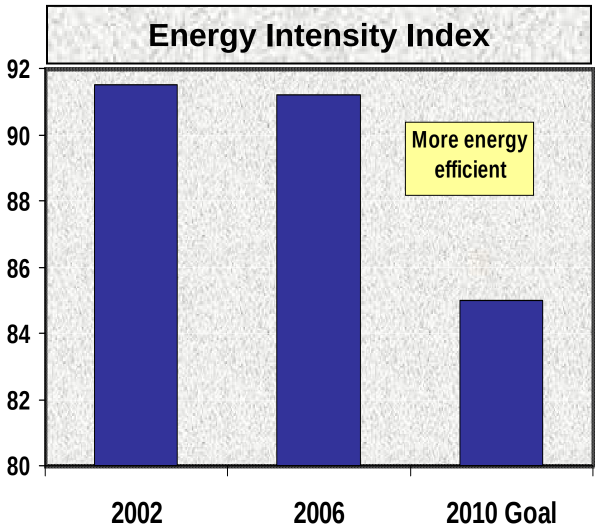
- **Transition to ULSD constraining diesel market**
  - Logistics issues expected
  - Some projects are delayed and costs have increased
- **"Early" gasoline sulfur credits expire at year-end 2006**
  - Makes it more expensive in 2007 to blend on-spec gasoline
    - Substantial volumes of higher sulfur blending components imported in 2006 with credits purchased by blenders
  - Fewer "vintage" credits available for 2007
    - Vintage credits likely to get much more expensive
- **Entering fall turnaround season in U.S. and Europe**
  - Expect moderation of clean imports into U.S.
- **Bullish outlook for gasoline demand**
  - Declining pump prices, more people, more vehicles, good economy…
- **And remember, winter will come**

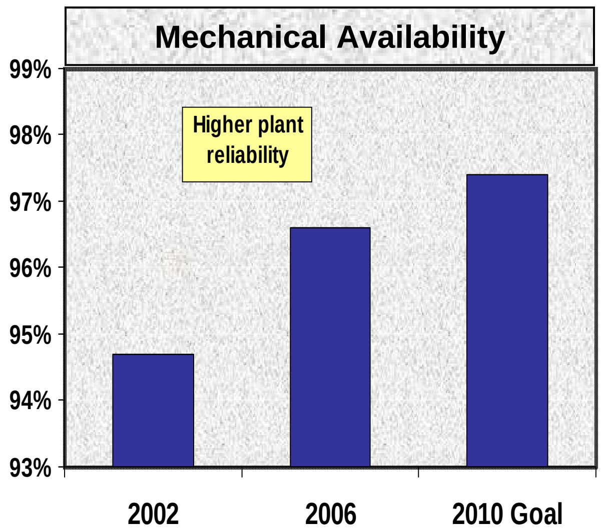
Strong Free Cash Flow

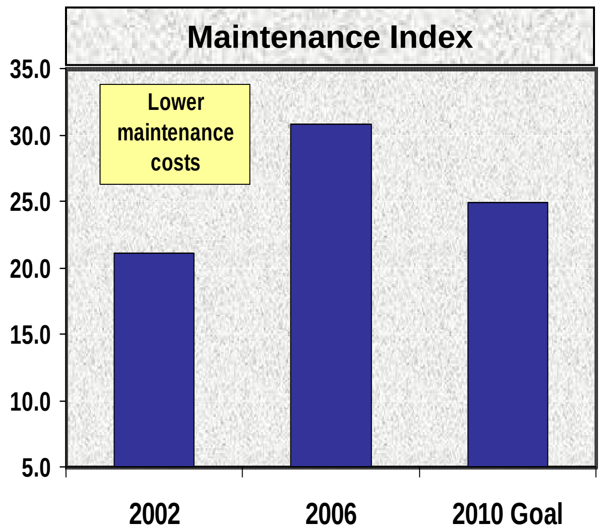
- **Maintain solid balance sheet**
  - Repay $285 million in maturing debt and may call $175 million of high-coupon debt in 2007
- **2006 capital budget up 5% due to higher project and turnaround costs**
- **For 2007, expect capital budget to be approximately $3.5 billion…under 2006**
  - Continue to review 2007 capital budget as part of strategic planning process
  - Costs are higher and project completion times are longer
- **Purchasing 5% of outstanding shares by end of 3Q06**
  - Year-to-date $1.7 billion in buybacks (28 million shares)
  - Plan a consistent buyback program
- **Continue dividend increases**
- **Selling ownership interest in Valero L.P.**
  - $355 million pre-tax cash generated in 2006 (40% of interest sold)
- **Still looking at acquisitions that meet our criteria**

Improving Operations

- **Valero has acquired many distressed assets at deep discounts to replacement cost**
  - Leverages Valero's operational expertise and talented workforce
    - built excellent team
  - Successful results achieved at St. Charles; Aruba and Delaware City improving
- **Many of our assets offer significant opportunities for financial improvement**
  - Example – system-wide improvement in Energy Intensity Index can save up to $300+ million/year



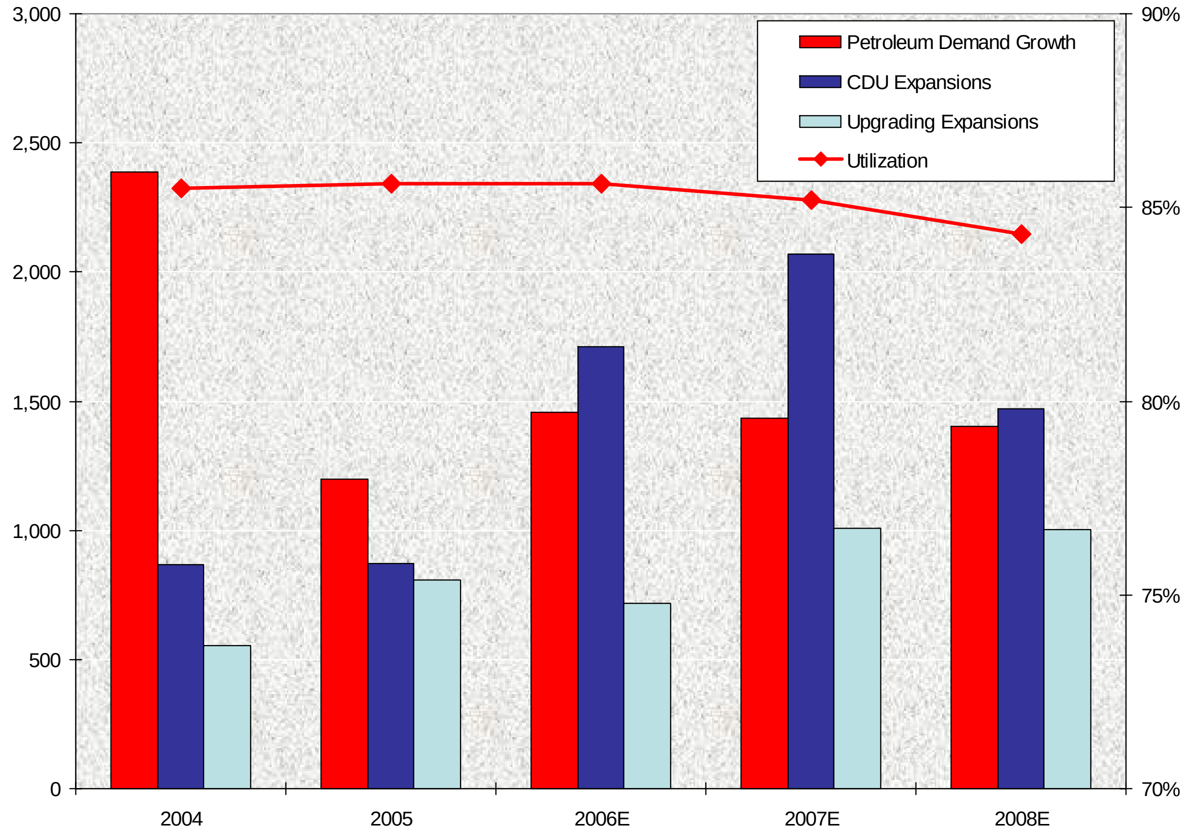




Note: Based on Solomon, Inc. survey data

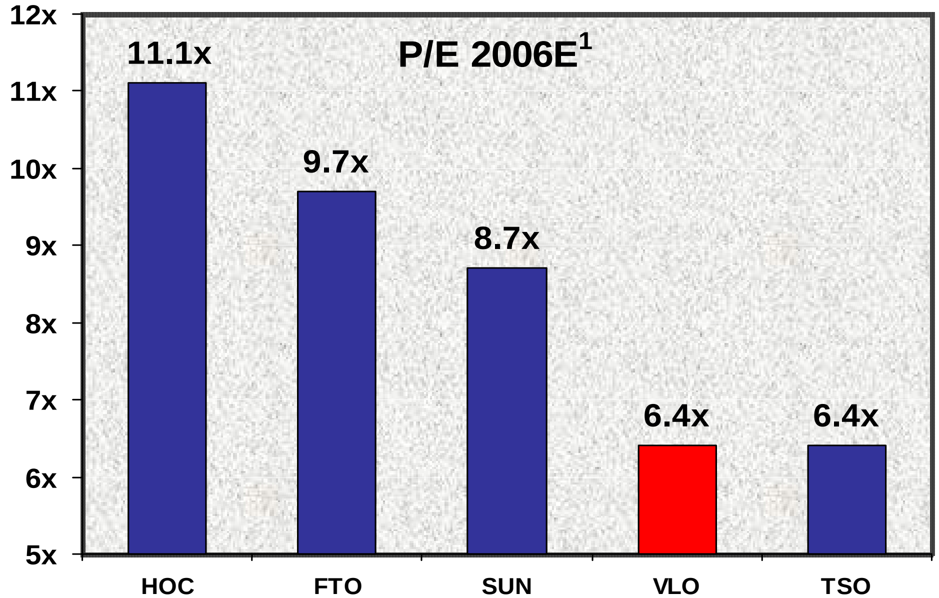
Tight Supply/Demand Balance to Continue

- **New capacity coming on-line slower than expected**
  - Costs up significantly
  - Skilled manpower and fabrication capacity limited
  - Projects being delayed/cancelled
  - Bulk of new capacity in high growth foreign markets or producing regions

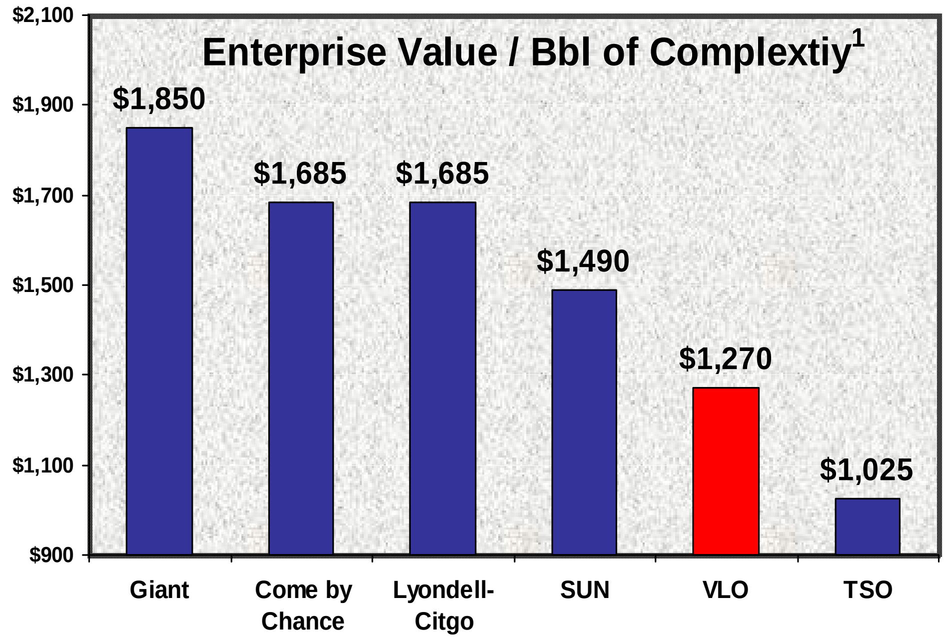


- **Demand continues to grow**
  - Global economy strong
    - Developing world is energy intensive/high growth
  - U.S. and Europe growing more slowly but on larger base
  - Expect continued 1.2 to 2.0 million BPD annual worldwide demand growth
- **Conversion capacity additions lagging demand growth**

Valero Undervalued



[1] 2006 First Call consensus estimate and stock prices as of September 1, 2006



[1] Crude capacity in thousand bbls/day divided by Nelson complexity factor

[2] Stock prices as of September 1, 2006

…Yet Valero has

- **the largest refining system in North America**
- **the most geographically diverse U.S. refining assets**
- **a highly complex system**
- **high capacity to process low quality/low cost feedstocks**
- **the most stock liquidity among refiners**
- **a high-quality balance sheet**
- **increased return of cash to shareholders**

Summary

- Outlook remains bullish
- Strong margin environment through at least end of decade
- Expect to continue generating significant free cash flow
- Balanced approach to investing free cash flow
- Focused on improving returns on capital
- Trading at a discount – but should trade at a premium
  - Returning more cash to shareholders
  - Quality assets and operations in best products market

Valero – The best value in refining!

Appendix

3Q06 Forward Curve

	As of July 28	As of September 1	Change
Gas Cracks			
Gulf Coast	$20.12	$12.65	-$7.47
NYMEX	$21.75	$14.75	-$7.00
Heat Cracks			
Gulf Coast	$9.07	$10.12	+$1.05
NYMEX	$11.10	$11.58	+$0.48
WTI - Mars	$6.95	$7.20	+$0.25
WTI - Maya	$16.22	$14.77	-$1.45

Note: Relevant charges and yields for Valero's system are available on Valero's website in the Investor Relations section at the following web address:
www.valero.com/Investor+Relations/Financial+Reports+and+SEC+Filings/Quarterly+Operating+Highlights/