

# NextGen Performance REALISED

Issue IV - 2010

## Congratulations! You Now Own It....

### 100-Day Value Creation Strategies

In our last issue, we discussed the importance of a comprehensive due diligence approach to acquiring refining assets. Now, we will consider what happens when the desired assets are owned. There is a classic temptation to “wait-and-see” before deciding what adjustments or integration efforts should occur once a transaction is completed. However, this strategy is typically flawed, and it can significantly sub-optimize the investment.

It has been statistically proven across numerous studies that if synergies are not clearly identified, capture plans in place, and the plans executed within 90-days post-closing, they are unlikely to be realised. Accordingly, there is a significant sense of urgency in accelerating the value

creation process. One primary reason contributing to this reality is that people will be the most receptive to change immediately after closing – they are expecting it. However, if changes are slow to materialise, people will settle back into a “business as usual” mindset, become recalcitrant in the desire to change, and presume the desire to make changes has past. Thus, a new owner, who has delayed changes, will often encounter significant corporate inertia in terms to implementing changes.

There are two other factors worth considering. Many companies have a quarterly earnings horizon; the first quarter post-closing earnings commentary will include notation the transaction has been

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## Improved Refining and Petrochemical Integration

As clients continue to consider methods to improve operating margins in challenging market conditions, many are focusing on the best way to leverage existing assets. One opportunity to consider is improving the level of integration between refining and petrochemical operations. In short, the concept is to optimise profitability across several operations and share the associated benefits.

For petrochemical producers, refinery - petrochemical integration (RPI) can improve feedstock quality and availability, maximise the upgrading value of by-products and feeds, and spread operating costs such as utilities, services, and infrastructure costs over a larger base with the refinery; thus, substantially improving the profitability for all parties. The more complex the site, the greater are the opportunities to benefit from RPI. Despite these potential advantages, the question often raised is: “Why doesn’t everybody do it?”

The most common reasons RPI fails are (1) the inability to set fair transfer pricing for feedstocks and derivatives, (2) cultural differences, (3) relative size of facility, (4) local profit focus, (5) inconsistent planning and price forecasting, and (6) trust issues between the refinery and petrochemical

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Capturing  
Market  
Leadership  
IN THE  
New Decade

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السوق في  
العقد الجديد

*In this photo: Dr. Abdul Hussain bin Ali Mirza, Minister of Oil and Gas Affairs, Chairman of the National Oil and Gas Authority (NOGA)*



In May, KBC hosted a Seminar in the Middle East discussing the changing global dynamics of the refining sector with an emphasis on the explosive growth in emerging markets. His Excellency, Dr. Abdul Hussain bin Ali Mirza, the Bahrain Oil Minister, opened the KBC Seminar with his vision of the future state of energy in the Middle East. This was followed by presentations on sector economics, the challenges of developing the local workforce, and how to obtain greater leverage from existing assets.

In the current marketplace, navigating the challenges facing businesses today can be difficult. We collaborate with clients to create unique solutions to provide results now that will move them closer to NextGen Performance in the future. We offer:

Strategic Solutions • Capital Solutions • Operating Solutions • Organisational Solutions • Environmental Solutions



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**Congratulations! You now own it...**

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concluded. However, at the second quarter post-closing, the buyer will be expected to further elaborate on how the integration and synergy realisation is progressing. The second factor relates to operations, which had been previously integrated within the seller's organisation. Likely, the buyer will be receiving services under a transition support arrangement. However, such services are not provided under an evergreen contract, and the buyer will need to quickly migrate away from these services or be subject to future risk. Thus, there is an urgency required post-closing to begin realising value and mitigate performance risk quickly.

### **100 Days Post-Closing is Too Short of A Time Horizon**

In reality, without a solid value creation plan already prepared prior to closing, this is absolutely a true statement. Savvy investors realise that value creation needs to be prepared prior to closing. Beginning with due diligence, once a go-forward decision is made and the transaction is considered worth pursuing, the processes should serve parallel functions: (1) confirmatory in terms of asset value for the offer and (2) preparatory for the rapid-paced value creation strategy that must be well underway at the point of closing (the date of closing is the point of terminal velocity). For example, as work practises and processes are being assessed, one part is focused on financial and risk implications in terms of value and the other part is to begin preparing plans for what will need to change and the timing of such change. A poor practise may need to be changed at closing, based on the risk of reduced safety performance, and others can be rolled out over the 100-day post-closing horizon. A comprehensive due diligence process will provide the initial inputs for the value creation strategy.

By being able to perform as much work as possible prior to closing, the 100-day post-closing time horizon can be greatly expanded to the advantage of the buyer. One typical constraint to performing such planning is the ability to exchange information prior to relevant regulatory approval. However, savvy investors are able to overcome this constraint by sharing restricted information to an independent third-party in a "clean room" environment. For example, two major refining organisations announced a merger. Before regulatory approval to share competitive information, the acquirer arranged for an independent third-party to perform certain analyses such as crude, end-products, conversion parameters, and operational



and market synergies, which allowed scenarios to be created. In a "clean room" environment, the detailed data could be shared with either the acquirer or seller; however, scenarios could not be created and broad answers provided to each party. This allowed the acquirer a significant advantage, with identified synergy opportunities and a value creation strategy which could be executed prior to closing. Leveraging a "clean room" approach is one specific option knowing the correlation between urgency and actual value realised. Further, a "clean room" exercise, while having limitations because of the way information is shared, could identify more upside potential to the buyer.

### **Transition Support is Not Permanent**

Imagine this scenario: the seller agrees to provide the buyer with central engineering support services for a period of six months post-closing to facilitate the transition as the refinery being acquired is heavily dependent on such support. Five days prior to the expiration of the support agreement, the buyer still does not have a plan to provide technical support to the acquired operations. What happens? Typically, the buyer has no recourse, and the risk of operating the newly acquired facility is suddenly magnified. Perhaps the seller would be willing to negotiate an extension, although there will likely be inflated rates due to the increased risk and desire for the buyer to become self-sufficient. However, this is the buyer's issue, not the seller's. The seller, too, desires to reduce risk and providing interim support entails ongoing risk. Accordingly, it is absolutely imperative for the buyer to quickly have a migration strategy in place to shift away from transition support arrangements, since the objectives of the seller and buyer may no longer be aligned post-closing.

This situation is often exacerbated by financial investors, who may not possess the necessary internal infrastructure to assume standalone responsibilities for the acquired operations. Thus, transition planning (which would commence during due diligence) could include identifying third-party contracted service providers to perform these functions once the initial transition support arrangement expires. Either way, a plan will need to be prepared

during the advanced due diligence stages. Even if the interim agreement is for a seemingly long period of time (e.g. one year or longer), the time required to develop a migration strategy is often longer than most buyers anticipate.

### **The Savvy Investor Knows**

There is a direct correlation between speed and operating synergy realisation. Thus, once initial due diligence is completed, transition and value creation planning commences with the second phase of confirmatory due diligence. The operations to be acquired will be most receptive to changes immediately after closing, with such receptivity waning quickly thereafter. Savvy investors leverage this momentum to the fullest extent possible, developing initial plans prior to closing, revamping them within the first 30-60 days (including obtaining additional data as required), and then executing between 90-100 days post-closing. Certain tools, such as generic LP programmes, can help jump-start the process. Leaving value creation plans for a later time (a novice mistake) can have undesirable consequences including financial underperform and the inability to realise the promised returns.

Finally, savvy investors know that managing market expectations is critical to establishing overall credibility with the investment community — often influencing ratings and trading multiples. By having the analysis and value creation plan completed prior to closing, the buyer can confidently announce at closing; the anticipated synergies from the transaction (areas of savings, range of amounts, how capture plans have been prepared, etc) this provides financial analysts the ability to track future progress against these targets.

KBC has many years of experience in helping clients develop value creation plans for investors, including sector economic analysis for crude supplies and the attractiveness of end product markets, mechanical integrity and fitness, optimisation opportunity identification (operations and working capital), workforce and operating practise assessment, tax appraisal support, and rationalising environmental compliance expenditures. In addition, KBC has worked with clients in a "clean room" environment to complete advanced scenario planning, thus enhancing the ability of investors to achieve the desired returns. We have performed these services for operators, financial investors, and banking institutions across the globe.

operators - even when they are owned by the same company. Innovative companies have taken RPI to new levels by evaluating opportunities to integrate operators - not just within the same fence-line or complex, but with petrochemical facilities in reasonable proximity, even if they are not owned by the same company. Next Generation performers often collaborate with competitors. The objective is to look at every possible opportunity, discounting none, and selecting the best value creation strategy. Most organisations undertake a multi-phase process to evaluate potential RPI opportunities. Phase one would involve a brief, high-level analysis to identify options and issues, visiting sites, to gather data, then completing a benchmarking process. From this, opportunity identification and evaluation would take place incorporating benefit allocation, project prioritisation, and the evaluation of quick wins. Phase two would involve more rigorous analysis of more difficult or marginal opportunities and of opportunities requiring the expenditure of capital. Simulation models and LP tools are often used to perform these types of assessments, which also support effective transfer prices between operations.

#### Case Study:

A major refinery 400,000 bpd was situated in proximity to multiple nearby olefins/aromatics complexes, most owned by third-parties. To date, there was relatively little integration. The first phase of the opportunity evaluation project focused on feedstock optimisation, by-product upgrades, business process consolidation, and leveraging bulk shipping opportunities. These were ranked based on the overall benefit, capital investment requirements, overall ease of implementation, and cultural considerations. Also, zero- to moderate-level investments were required to have a payback in a period of

under six months. In terms of attractive capital opportunities, the required payback period was under 24 months.

The equivalent of US\$50 million/year in margin improvement opportunities were identified meeting the zero to moderate investment criterion and US\$200 million meeting the attractive capital investment opportunity criterion. The benefits were equally split between the refinery and the petrochemical operations. Some of the opportunities in the first category included the following: cracker C<sub>9</sub>+ aromatics to refinery fuel oil blending, cracker C<sub>5</sub>s to refinery gasoline blending, refinery LCO to cracker wash oil, sales agreements to reduce imports/exports, cracker pygas raffinate to reformer, reformer raffinate to cracker, increase polymer grade propylene production, consolidate LPG marketing, hydrogen recovery, increased demand due to sulphur legislation, condensate pre-fractionator, cheaper feedstock, improve cracker light naphtha and reformer HN supply, olefin recovery from FCC off-gas.

Once the opportunities had been identified, screened, and ranked based on the pre-established criteria, the second phase of the project was to develop a detailed implementation plan. This included gaining consensus on the “quick wins” to be implemented first to gain confidence and momentum then develop fair transfer pricing. Tactical implementation steps included updating the planning and scheduling systems. Overall, the company was able to achieve a positive result by creating a relationship between the refining and petrochemical operations and taking advantage of savings and efficiencies when considered in tandem versus stand-alone operations.

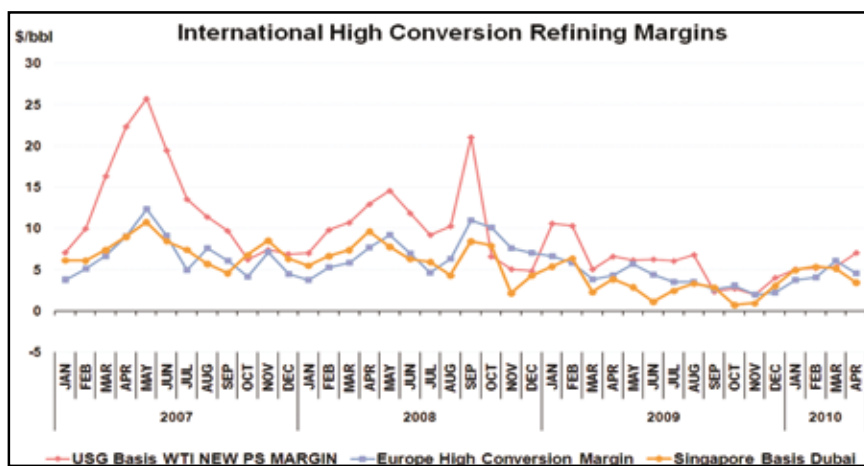
## REFINING MARKET UPDATE

There were contrasting trends in returns to high conversion refineries in April with margins in the US Gulf (measured against WTI as the regional crude benchmark) rising by around US\$1.50/bbl, while those in NW Europe (versus dated Brent) and Singapore (versus Dubai) fell by a similar amount.

- The fallback in margins in Europe and Asia was due to some weakening in formerly strong cracks for light ends. In NW Europe, the monthly average gasoline crack spread slipped from US\$14/bbl in March to US\$11/bbl in April with a corresponding drop at Singapore from around US\$13.50/bbl to US\$10.50/bbl for 95 octane material.
- However, cracks for middle distillates were slightly stronger, month-on-month, in both Europe and Asia. This was in sharp contrast to lower fuel oil cracks especially for high sulphur material with 180 cst at Singapore slipping from minus US\$4.50/bbl in March to minus US\$7.25/bbl in April.
- Due to the arrival in Asia of large arbitrage volumes from the West, the weaker trend in fuel oil contributed to the fall in margins for simple refining in April for both hydroskimming at Singapore and basic conversion in NW Europe (see chart right). Indeed, the negative return at Singapore means that ‘hydroskimming only’ now seldom sets the economics of refining the marginal barrel in Asia.
- Though global refinery margins in April were typically lower than in March, they continued to receive strong support from widespread seasonal maintenance in Europe and Asia. This support will continue into May, which should underpin margins

in Europe and especially Singapore at levels close to those seen in April. Thereafter, however, given the surplus in global refining capacity, as units come back on stream from maintenance it is difficult to envisage anything other than a gradual decline in margins through June and July.

- The excess stocks position at Cushing should begin to correct as local refineries come back on stream from maintenance. Nevertheless, there is likely to be a deep WTI/dated Brent inversion during May which will continue to give a misleading impression of strong US margins. Indeed, LLS in the US Gulf is currently trading at a premium to land-locked WTI of more than US\$5/bbl compared to a more normal level of around US\$1/bbl. This suggests that WTI margins are as much as US\$4/bbl above the more typical level of returns to US Gulf refiners from processing internationally traded crudes.





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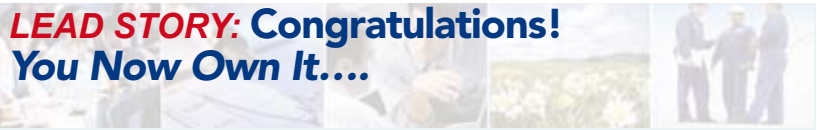
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**Catalyst: P+M+T**

P = People  
M = Methodologies  
T = Technologies

**Your Company + KBC Produces NextGen Performance<sup>®</sup>**

We collaborate with our clients to create unique solutions to their specific challenges. Some of these challenges may include:

- Strategic Challenges**
- Creating Effective Business Strategy/Decisions
  - Increasing Return on Investments
  - Enhancing Returns on Acquisitions/Divestitures
  - Reducing Strategic/Capital/Market/Investment Risk
  - Enhancing Yields
  - Creating Effective Response to Crude/Feedstock/Product Markets
  - Improving Financial Performance
- Capital Challenges**
- Increasing Return on Capital Investment
  - Rationalising/Optimising Environmental Compliance Capital Expenditures
  - Reducing Capital Risk
- Operating Challenges**
- Improving Yield
  - Reducing Maintenance Costs
  - Implementing/Improving Behaviour-based Reliability
  - Improving Supply Chain Performance
  - Increasing Availability
  - Improving Safety Performance
  - Managing Operational Risk
- Organisational Challenges**
- Increasing Organisational Effectiveness
  - Improving Employee Competency/Capability
  - Enhancing Employee Support Systems
  - Improving Shift Team Function
- Environmental Challenges**
- Reducing Emissions
  - Reducing/Managing Environmental Liabilities
  - Rationalising Compliance Expenditures
  - Ensuring Compliance
  - Improving Energy Efficiency