

## Downstream

Mike Wirth Executive Vice President Downstream

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## What We Accomplished in 2007

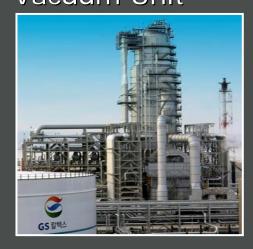
**Improved Base Business** ✓ Record Safety ✓ Major Asset Divestments Reliability Refinery **Delivered 16% ROCE** Increased Scale & Flexibility ✓ South Korea Upgrade ✓ El Segundo Upgrade ✓ U.K. Caspian Integration



## **Added Scale and Flexibility in Asia**



## Yeosu Refinery, South Korea – Heavy Oil Upgrade Vacuum Unit



Hydrocracker



Lube Oil Plant



- One of the world's largest vacuum columns
- Lower crude costs ~\$1/bbl

33 MBD light product increase 15 MBD new lube base oils 

## Added Scale and Flexibility in the U.S.



### El Segundo Refinery, California – Heavy Crude Project

#### New Coker Fractionator



- Lower crude costs ~\$1/bbl
- Improved coker reliability
- Increased coker throughput

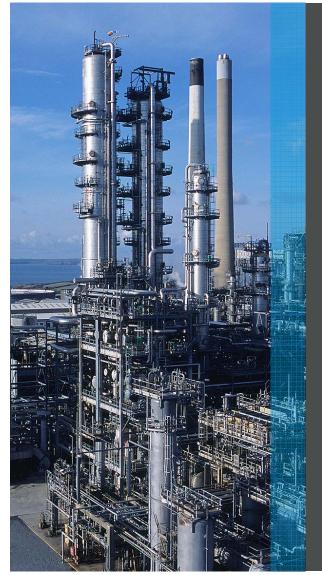


# Right Strategies



## **Leveraging Our Portfolio and Capabilities**





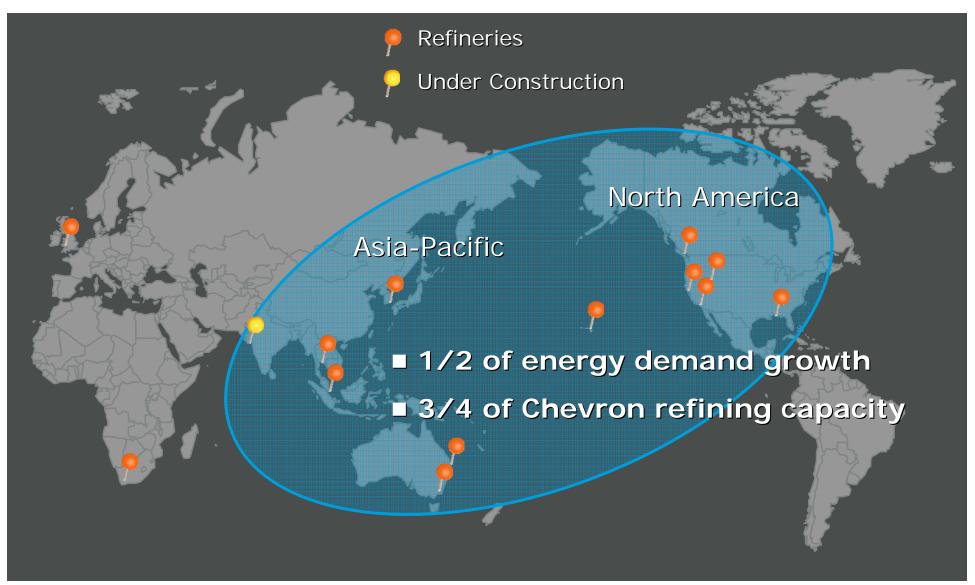
Improve returns and selectively grow, with a focus on integrated value creation
Operational excellence in base business
Focused portfolio high-grading
Disciplined growth in refinery scale

and flexibility

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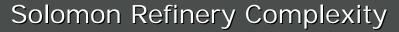
## **Well-Positioned In Growth Regions**

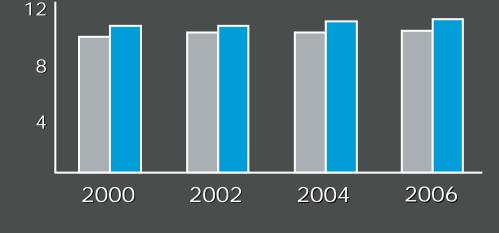




## **Superior Refining Assets**







#### Solomon Net Cash Margin (Indexed)

2002

2004

2006

- Sustained complexity and margin advantage
- Investing to further enhance flexibility
- Improving through reliability and flexibility



\* The eight majors tracked by Solomon

Base

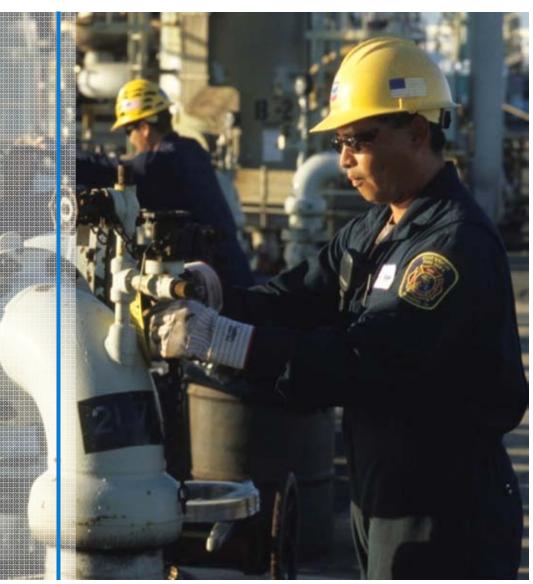
2000

200%

100%



## Effective Execution





## "Reliability Refinery" Is Top Priority

## Superior Capabilities



- Hiring experts
   Reliability specialists
- Reliability University

## World-Class Processes



- Regular asset reliability briefs
- Focus on risk elimination

## Advanced Equipment



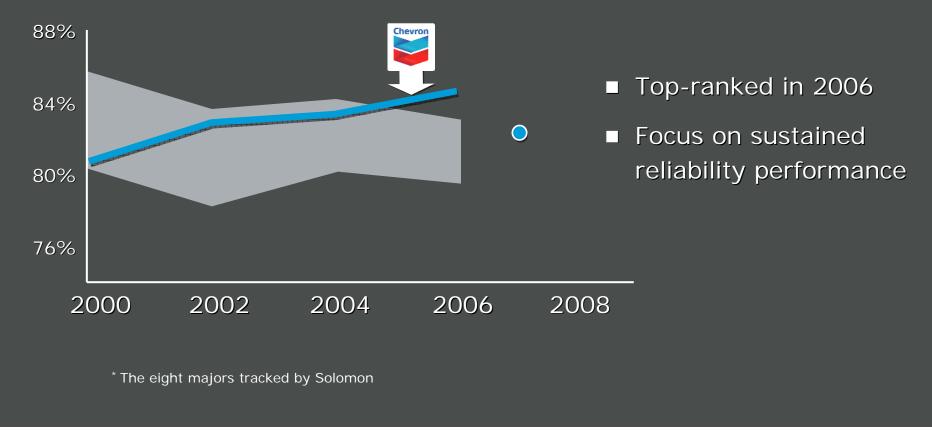
- Risk detection
- Remote monitoring
- Design for Reliability

## Strong Risk Management Culture



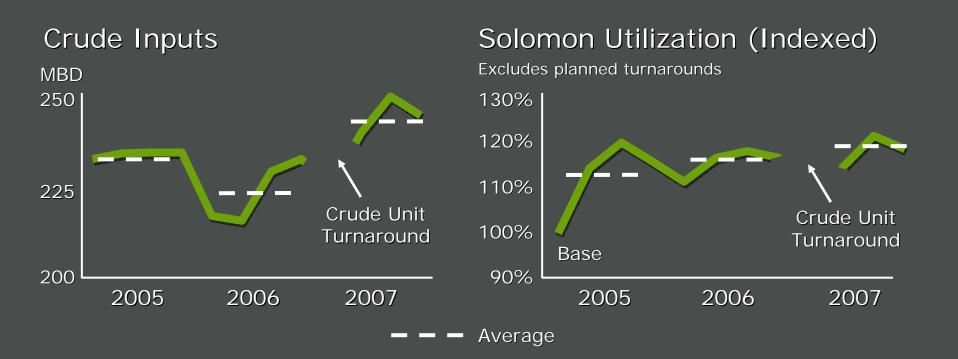
## **Improving Competitive Performance**

Solomon Utilization Chevron vs. International Majors<sup>\*</sup>



## **Richmond Refinery Reliability Improvement**





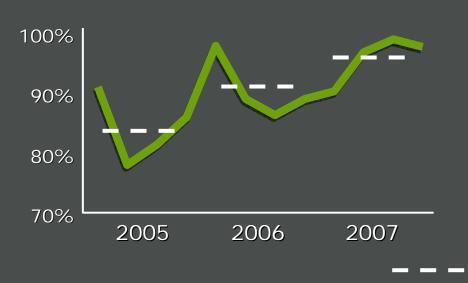
- Design for Reliability process has enhanced performance
- 100+% crude unit utilization since post-fire recovery

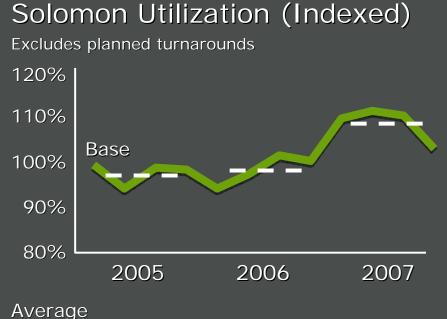
- 100+ risks eliminated in 2007
- 40% fewer incidents

## Pembroke Refinery Reliability Improvement



Steam Plant Availability



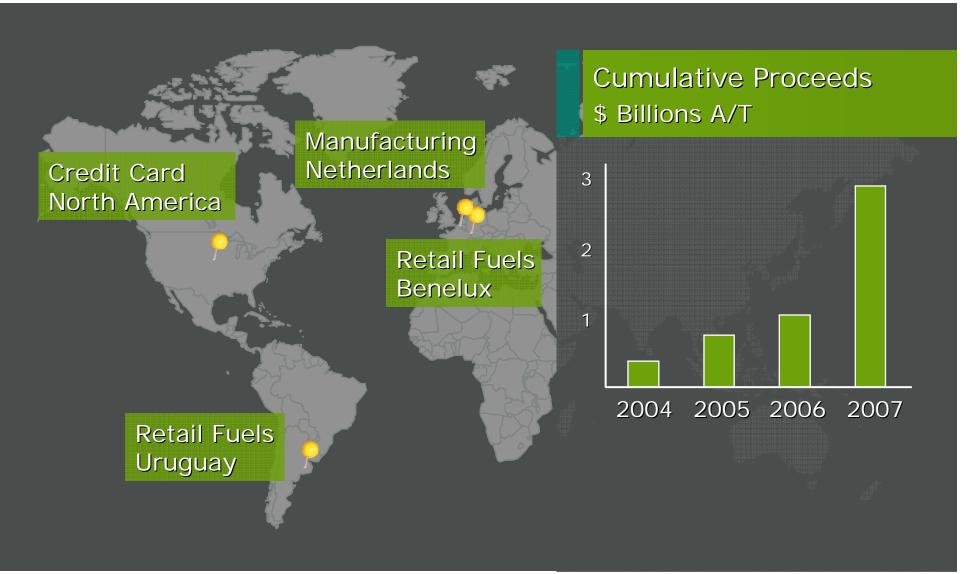


- 11 boiler failures in 2005
- Zero failures in 2007
- Significant utilization impact

- 40% fewer down days
- 50% fewer incidents
- Uptime interval grew 140%

## Significant Portfolio High-Grading in 2007

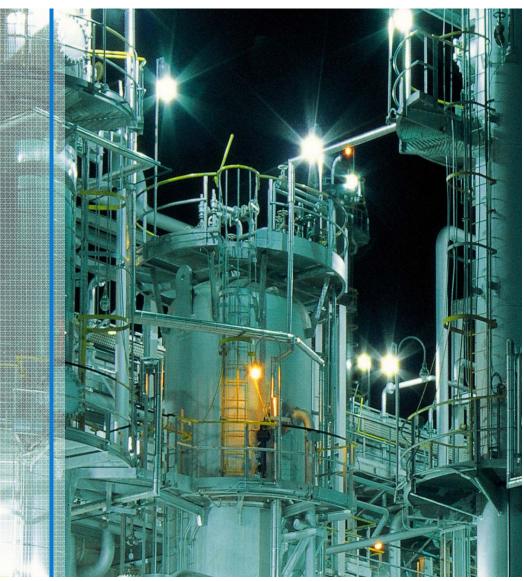




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## Profitable Growth





## **More Focused and Efficient Marketing**

#### Rationalizing Footprint



- Fewer markets
- Simpler model
- Generate cash

#### Higher Return Channels



- Less ownership
- Grow non-retail
- Focused C-Stores

#### Premium Brands

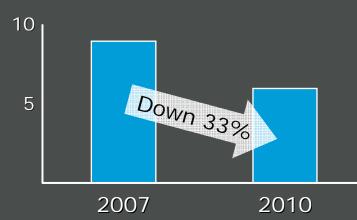


- Reliable supply
- Unsurpassed fuels
- Strong brands

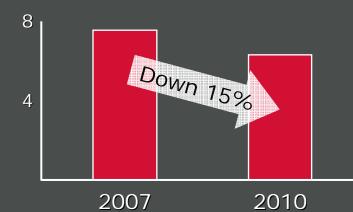
## **Improving Marketing Returns**



Lubricants Product Line Complexity Thousand Inventory Units



#### Marketing Capital Employed <sup>\$ Billions</sup>



Targeted Benefits by 2010

- Simplified product line
- 70 possible country exits
- More retail sites divested
- Restructuring

- Less capital employed (\$1 B)
   OOV of rotal field through
  - 80% of retail fuel sold through higher return channels
  - Lower operating costs (\$0.7 B)



## **Increasing Integration to Capture Value**

#### PNZ Heavy





#### El Segundo



#### Asia High-Mercury





#### Asia-Pacific



#### **Caspian Blend**





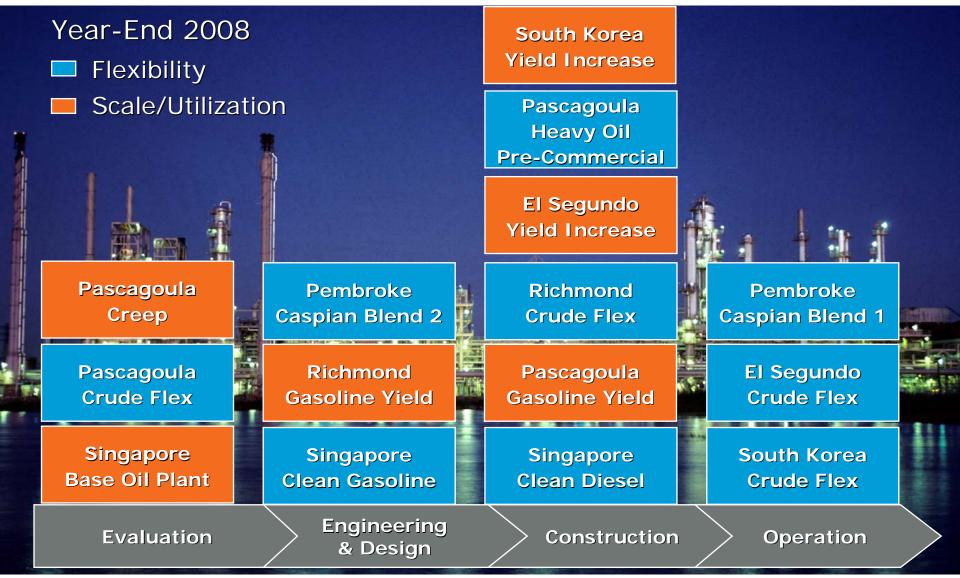
#### Pembroke



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## **Adding Scale and Flexibility**





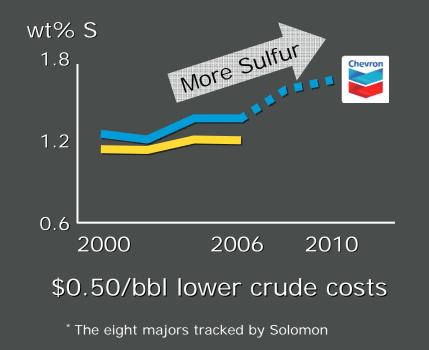
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## **Investing to Increase Margins and High-Value Production**

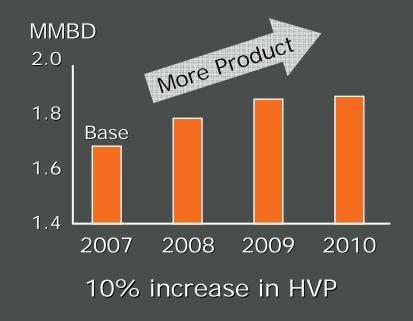


Heavier/Higher Sulfur Slate Capacity Creep

#### Crude Sulfur Chevron vs. International Majors\*



#### **High-Value Product**





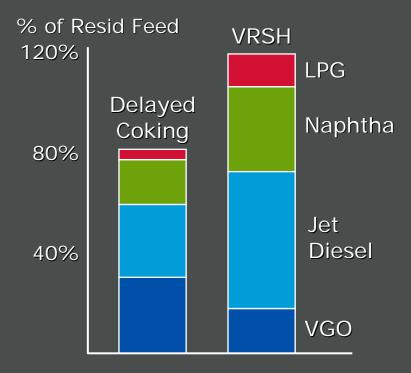
## **Developing Proprietary Technologies**

Vacuum Resid Slurry Hydrocracking (VRSH) Pascagoula Pre-Commercial Plant



**Ultra-Clean Products** 

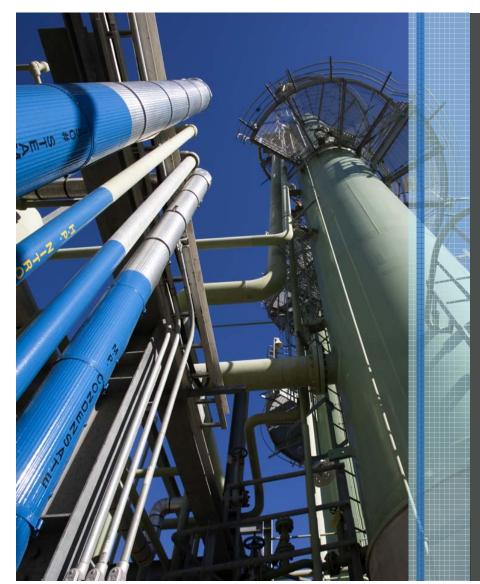




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## **Focus and Execution Are Key**



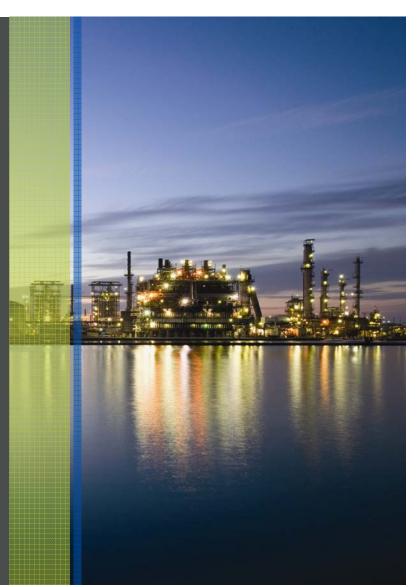


- Sustained reliability
- Portfolio high-grading
- Marketing efficiency
- Greater flexibility/margins
- Cost-effective capacity creep
- Increasing integration value

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## Our Continued Commitment to Earnings and Returns

Improve Utilization by 6% 2008 **Additional Divestments** 2008 Marketing Restructuring 2009 **Reliance Decision** 2009 South Korea Upgrade 2010 **Richmond Upgrade** 2010 El Segundo Upgrade 2010 Pascagoula VRSH 2010



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### **Questions and Answers**





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## **Break**



