

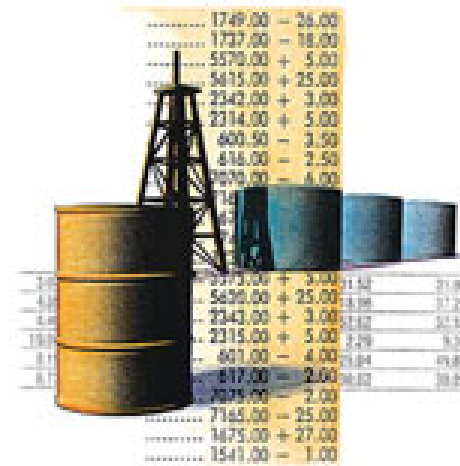
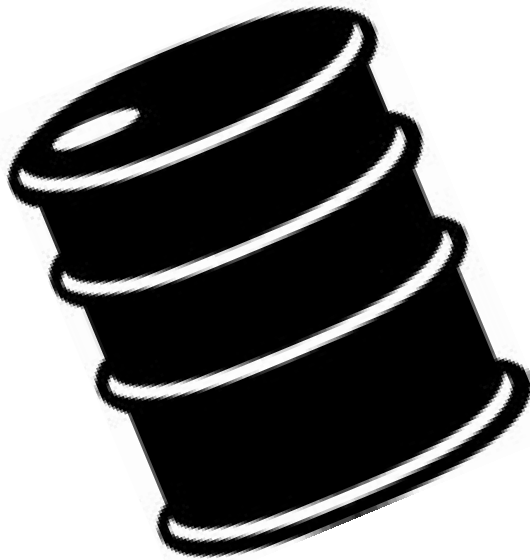
The Fundamentals of the Alberta Oil and Natural Gas Sectors: How Much Growth Can Be Expected? Where Are They Heading?

**The Calgary Real Estate Forum
October 20, 2010**

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Managing Director, Institutional Research**

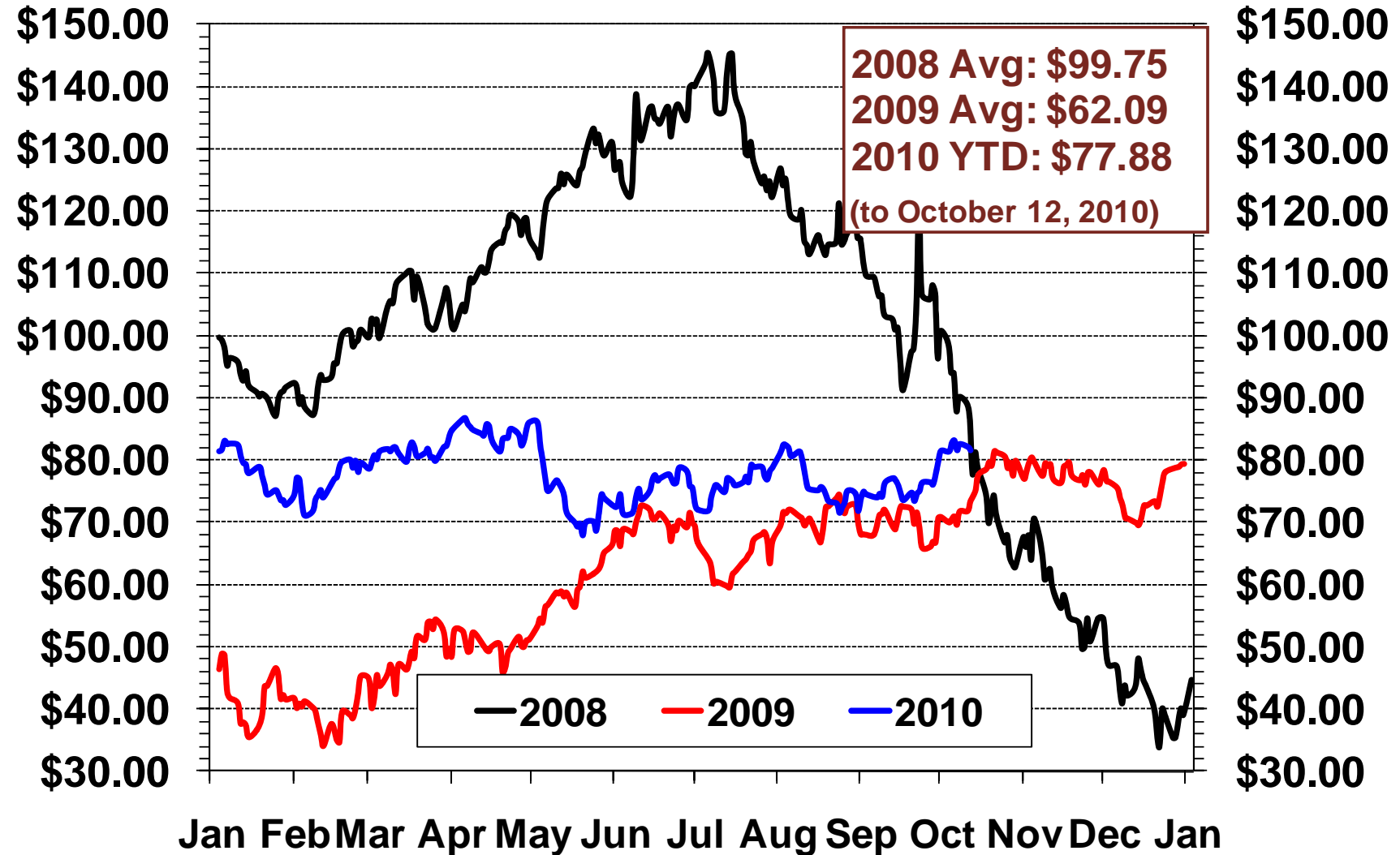
- **Oil Price Outlook**
- **Natural Gas Price Outlook**
- **Impact on Canadian Energy Sector**
- **Conclusions**

World Crude Oil Markets



WTI Crude Oil Prices

US \$/BBL

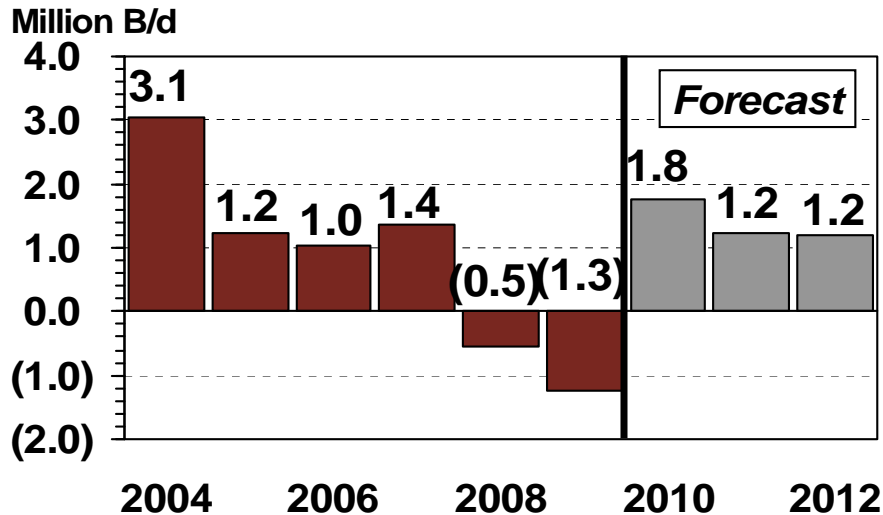


Source: FirstEnergy Capital Corp., Bloomberg.

- **Market still relatively balanced and looking to stay price range bound through 2011.**
- **Demand holding up relatively well, especially in emerging economies, despite economic uncertainty.**
- **Supplies expected to gradually tighten, with few capacity adds in OPEC for the next 18 months.**
- **Inventories ample in developed economies, but structural inventory build in emerging economies providing price support.**
- **Near term prices stable on inventories and spare capacity; gradual erosion of capacity cushion should start to lift prices as 2012 approaches.**

- **Prices have gone through a remarkable range bound exercise since mid-2009 to the present day.**
- **Demand has recovered as expected, while forward expectations of demand growth have changed little.**
- **Underlying supply fundamentals have not changed radically; Non-OPEC starting to slow, OPEC standing ready to tighten if needed; remains vocal.**
- **Inventory picture remains mixed between nations and fuels (crude versus refined products).**
- **Expect little change for the near-term.**
- **Financial players looking at other markets, reducing volatility.**

World Oil Demand Growth



Source: FirstEnergy Capital Corp., IEA.

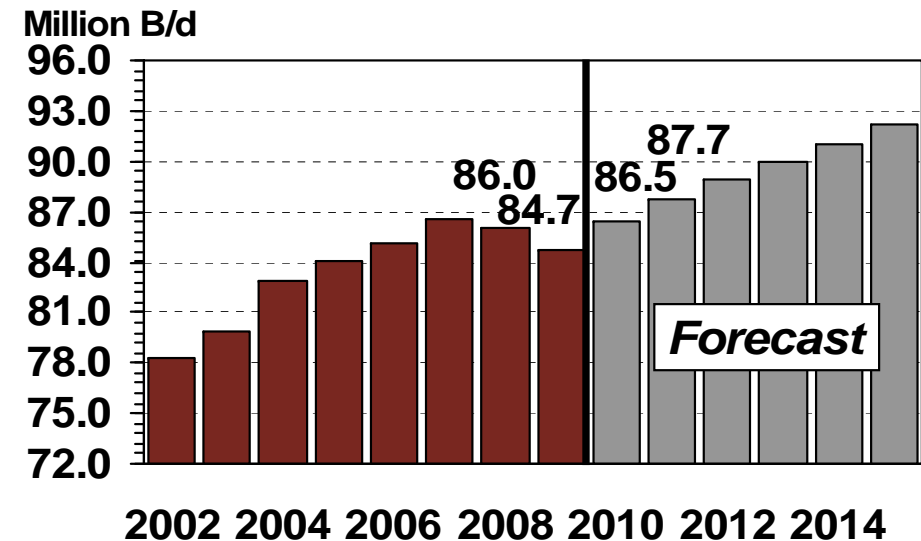
- 2010 demand recovery has lined up with most expectations; may even be slightly on the low side.
- Recovery from demand contraction has been fast; 18 months versus 6 years from previous big drop in 1980-82.

- With slow economic growth expected (but no double dip recession), oil demand growth to stabilize near 1.2 million B/d for the next couple of years.
- Double dip recession would see demand growth erode to about 0.7 million B/d for 2011 and 2012.
- Focus remains on the emerging economies.

Long-Term Oil Demand Growth

- We do not foresee a 100 million B/d world before 2020.
- Supply constraints and price escalation should keep demand in check along with marginal gains in biofuels, efficiencies, and alternate fuels.

World Oil Demand



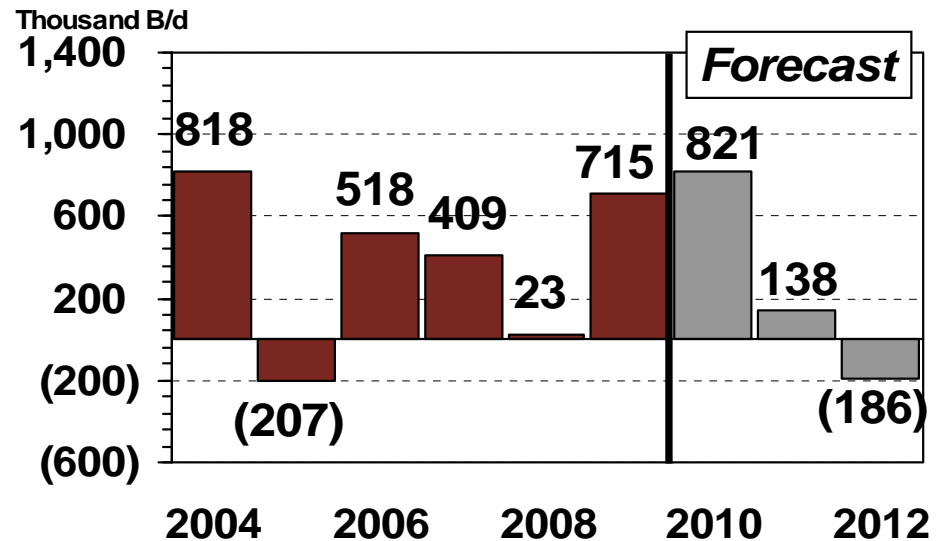
Source: FirstEnergy Capital Corp., IEA.

- See a steady trend in developed economy demand erosion and emerging economy demand gains. Emerging economies will be 50% of global oil demand and global GDP by 2012 or 2013.
- Income growth will continue to trump price effects in emerging economies for at least another decade.

Rollover in Non-OPEC Supply?

- 2010 was major upside surprise year, but growth focused in U.S. (GoM) and Russia. Both expected to see reversals or major slowing in 2011 and 2012.
- Bright spots remain Canada and Brazil.

Non-OPEC Oil Supply Growth

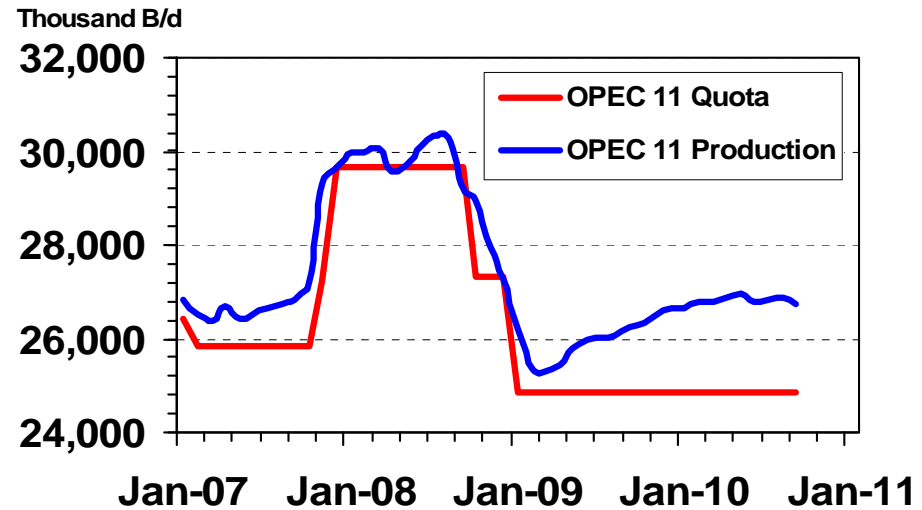


Source: FirstEnergy Capital Corp., IEA.

- Majority of Non-OPEC already seeing declines or peak production. Problem will only get worse.
- Biofuels still a small and growing component, but unable to grow fast enough to offset crude oil losses.
- More regulation likely to constrain future exploration potential.

- OPEC compliance has been eroding; now at 50%.
- Likely needs some improvement with next meeting on October 14, but probably no formal change in targets.
- Nigeria, Iraq questionable.

OPEC Supply and Forecast

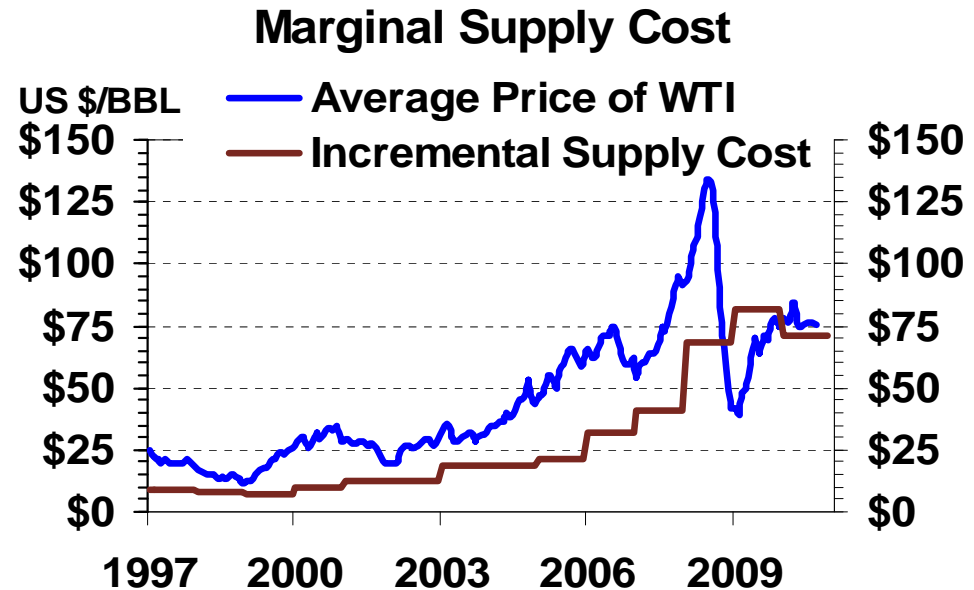


Source: FirstEnergy Capital Corp., Bloomberg.

- Vast bulk of supply influence lies with Saudi, Kuwait and UAE. Makes supply coordination and discipline easier to digest. Cartel remains focused on emerging economy demand growth and inventory accumulation.
- Internal demand growth has been phenomenal, so some supply “growth” may not be reaching external markets.

Global Supply Costs

- Global supply cost inflation has moderated a great deal, but major pullback did not occur.
- With growing Non-OPEC supplies in deep water and oil sands, these projects still face major cost hurdles to be economic.

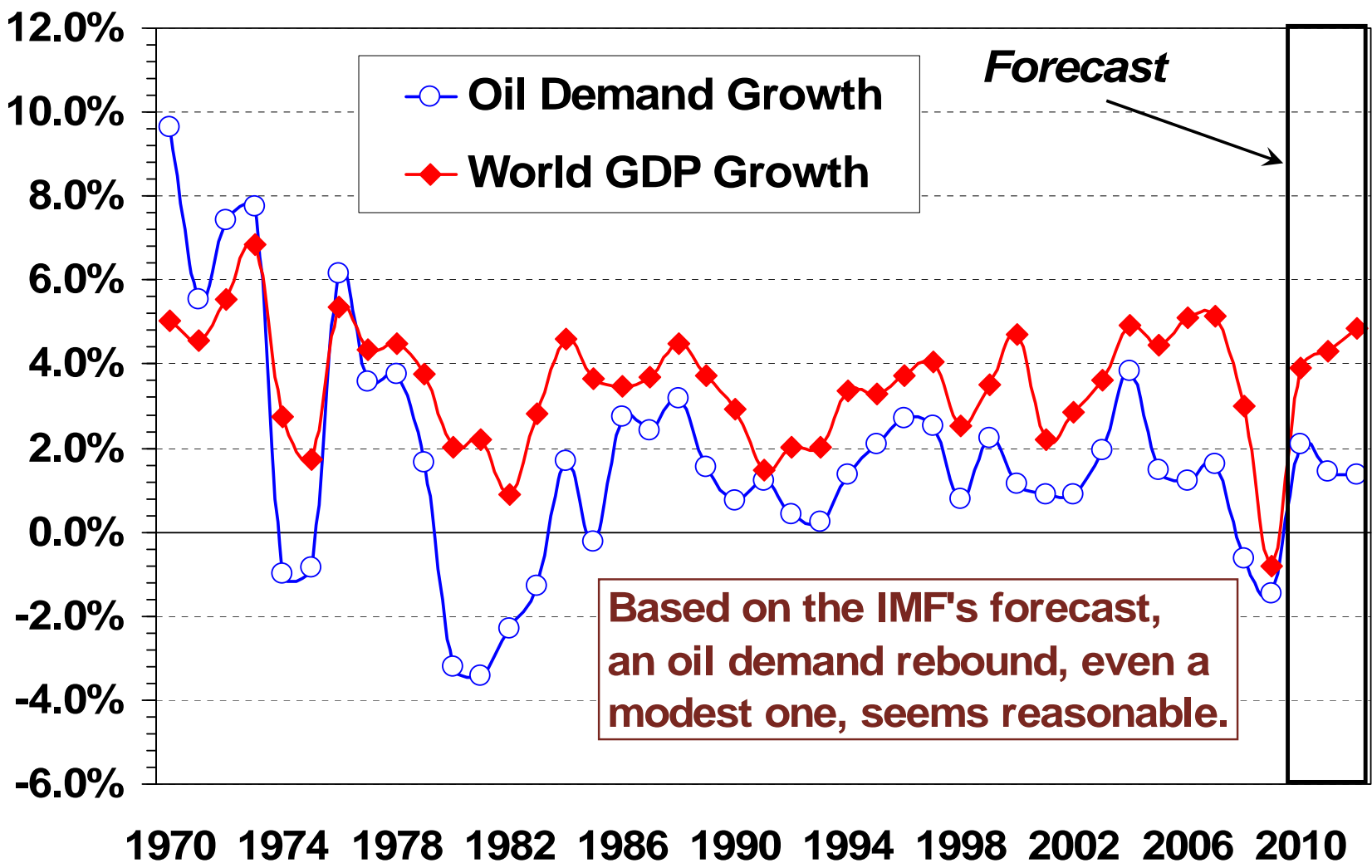


Source: FirstEnergy Capital Corp., Total.

- Marginal barrel probably still needs bare minimum US \$65 per barrel to make economics work; to compensate for additional risks (political, environmental), global marginal cost structure could be approaching US \$80 per barrel. Slow cost push on prices into the future.

- **Fundamental drivers suggest little reason to deviate from recent price range bound activity for next 12 to 18 months.**
- **Demand growth wavering, but likely to hold steady near market expectations; unless there is a severe erosion in demand expectations for 2011, little reason for forward prices to deviate from US \$75 to US \$85 range.**
- **OPEC talking the talk and seems ready to walk the walk, should better compliance be needed.**
- **Non-OPEC supply erosion likely with little upside expected out of Russia; steeper erosion than forecast could be in store for North Sea and Mexico.**
- **Refiners to remain cautious in crude runs, which should gradually undermine product inventories.**
- **Gradual global economic recovery remains intact - so far.**

World GDP Growth Vs. Crude Oil Demand Growth

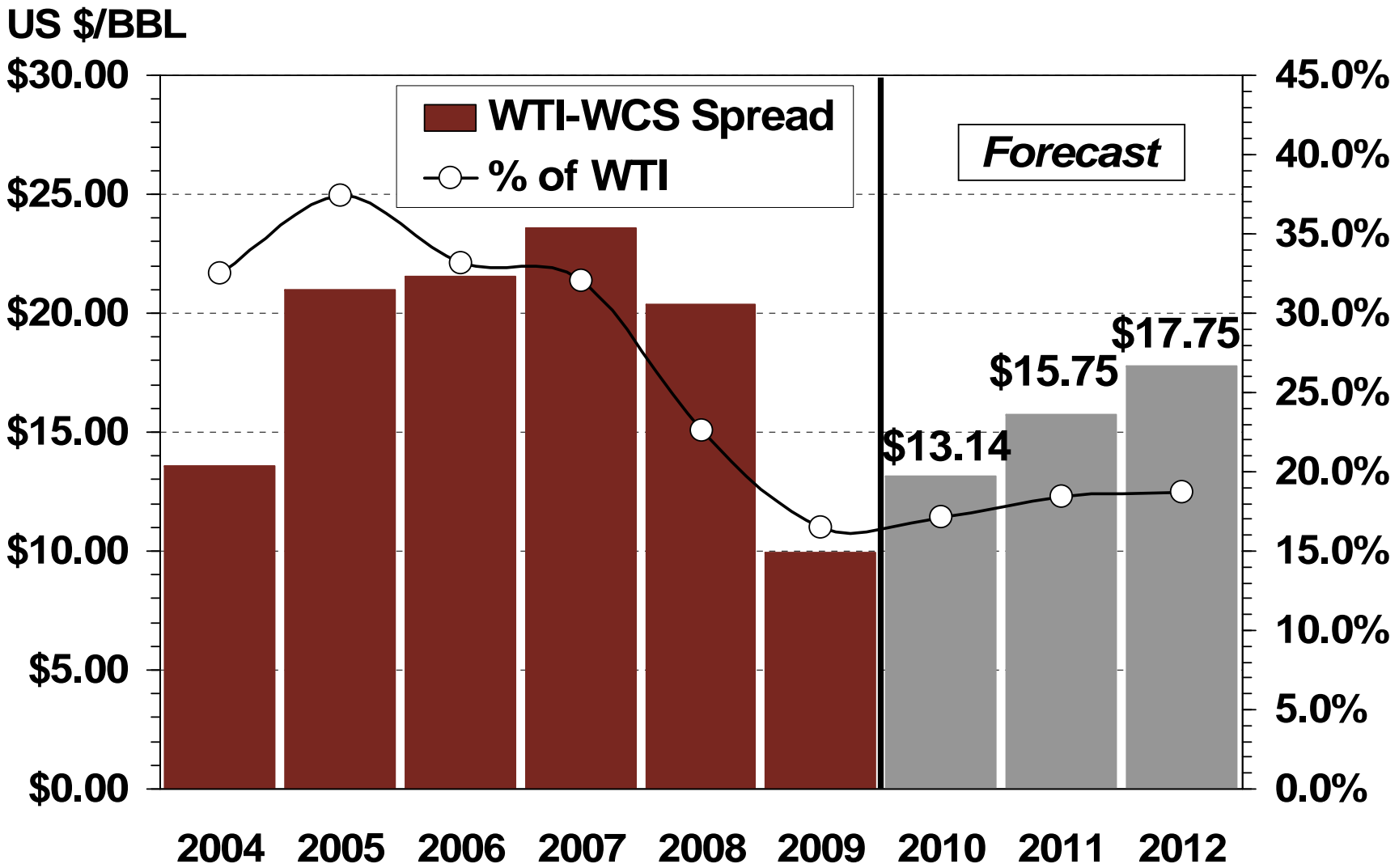


Source: FirstEnergy Capital Corp., IEA, IMF.

- **Global (or just U.S?) double-dip recession remains biggest uncertainty, compounded by lingering debt fears for countries and consumers.**
- **Developed economy inventories (crude and products) may persist at high levels for some time.**
- **Geopolitically driven upside should Iran situation heat up.**
- **Supplies may prove to be more robust for some regions (Russia, Brazil) than forecast. OPEC's mettle not tested for some time.**
- **Emerging economy (China) slowdown.**
- **Financial market volatility could force another of cash consolidation from commodity sectors.**
- **New financial legislation to reduce capital flows?**
- **Demand upside surprises possible in 2011, 2012?**

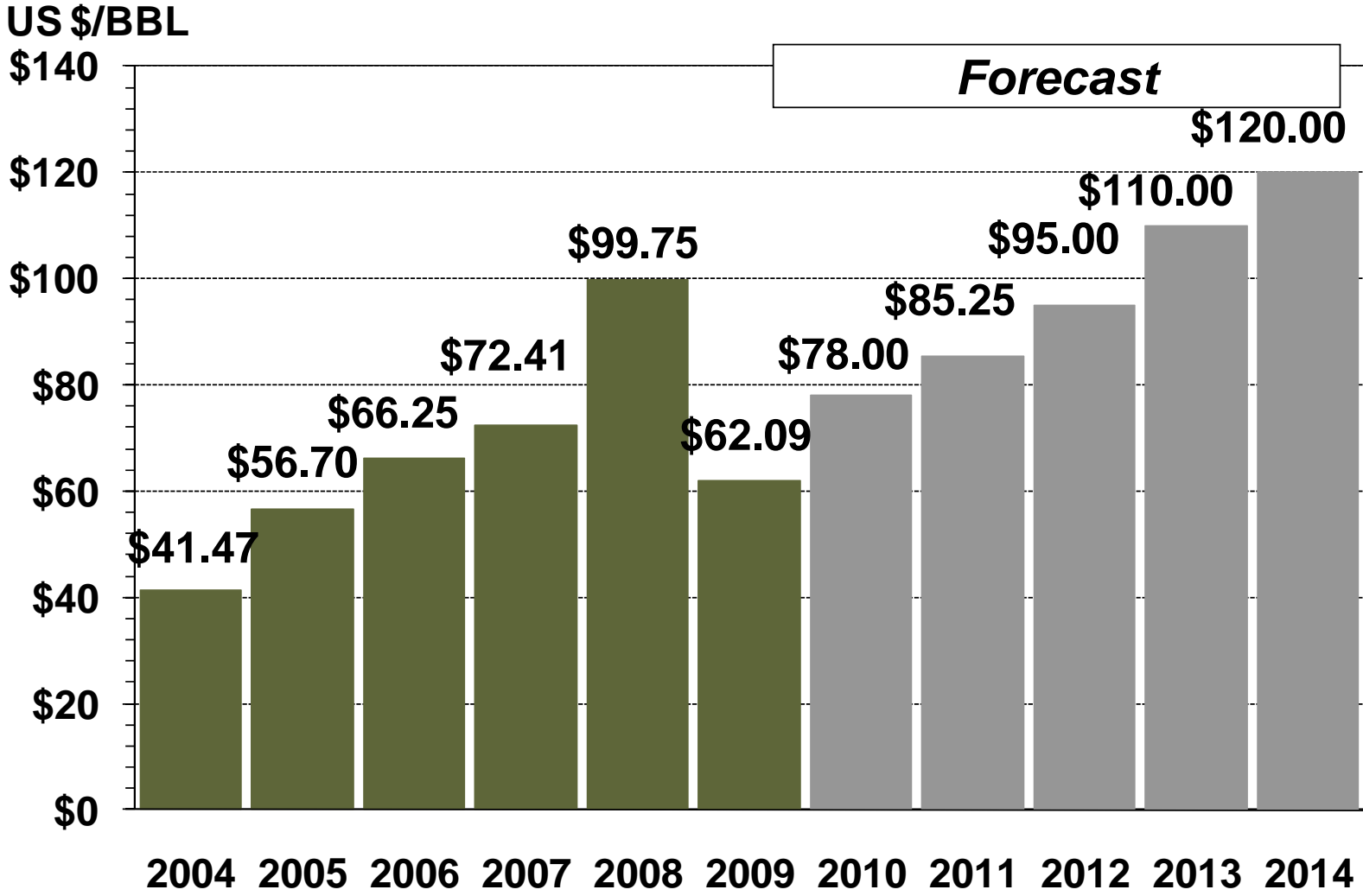
- **Mix of supply, demand and inventory factors suggest little change to underlying fundamentals for the time being – range bound pricing to persist into 2011, some uplift with the onset of 2012.**
- **Capacity erosion to become more pronounced into 2012 as few capacity adds expected and demand grows.**
- **In terms price formation and expectations, market shifting to structural factors that drive emerging economies.**
- **Financial drivers remain potent, but shift in capital to other sectors may finally be keeping a lid on oil price volatility.**
- **Do expect return of triple digit pricing as supplies tighten and capacity undergoes steep erosion in 2013-2014.**
- **Global bare minimum supply costs still US \$65+ per barrel.**

WTI-WCS Price Spread and % Discount



Source: FirstEnergy Capital Corp., Bloomberg, Enerdata.

FirstEnergy Crude Oil Price Forecast

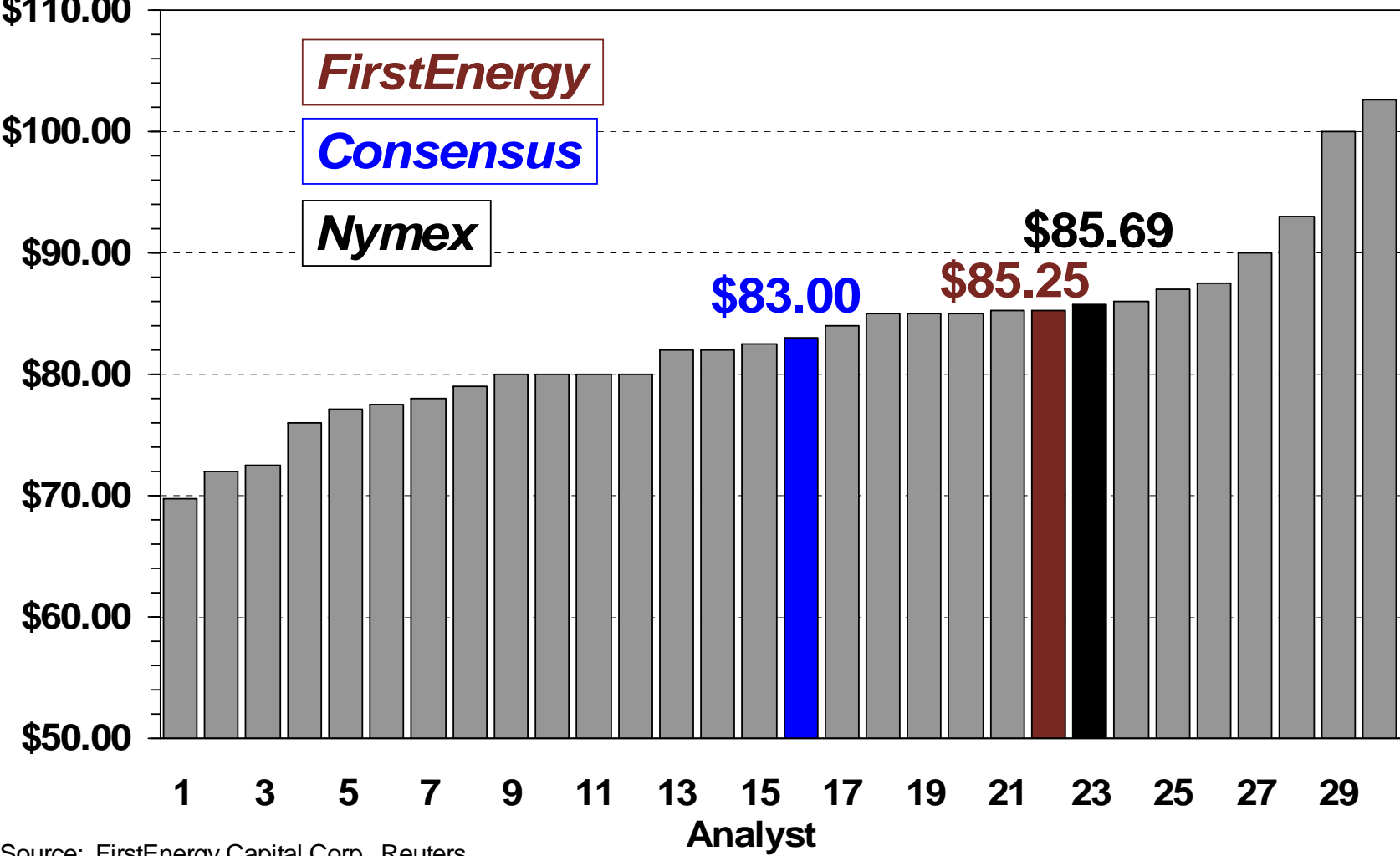


Source: FirstEnergy Capital Corp., Bloomberg.

Expectations For The Price Of WTI in 2011

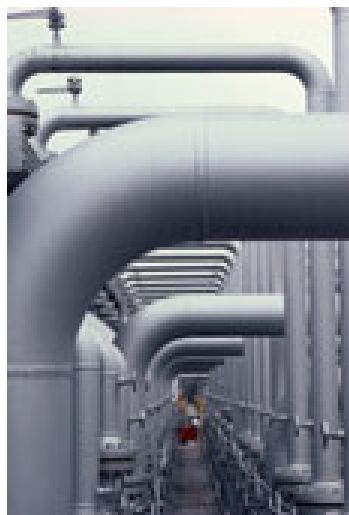
(As of Sep. 28, 2010 survey; Nymex value as of Oct. 1, 2010)
(Consensus estimate does not include Nymex value)

US \$/BBL

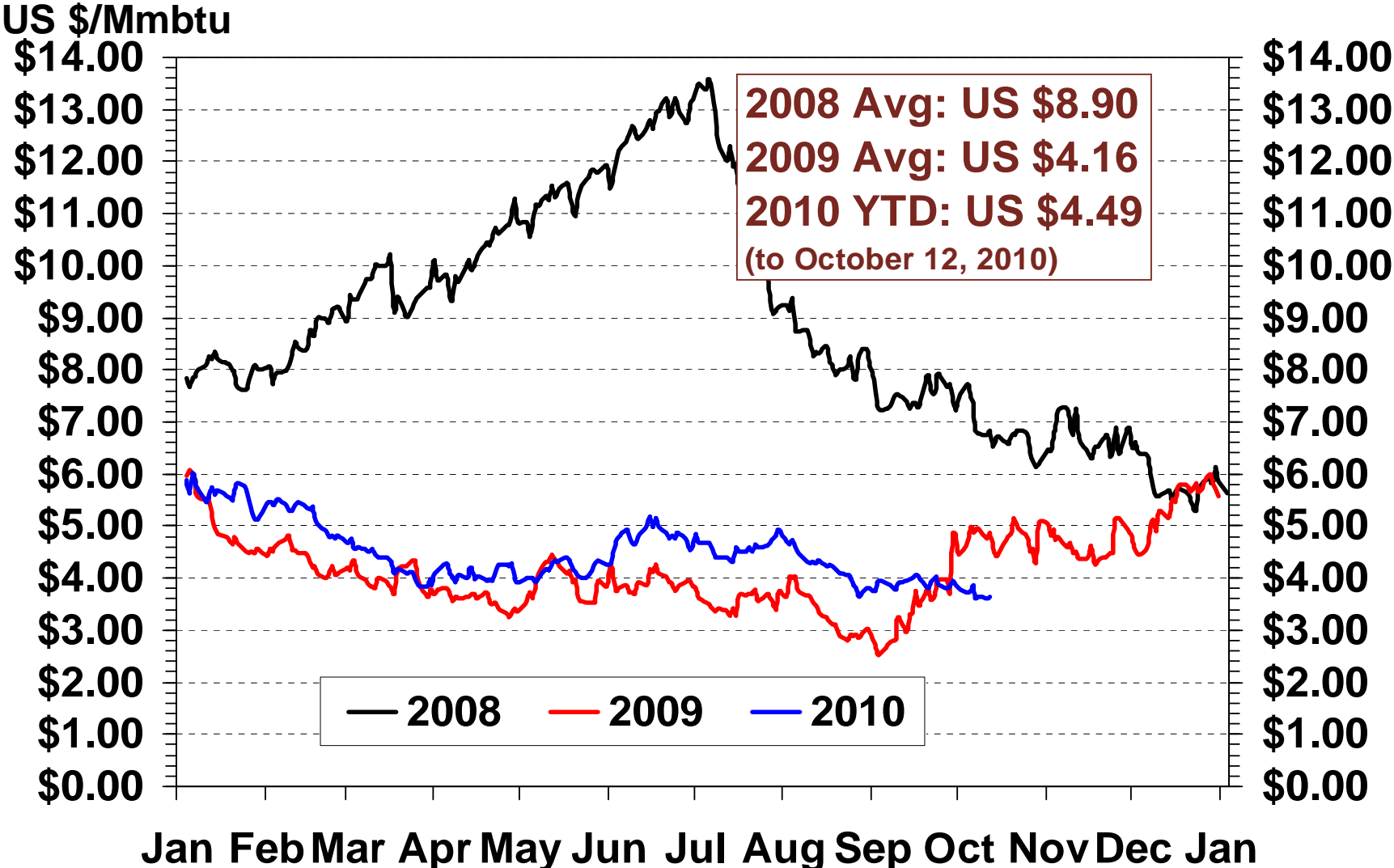


Source: FirstEnergy Capital Corp., Reuters.

World Natural Gas Markets



Nymex Natural Gas Prices



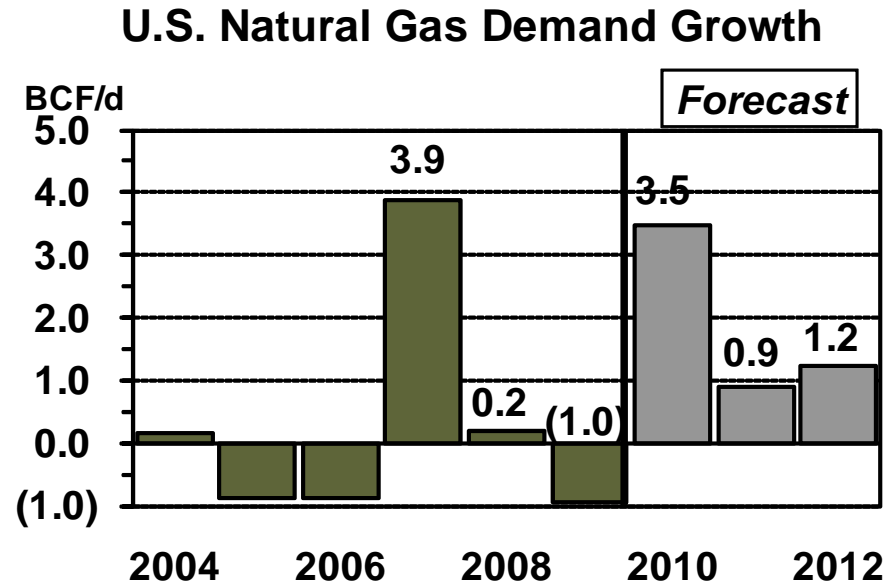
Source: FirstEnergy Capital Corp., Bloomberg.

Unlike Fall 2009, we see the odds of a price rally as being low to nil this year:

- **Economic recovery was underway last year, but lacking additional momentum this year.**
- **Supply declines anticipated last year after rig downturn; this year rigs 50% higher, more horizontal rigs and supply still growing.**
- **Weather adjusted balances suggest market may still be oversupplied.**
- **Canadian supplies stabilizing/recovering.**
- **Storage still historically high in Canada/U.S.**
- **Fears of warmer than normal winter.**

Natural Gas Demand

- U.S. gas demand in 2010 boosted by historically high gas burn this summer.
- Industrial sector has staged modest recovery into 2010, but appears to be just steady for now.



- Additional strong gas demands in 2011 hard to see given weaker YoY comparisons in power sector and meager gains in industrial; commercial and housing sectors still sluggish.
- Low forecast prices will help demand, but switching opportunities are very limited and confined mostly to power sector; some signs of pet-chem demand pick up, but very economically dependent.

Supply – Time To Slay The Supply Dragon

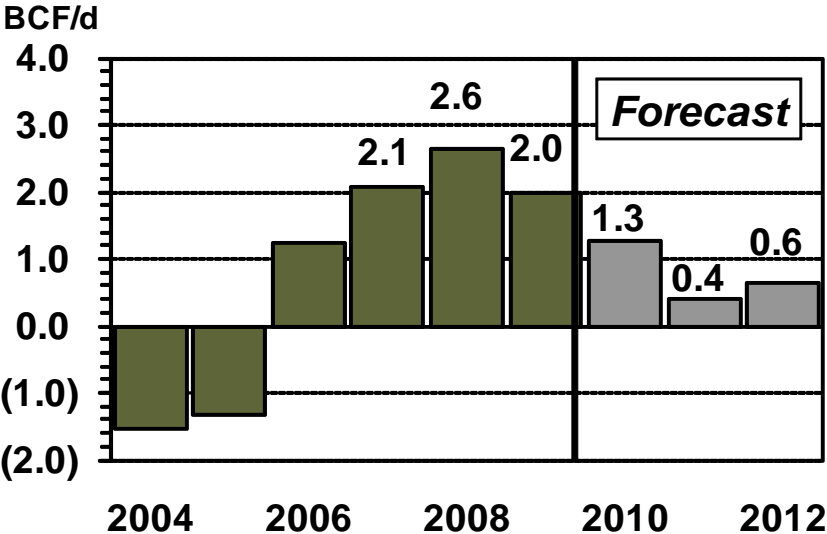
- Market has shifted its focus to supply destruction. Price sword to slay the supply dragon!
- Prices must be low enough for long enough to generate some sustained negative supply impacts.

Supply is Not Your Best Friend



Source: Griffith University.

U.S. Natural Gas Supply Growth



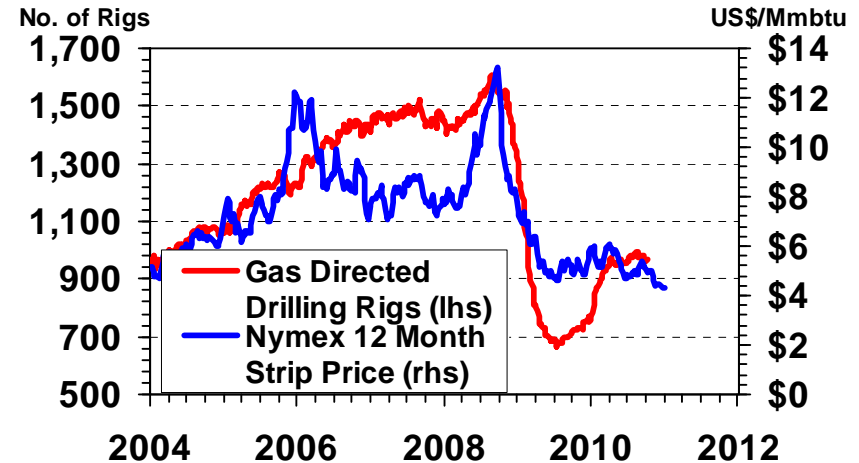
Source: FirstEnergy Capital Corp., USDOE/EIA

- Market now starting to test the real economics of unconventional gas plays.
- Our current supply forecast may actually still be too low given that rig counts have held up relatively well.

Natural Gas Drilling Unwilling To Die

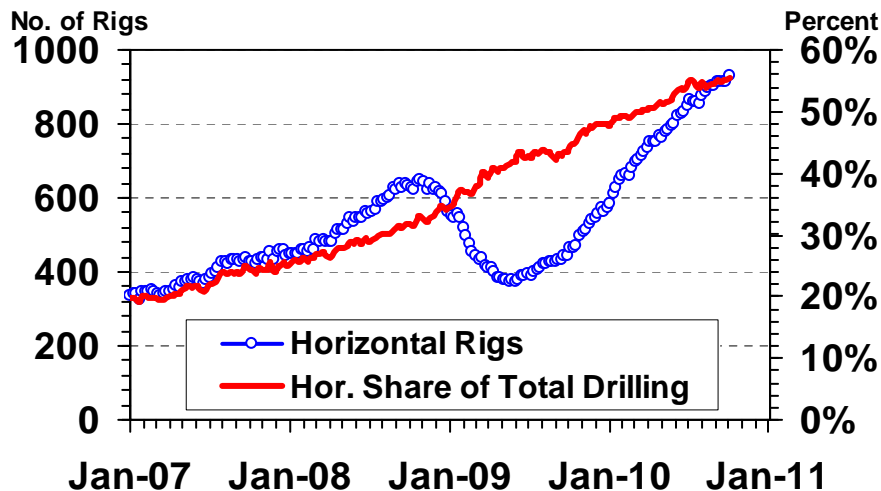
- Gas rig count 50% higher than same time last year.
- Rig productivity much higher and still rising with growing presence of horizontals; more than doubled in the past 2 years.

U.S. Total Gas Drilling vs. Gas Price



Source: Baker Hughes, Bloomberg

U.S. Horizontal Drilling



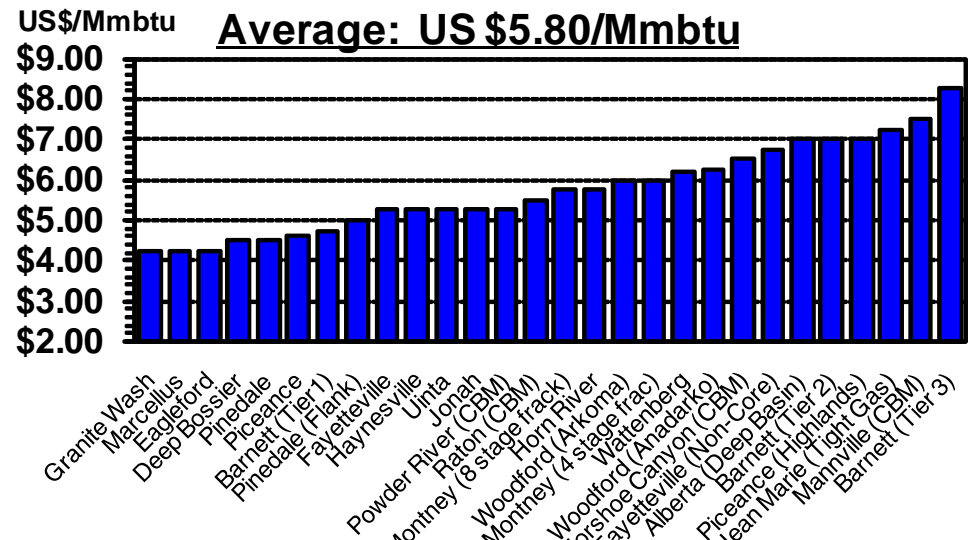
Source: FirstEnergy Capital Corp., Baker-Hughes.

- Steady retrenchment of forward prices reflecting the need to create a downturn in rig counts.
- Current activity should generate supply gains well into 2011.

Reason to Drill Are Many – For Now

- We believe that full cycle costs are north of US \$5.00 or even US \$5.50.
- Real tests of shale play economics will emerge in 2011. Why?

Natural Gas Full Cycle Supply Costs



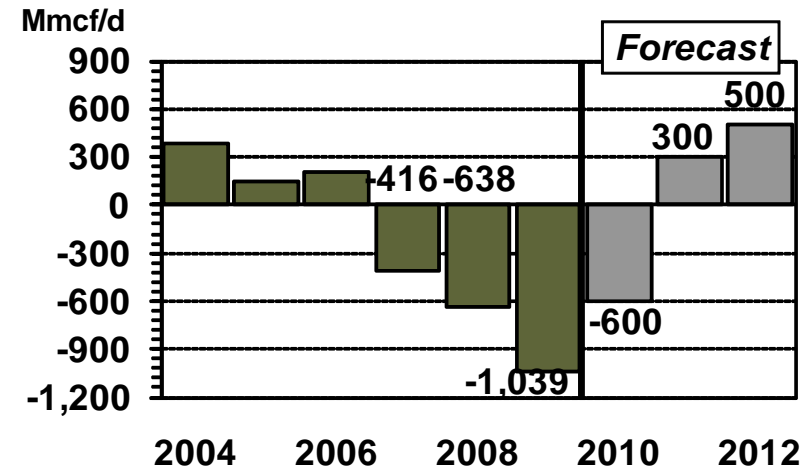
Source: FirstEnergy Capital Corp.

- Producers have been able/needed to drill as a result of land lease retention, bank credit availability, JV money, favourable forward pricing/hedges. All but the lease retention issue will be absent in 2011.
- We expect that a rig downturn will start to materialize in 2011, but will take a good deal of time to generate negative supply impacts.

Canadian Natural Gas Supply

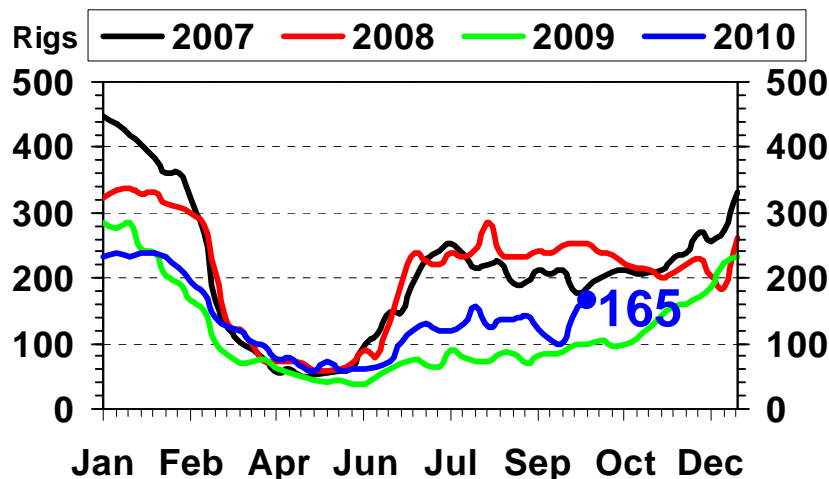
- Canadian gas supply holding up better than thought; forecast likely too pessimistic.
- Another price bearish supply factor in a market which has seen steady losses for several years, but starting to stabilize.

Canada Natural Gas Supply Growth



Source: FirstEnergy Capital Corp., company pipeline postings.

WCSB Natural Gas Rig Count



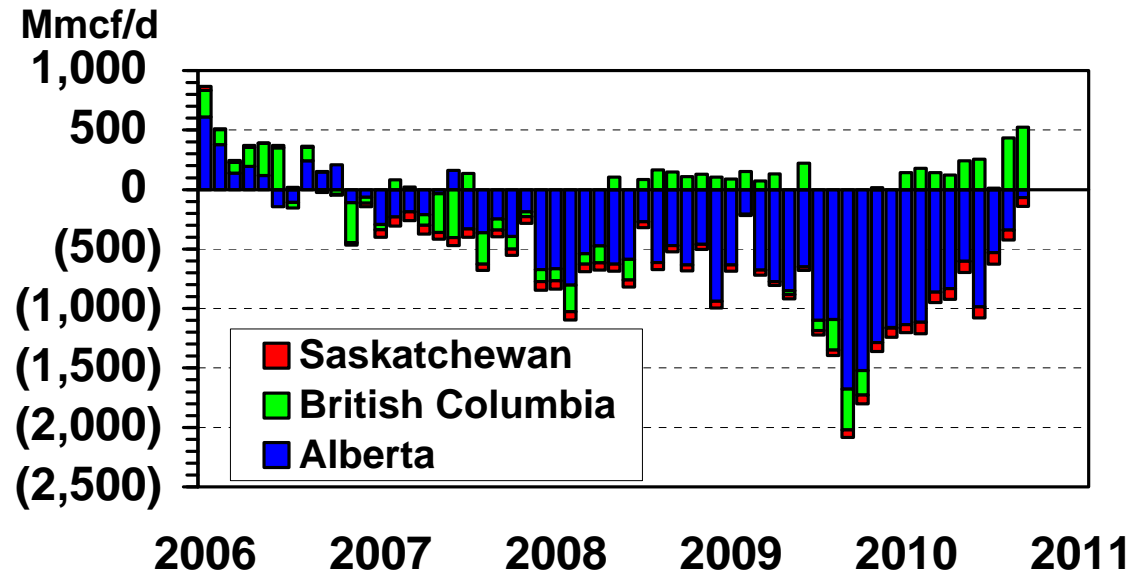
Source: FirstEnergy Capital Corp., Baker-Hughes, CAODC.

- Rig count ahead of last year partly due to higher prices, but also a shift to more unconventional drilling.
- Provinces have enacted numerous royalty changes to incentivize unconventional gas drilling.

Canadian Supply By Province

- All provinces starting to show signs of supply stabilization.
- B.C. best performing region due to Montney and Horn River deep gas/shale drilling.
- New pipes to be tied into this region by early 2011.

WCSB Supply Growth by Province - YoY



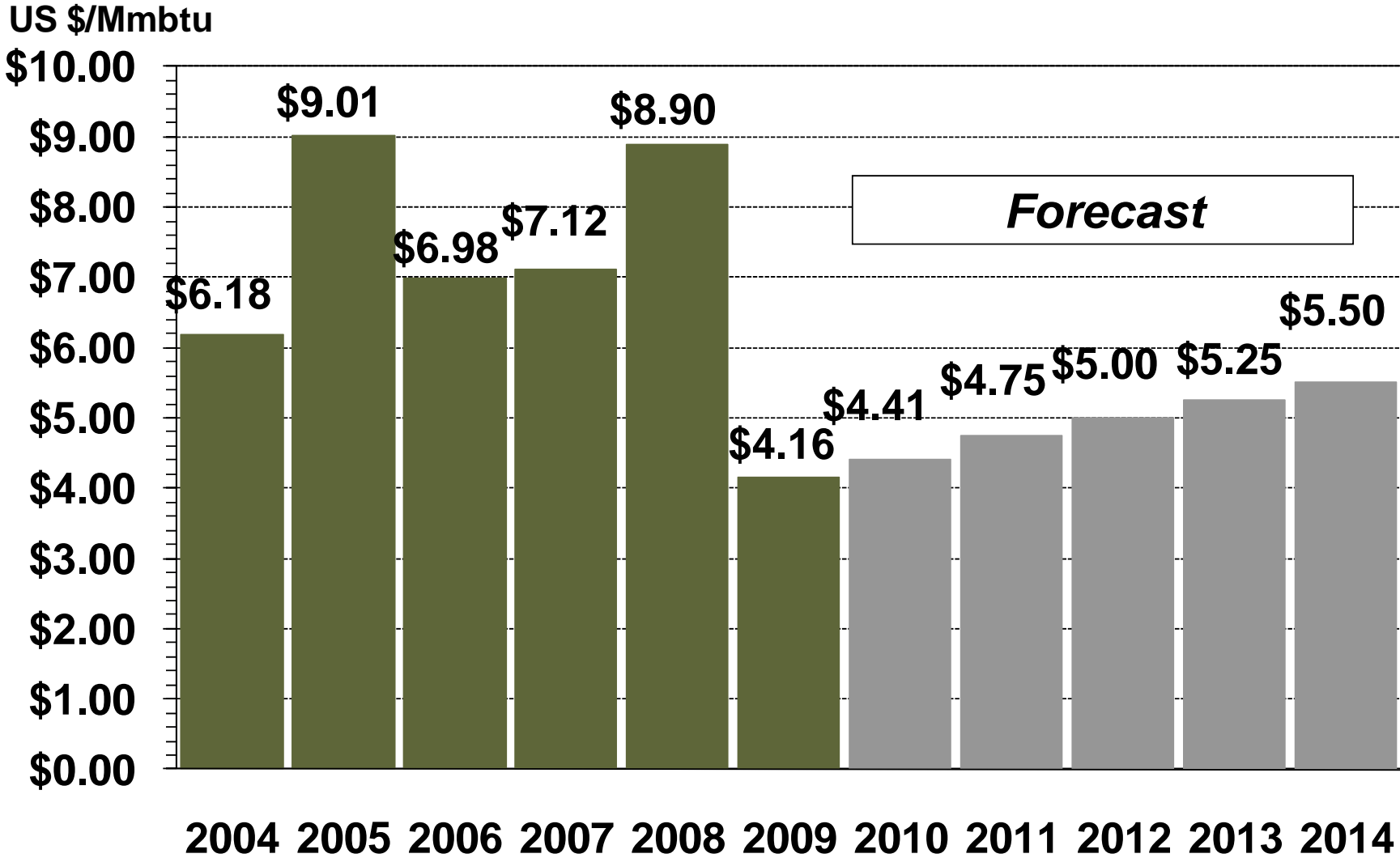
Source: FirstEnergy Capital Corp.

- Economics unclear to a degree, but some Horn River wells economic at US \$4.25 (full cycle) and Montney economic at US \$3.50 (full cycle).
- Conventional gas probably still needs US \$5.50.
- East Coast volumes to increase with Deep Panuke on-stream in 2011.

- **Biggest concern now is the potential for a warmer than normal winter in key space heating regions. Forecasters got the hot summer correct, can they do it again?**
- **Supply costs may actually be much lower than widely believed; just means even lower prices for longer.**
- **Double-dip recession in U.S.? Globally?**
- **LNG oversupply in 2011 on lack of supply action?**
- **Canadian gas facing increasingly tough competition from U.S. gas.**
- **Some upside potential from power sector should base load growth prove robust; economics still favour gas use in power to at least 2015, coal retirements.**
- **LNG supply slowdown in 2012-15 timeframe.**

- **Market sentiment has shifted in past 18 months from one of pending tightness in the near- and medium-term to one of readily available supply and surplus.**
- **Gauntlet is being laid down to see what price will be needed to make a major negative impact on supply and undermine storage surplus. Price induced market capture is limited in industrial and power, though gas-fired generation base is growing steadily.**
- **Will likely take into 2012 before some significant negative structural supply impacts occur (i.e. not shut-in related).**
- **Economically driven demand growth still sluggish into 2011.**
- **Overseas gas markets still a better bet for strong pricing given oil price outlook, demand recovery and supply management. North American price recovery in 2012?**

FirstEnergy Natural Gas Price Forecast

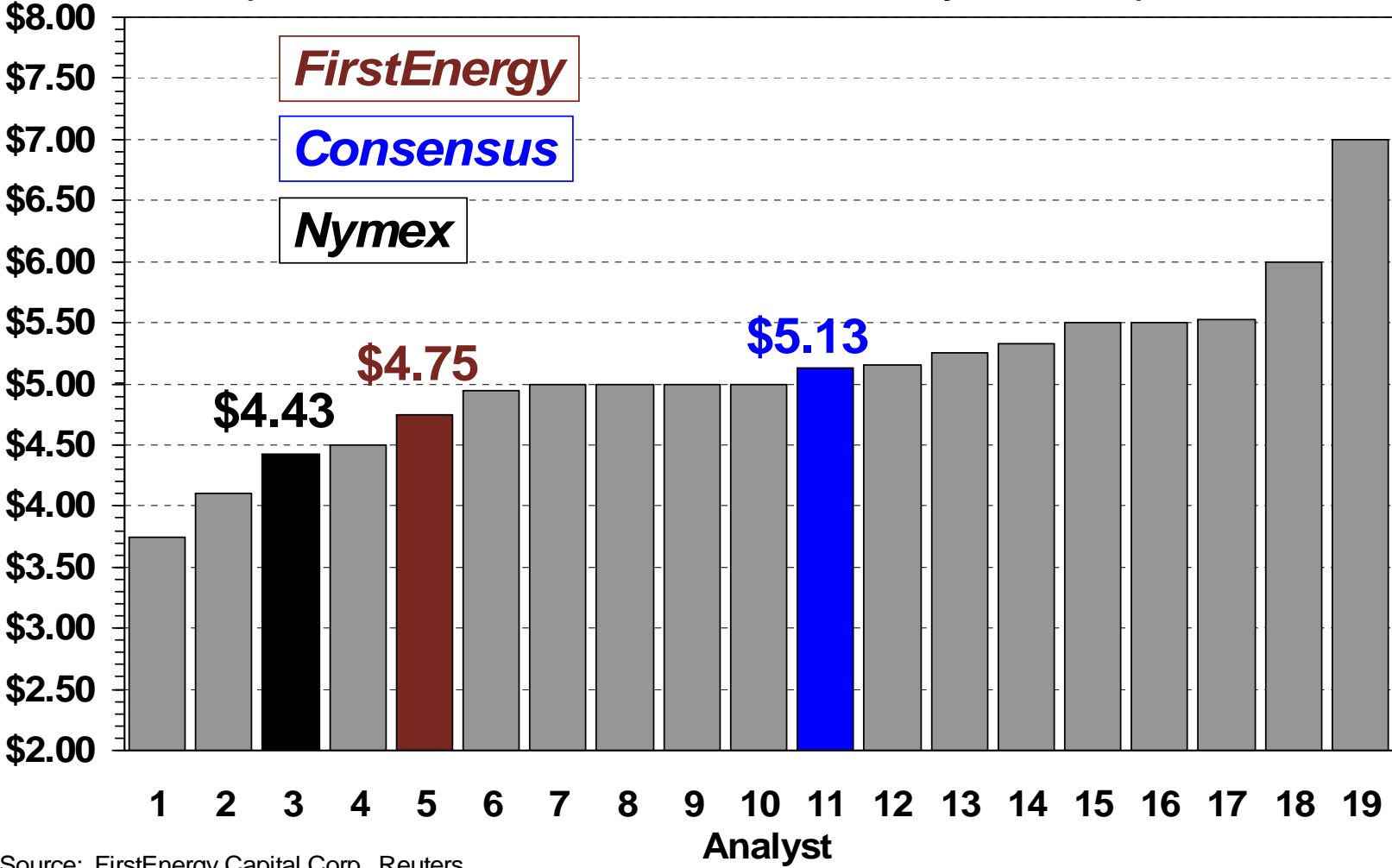


Source: FirstEnergy Capital Corp., Bloomberg.

Expectations For Price Of Henry Hub In 2011

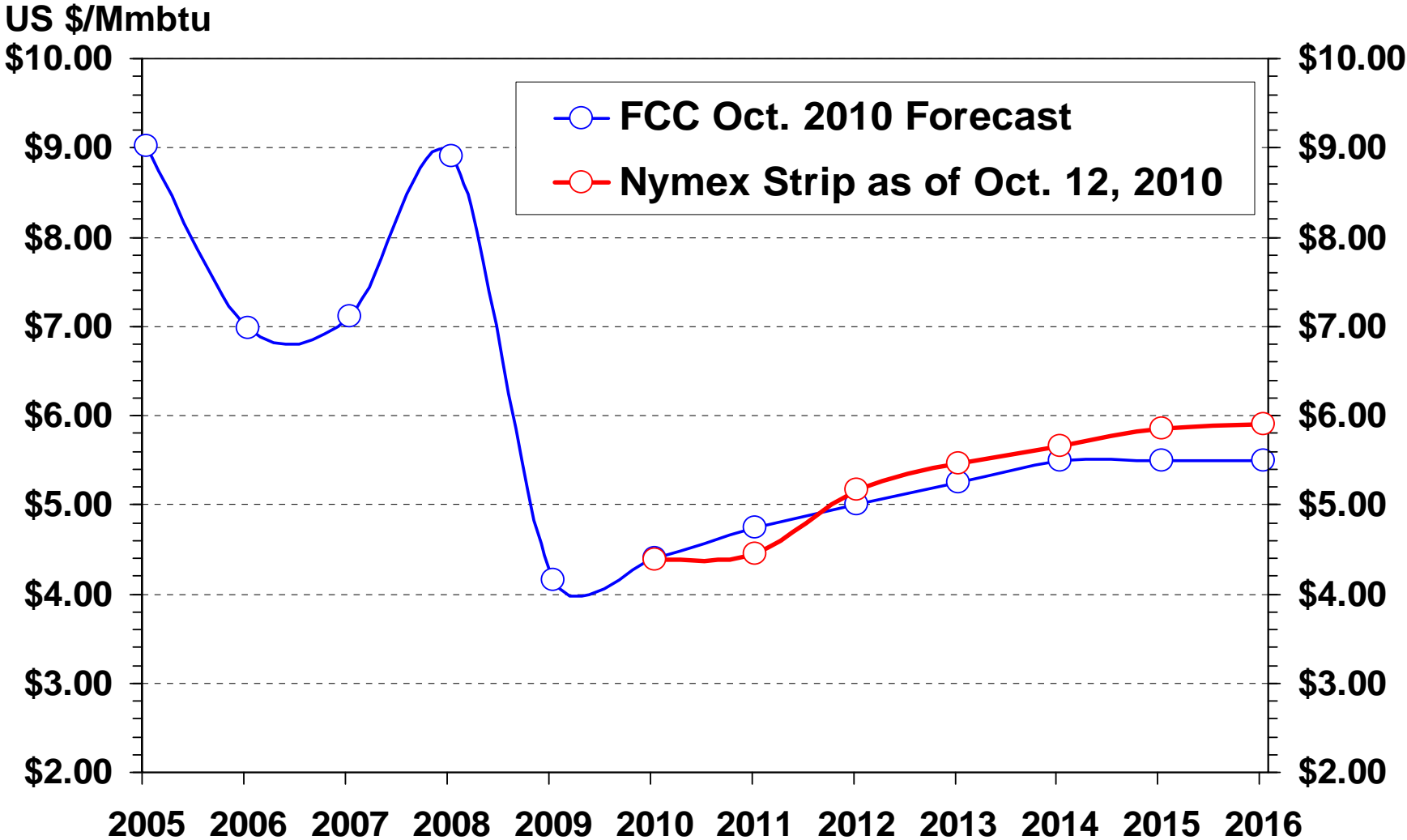
(As of Oct. 1, 2010 survey; Nymex value as of Oct. 1, 2010)

US \$/Mmbtu (Consensus estimate does not include Nymex value)



Source: FirstEnergy Capital Corp., Reuters.

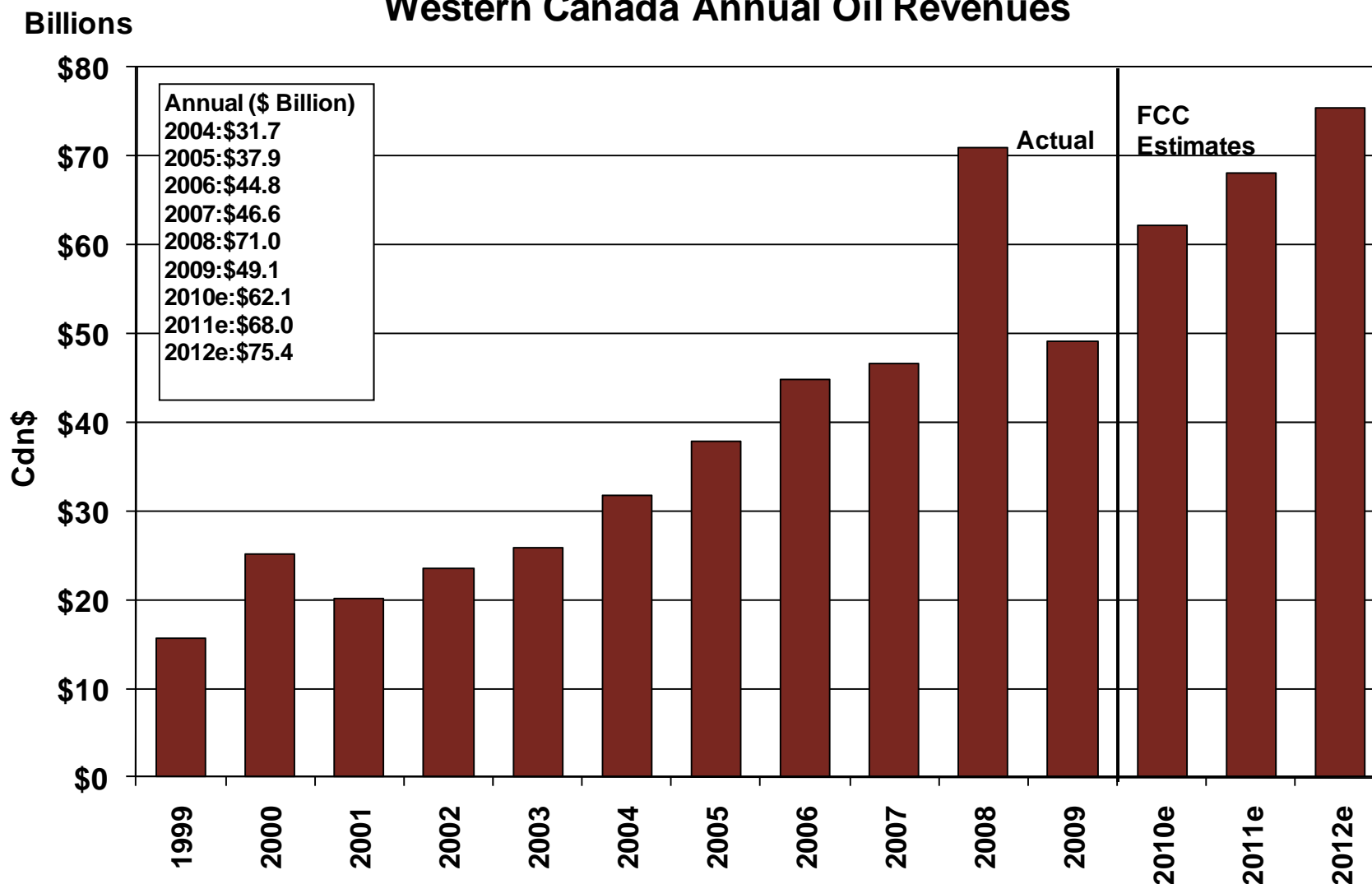
Long Term Pricing



Source: FirstEnergy Capital Corp., Bloomberg.

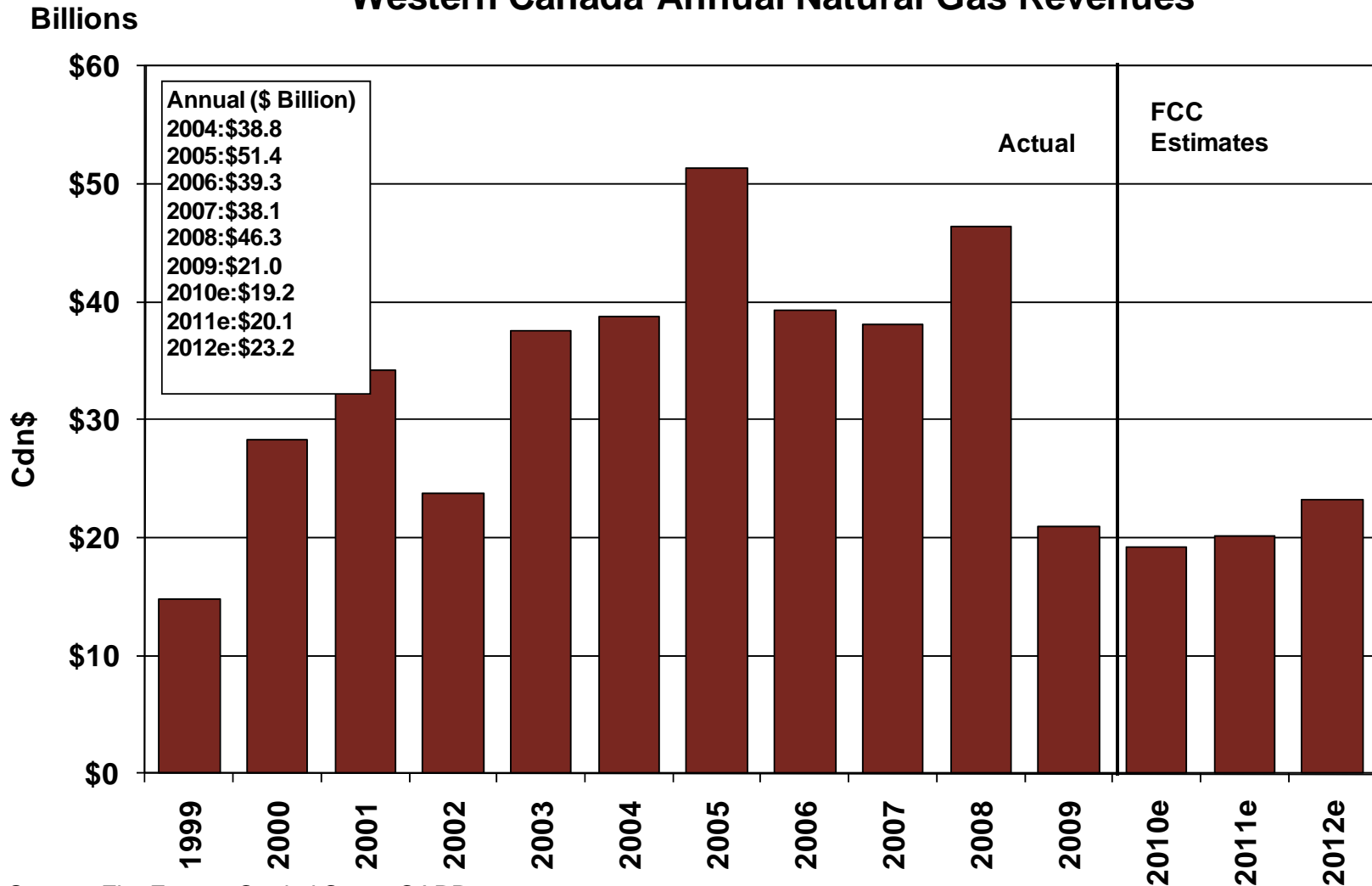
What Does Our Price Outlook Mean To the Canadian Energy Sector?

Western Canada Annual Oil Revenues



Source: FirstEnergy Capital Corp., CAPP

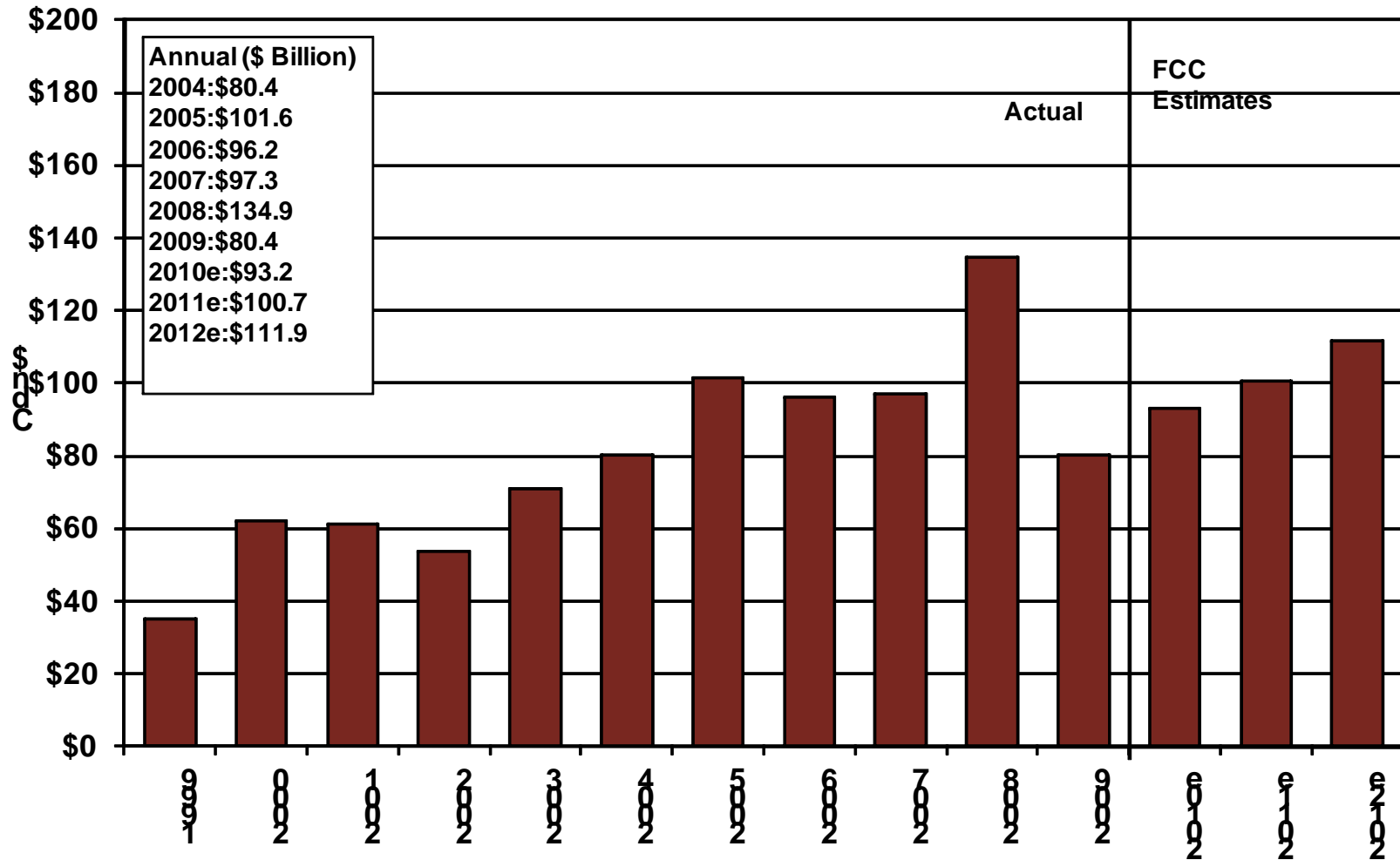
Western Canada Annual Natural Gas Revenues



Source: FirstEnergy Capital Corp., CAPP

Western Canada Annual Oil & Gas Upstream Gross Revenues

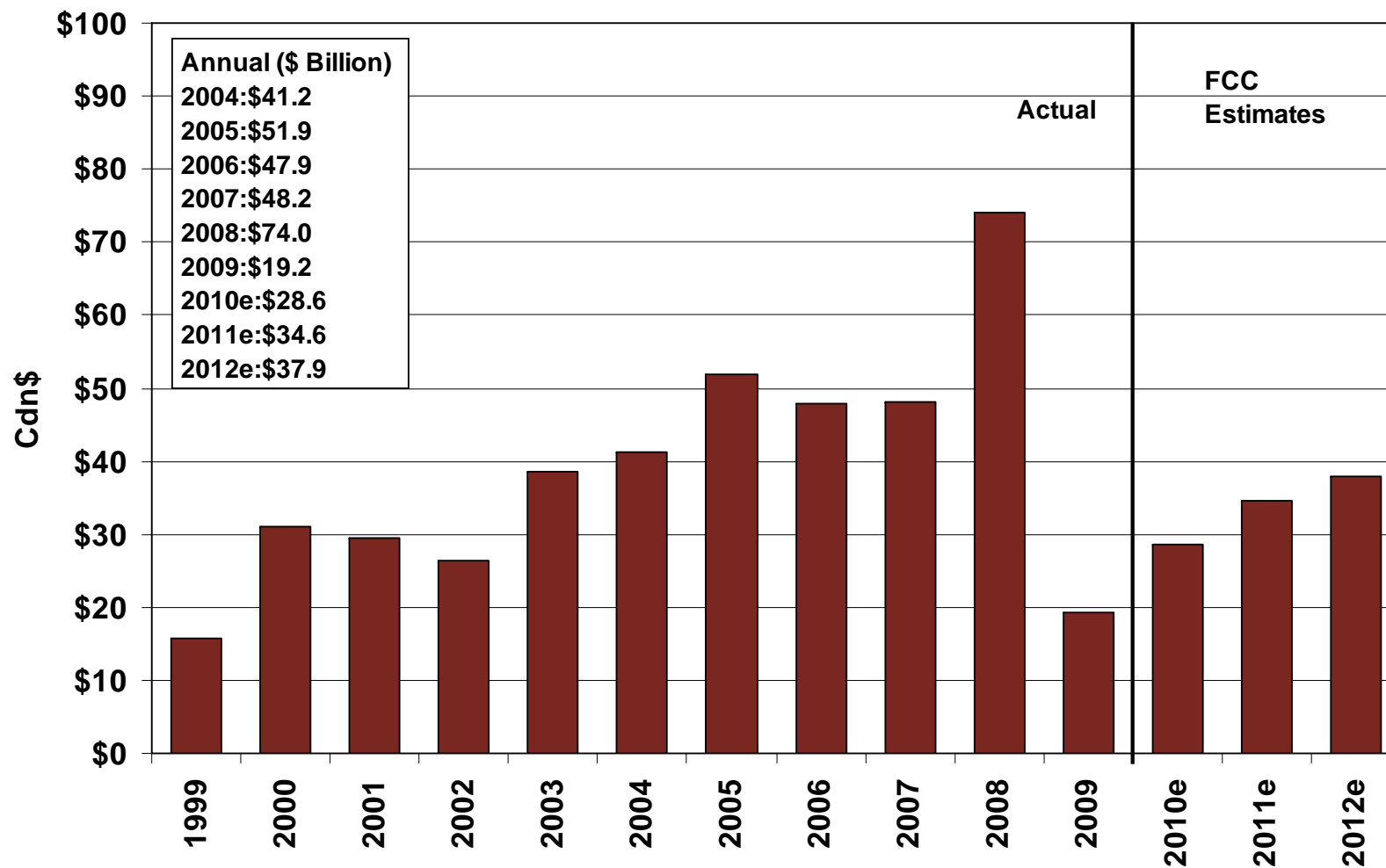
Billions



Source: FirstEnergy Capital Corp., CAPP

Billions

Western Canada Annual Oil & Gas Upstream Cash Flow



Source: FirstEnergy Capital Corp., CAPP

- **Their challenge is managing energy enterprises in an environment of very material and significant change in most if not all aspects of their operations e.g. commodity price expectations, capital and operating cost inflation, competition for intellectual capacity, government takes, labour availability, competition for services, delays in project execution, acquisition cost versus value expectations, environmental permitting, all this topped off with equity market valuations that materially trail other sector performance YTD on the Toronto Stock Exchange.**

- **Canadian energy players are everywhere looking at everything! Not in the least restricted to Canada.**
- **Capital is available for well thought through ideas for credible management teams.**
- **Producers are now mid way through their 2011 budgetary process. Natural gas CAPEX is under material downward pressure while oil, especially heavy oil looks very attractive.**
- **People retention and additions will be a differentiating factor going forward.**
- **Challenge in 2011/2012 will be redeploying cash flows while adding financial flexibility.**

- **Competition will remain intense, in every aspect of the domestic and global energy business.**
- **North American natural gas levered Producers face a complete reinvention of their business plans. The war on costs is on!**
- **North America desperately needs natural gas export capacity. Gas on gas competition will be ferocious over the next couple of years.**
- **Smart and flexible people are the single most important asset in Energy. Ideas are worth a lot!**
- **Corporately the winners will be the lowest cost producers. Superior insight into new technologies, and excellent project execution will generate the most value per share.**

Questions?