



## 2010 Oil & Gas Industry Perspective

We'd like to take this opportunity to share our perspective on the most important trends in the oil and gas industry and our ideas for how companies should address them over the next year and beyond. With appropriate action, 2010 could be a year with more positive memories, regardless of what the economy holds.

### A Brief Look Back

It's been a challenging year for oil and natural gas companies. The global economic downturn that began in 2008 sent prices tumbling across the board as the demand for hydrocarbons in the consumer and industrial sectors slumped significantly. Only oil producers have weathered the difficult period well as the OPEC oligopoly has ratcheted supply downward in line with shrinking demand. Such diligent supply management, combined with the weak U.S. dollar – oil's currency peg – has revived oil prices from \$35 or so per barrel at the beginning of the year to highs of more than \$80 per barrel in October and November.

Downstream, the news isn't as good. Refiners have been particularly hard hit because overcapacity, partially built up in response to the prior demand surge, had already deeply cut margins; refining margins will likely continue to be depressed, at least in the short term. We anticipate that demand for gasoline will remain under pressure in the coming years as mandates for biofuels, the popularity of hybrid and diesel vehicles, and perhaps the use of natural gas in fleets and elsewhere exacerbate supply pressures.

While margins suffer, refining costs are expected to increase with the passage of some form of carbon legislation. Such legislation is likely to require refineries to purchase pollution permits to operate, to invest additional capital in pollution mitigation measures, or both. The problem of oversupply is exacerbated by the challenges in eliminating capacity: Refineries are difficult to shutter, and refining is a fragmented industry sector.

Natural gas producers have little to cheer about either. U.S. natural gas inventories remain high at approximately 3,800 bcf (400 bcf higher than last year). Moreover, many unconventional fields are continuing to produce at higher than expected levels, despite significant declines in drilling activity. And marginal liquefied natural gas (LNG) cargoes, while down over 15% from two years ago, continue to add to the oversupply. Consequently, despite a slight recent run-up, natural gas prices are still languishing below half their July 2008 level. One positive, though still far from certain, possibility for natural gas producers: Carbon legislation pending in Congress could greatly expand natural gas usage in power generation as well as in transportation.

### **Survival of the Fittest**

Given these realities, current excess capacity will take time to clear out in natural gas and especially in refining. This translates into a lengthened or even prolonged industry struggle that will end with the survival of only the fittest – namely, companies whose capabilities are distinctive and whose key assets are strongly positioned to withstand margin contraction and volatility. Companies without these characteristics will continue to struggle and eventually perish.

In our view, the key element of any viable future strategy for refiners and natural gas producers is “shifting to the left” on the supply curve. Although some incumbent positions will be difficult to overtake (for example, mega-scale refineries integrated with petrochemical operations or first-mover leases in unconventional gas plays), we foresee shifts that integrate and consolidate existing assets into stronger, more resilient positions. We also anticipate a few bold investments from players that want to better position themselves to compete into the next generation (for example, Midwest refiner investments to process heavy Canadian crude). Equally important, in light of industry maturation and continuing segmentation in asset types and markets, companies should push harder to identify and capture advantages in execution. Both in oil and in gas, emerging asset classes including deep water, extra heavy oil, unconventional gas, and LNG create opportunities for skill advantages.

Shifting left is not an easy assignment for many companies because they tend to form attachments to hard assets and find it difficult to make investment and divestment decisions based on forecasts. There is always the possibility that the predictions may be wrong and the race to the left may be foolhardy – what if demand rebounds and shifts the curve to the right? But that’s not likely. Moreover, companies often struggle to objectively assess their existing capabilities to determine which – if any – are differentiating, and which are

needed to win in each asset class. Yet, refiners and natural gas producers stand at a critical juncture and need to carefully assess the implications of reducing capacity to bring the overall portfolio in line with new forecasts for future demand and supply. They must also consider how to out-execute competitors; e.g., through better operating approaches and improved use of technology. We envision an escalating M&A and joint-venture environment as companies seek to achieve these advantages in position and operations.

To tack to the left side of the supply curve, we recommend a combination of the following four actions:

- Concentrate and invest in areas where you have, or can build, significant capabilities that give you the “right to win.” For example, an emerging segment of the gas business, unconventional gas, offers increased opportunity to create competitive advantage based on differentiated execution skills, such as through application of lean manufacturing techniques. Likewise, LNG offers differentiation opportunities around market and trading skills, among others. At the same time, cut costs deeper in areas that are undifferentiated. This represents a break from the traditional industry approach of indiscriminate, across-the-board cost cutting.
- Focus on and nurture your best assets, the ones that are outperforming or that can outperform the competition on the relevant supply curve. Holly’s integration of Group III refining assets and Devon Energy’s decision to shed international and Gulf of Mexico assets to focus on its unconventional gas and other positions in North America are recent examples of this strategy in action.
- Divest or shut down lagging assets, permanently or temporarily; for example, Sunoco and Valero have already done this on the refinery side. Suncor Petro-Canada and others are moving in this direction upstream.
- Pursue M&A, and joint ventures, as needed to create or access advantage in position and execution. For example, several international oil companies (IOCs) have partnered with unconventional gas specialists to access both their operating model skills (e.g., lean manufacturing) and first-mover positions in prospective shale gas basins. Long-term crude oil agreements between national oil companies (NOCs) and Gulf Coast refiners could make the difference between creating a sustainable position under a new operating model and becoming a marginal refinery.

With so much uncertainty in the energy sector, one thing is clear: 2010 will be anything but a dull year in the oil and gas industry. Difficult periods are often the best time to prepare your business for expansion and growth. Companies that don't shrink from the task will be the clear winners when industry conditions improve.

We hope you find these insights helpful as you consider your organization's strategy for 2010 and beyond, and we welcome the opportunity to further discuss them with you.

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