APPENDIX

G. Valero Presentation: Benicia Refinery Tour - August 17, 2010

34 Pages

(Content attached is the most relevant portions of the original Presentation: pp. 1-34 (the main portion of original Presentation); the Appendix of the original Presentation (pp. 35-50) not provided here)

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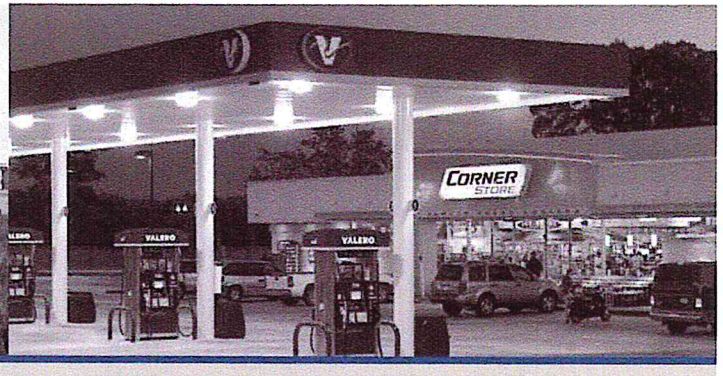


VALERO

Benicia Refinery Tour

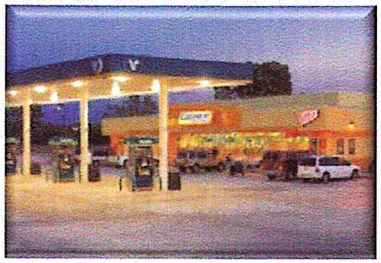
August 17, 2010

Safe Harbor Statement

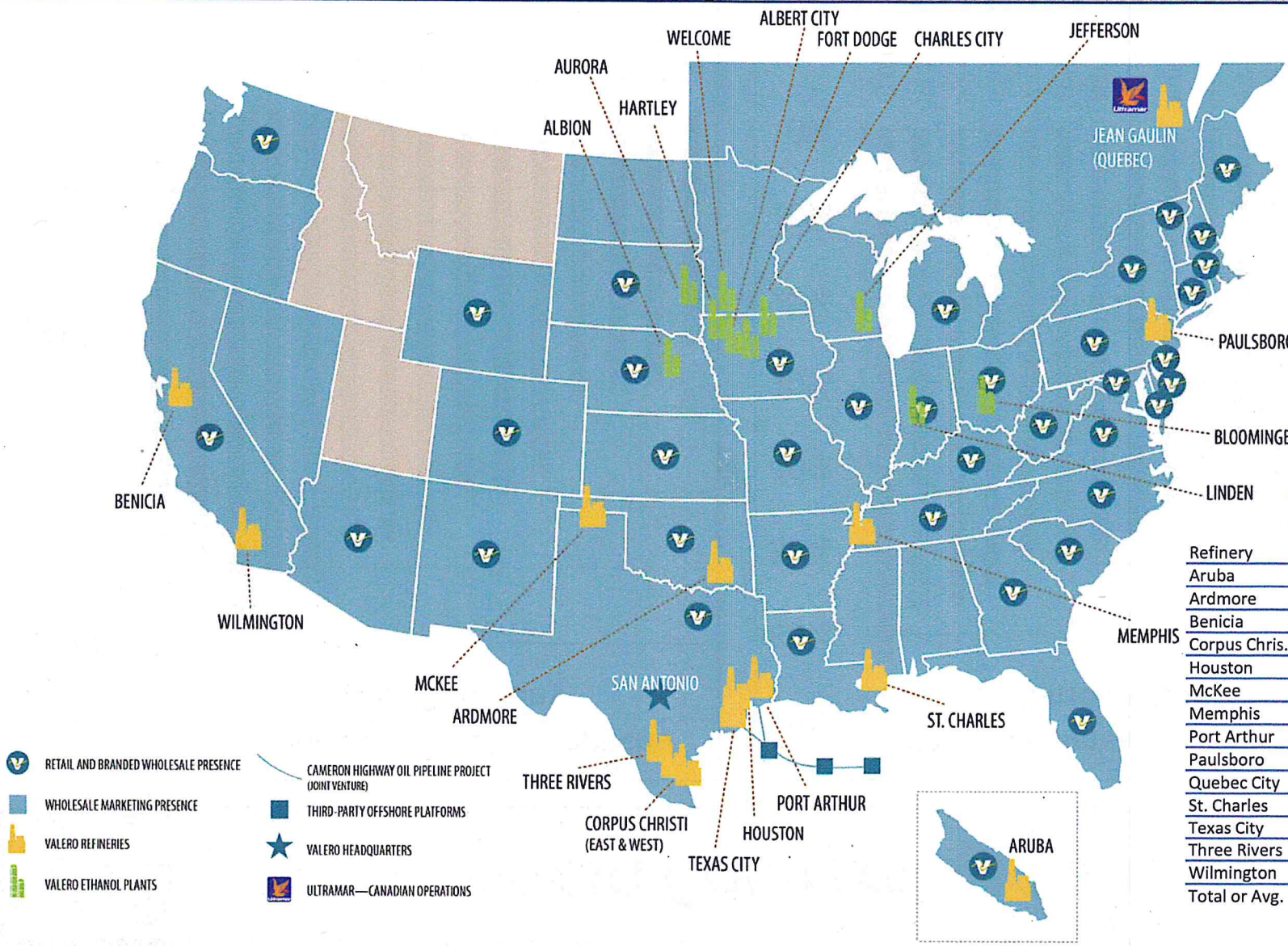
Statements contained in this presentation that state the Company's or management's expectations or predictions of the future are forward–looking statements intended to be covered by the safe harbor provisions of the Securities Act of 1933 and the Securities Exchange Act of 1934. The words "believe," "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.

Valero Energy Overview

- Largest independent refiner in North America
  - 15 refineries, 2.8 million barrels per day (BPD) of capacity
  - Refineries geographically diversified among four key regions
  - Significant conversion capacity provides flexibility to process a variety of lower cost feedstocks and produce higher value products that meet the most stringent specifications on the globe
- One of the nation's largest retail fuel marketers with nearly 5,800 branded marketing sites
  - Company-owned/operated sites: approximately 1,000 in U.S. and 400 in Canada including leased sites
- One of the largest ethanol companies in U.S.
  - 10 large-capacity plants with total of 1.1 billion gallons/year (72,000 BPD) of production capacity
  - All plants located in resource-advantaged corn belt
- Other investments in alternative energy
  - 50 megawatt wind farm in Texas Panhandle
  - Seed investments in next generation ethanol and biodiesel
- Approximately 21,000 employees
- Strong 2Q10 results with $0.93 of EPS from continuing ops

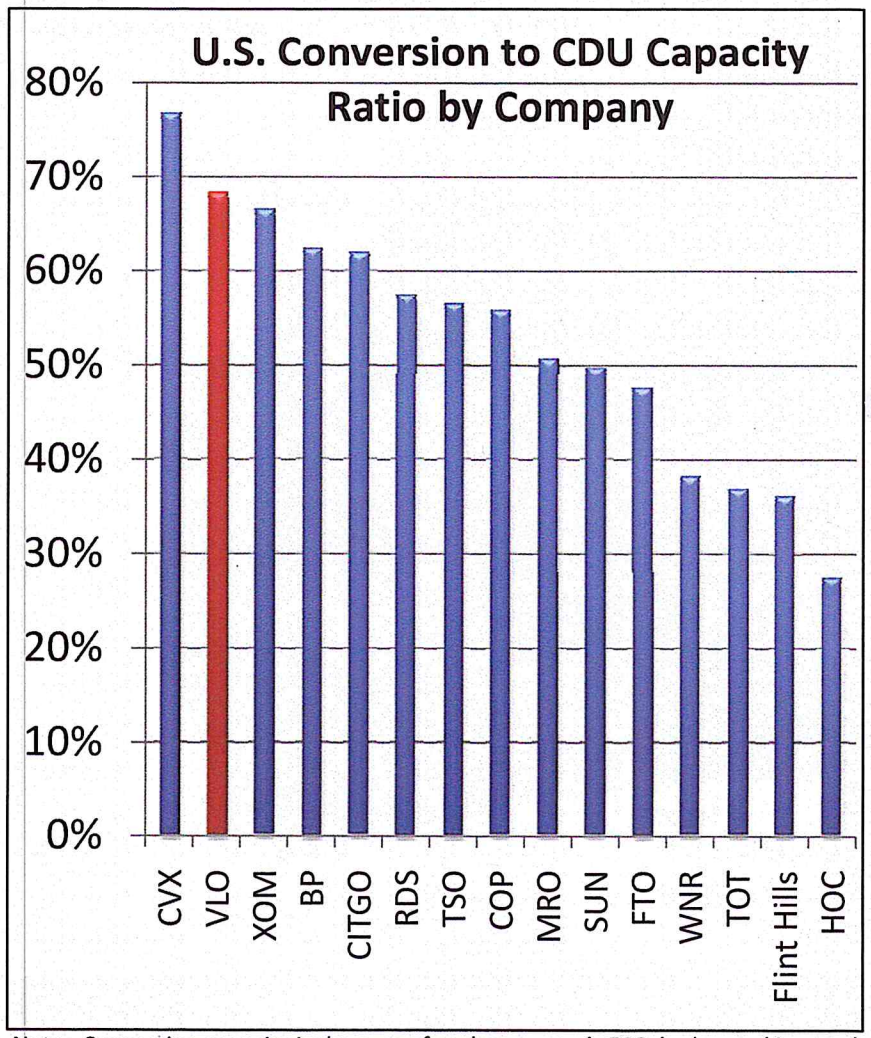


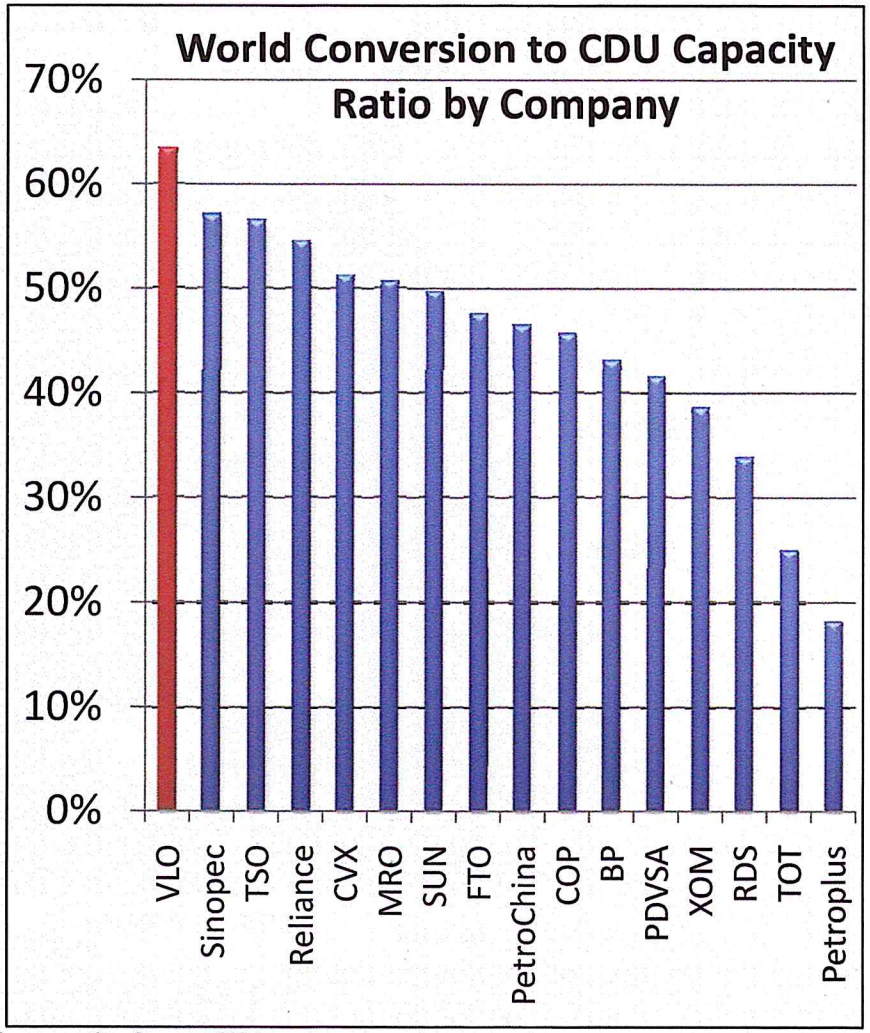
Valero's Geographically Diverse Operations



Refinery	Capacities (000 bpd) Total Through-put	Crude Oil	Nelson Index
Aruba	235	235	8.0
Ardmore	90	86	12.0
Benicia	170	145	15.0
Corpus Chris.	315	205	20.6
Houston	145	90	15.1
McKee	170	168	9.5
Memphis	195	180	7.5
Port Arthur	310	290	12.7
Paulsboro	185	166	9.4
Quebec City	235	230	7.7
St. Charles	250	190	15.2
Texas City	245	225	11.1
Three Rivers	100	95	12.4
Wilmington	135	85	15.8
Total or Avg.	2,780	2,390	11.9

Leader in Conversion Capacity



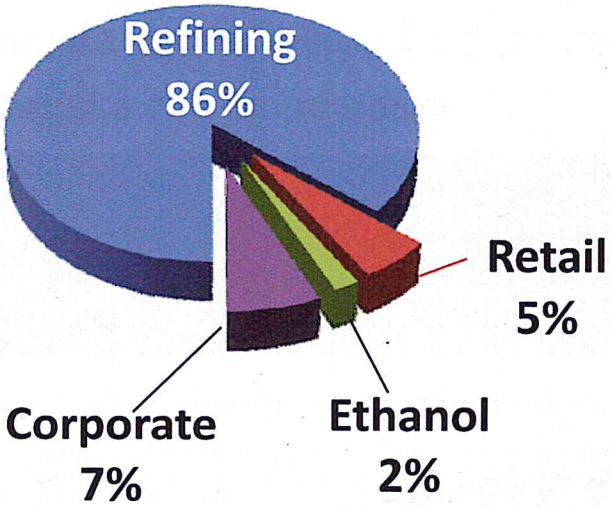


Note: Conversion capacity is the sum of each company's FCC, hydrocracking, and coking capacity Source: PIRA

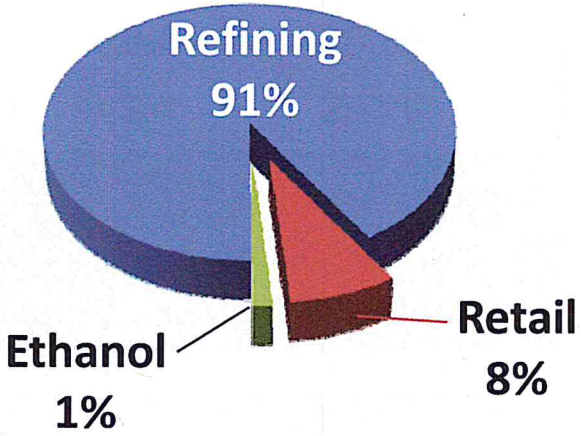
Business Segments

- Valero has three business segments:
  - Oil refining and marketing
    - As an independent, we don't produce or own reserves of oil
  - Retail marketing
  - Ethanol production

Assets as of 12/31/2009



2009 Volumes

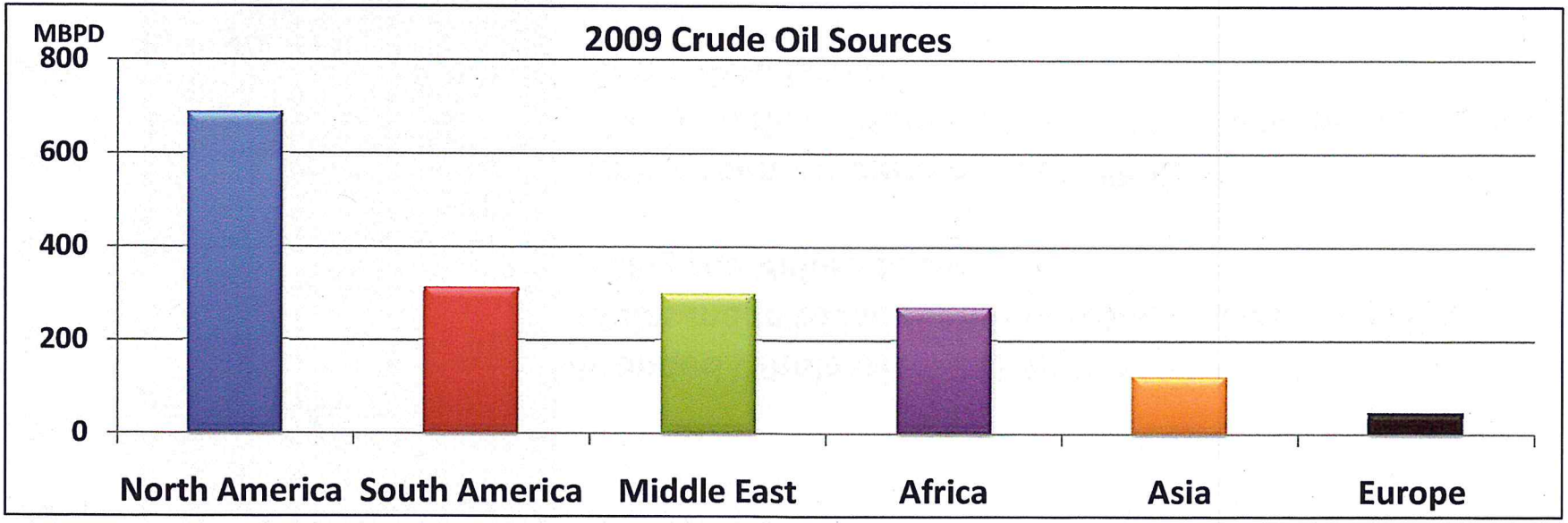


Charges and Yields

	2009 Volume (MBPD)		Annual Estimated EPS Sensitivity for $1/barrel change [1]
Gasolines and blendstocks	1,101	48%	$0.46
Distillate (diesel, heating oil, jet fuel)	748	33%	$0.32
Other	432	19%	$0.18
Total Products	2,281	100%	$0.96
Sweet	632	28%	
Medium Sour & Acidic	581	26%	$0.25
Heavy & Resid	635	28%	$0.27
Other	424	19%	
Total Feedstocks	2,272	100%	
	MBPD	MGPD	
Ethanol[2]	69	2,800	$0.03

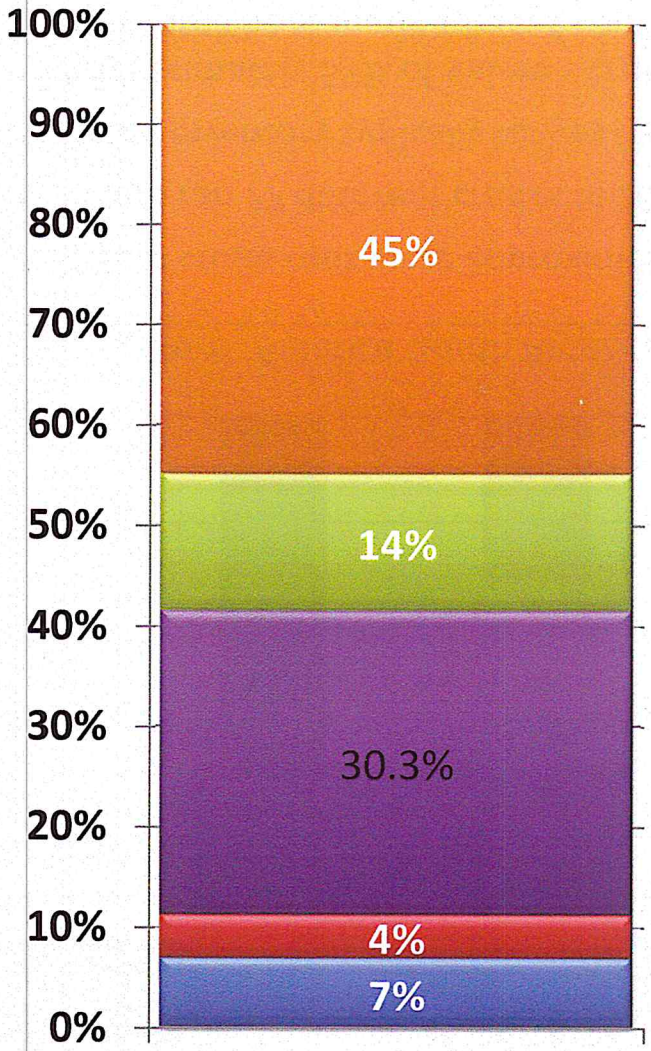
[1] Assumes 2009 volumes, a 35% tax rate, and 1Q10 wtd. shares outstanding of 562 million
[2] Ethanol estimated using volumes of 2.8 mmgpd including the new ethanol plants

Crude & Feedstock Supply



- Valero crude runs were approximately 2.3 million barrels per day in 2009
- Valero ran 77 different crudes in 2009, including the addition of 8 new crudes
- Crude inventory typically ranges from 45 to 55 million barrels throughout the year
- Approximately 55% of Valero's crude purchases were under term contracts, but nearly all purchases have market-based pricing
- Valero hedges all crude against LIFO to protect against volatile swings in crude price between date of purchase and date of delivery/ consumption at the refineries
- Valero receives crude and feedstocks by many modes of transport including tanker ship, barge, pipeline, rail, and truck

Gasoline, Diesel, and Jet Fuel Marketing Channels



Bulk Sales (spot market sales) – 775 MBPD
- Large volume sales made to other refiners and marketers

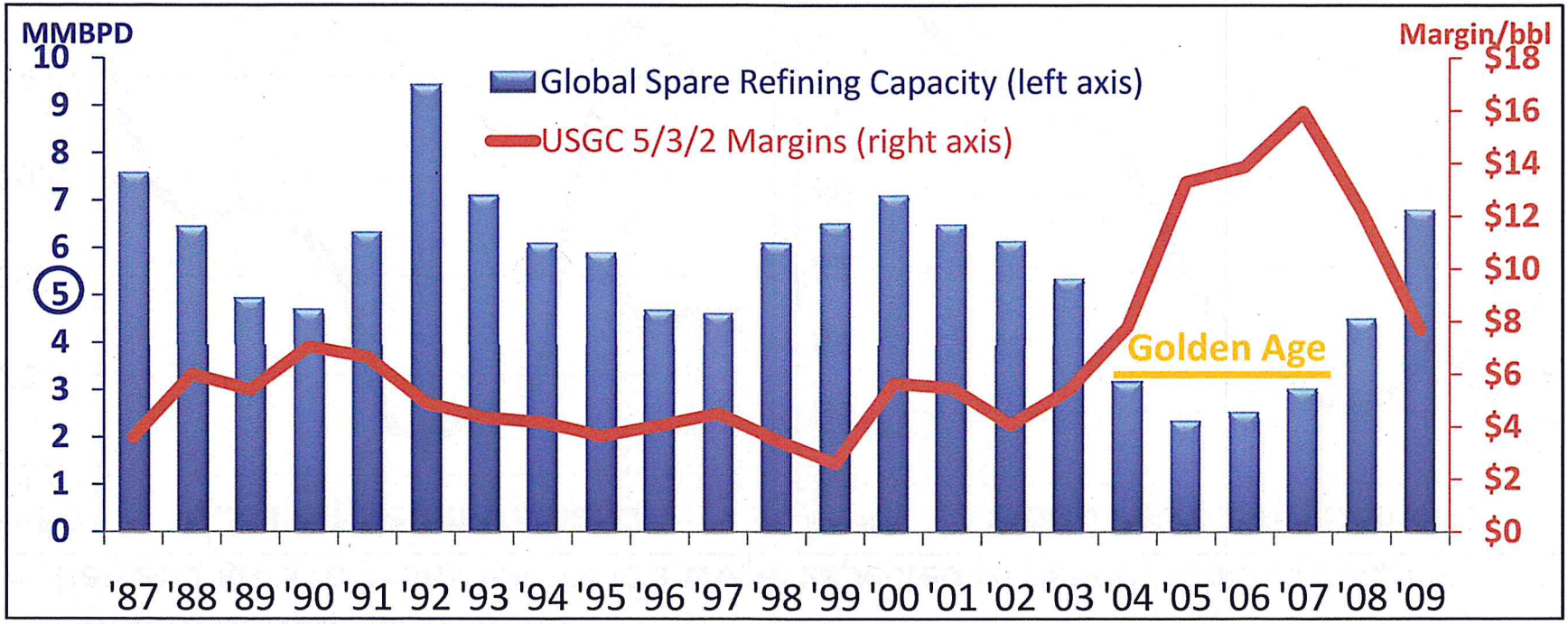
Branded Wholesale – 233 MBPD
- Sales made to independent retailers who are sell fuels using the Valero brand

Unbranded Wholesale – 524 MBPD
- Sales made to independent retailers who are not under the Valero brand

Canada Retail – 75 MBPD (813 branded sites currently)
U.S. Retail – 119 MBPD (990 sites currently)

Notes: Based on 2009 total output of gasoline and distillate production (includes Canada and Aruba production, excludes blendstocks)

Global Spare Capacity Impacts Margins

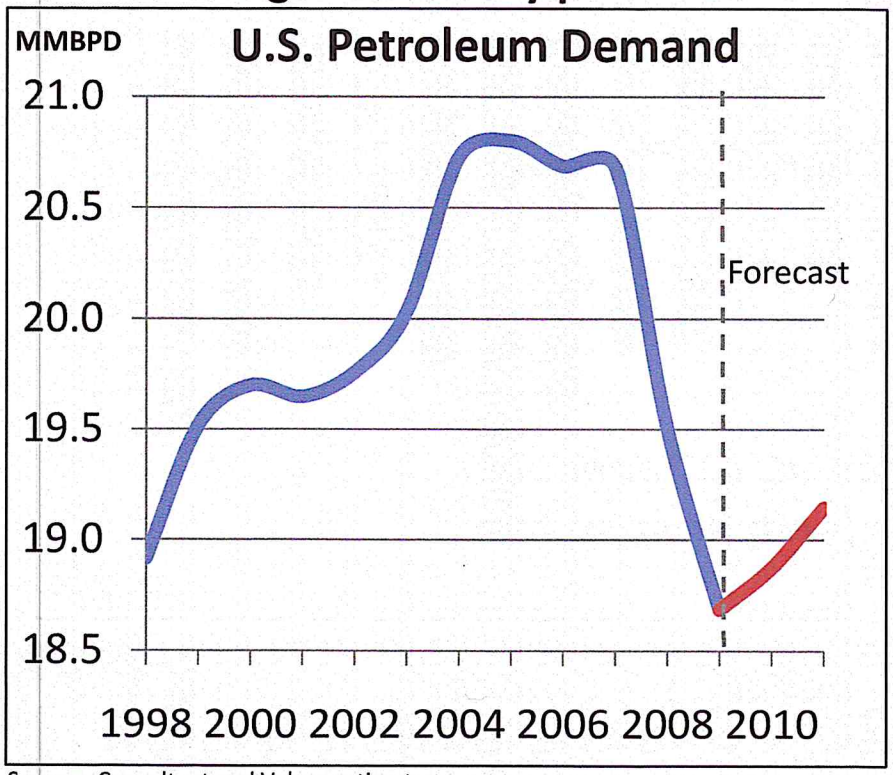


Note: Availability of world CDU capacity assumed to average ~94%; Historical CDU capacity data from the DOE; USGC 5/3/2 = 3*USGC Gasoline+2*USGC ULSD-5*WTI

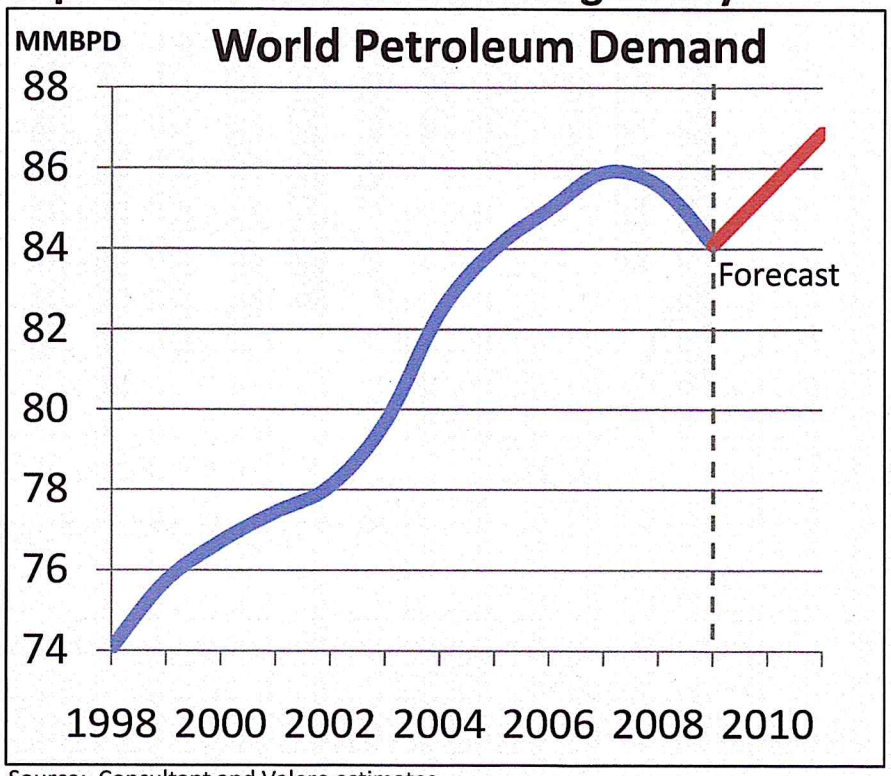
- **At spare capacity above 5 million BPD, Gulf Coast margins ranged $3 to $6/barrel**
- **During "Golden Age," spare capacity fell below 3 million BPD while margins tripled**
- **Estimated 7 million BPD of global spare refining capacity at end of 2009**
- **Margin improvement is tied to spare capacity falling below 5 million BPD**
  - **<u>Refinery rationalization</u> must play a part through run cuts, shutdowns, and closures**
    - **Approximately 1.5 million BPD in closures or shutdowns since 2007**
  - **<u>Demand growth</u> will return with growth in GDP, industrial production, trade, and jobs**

Estimate Economic and Demand Recovery Underway

- Economic recovery will drive demand growth
  - Expect world to return to at or above average growth
- U.S. and OECD demand expected to grow, but below historical average growth rate
- World demand expected to grow in 2010 and then accelerate in 2011 when total demand exceeds 2007 levels
- Demand growth in any part of the world expected to benefit refiners globally

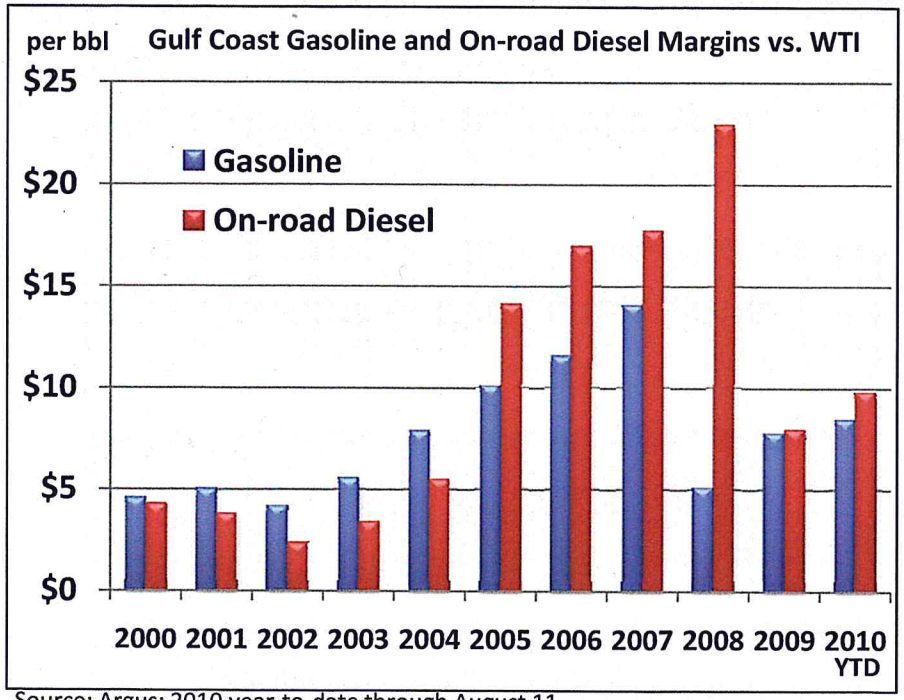


Source: Consultant and Valero estimates

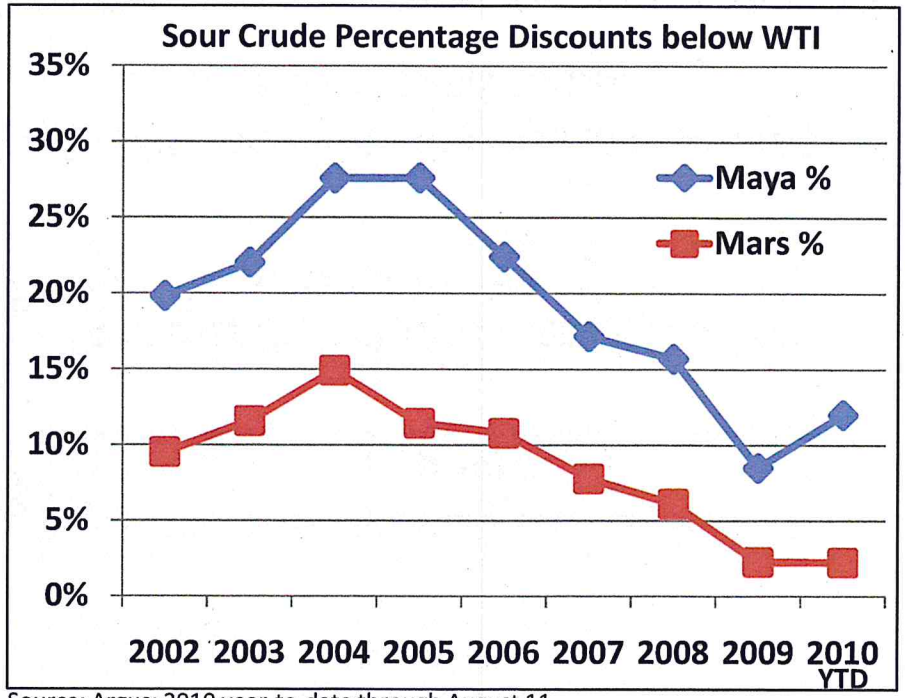


Source: Consultant and Valero estimates

Margins and Crude Oil Discounts Improving in 2010



Source: Argus; 2010 year-to-date through August 11



Source: Argus; 2010 year-to-date through August 11

- **Plentiful spare capacity and product inventories squeezed margins in 2009**
- **2010 margins recovering, cautiously optimistic 2010 margins can continue improvement on capacity rationalization and stronger demand**
- **As always, potential for margin spikes in the spot market on supply disruptions**

- **Sour crude discounts recovering in 2010 due to:**
  - OPEC increasing production
  - Relatively high residual fuel oil balances
  - Lower consumption of low-quality medium/heavy sour crude oils in South America due to refinery outages
  - Better than expected supply of low-quality crudes
- **Longer term, expect to benefit from Canadian heavy crude oil to Gulf Coast**

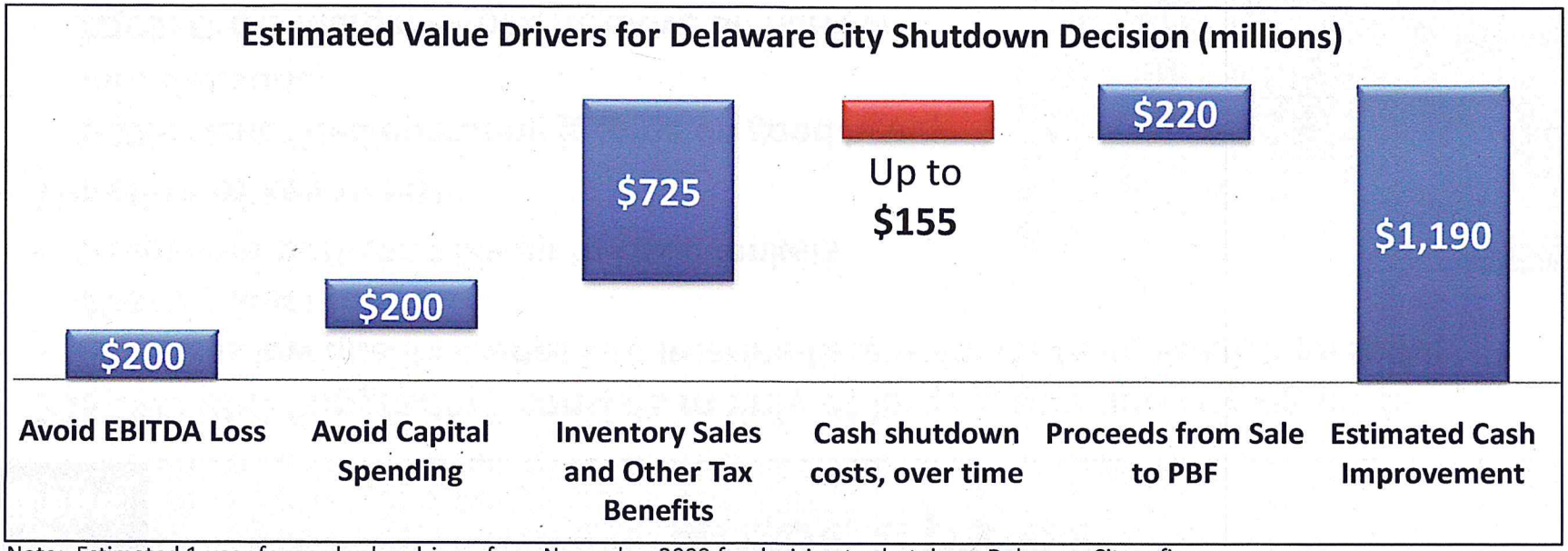
Valero's Position Improves for 2010

Strategic Priorities	Actions Taken
Upgrade refining portfolio	Addressed Delaware City and Aruba refineries
Reduce costs	Cut refinery costs and capital spending
Seek attractive acquisitions	Successfully acquired large position in ethanol industry
Manage financial strength	Maintained liquidity and investment grade credit rating

Result Given another year of low margins like 2009, Valero has potential for improvement; higher margins should add to results

Delaware City Decision

- History of poor performance under Valero and prior owners
- Large loss in 2009: approx. $390 mil. operating loss, excluding special charges
- Decided to shut down in November per approximately $1 billion case
  - Estimated shutdown costs include relatively low environmental clean-up (a previous owner retains primary liability) and will be spent over several years
- Closed on sale of assets to PBF Investments LLC for $220 million in cash in June, 2010
  - Provided incremental value above original shutdown decision
  - Avoided over $40 million in estimated cash shutdown costs



Note: Estimated 1-year forward value drivers from November 2009 for decision to shut down Delaware City refinery

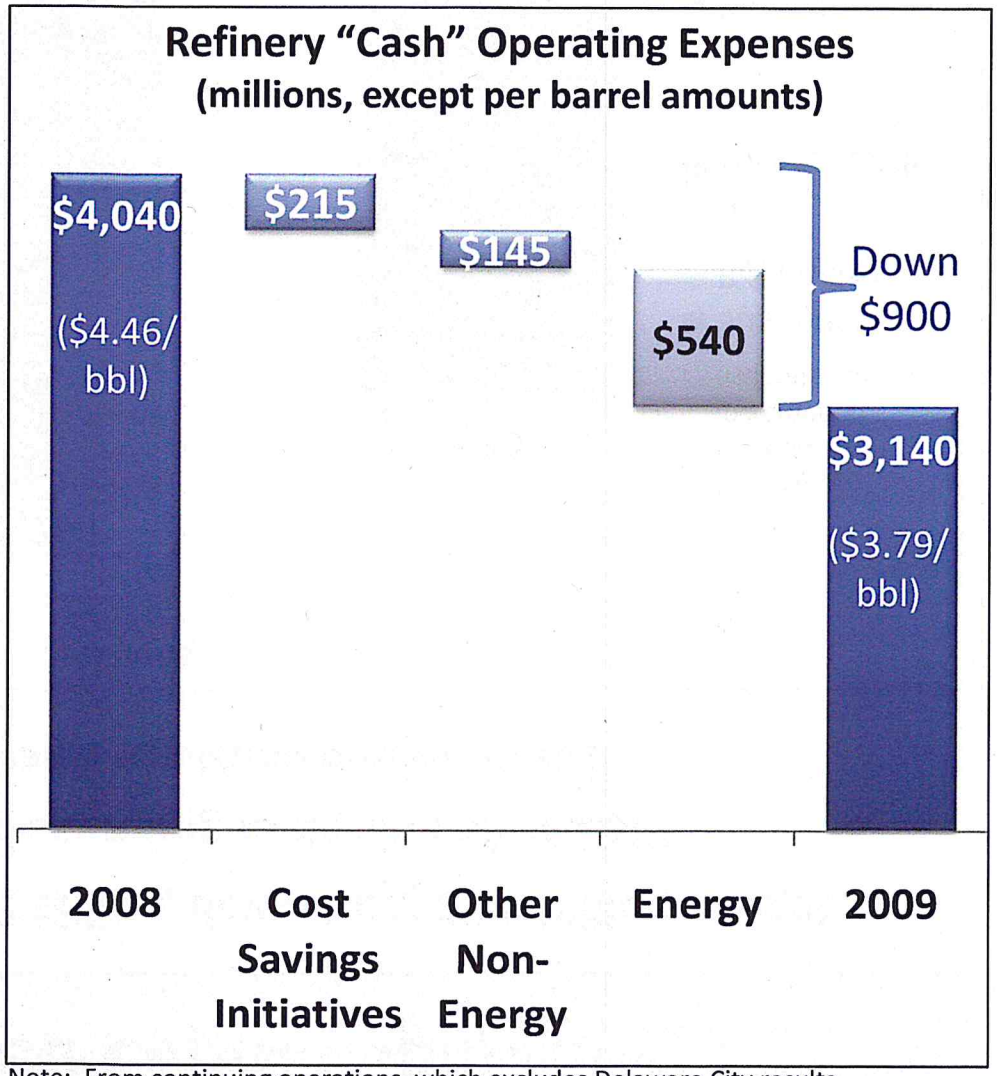
[1]EBITDA Loss = Operating loss less depreciation & amortization expense, assuming 2009 1Q-3Q performance

Aruba Update

- 235,000 BPD "upgrader" consists mainly of large crude and coking units
  - Processes low quality crudes into intermediate products (e.g., VGO), high sulfur diesel, and jet fuel
  - Deepwater port can take up to ULCC tankers
- Timeline of key events
  - 1Q09: Generated operating income on good heavy sour discounts
  - 2Q09: Gross margin turned negative on narrow heavy sour discounts
  - 3-4Q09: Shut down plant to avoid negative gross margins, cut "cash" opex by $10 million/month
  - May-10: Govt. of Aruba approved new tax system
    - Attractive, stable tax system lasts for 20 years
  - Jun-10: Started maintenance turnaround that will be completed mid-October
    - Estimated cost of $50 million for turnaround
    - Provides option to operate plant when margins are profitable
    - Enhances strategic alternatives

Reduced Operating Expenses

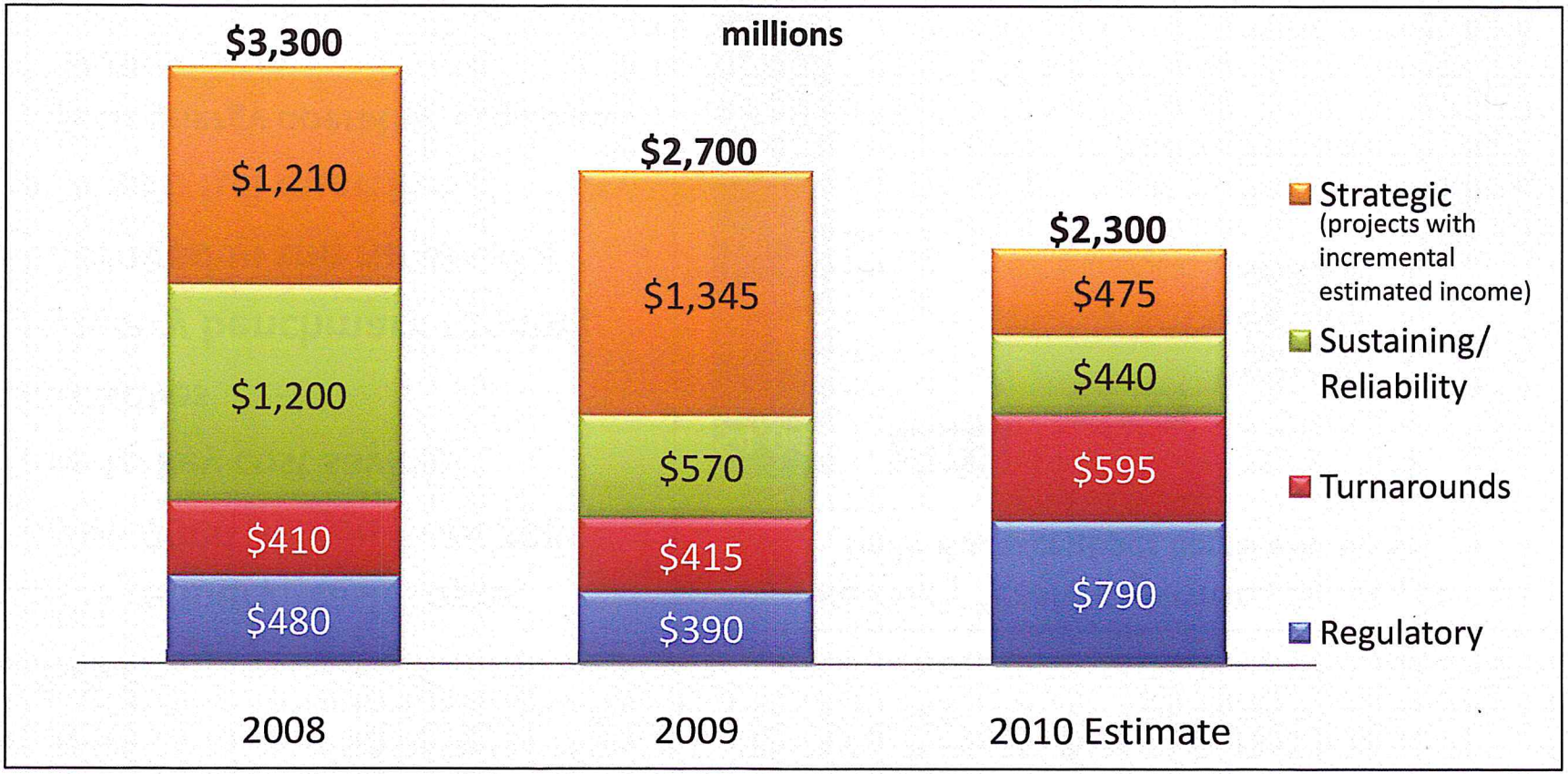
- 2009 refinery "cash" opex down $900 million from 2008 due to key cost savings initiatives
- Industry benchmark ranking improved in the range of a half to a full quartile
  - Non-energy operating expenses
  - Maintenance
  - Personnel efficiency
- Also, remain very focused on corporate G&A expenses
- *On pace in 2010 to cut more than $100 million in costs in addition to last year's savings*



Note: From continuing operations, which excludes Delaware City results

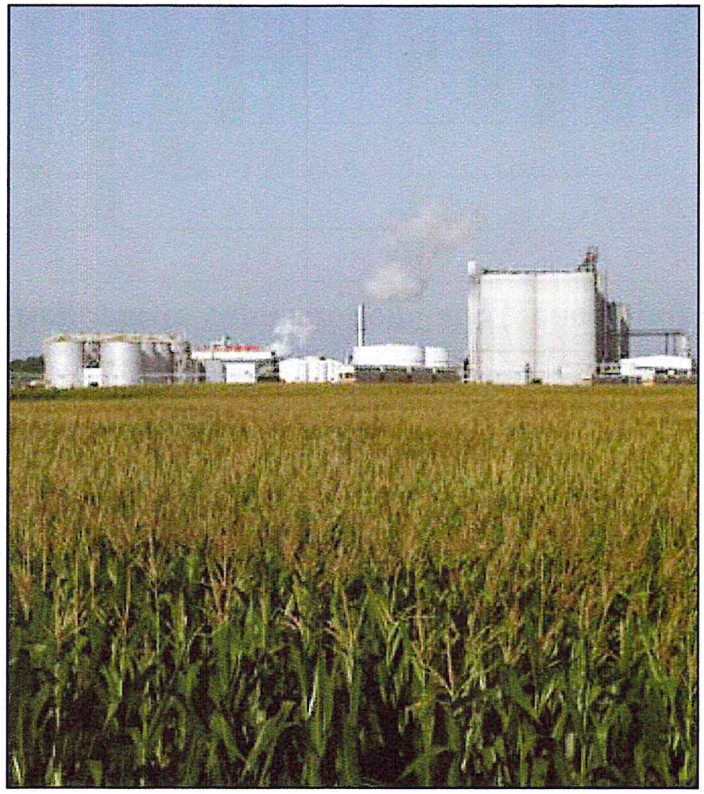
Reduced Capital Spending

- 2010 spending estimated at $2.3 billion, down from $2.5 billion budget
- Expect "Stay in Business" capital spending to decline after 2010
  - Completing legacy reliability and large regulatory projects in 2010



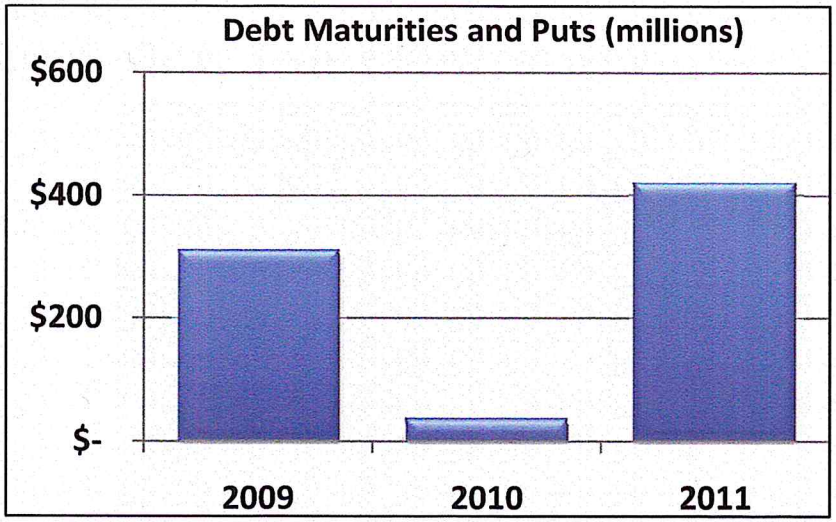
Made Excellent Ethanol Acquisitions

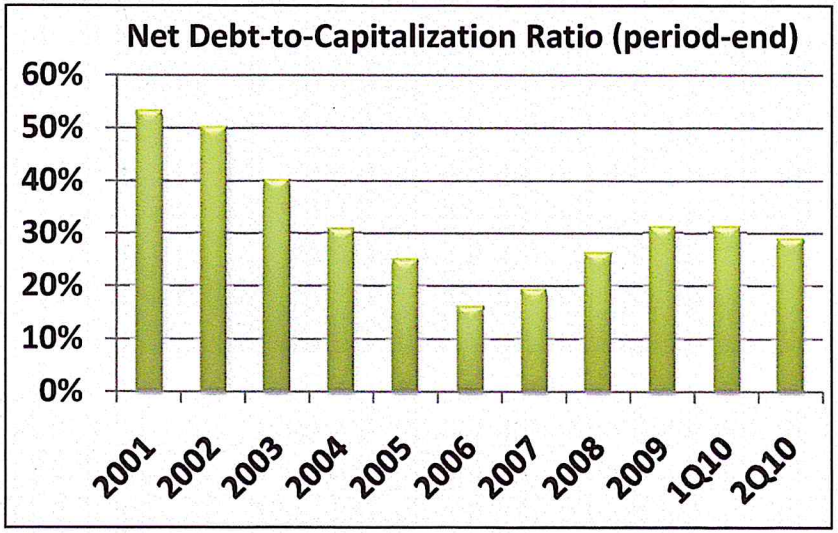
- **Built position for average of only 35% of estimated replacement cost**
  - 2Q09: acquired 7 plants with 780 million gallons per year of world-scale capacity in advantaged locations
  - 1Q10: Added 3 plants with 330 million gallons per year of capacity
  - 2Q10 and 3Q10: All 10 plants operating well
- **Favorable margin outlook**
  - High crude oil prices support ethanol prices
  - Plentiful corn and increasing corn yields keep feedstock costs low
  - 2010 ethanol mandate grows 14% over 2009
  - Expect demand to outgrow capacity after 2010, but blend wall must be addressed
  - To incentivize new builds, margins must be high enough to yield reasonable return on higher-cost, new-build plants
- **Valero's low-cost acquisitions of high-quality plants imply a competitive advantage in any margin environment**
- **Provides platform for future production of advanced biofuels**



Managing Financial Strength

- Investment grade credit rating is a priority
- Successfully completed in February a $1.25 billion debt offering
  - Took advantage of very attractive rates in February
  - S&P, Moody's, and Fitch affirmed investment grade ratings
  - Redeemed nearly $500 million of higher-cost notes in March and May
  - $418 million of maturities in early 2011
- Ended 2Q10 with $2.0 billion of cash and $4.4 billion of additional liquidity
- Net debt-to-cap ratio far below credit facility covenant of 60%
  - At 6/30/10, was 28.6%
  - No other coverage-type ratios
  - No borrowings on bank revolver





Why Invest in Valero Today?

Improving Macro

- Economic recovery underway
- Demand is growing: U.S. total products supplied up 2.1% year-to-date versus the same period last year
- Capacity rationalization occurring: nearly 1.5 MMBPD of marginal capacity closed since 2008
- Product margins higher: GC ULSD WTI crack up 9% year-to-date versus the same period last year
- Crude oil discounts wider: Heavy sour discount/bbl up 103%, and up 41% as a % of WTI year-to-date versus the same period last year

Stronger Valero

- Largest, most geographically diverse independent refiner
- Took action to cut costs, reduce capital spending, and address challenged refineries
- Getting excellent returns on attractive ethanol acquisition
- Strong liquidity position and debt ratios with investment grade rating
- Great way to invest in economic recovery

What's in a Barrel of Crude Oil?

Crude Oil Types	Characteristics	Inherent Yields
Light Sweet (e.g. WTI, LLS, Brent)	> 34 API Gravity < 0.7 % Sulfur 35% Demand Most Expensive	3% 32% 30% 35%
Medium Sour (e.g. Mars, Arab Light, Arab Medium, Urals)	24 to 34 API Gravity > 0.7 % Sulfur 50% Demand Less Expensive	2% 24% 26% 48%
Heavy Sour (e.g. Maya, Cerro Negro, Cold Lake, Western Canadian Select)	< 24 API Gravity > 0.7 % Sulfur 15% Demand Least Expensive	1% 15% 21% 63%

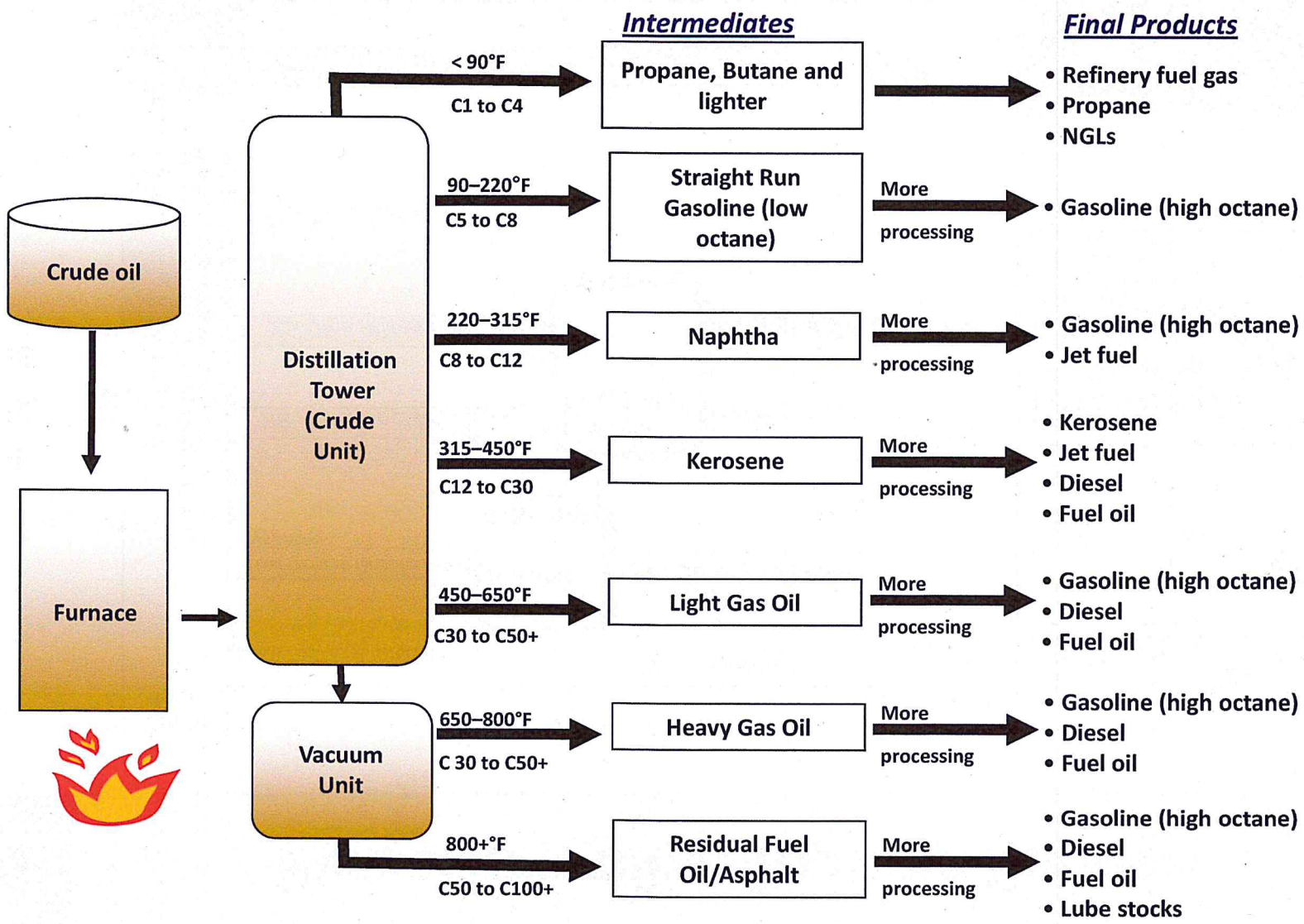
2009 U.S. Refinery Production

9%	Refinery Gases
46%	Gasoline RFG Conventional CARB Premium
36%	Distillate Jet Fuel Diesel Heating Oil
9%	Heavy Fuel Oil & Other

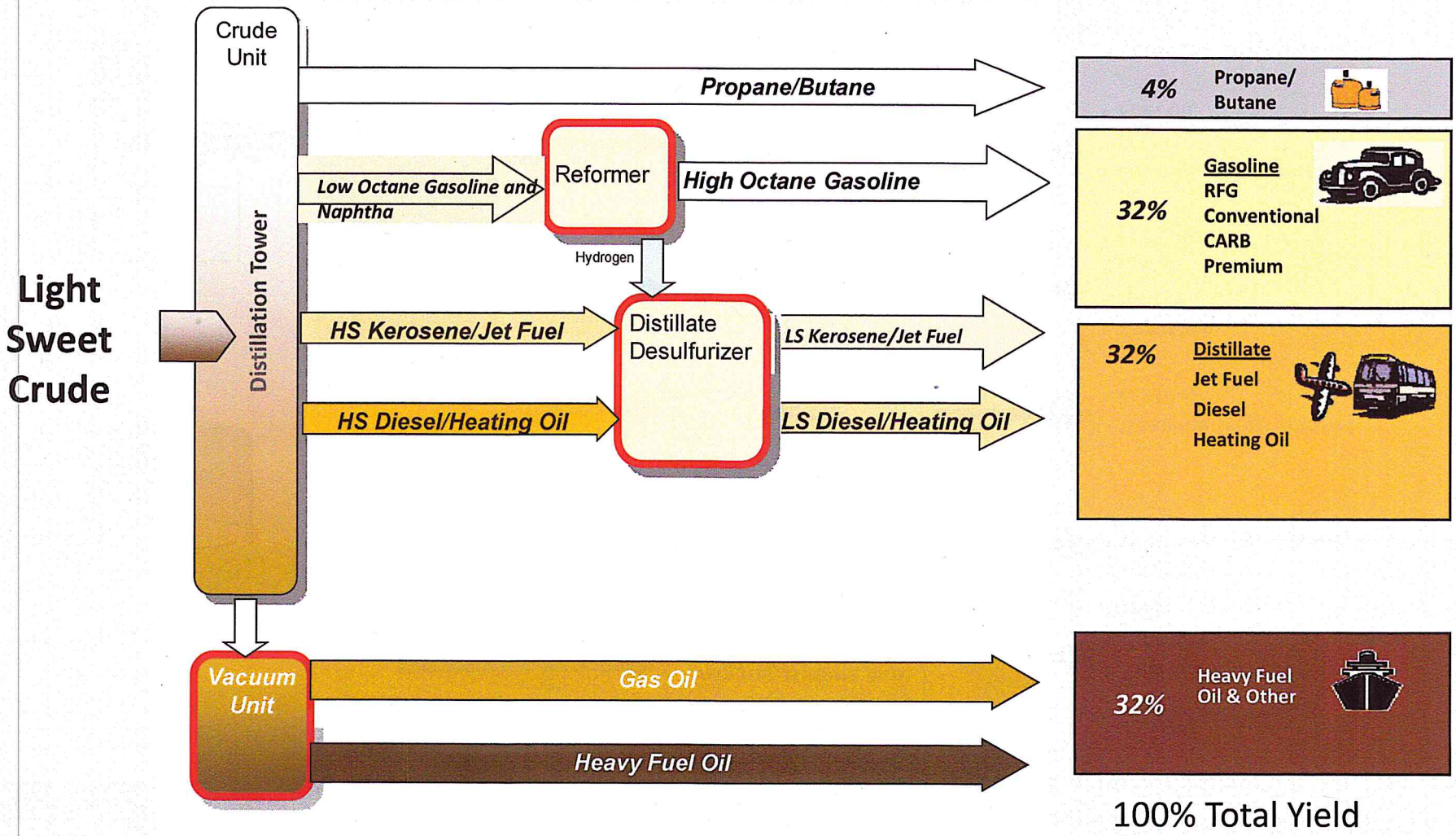
Source: EIA Refiner Production

Refineries upgrade crude oil into higher value products

Basic Refining Concepts



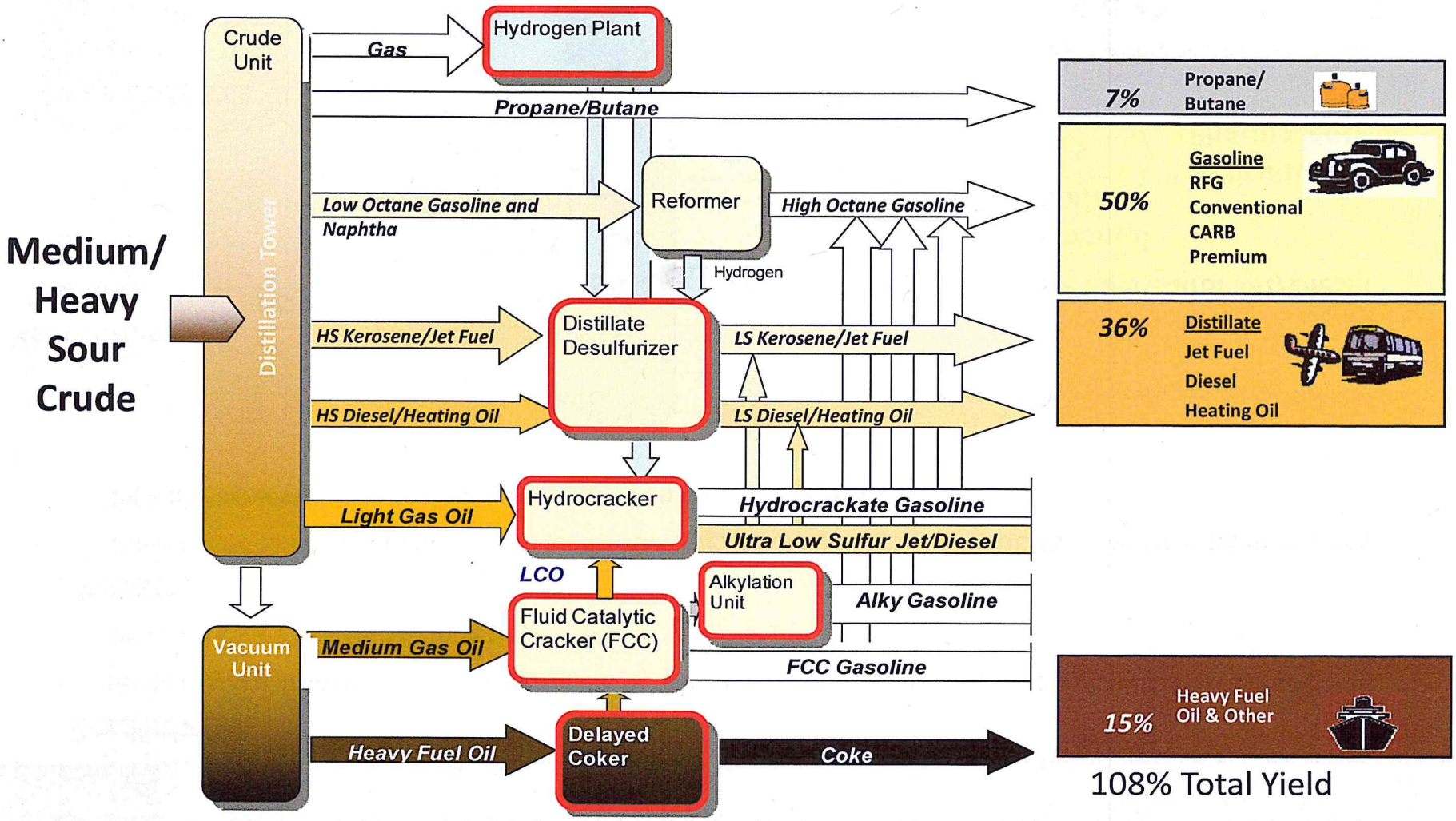
Hydroskimming/Topping Refinery



100% Total Yield

Simple, low upgrading capability refineries run sweet crude

High Conversion: Coking/Hydrocracking



Complex refineries can run heavier and more sour crudes while achieving the highest light product yields and volume gain

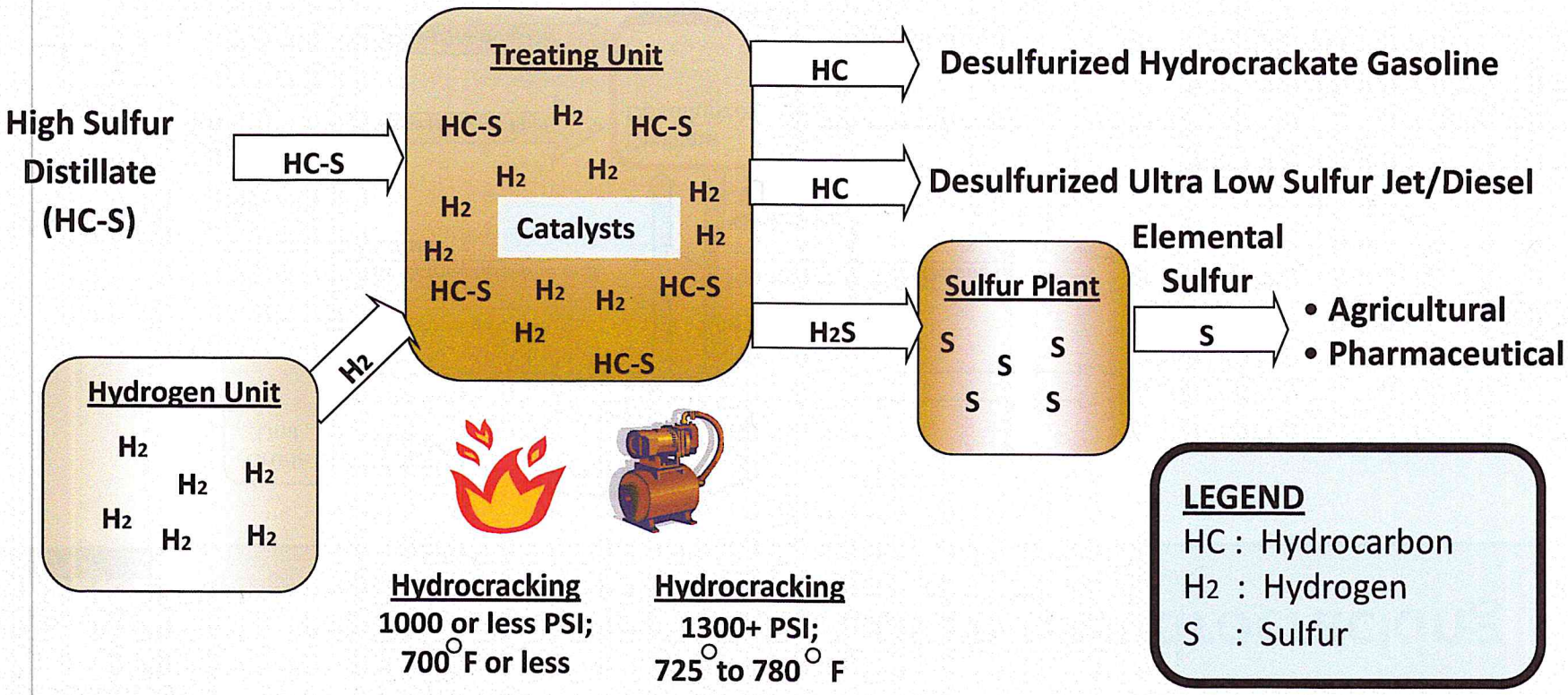
Desulfurization/Hydrocracking Basics

Desulfurization

- Remove sulfur from light products (gasoline or diesel) to meet air quality requirements for clean burning fuels
- Units are called desulfurization or hydrotreater

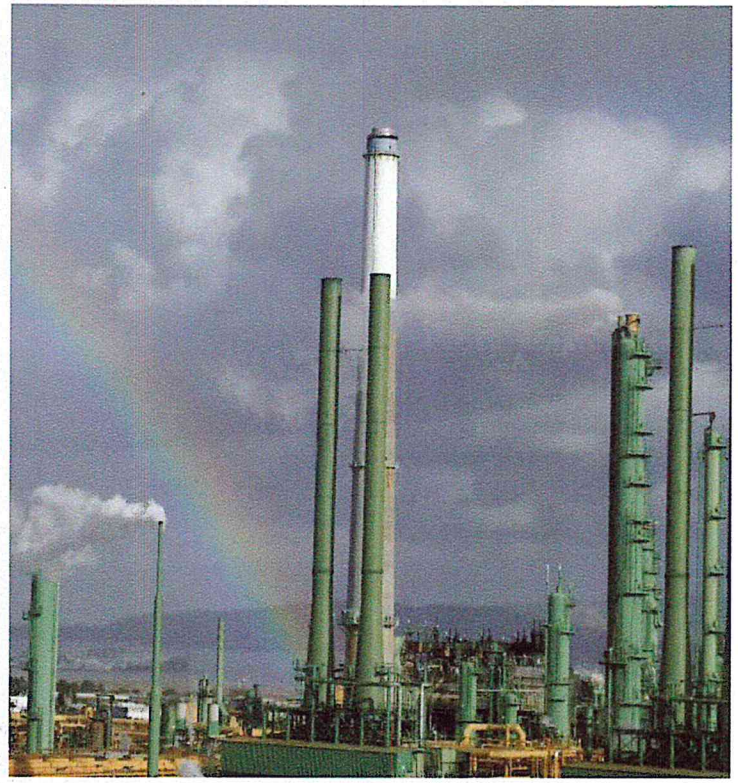
Hydrocracking

- Value-added upgrading of high sulfur feedstocks (e.g, VGO) into high quality ULSD/jet and low sulfur gasoline
- **Typically achieve 20% to 30% volume expansion due to hydrogen saturation**



Valero Benicia Refinery

- Built by Exxon in 1969 on the site of the former Benicia Army Arsenal
- Significant modifications and upgrades have made the refinery one of the most complex and profitable refineries in the United States
- Valero acquired the refinery in 2000 and has made additional improvements since that time
- Valero acquired Huntway Refining Company in 2001



Aerial View of Benicia

Benicia Refinery Operations

- OSHA VPP Star Site
- Total throughput of 170,000 bpd
- Primary products include "CARBOB" gasoline, diesel, jet fuel, LPG, fuel oil and asphalt
- High conversion operation
- 70%+ gasoline yield
- Located on 425 acres with 475 acre buffer zone
- Staffed by 490 full-time employees
- Approximately 275 continuing service contractors

Benicia Feedstocks

- Crude slate includes a wide variety of international crudes, San Joaquin Valley (SJV), and Alaska North Slope (ANS)
  - 75% received by ship across refinery docks
  - 25% received by pipeline
- Shifting crude slate
  - When acquired in 2000, 80% of Benicia's crude was ANS
  - Today, less than 10% ANS
- Versatile, high-conversion facility with ability to process heavy, sour crudes
  - 35% heavy sour, 47% medium/light sour, 18% other
- Capable of processing imported intermediate feedstocks
- Primary utilities used include natural gas, electric power and fresh water

Benicia Products

- California gasoline - "CARBOB"
  - 80% CARBOB distributed through pipeline system
  - 20% finished gasoline blended at refinery terminal
- Major supplier of military jet fuel in northern California (pipeline)
- Refinery also produces Ultra Low Sulfur Diesel (ULSD)
- 2009 startup of Butamer Unit (isobutane)
- Benicia Asphalt Plant supplies 25% of northern California asphalt market (shipped by truck)

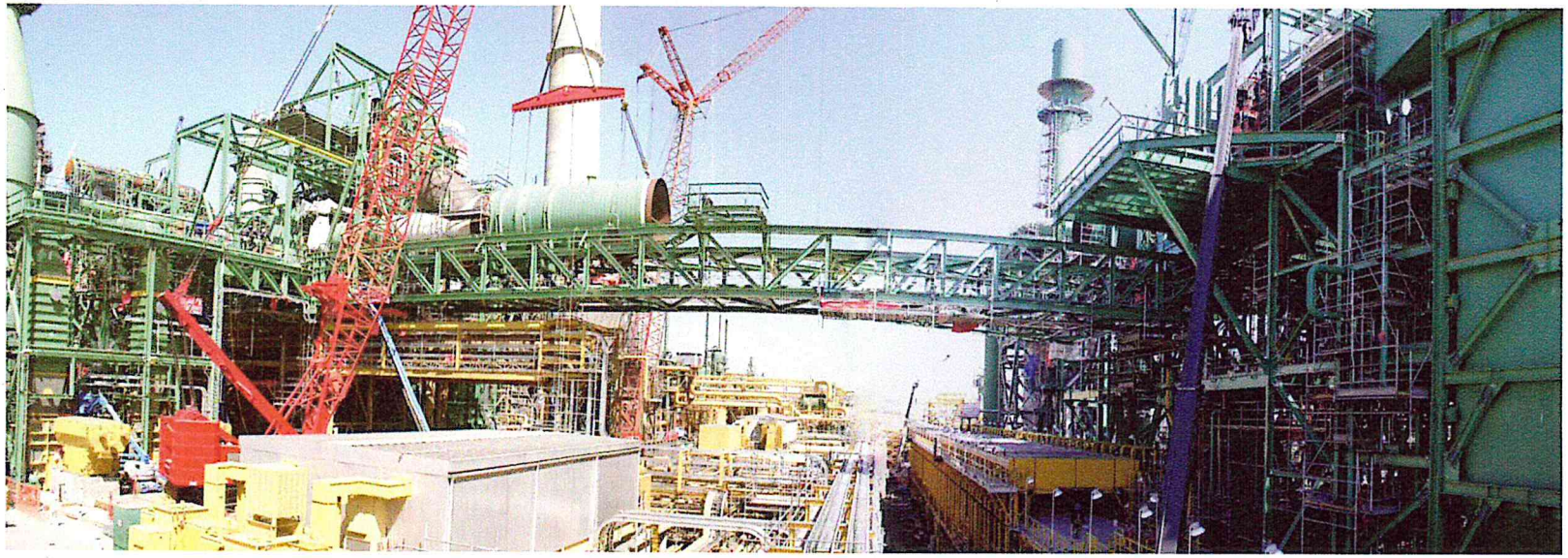
Flue Gas Scrubber

- Reduces SO_2 emissions from the Main Stack
- Retire existing furnaces and build new energy-efficient furnaces

Flue Gas Scrubber

Site and Foundation

Flue Gas Scrubber

11 Goggle Valves – some as large as 166" in diameter

Flue Gas Scrubber - Overview