

# Upstream

George Kirkland

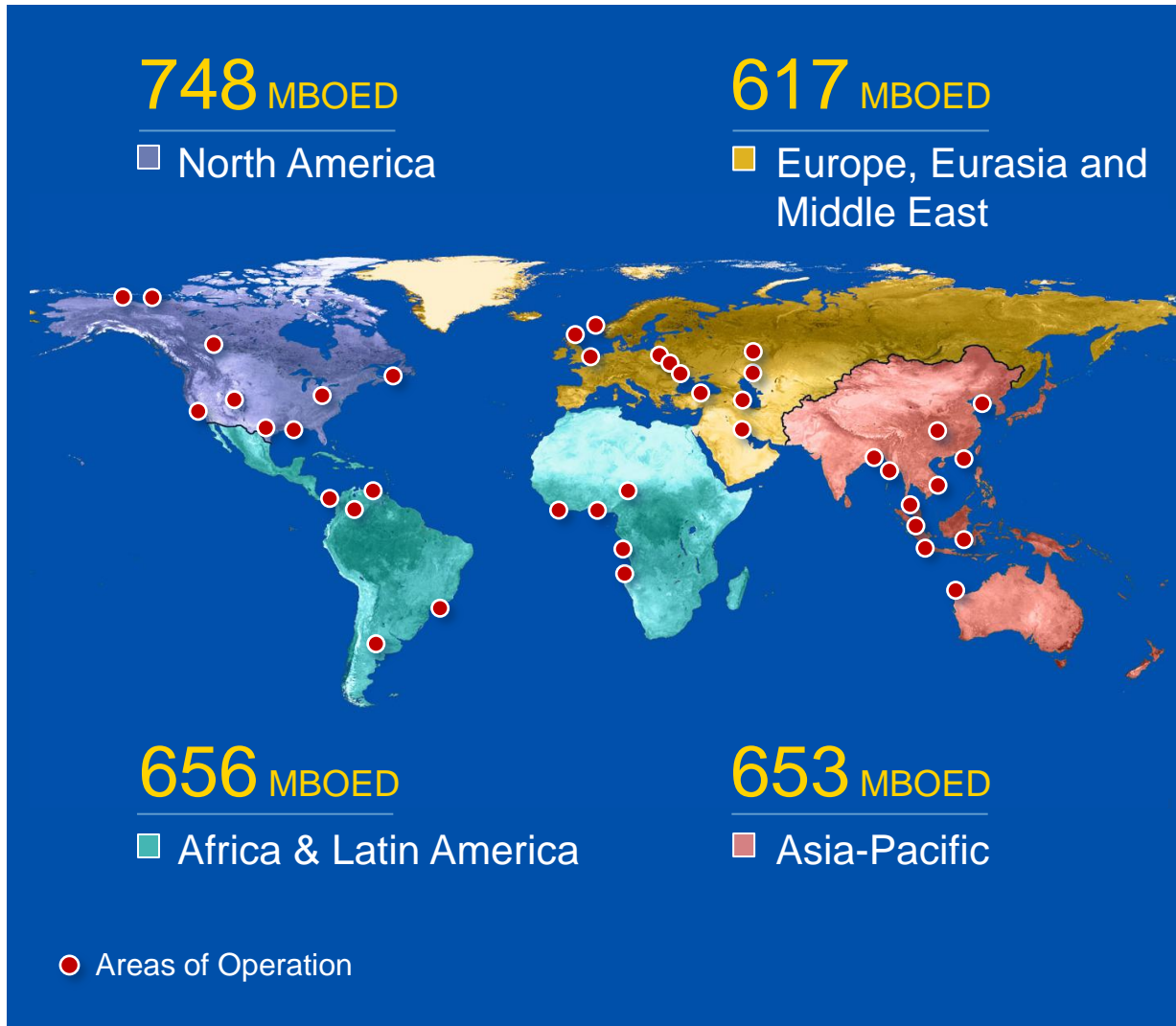
Vice Chairman and Executive Vice President

Gary Luquette

President North America Exploration and Production



# A Strong Worldwide Portfolio



# Upstream Themes



Strategy

Performance

Growth



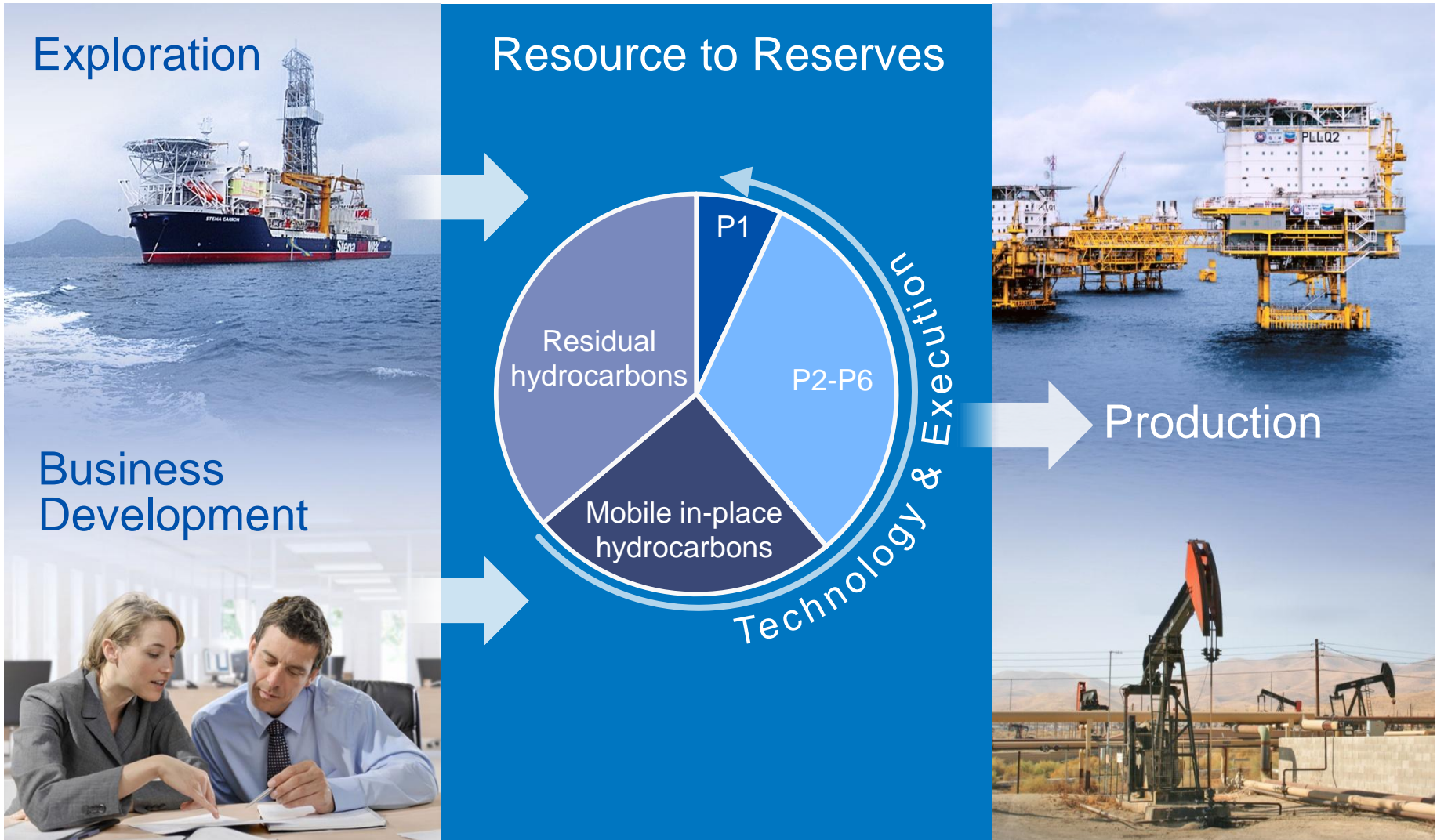
# Upstream Continues to Execute the Right Strategies

## Grow profitably in core areas and build new legacy positions

- Operational excellence
- Maximizing value of base business
- Selection and execution of major capital projects
- Superior exploration performance
- Commercializing large gas resources
- Capturing new core positions



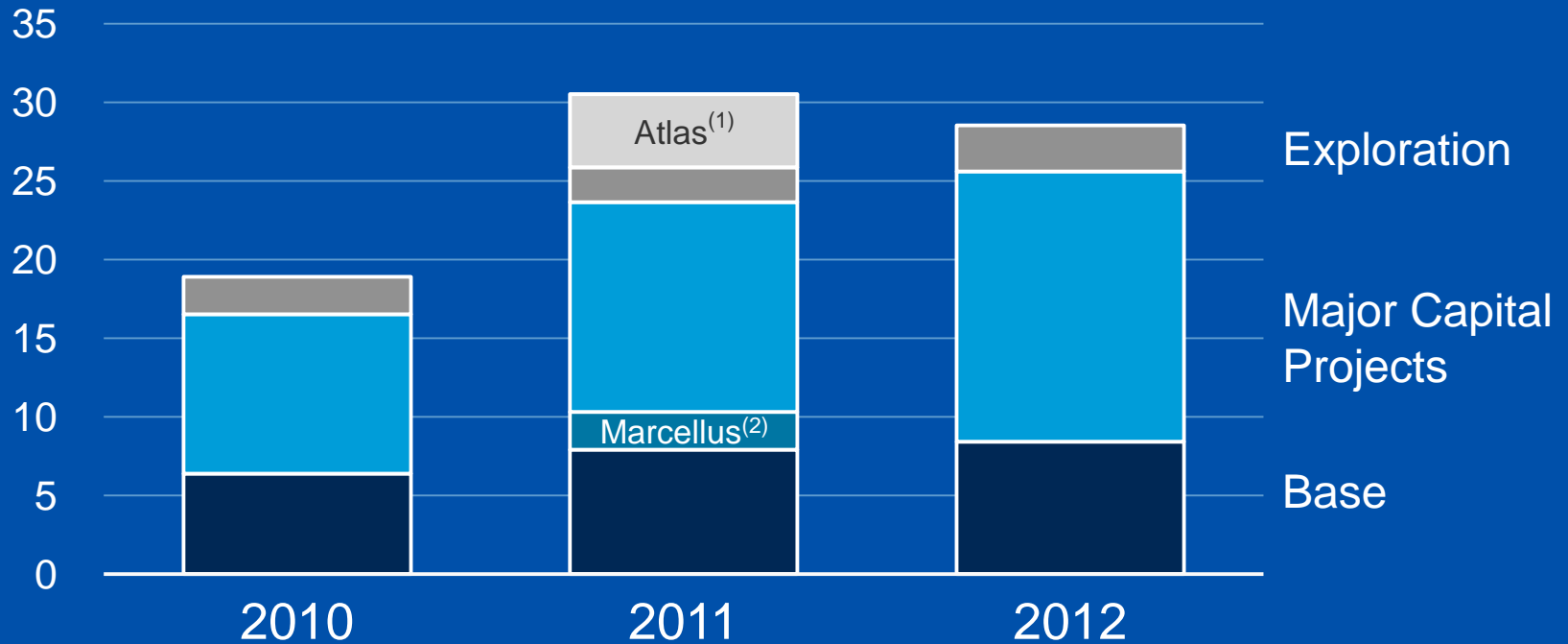
# Resource to Reserves to Production Resource Factory



# Upstream Capital Investments



2012 Capital & Exploratory: **\$28.5**  
\$ Billions



(1) Treated as a business combination; not included in Upstream C&E

(2) Includes additional 2011 Marcellus acquisitions

# Upstream Themes



Strategy

Performance

Growth



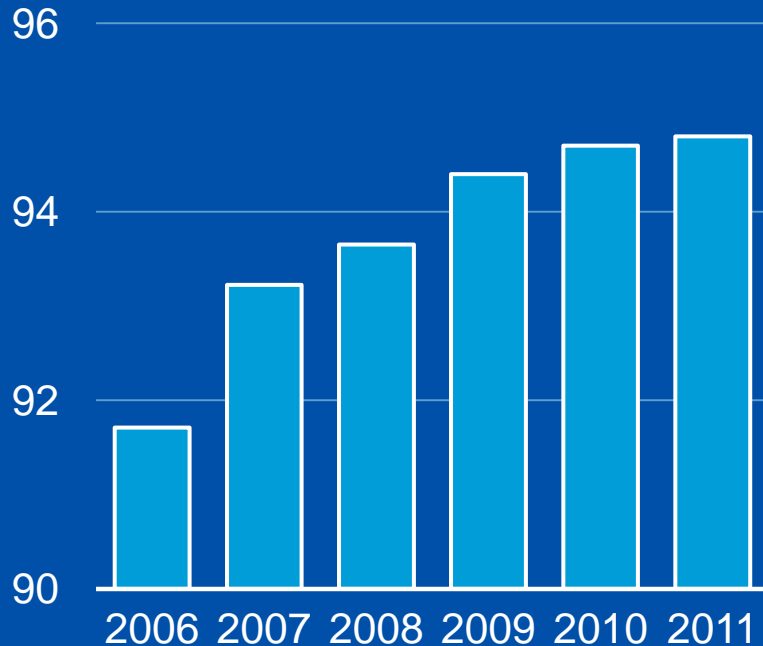




# Base Business Performance Continues to Deliver Value



## Production Efficiency\* Percent



\* Ratio of actual total operated production to assessed production capacity (%)

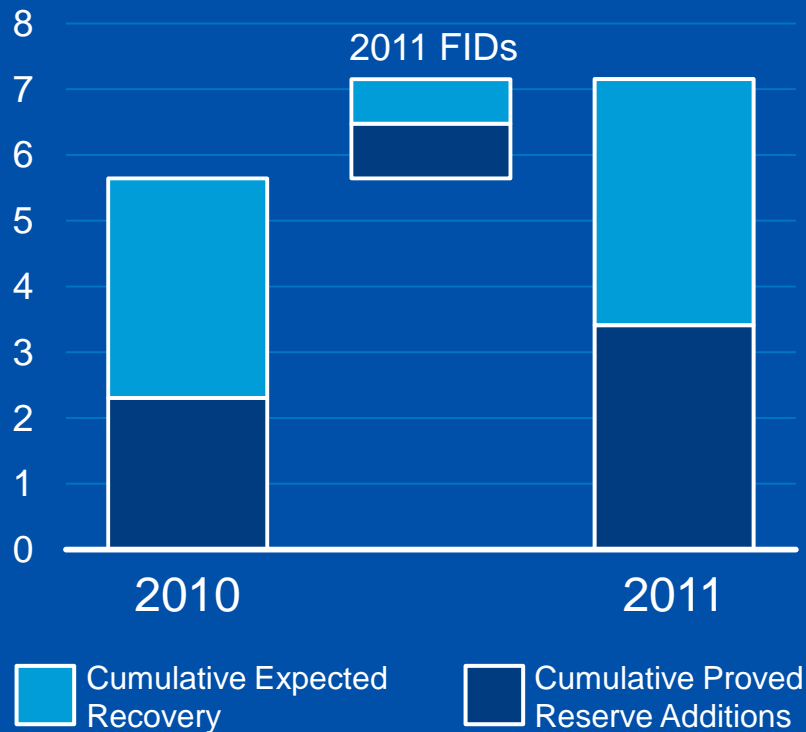
- Efficiency gains deliver cumulative 100 MBOED net production
- Optimization and process improvements generate revenue and cost savings
- Maintain outlook of ~4% base business decline





# Major Capital Projects Continue to Drive Long-Term Reserve Growth

## Cumulative MCP Resources\* and Proved Reserves (Billion BOE)



In 2010, expected recovery of 30 sanctioned greenfield MCPs

**5.6 billion BOE**

Including 2011 project sanctions, expected recovery increases to

**7.2 billion BOE**

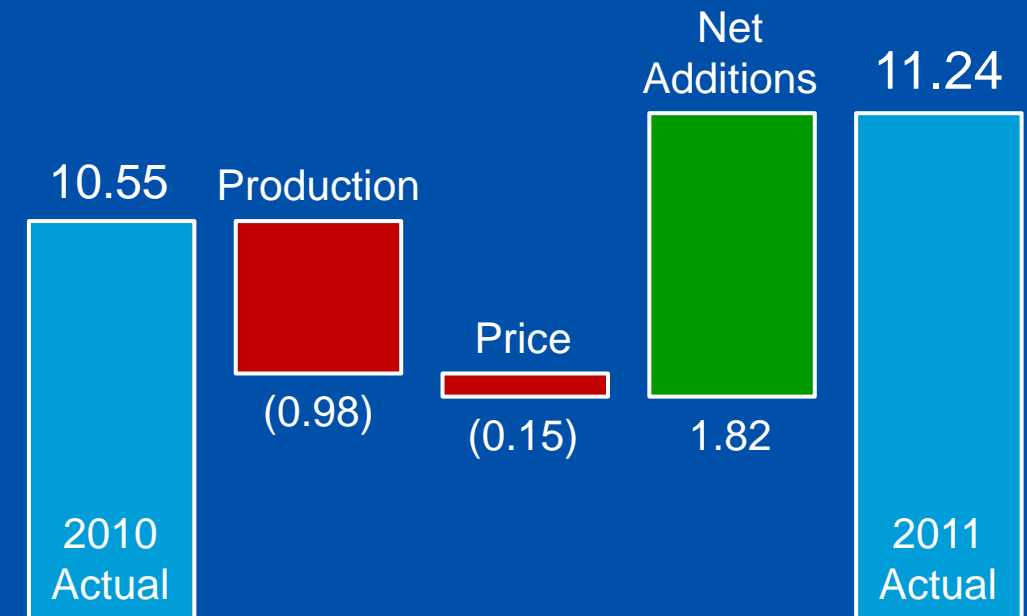
Percent proved reserves increases from

**40% to 49%**

# Strong Reserve Performance



2011 Reserve Replacement Ratio: **171%**  
Billion Barrels of Oil-Equivalent



Based on SEC proved reserves

Reserve Replacement Ratio

**102%**

3 Year

**92%**

5 Year

**94%**

10 Year

# 2011 Startups and Ramp-ups

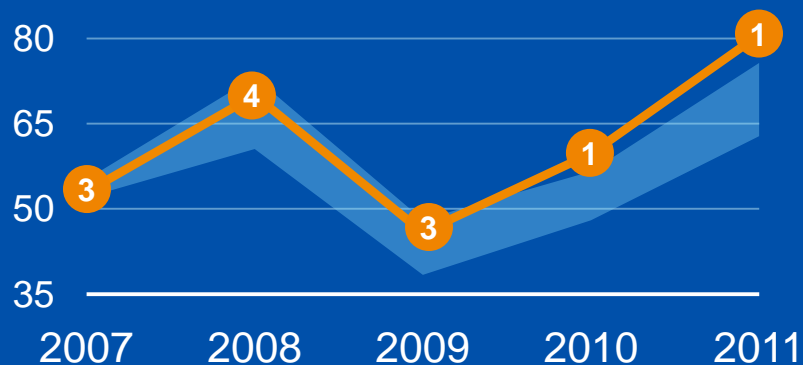


# Portfolio Delivers Strong Realizations and Competitive Cost Structure



## Realizations

\$ per BOE



Realizations lead peer group for second consecutive year

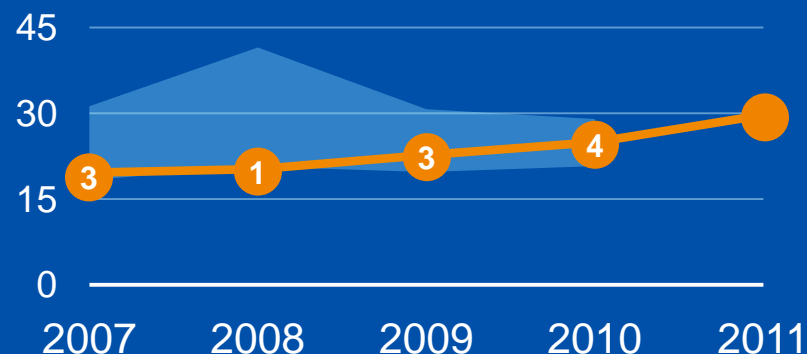
- Oil-linked portfolio
- Disciplined project selection

**1** Ranking Relative to Competitors  
1 being the best

Competitor Range  
BP, COP, RDS, TOT, XOM

## Upstream Costs

\$ per BOE



Cost structure remains competitive

Higher oil prices increase:

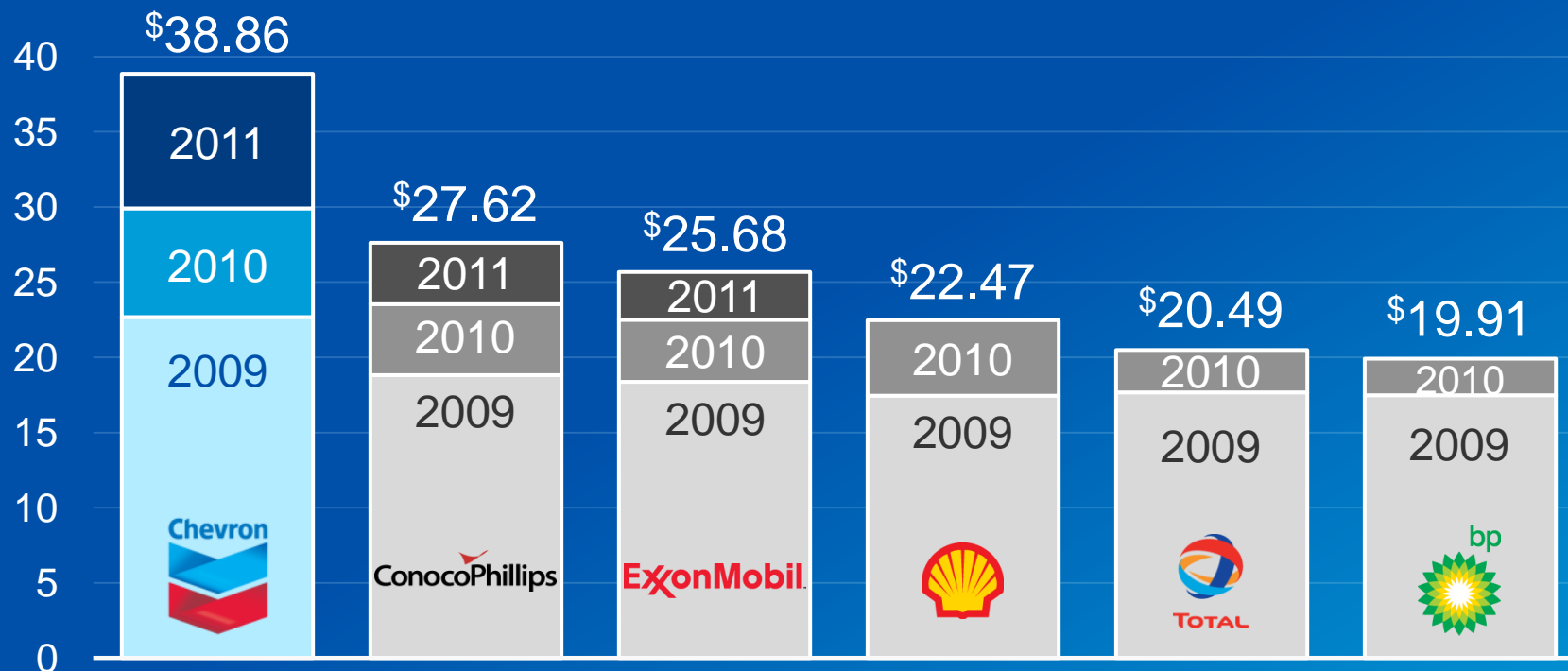
- Taxes and royalties
- Fuel expense

# Portfolio Delivers Superior Cash Margins



## Oil and Gas Cash Margins

\$ Per BOE

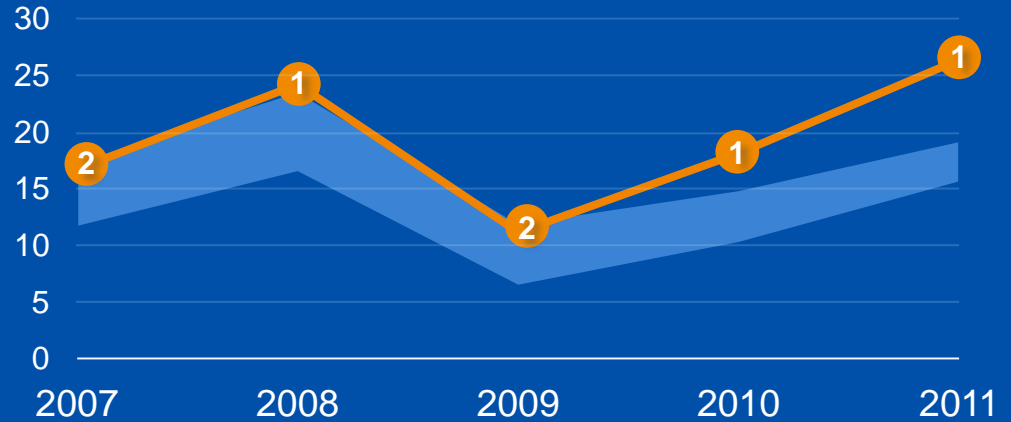


# Superior Financial Performance Distancing From Competitors



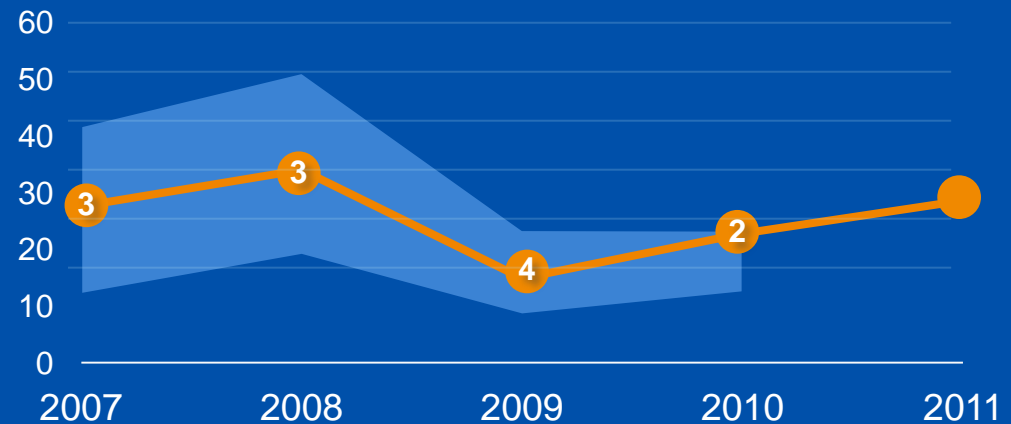
**\$26.36**

2011 Adjusted  
Earnings Per BOE



**29%**

2011 Adjusted  
ROCE



**1** Ranking Relative to Competitors  
1 being the best

**■** Competitor Range  
BP, COP, RDS, TOT, XOM

# Upstream Themes



Strategy

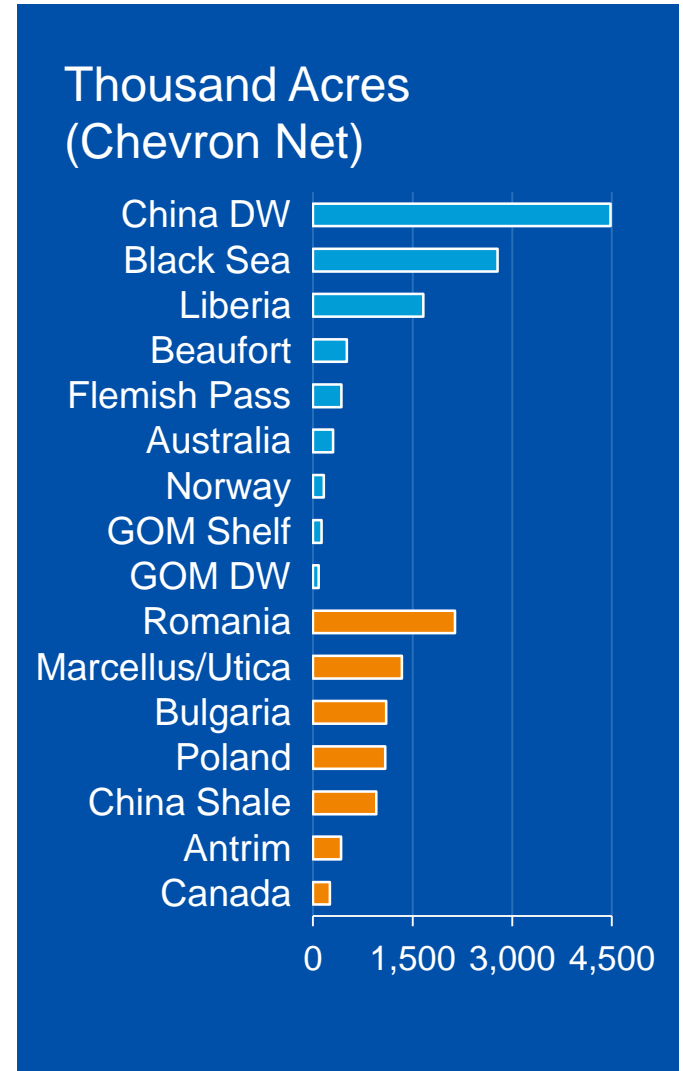
Performance

Growth





# 18 Million Acres in Portfolio Additions Since 2009



# Consistent Exploration Success



**10.5** BBOE  
Resource Adds  
10 Year Total

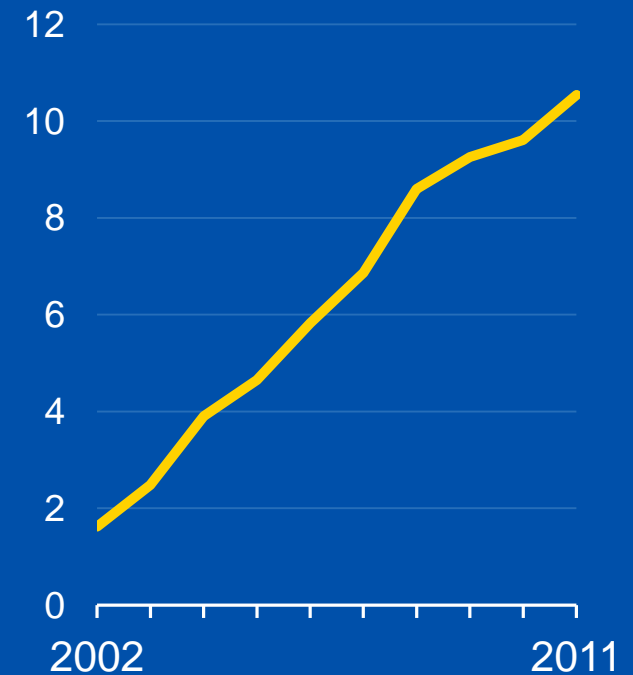
**49%**  
Success Rate  
10 Year Average



● 2011 Key Discoveries  
△ 2010 Key Discoveries

Cumulative Resources\*  
Added From Exploration

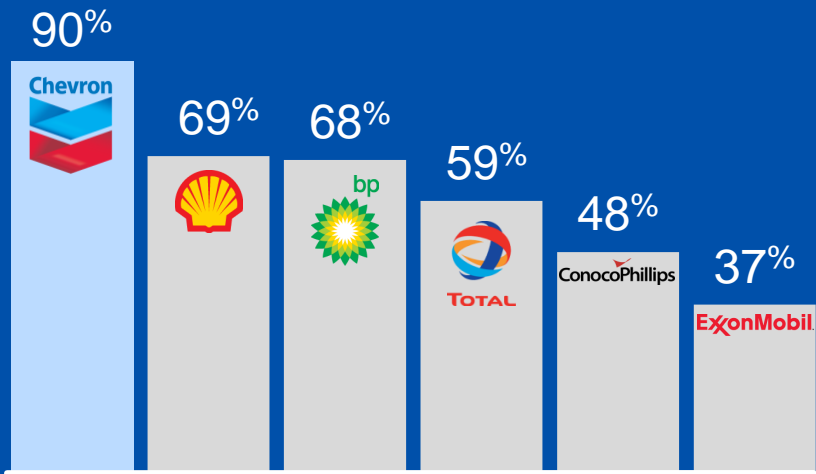
BBOE



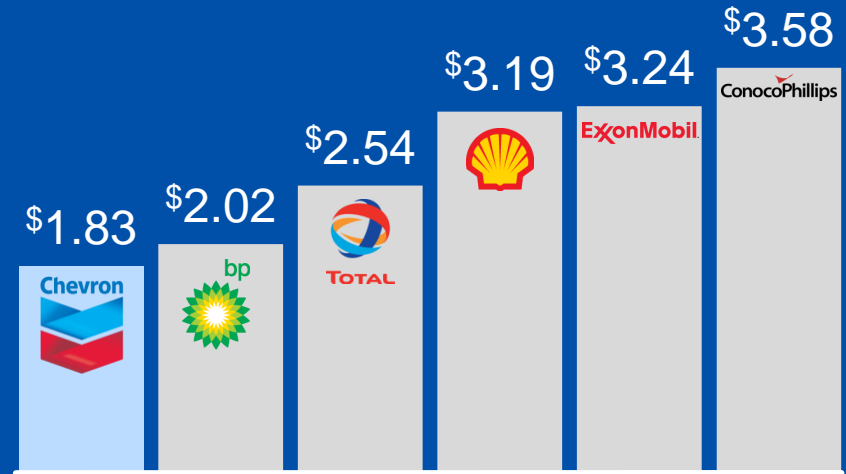
# Superior Exploration Performance



## Resource\* Replacement 2002-2010 Percent Replacement



## Average Underlying Finding Costs\* 2002-2010 \$ Per BOE



**59%**

Higher resource replacement  
than competitor group average



**37%**

Lower finding costs than  
competitor group average

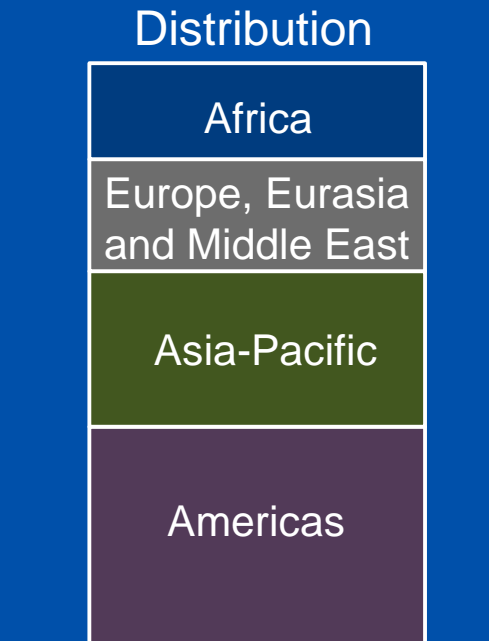
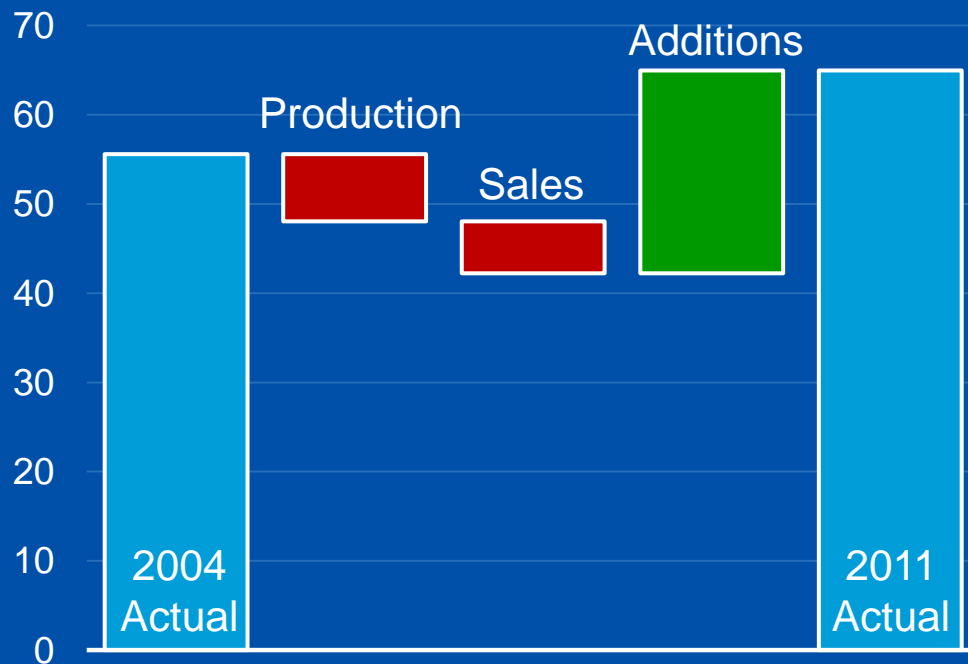
\*Based on Wood Mackenzie estimates of commercial plus sub-commercial resources

# Delivering Sustained Resource Growth



2004 – 2011 Resource\* Growth: **17%**

Billion Barrels of Oil-Equivalent



# Key 2012 Exploration Activity Conventional



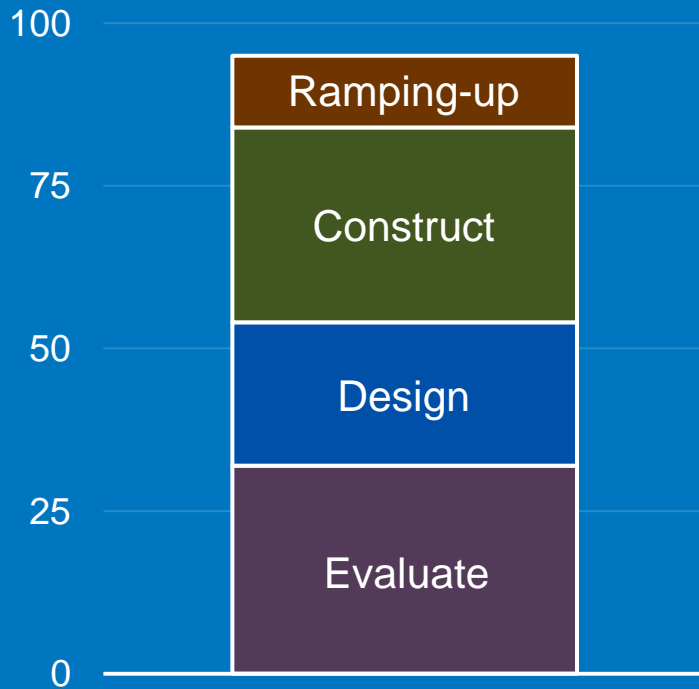
# Key 2012 Exploration Activity Unconventional



# A Strong Project Inventory Drives Future Growth

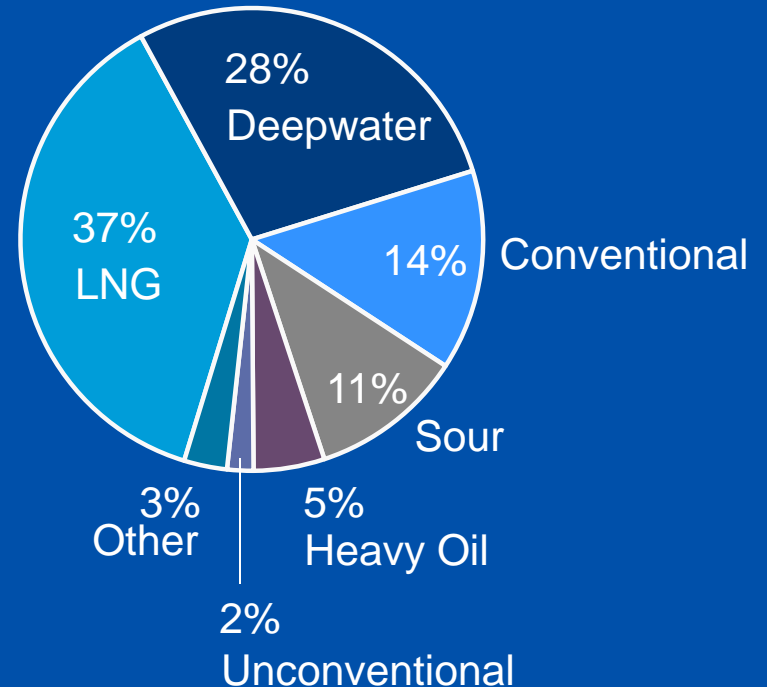
## Project Phase

Number of Projects



## Project Spend

Spend estimates for 2012 to 2017 as a percentage of total spend



# Continued Growth From Major Capital Project Startups Between 2012 and 2014



**28** Project Startups  
>\$250MM net Chevron Share

**11** Project Startups  
>\$1B net Chevron Share



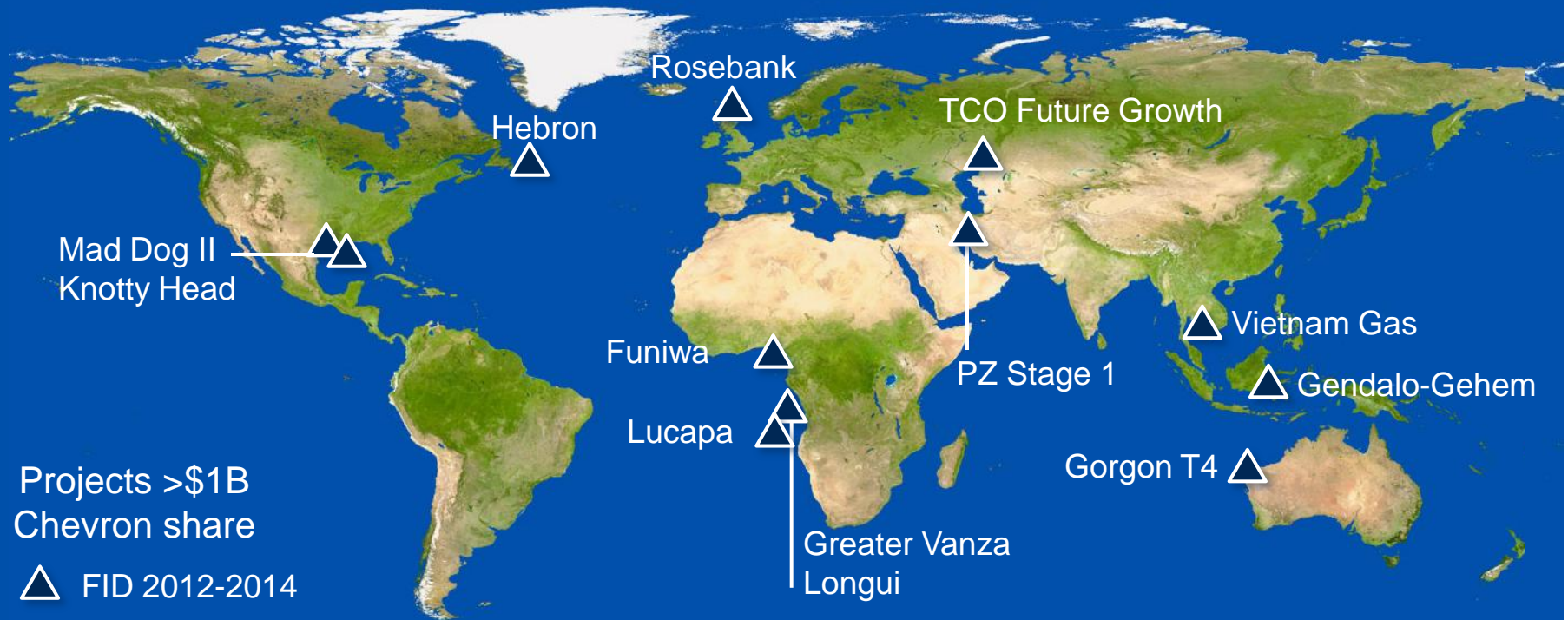


# Advancing the Inventory

## FID Milestones – 2012 to 2014



**12** Project FIDs >\$1B net Chevron Share





# Major Capital Projects Drive Future Growth

**950** MBOED

in Construction and  
Design

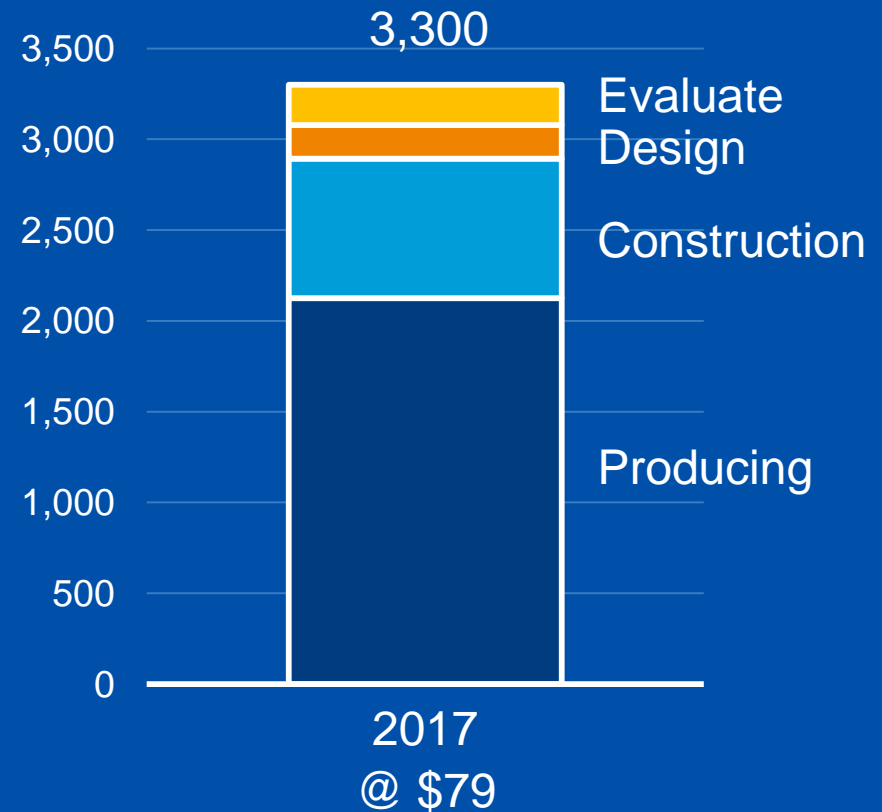
**Progressing**

Design/Evaluate  
Projects to FID

**Momentum**

for Future Growth

## Net Production MBOED



# Exposure to Oil Pricing Remains Consistent Through 2017



Current portfolio tilted toward oil and oil-linked gas

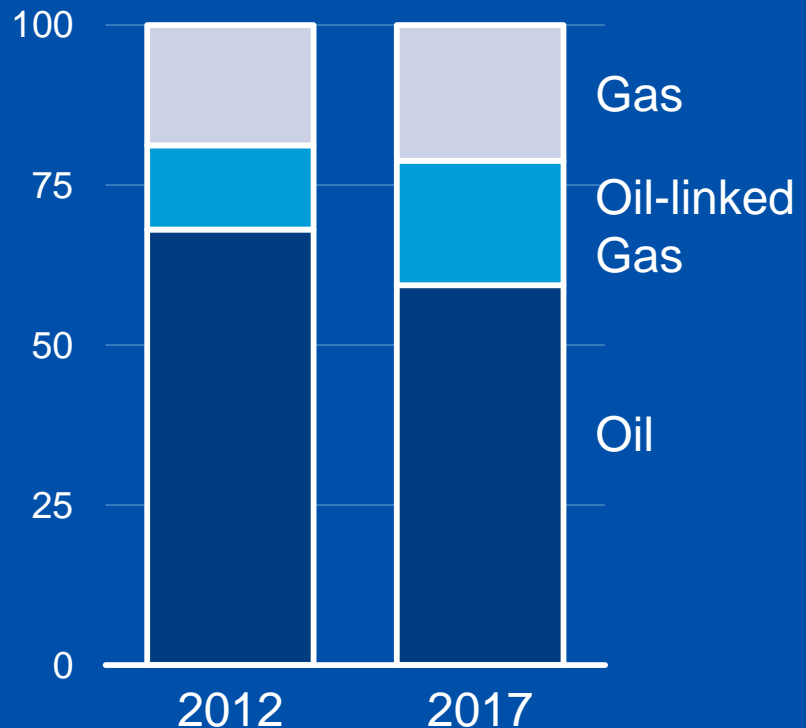
~80%

Growth in LNG maintains exposure to oil pricing in 2017

~80%

Realizations continue to benefit from strong oil weighting

## Net Production Percent



# Upstream Themes



## Future Growth

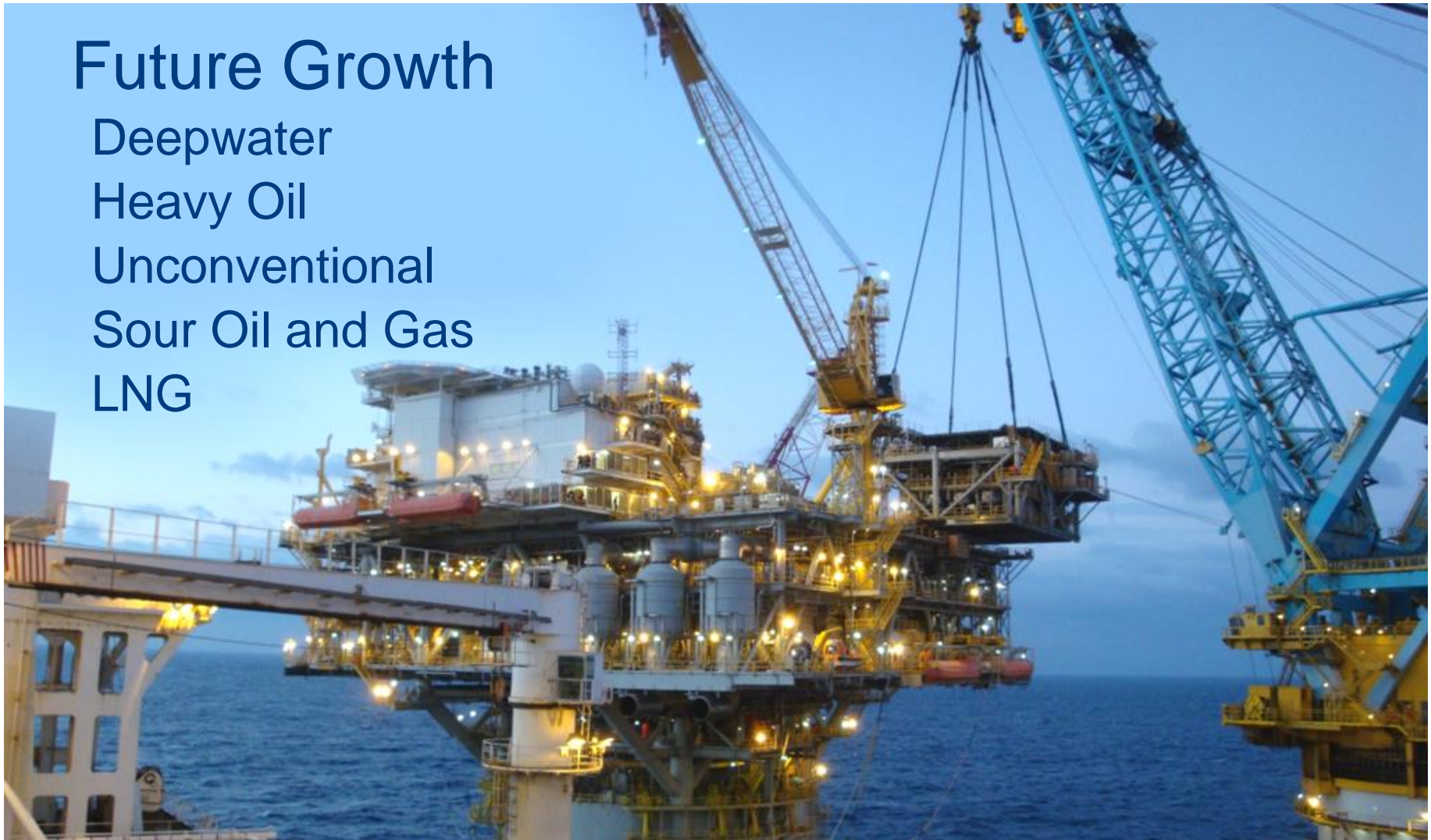
Deepwater

Heavy Oil

Unconventional

Sour Oil and Gas

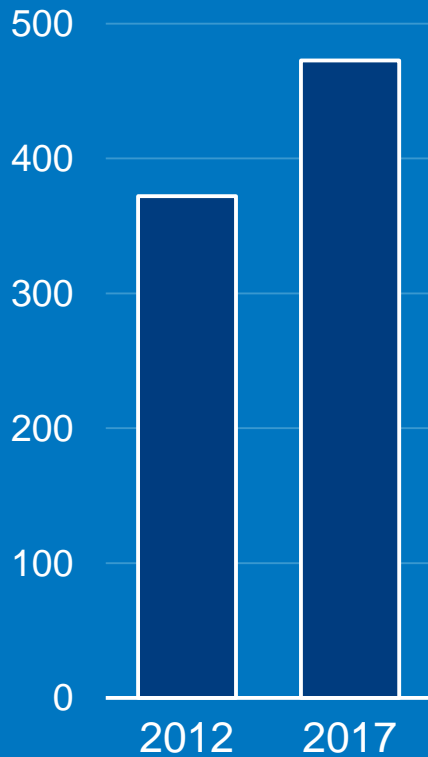
LNG



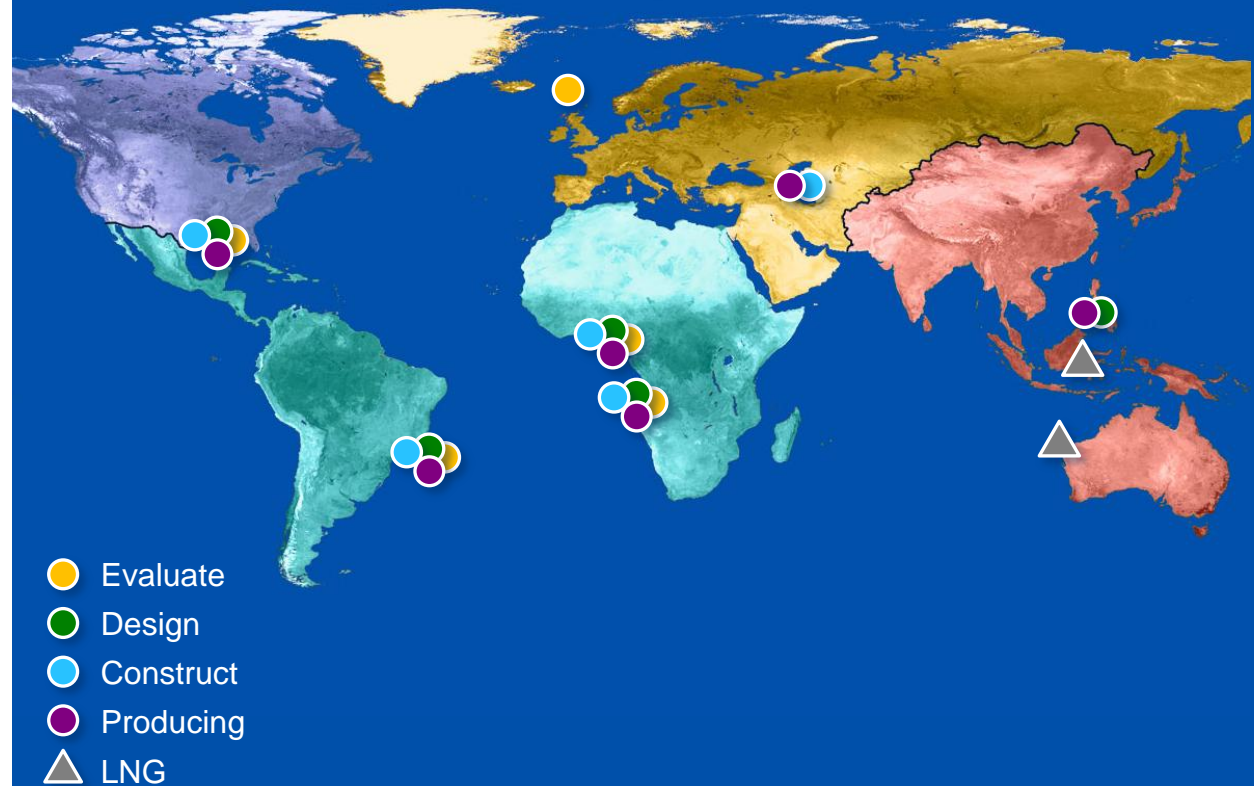
# Deepwater Projects Deliver Production Growth



## Net Production\* MBOED



Deepwater production grows to  
**470** MBOED by 2017



# Growth in Deepwater from 2012 Startups



## Usan

- February startup
- Peak capacity of 180 MBOD
- Ramp up to peak capacity in ~1 year



## Agbami 2

- Total cost \$1.9B
- Drill and complete 10 additional wells
- Extend 250 MBOD production plateau



## Tahiti 2

- Total cost \$2.3B
- Commenced water injection in February
- Currently drilling and completing additional producers



# Future Growth in Deepwater from Mid-Term Startups

## Jack/St. Malo

- Startup in 2014
- Production capacity of 177 MBOED
- Hull and topsides fabrication underway
- Commenced batch drilling of producers



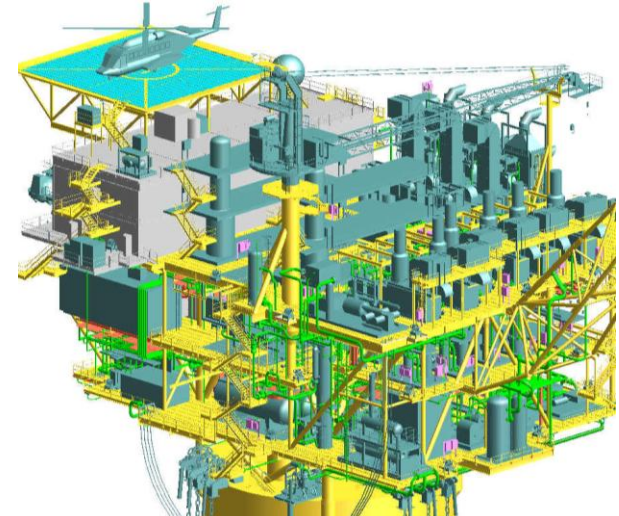
## Big Foot

- Startup in 2014
- Production capacity of 79 MBOED
- Hull and topsides fabrication underway
- Commenced batch drilling of producers



## Tubular Bells

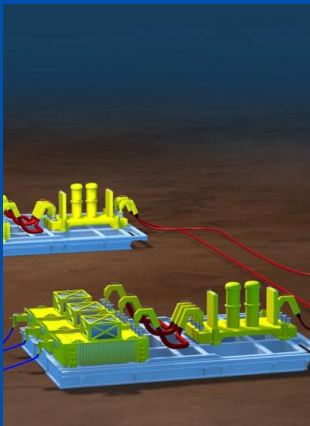
- FID in October 2011
- Startup in 2014
- Total cost \$2.3B
- Peak production of 40-45 MBOED



# Technology to Increase Recovery in the Lower Tertiary



< 10%  
recovery factor



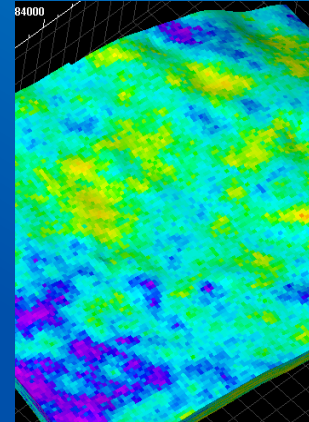
Natural Flow



Seafloor  
Pumps

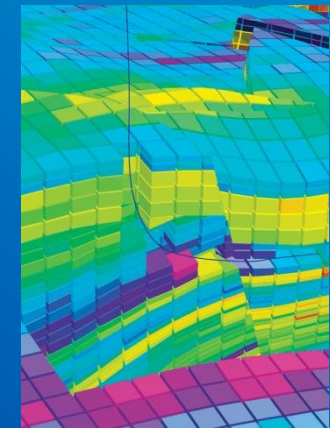


Long Life  
In-Well Pumps



Optimized  
Waterflood

> 20%  
recovery factor



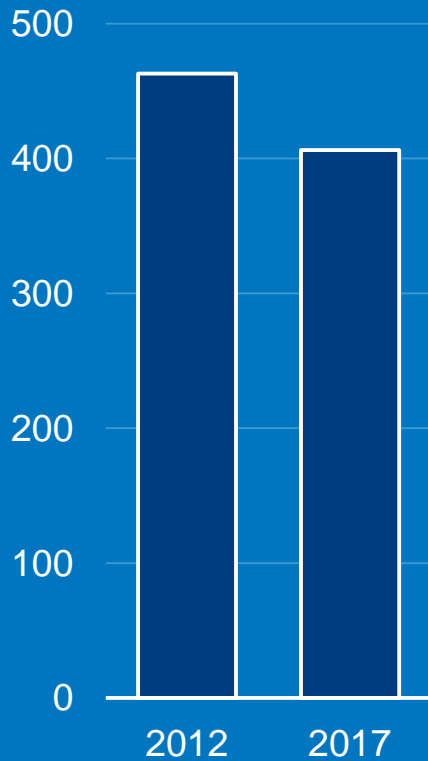
Gas Injection for  
Enhanced Oil  
Recovery



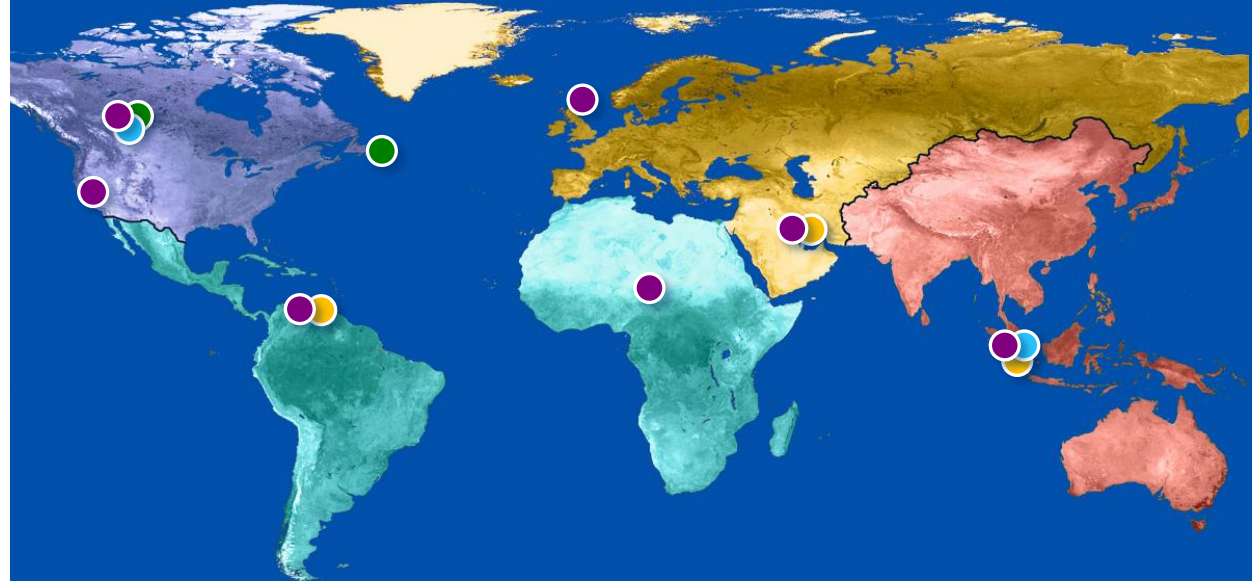
# Heavy Oil Delivers Legacy Production



## Net Production MBOED



Heavy oil production > 400 MBOED in 2017



- Evaluate
- Design
- Construct
- Producing

# Decades of Experience Drive Future Growth Opportunities in Heavy Oil



## Kern River

- Produced >2 billion barrels of oil
- Current recovery factor of ~60%
- Additional recovery potential of ~500 MMBO



## Duri

- Produced >2 billion barrels of oil
- Current recovery factor of ~40%
- Continue to pursue additional expansions



## Wafra

- Produced >400 million barrels of oil
- Current recovery factor of ~5%
- Pursuing full-field steamflood of 1st Eocene



# Technology Enables Improved Recovery



## Best-in-Class

Reservoir and Heat Management

## Dedicated

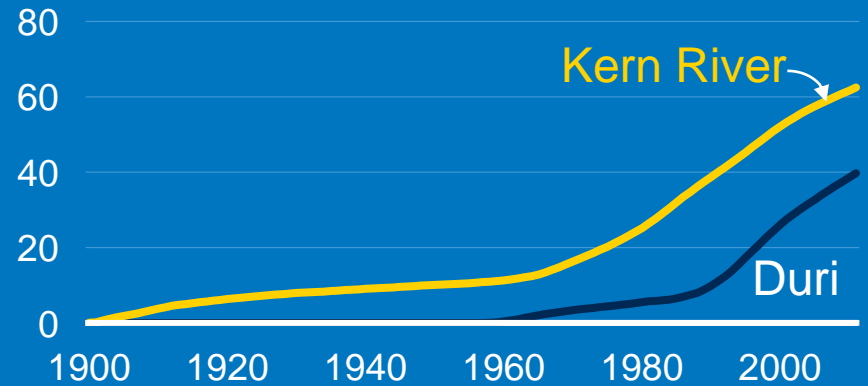
Heavy Oil Center of Excellence

## Worldwide

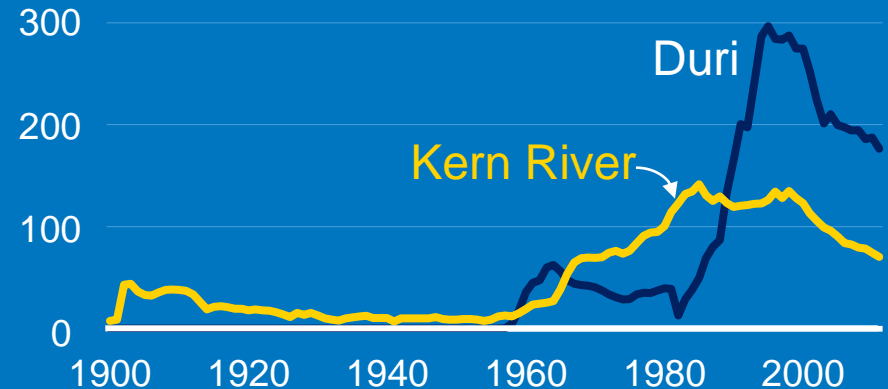
Technology transfer



Recovery (% Original Oil in Place)



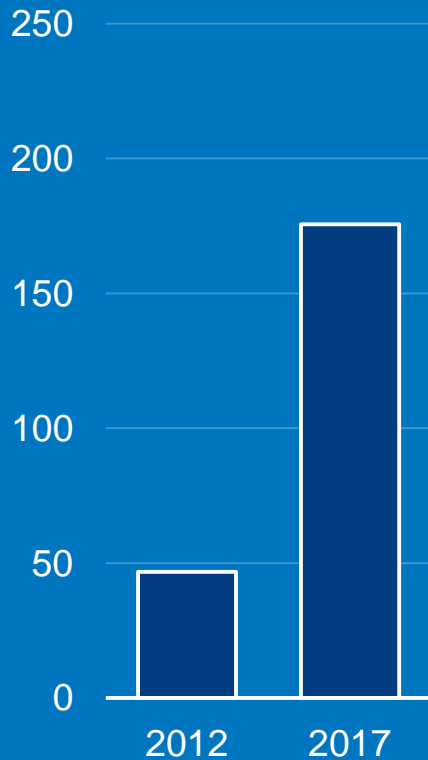
Production MBOD



# Unconventional Oil and Gas Supports Growth Beyond 2017



## Net Production MBOED



## Unconventional production grows to **175** MBOED by 2017



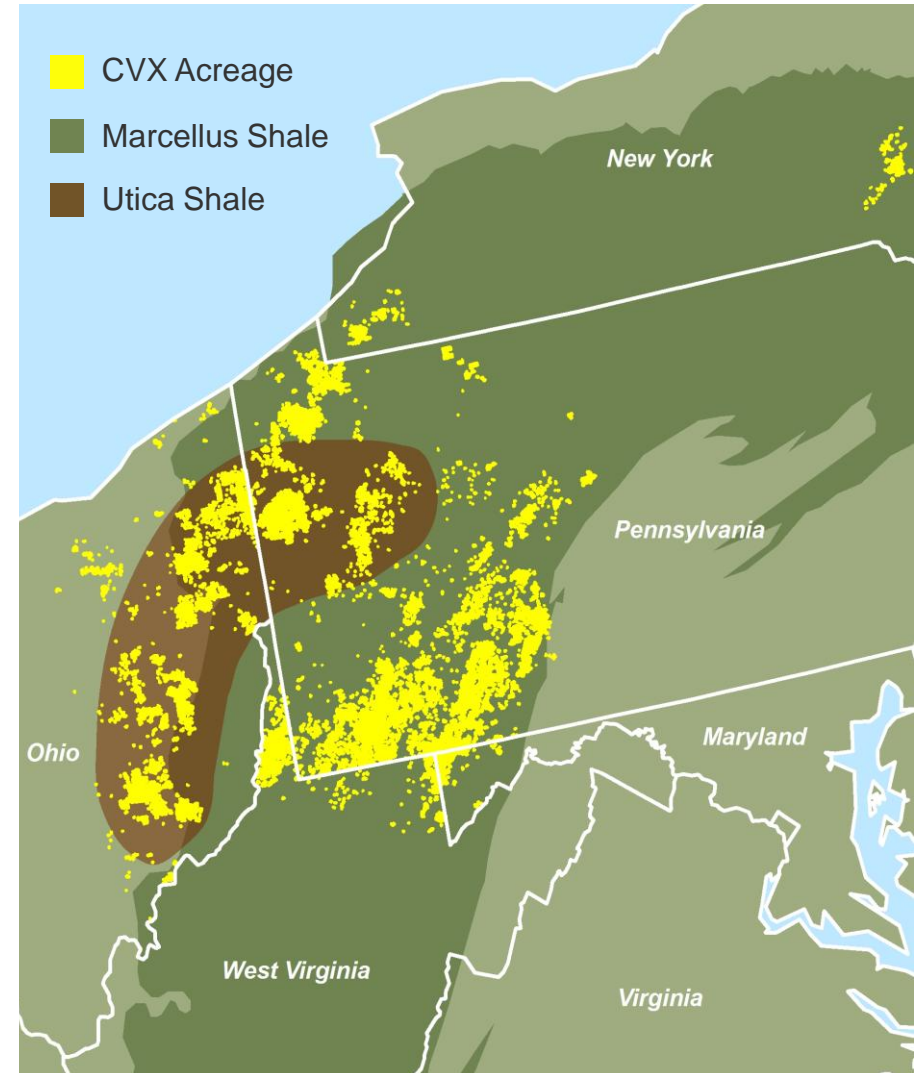
# Strong Position in the Marcellus and Utica Shales

## Marcellus: 700,000+ acres

- Early well results exceeding expectations
- Measured pace at current prices
- Building execution capability to intersect more robust gas market
- Using remaining \$1.3 billion carry

## Utica: 600,000 acres

- Begin evaluating Utica position in 2012



# Diverse Portfolio of Unconventional Resources in the U.S. Lower 48



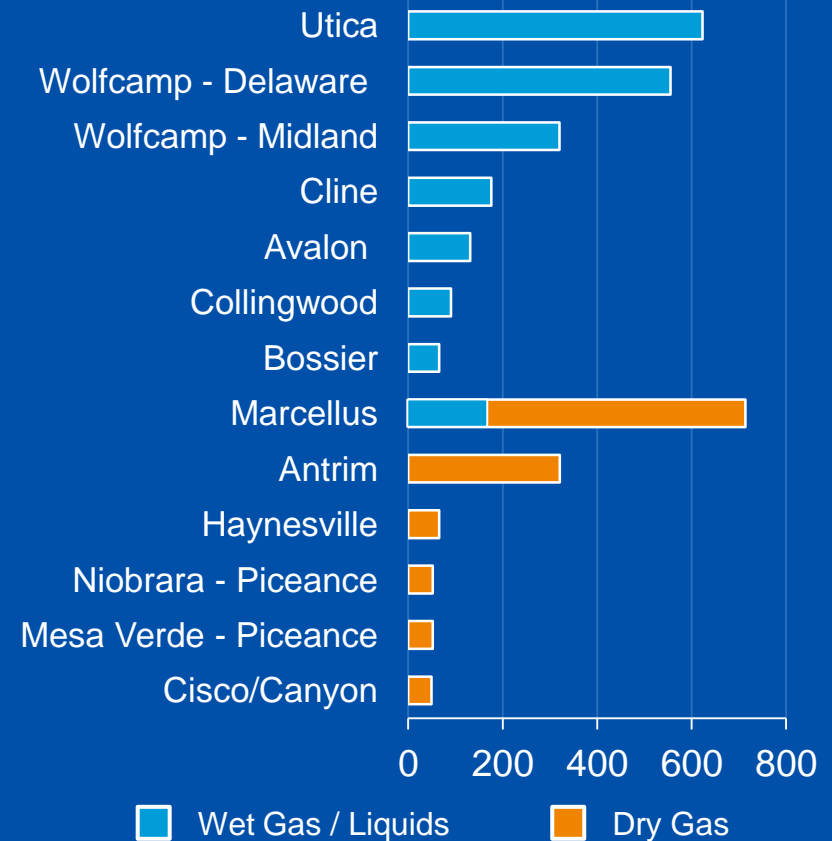
>3 million net acres in 13 unconventional plays

Significant acreage with wet gas and/or liquids potential

Expect to drill >200 wells Midland Basin Wolfcamp in 2012

Continue to benefit from legacy positions in key basins

Thousand Acres (Chevron Net)



# Future Growth

## Unconventional – Focus on Europe

### Poland

- Completed seismic in 2011
- Started 2nd well 1Q 2012

### Romania

- Complete seismic in 2012
- Exploration drilling to commence late 2012

### Bulgaria

- 100% interest in one block
- 1.1 million acres



# Future Growth

## Global Unconventional Opportunities

### Canada

- Increased Duvernay position to ~250,000 acres
- Initial drilling program underway
- Significant liquids potential
- 100% working interest



### Argentina

- 110,000 acres through El Trapial position
- Extended concession to 2032
- Initial exploratory drilling in 2012
- 85% working interest



### China

- Joint Study Agreement with Sinopec covering 940,000 acres
- Commenced drilling initial well 1Q 2012
- 49% working interest





# Upstream Themes



## Future Growth

Deepwater

Heavy Oil

Unconventional

Sour Oil & Gas

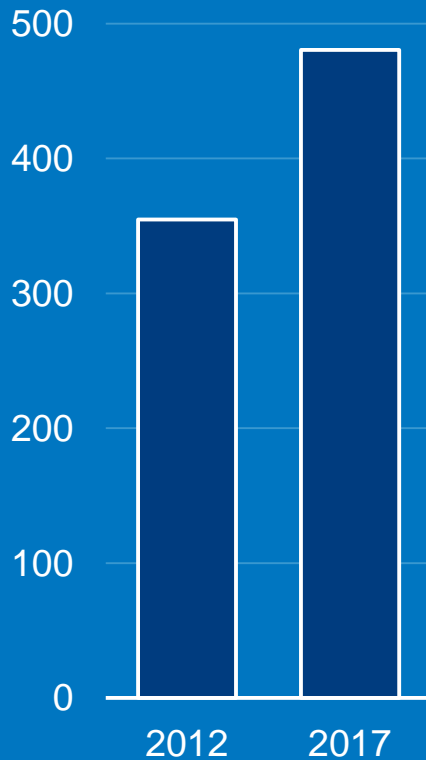
LNG



# Sour Oil and Gas Major Capital Projects Unlock Additional Value



## Net Production MBOED



# Future Growth Sour Oil and Gas



## CPC Expansion

- Phased increase in capacity to 1.4 MMBOD by 2016
- Total cost \$5.4B
- Enabler to Tengiz FGP



## Tengiz FGP

- Expect to enter FEED mid-2012
- Peak capacity of 250-300 MBOD
- Similar to SGI/SGP without sulfur trains



## Chuandongbei

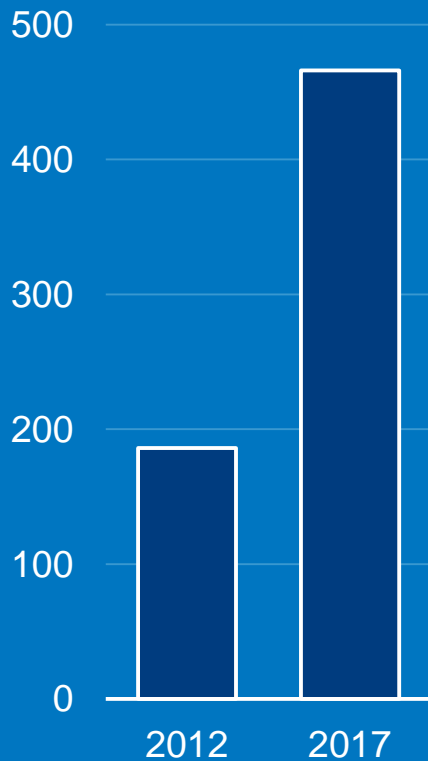
- Startup in 2013
- Total cost \$4.7B
- 560 mmscf/d production capacity
- Estimated recovery of 3 TCF



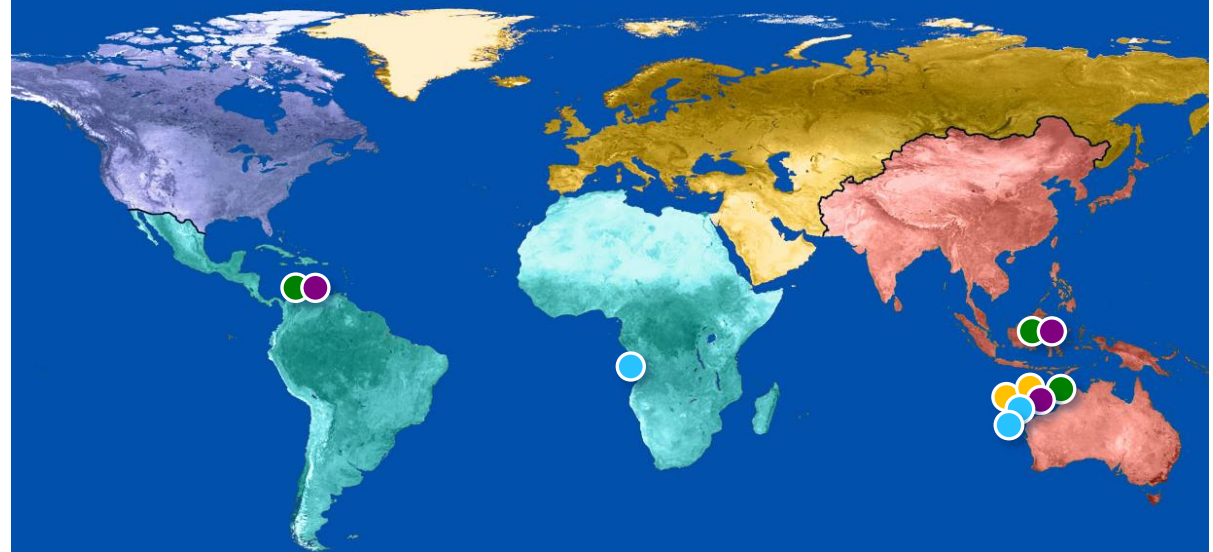
# LNG Drives Future Production Growth



## Net Production\* MBOED



LNG production grows to **460** MBOED  
by 2017



- Evaluate
- Design
- Construct
- Producing

# Angola LNG 2012 Startup



Greenfield 1 x 5.2  
MMTPA LNG plant

**First cargo** in 2Q

**175 MBOED** peak  
production

**Flexibility** to market  
globally



# Gorgon: Achieving Milestones and Advancing Toward First LNG

## Progress

- Construction 40% complete
- Dredging complete
- Development drilling continues
- Construction proceeding globally
- 70% LNG committed under long-term contracts

## 2012 Milestones

- First module on Barrow Island
- Start construction of domestic gas pipeline
- Begin completing Gorgon development wells



Barrow Island, Australia



Pennsylvania



South Korea



Indonesia



# Wheatstone: Awarding Contracts and Ramping Up Construction Activity

## Progress

- FID in September 2011
- Project cost \$29 billion
- Awarded >\$13 billion in contracts
- Construction of roads and infrastructure underway
- 60% LNG committed under long-term contracts

## 2012 Key Milestones

- Completion of pioneer camp
- Cut first steel on platform topsides
- Increase LNG volumes under long-term contract





# Continued Exploration Success Builds Momentum for Australia LNG Expansions

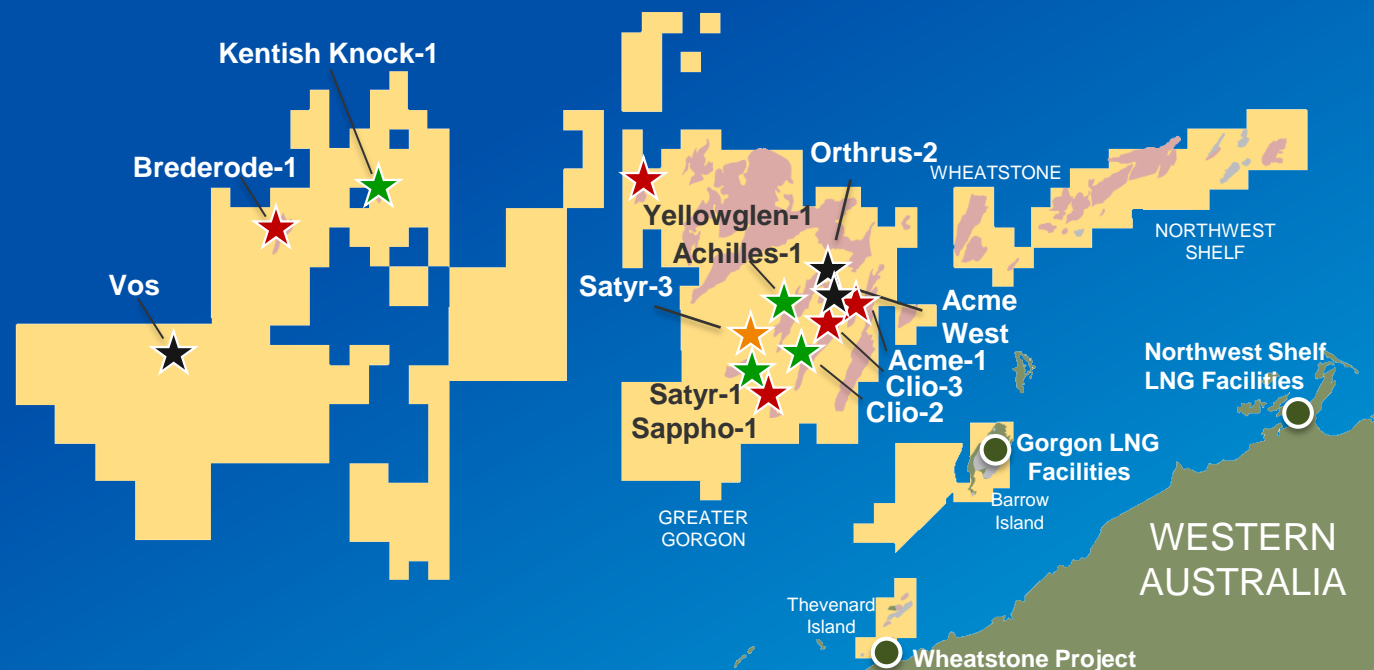
**13** Discoveries  
2009-2011

Added **7** TCF  
of Resources\*

Plan to Drill **4** Impact  
Wells in 2012

## Discoveries

- ★ 2009
- ★ 2010
- ★ 2011
- ★ 2012





# On Track to Deliver in 2017



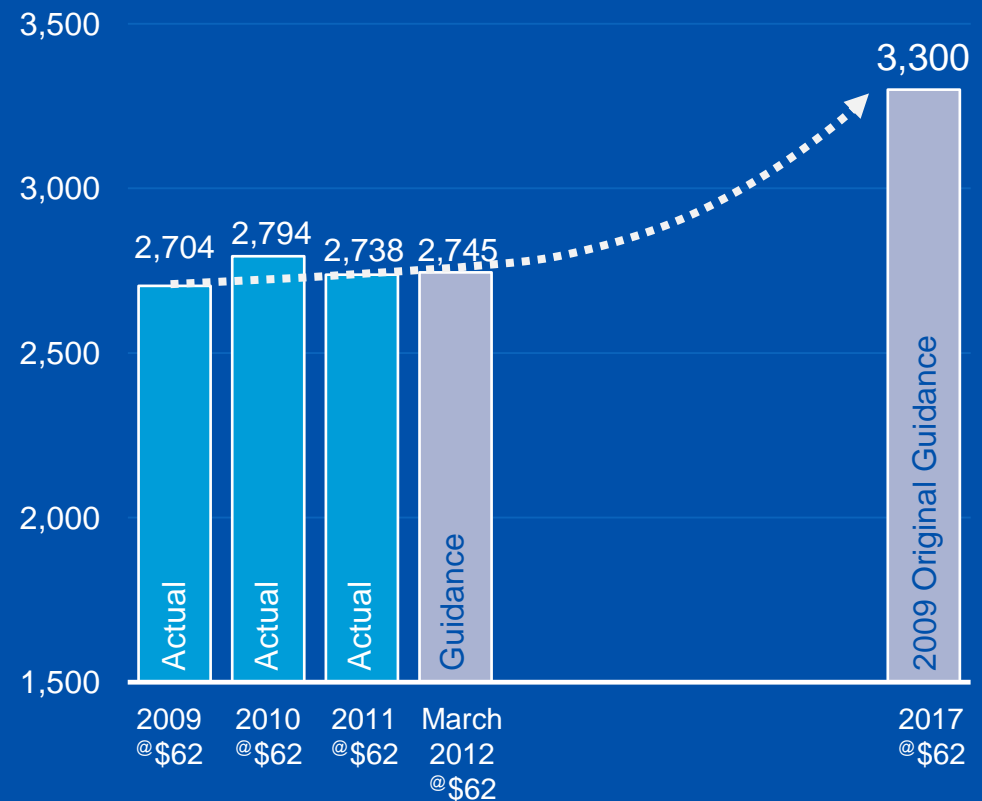
**Superior** portfolio of producing assets with a ...

**Strong** queue of major capital projects ...

That grow production to **3,300** MBOED ...

With **leading** financial performance

## Price Normalized Net Production MBOED



# On Track to Deliver in 2017



**Superior** portfolio of producing assets with a ...

**Strong** queue of major capital projects ...

That grow production to **3,300** MBOED ...

With **leading** financial performance

## Net Production MBOED

