Finding the Right Formula
How the Middle East will impact European Chemical Companies
Finding the Right Formula

Middle Eastern governments and companies are actively seeking to attract industries outside of the oil sector, and chemicals is an industry firmly in their sights.

With an abundant supply of cheap oil and gas reserves and proximity to the emerging markets in Asia, the Middle East is leveraging its strengths to become a global petrochemicals producer, developing from a net importer in the past to a net exporter of petrochemicals in the near future.

Many companies in the oil and gas rich Middle Eastern region are making massive investments to increase their capacities to produce petrochemicals along the value chain. Ethylene capacities, for example, are expected to more than double and combined polyethylene (PE) and polypropylene (PP) capacities to nearly triple by 2012, and this is just the first wave of the development. Some consumer products companies are already moving their whole value chains to the Middle East and this is not only to supply local demand.

In contrast, European companies are facing ever-increasing pressures due to increasingly volatile oil and gas prices, unfavorable exchange rates due to the strong euro and weakening consumer demand for end-products. This has led to significant underutilization of capacity, plant shutdowns and margin erosions.

Many European companies are being forced to re-think their strategies on how to respond to these challenges, which are likely to have a significant impact on the stability of European chemical markets in the future, and leverage the developments of the Middle Eastern region for their benefit. A question for European chemical players is not whether to have a Middle East strategy, but how they can quickly turn the momentum underway in the region to their advantage.

Foreword

The Middle East could change the global chemical world

Middle Eastern governments and companies are actively seeking to attract industries outside of the oil sector, and chemicals is an industry firmly in their sights.

With an abundant supply of cheap oil and gas reserves and proximity to the emerging markets in Asia, the Middle East is leveraging its strengths to become a global petrochemicals producer, developing from a net importer in the past to a net exporter of petrochemicals in the near future.

Many companies in the oil and gas rich Middle Eastern region are making massive investments to increase their capacities to produce petrochemicals along the value chain. Ethylene capacities, for example, are expected to more than double and combined polyethylene (PE) and polypropylene (PP) capacities to nearly triple by 2012, and this is just the first wave of the development. Some consumer products companies are already moving their whole value chains to the Middle East and this is not only to supply local demand.

In contrast, European companies are facing ever-increasing pressures due to increasingly volatile oil and gas prices, unfavorable exchange rates due to the strong euro and weakening consumer demand for end-products. This has led to significant underutilization of capacity, plant shutdowns and margin erosions.

Many European companies are being forced to re-think their strategies on how to respond to these challenges, which are likely to have a significant impact on the stability of European chemical markets in the future, and leverage the developments of the Middle Eastern region for their benefit. A question for European chemical players is not whether to have a Middle East strategy, but how they can quickly turn the momentum underway in the region to their advantage.
Commodity prices have experienced both historic heights and rapid falls in 2008, driving significant volatility in the Chemical industry.

The Middle East, with its transformation from provider of resources to a global player, has taken center stage in the industry. The possible threats and opportunities this represents for the established Chemical industry in Western economies are demanding and can make determining long term consequences particularly challenging.

However, predictions for the next five to ten years may be made by taking a closer look at current and expected developments:

- Increasing competition from Middle East companies through significant investment in new capacity in the region, and the overall impact this could have on supply/demand cycles.

- Middle East companies are likely to become truly global players; continuing to have access to favorably priced raw materials, and potentially lower logistics costs due to greater proximity of the Middle East to growing Asian markets.
• Further consolidation can be expected in a fragmented European industry, which is also currently facing the effects of the global economic downturn in its customer industries. The European industry is also facing increasingly strict EU regulations, with the resulting challenges for Chemical companies to operate in a more sustainable way.

• Middle East companies as potential bidders in M&A situations especially in this time of difficult financing.

European chemical companies may have to re-assess their global strategies, and the successful players will be those that take advantages of new opportunities especially in partnering with Middle East companies. Appropriate selection of partners, establishment of symbiotic partnerships and sustained management of the resulting joint ventures will be one of the keys to reaping the potential rewards through engagement in the Middle East region.

However, not all of today’s Chemical companies will survive in the next few years. As BASF CEO Jürgen Hambrecht summarized in a recent interview on the European Chemical industry in the next few years: “There will be fewer chemical companies.”

1 Interview with Jürgen Hambrecht, CEO BASF Handelsblatt, 11 September 2008
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASG</td>
<td>Arabian Services Group</td>
</tr>
<tr>
<td>bn</td>
<td>Billion</td>
</tr>
<tr>
<td>BTU</td>
<td>British Thermal Units</td>
</tr>
<tr>
<td>C&amp;EN</td>
<td>Chemical &amp; Engineering News</td>
</tr>
<tr>
<td>CAGR</td>
<td>Compounded Annual Growth Rate</td>
</tr>
<tr>
<td>CEFIC</td>
<td>European Chemical Industry Council</td>
</tr>
<tr>
<td>CMAI</td>
<td>Chemical Market Associates, Inc.</td>
</tr>
<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
</tr>
<tr>
<td>e</td>
<td>Estimate</td>
</tr>
<tr>
<td>EO</td>
<td>Ethylene oxide</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUR</td>
<td>euro</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FTA</td>
<td>Free Trade Agreement</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GE</td>
<td>General Electric</td>
</tr>
<tr>
<td>GPA</td>
<td>Gulf Petrochemicals and Chemicals Association</td>
</tr>
<tr>
<td>JV</td>
<td>Joint Venture</td>
</tr>
<tr>
<td>LNG</td>
<td>Liquefied Natural Gas</td>
</tr>
<tr>
<td>m</td>
<td>Million</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers and Acquisitions</td>
</tr>
</tbody>
</table>
### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>mt/a</td>
<td>Million tons per year</td>
</tr>
<tr>
<td>OPIC</td>
<td>Oman Petrochemical Industries Company</td>
</tr>
<tr>
<td>p.a.</td>
<td>Per annum</td>
</tr>
<tr>
<td>PE</td>
<td>Polyethylene</td>
</tr>
<tr>
<td>PET</td>
<td>Polyethylene terephthalate</td>
</tr>
<tr>
<td>PIC</td>
<td>Petrochemicals Industries Company</td>
</tr>
<tr>
<td>PO</td>
<td>Propylene oxide</td>
</tr>
<tr>
<td>PP</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>PVC</td>
<td>Polyvinyl chloride</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorization and Restriction of Chemicals</td>
</tr>
<tr>
<td>SABIC</td>
<td>Saudi Basic Industries Corporation</td>
</tr>
<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>USP</td>
<td>Unique Selling Point/Unique Selling Proposition</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>VP</td>
<td>Vice President</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
</tbody>
</table>
Contents

Foreword ii
Executive Summary iii
List of Abbreviations v

1. European Chemical Industry Overview 1
  1.1. Key Challenges in the Industry 3

2. Current Scenario in the Middle East and Opportunities for European Companies 7
  2.1. Petrochemicals Industry in the Middle East 7
  2.2. Growth Opportunities for European Companies 13

3. Strategy Options 17
  3.1. Strategic Assessment 17
  3.2. Search and Fit Analysis 19
  3.3. Establishing Symbiotic Partnerships 19
  3.4. Sustained Management 20

4. Conclusion 21

Appendix 23
Bahrain 23
Kingdom of Saudi Arabia 24
Kuwait 25
Oman 26
Qatar 27
The United Arab Emirates (UAE) 28
Finding the Right Formula

In 2007, the global chemicals industry produced output valued at EUR2.3 trillion and was forecast to grow at 4.3 percent CAGR to reach a total value of EUR4 trillion by 2020. Europe currently accounts for 30 percent of this market with Asia a close second at 29 percent. An estimated 23,500 companies employ over 1.4 million people in chemical industries. In Europe, Germany, France, the U.K. and Italy represent the largest European chemical producers with a combined two-thirds of sales in the EU.2

European Chemical Industry Overview

In understanding how the Middle East will impact European chemical companies, it is important to first consider the state of the industry in Europe itself.

Chemical production in Europe still has basic chemicals as the largest segment, making up 43 percent of total chemical production. This is broken down into petrochemicals (16 percent), basic inorganics (8 percent) and polymers (19 percent). Pharmaceuticals contributes 28 percent of the overall production. Specialty chemicals account for almost 19 percent of total chemical production. Consumer chemicals, consisting of products such as detergents or perfumes account for 10 percent of total European chemical production.3

The production output of the European Chemicals industry (excluding pharmaceuticals) grew 2.6 percent in 2007 up from 2.1 percent in 2006.4 Growth was largely driven by high demand from Asia, where emerging countries, especially China, lack sufficient domestic manufacturing capabilities of basic chemicals to satisfy local demand.

In 2008, growth has slowed and margins have been declining. The high increase in raw material prices (until summer 2008) played a crucial role in these developments. Since 2003 crude

---

2 EU Chemical Industry: Current State & Future Prospects, Dr. Rafael Gomez, ECEG-EMCEF Conference, November 2007
3 European chemical production trends, CEFIC, June 2008
Finding the Right Formula

Oil prices rose from US$28 a barrel to peak levels over US$150 in July 2008 before easing back to around US$50 in late November. For the 2007-2010 period, European Chemical industry sales are forecast to grow at 3.2 percent per annum while petrochemical and specialty/fine chemical sales are forecast to grow at only 2.9 percent and 1.5 percent respectively. The reasons for this development can be found both on the supply and the demand side. Asia has been constructing its own chemical plants and using joint ventures with European players to become more self-sufficient. China, in particular, is very active in attempting to decrease its dependency on foreign markets. China’s self-sufficiency index for basic chemicals, resins and fibers is at present approximately 80 percent, according to estimates from Chemical Market Associates Inc. (CMAI), and this level will reach 85 percent by 2015. A second and probably more important factor is the Middle East’s ambition to become a global player in the Chemical industry. In addition to exploiting an immense cost advantage due to readily-available cheap raw materials in the form of oil and natural gas, governments are looking to create whole industry sectors that extend the region’s presence down the chemical value chain. A total of up to 53 plants with a capacity of more than 34 mt/a could come on stream by 2012 (see figure 2). About 70 percent of the projects, producing ethylene, propylene, PE or PP are already either in the engineering or construction phase.

With further investment in new capacity in Asia, overcapacity would result if all projects come on stream together with an expected negative effect on European players.

The European chemicals industry is highly fragmented.
1.1 Key challenges in the Chemical Industry
In Europe, the Chemical industry faces a number of challenges that may effect its ability to sustain its global leadership position in the long run. Some of the major challenges include high fragmentation levels, high and volatile energy and raw material prices, strict and increasing regulations, customer industry segments shifting to other regions, low R&D levels as well as continued strength of the euro versus the US Dollar.

1.1.1. High fragmentation drives market consolidation
According to CEFIC, large companies (more than 250 employees) make up only 4 percent of enterprises but generate about 70 percent of total sales in the European Chemical industry. The remaining 96 percent are medium to small sized companies which are more vulnerable to adverse impacts like market downturn, increasing competition and increasing costs. To counteract the challenges, the European Chemical industry has seen consolidation in all sizes of enterprises. To offset Europe's dependency on raw materials from foreign sources, companies are keen to expand further into downstream activities, to increase economies of scale and enter new (niche) market segments that offer growth potential and the opportunity to improve overall market position. In the first seven months of 2007 four major deals worth EUR6.4bn in total took place. However, the onset of the 2008 credit crisis and a global economic slowdown saw a significant reduction in the number of deals.

A number of transactions were either delayed or cancelled completely due to difficulties in financing and/or because the market outlook no longer justified the transaction. One of the reasons for the breakdown of the merger between chemicals giants Hexion and Huntsman in 2007 was cited as the financial crisis.

Analysis of recent transactions, indicates that large chemical players in the Middle East such as Saudi Basic Industries Corporation (SABIC) are not only planning to grow in the region but are also expanding globally into further downstream areas.

While initially it appeared M&A activities were adversely impacted when the credit crunch started to unfold in the second half of 2007, it could now potentially act as a catalyst to drive market consolidation in the coming years.

1.1.2. High energy and raw material prices
The Chemical industry with its use of oil and gas both as a manufacturing resource and energy for its plants accounts for 17 percent of total

“...The sector is poised for higher valuations and further takeovers”
Businessweek, July 2007

5 “How to ensure that Europe remains a leading production platform in 2015”, CEFIC, June 2007
6 ICIS, September 2008
Finding the Right Formula

Figure 3: Overview of selected M&A and JVs, 1998-2008


Merger of Exxon and Mobil Value: USD80.1bn

BP acquires Amoco

TotalFina acquires Elf Aquitaine to form TotalFinaElf (Renamed to Total in 2003)

SABIC/Chemicals acquires DSM Petchem Value: USD2.3bn

Blackstone and National Bluestar The PE house acquires 20% stake in the Chinese chemical firm

Dow Chemical and Kuwait Petroleum Industries JV Value: USD13bn

Blackstone acquires Gea Value: USD3.8bn

Dow Chemical acquires Rohm & Haas Value: USD18.6bn

Dow Chemical acquires Innovene from BP

BP exit from olefin and most parts of its polymer businesses

Dow Chemical acquires Rohm & Haas Value: USD18.6bn

Total spin off Total spins off most of specialty chemicals as Arkema

SABIC/Chemicals acquires Depussa Construction Chemicals Value: USD1.7bn

BASF acquires gas prices for crude oil and naphtha have retreated from their record highs in July 2008, the Chemical industry should further improve energy and manufacturing efficiency levels to reduce impacts on margin levels.9

Companies like ExxonMobil Chemicals spend almost 50 percent of their operating costs on fuel. Even though manufacturing energy demand in Europe. In some sub-sectors such as petrochemicals, energy and feedstock (for example naphtha) can amount to 50 percent or more of total cost.7

7 “The state of the European Chemical industry”, European Commission 2007
8 Chemical Week, September 2008
9 Chemical Week, September 2008

1.1.3. Regulations

The introduction of the REACH guidelines (Registration, Evaluation, Authorization and Restriction of Chemicals) in the EU transferred the responsibility for health and chemical security from the governments to the Chemical industry in Europe. This impacts the whole product chain and makes the introduction of new products more complex and time intensive.

Figure 4 shows how the number of guidelines in the Chemical industry in Europe has increased from 19 to 527 between 1990 and 2003. Dangerous substances and safety guidelines make up more than two-thirds of regulations, accounting for 33 percent and 35 percent respectively. Compared to the U.S., the introduction of a new chemical substance in Europe takes three times longer and is ten times more costly. Europe is also a major supporter of the Kyoto protocol which is focused on reducing carbon dioxide (among other greenhouse gases) and governments are keen to ensure its implementation.

1.1.4. Industry segments shifting to other regions

The Chemical industry in Europe caters to most industries with an estimated 80,000 products. However, many of the end-user industries have started to move operations outside of Europe. The textile industry has offshored to the Middle East or Asia to be closer to high growth regions or benefit from lower manufacturing and logistics costs. Parts of the automotive industry have moved to Eastern Europe, followed by their tier one and two suppliers to improve their competitiveness and benefit from more financially attractive locations.

1.1.5. Low Research and Development (R&D) levels

Europe is one of the major innovation drivers in the Chemical industry. In recent years however, R&D spending as a percentage of sales has declined. The European Chemical industry is aiming to increase R&D spending levels from currently below two

The introduction of a new chemical substance in Europe takes three times longer and is ten times more costly than in the USA

Source: “Horizon 2015 - Is the European chemical industry losing its global leadership?”, CEFIC, June 2004

Source: CEFIC, UNICE, 2006

Source: CEFIC, UNICE, 2006

Source: “Horizon 2015 - Is the European chemical industry losing its global leadership?”, CEFIC, June 2004

percent to three percent of sales by 2010. However, factors such as end-user industries moving out of Europe as well as the skills base not being attracted to the industry and a tighter regulatory environment, may negatively affect plans. Considering that the Chemical industry plays a major role in the innovation levels of downstream industries, lower R&D spending levels could add to the challenges for the European industry in the long run.

1.1.6. Continued strength of the euro versus the US Dollar

The appreciation of the euro versus the US Dollar has impacted the European Chemical industry in several ways. Firstly, chemicals produced in Europe became more expensive on international markets which challenges the industry to decide how to pass this on to customers. A further impact is that European chemical customers have started to procure raw materials, such as PE, from countries with cost advantages. For some companies this may further add to the argument to move some or all manufacturing capacities from Europe to Asia or the Middle East, which are already attractive due to the high growth in consumer markets and low production costs.

1.1.7. High logistics costs

In addition to the high costs of manufacturing, European chemical companies are also facing high logistical costs for shipping to high growth markets, such as China, resulting in a tendency for Asia to import materials from the Middle East with its production and shipping costs.

The Middle East is keen to expand along the value chain into more downstream activities
Before examining options for Western companies, this report seeks to explore the situation in the Middle East and take a closer look at the economic and investment profiles of individual countries.

The Middle East region has the largest oil and gas reserves globally, accounting for around 67 percent and 45 percent respectively. In 1981, six countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE) created a trade bloc called the Gulf Cooperation Council (GCC) to work together in developing the region's economy and secure future growth.

2.1 Petrochemicals industry in the Middle East

Through the provision of chemicals such as propylene or ethylene at highly competitive prices and with high demand from Asia, the Chemical industry in the Middle East has been growing at a high rate. In 2007, the Middle East Chemical industry generated a total output of EUR46bn – growing at more than nine percent p.a. during the decade from 1997 through 2007. Forecasts until the year 2020 predict that the region will continue to grow at an average of over 9.5 percent per year, making it the area of highest
regional growth at more than twice the global average of 4.5 percent. The large availability of natural resources provides the Chemical industry in the Middle East with energy and feedstock at relatively low prices. Crude oil and liquid gas are also available at significantly discounted prices. Companies like SABIC paid only US$0.75 for one million British Thermal Units (BTU) compared to the average market price of between US$7 to US$8 in Western countries in 2005 (see figure 5).

Source: American Chemistry Council, October 2008

Figure 5: Average prices of one million BTUs of natural gas (in US$) in 2005

$\text{United States} \quad \text{Belgium} \quad \text{China} \quad \text{Brazil} \quad \text{Russia} \quad \text{Oman} \quad \text{Saudi Arabia}$

Source: American Chemistry Council, October 2008

---

Finding the Right Formula

One of the key regional drivers also comes from the investments by the major petrochemical companies in Saudi Arabia, the UAE, Qatar, Oman, Bahrain, Kuwait and Iran (see figure 6).

2.1.1. Growth through capacity expansions

Middle Eastern countries are making massive investments to increase capacity in both upstream and downstream production facilities. As a result, ethylene capacities were expected to increase from 14.3 mt/a in 2007 to 33 mt/a by 2012, and the combined PE and PP capacities in the region were expected to increase from 11.3 mt/a in 2007 to 30 mt/a by 2012 (see figure 7).^14

However, with the current economic crises resulting in significantly lower demand in downstream industries, such as automotive, the value chains back to chemicals manufacturers will probably be affected. This could result in capacity investments being delayed or cancelled altogether where downstream demand in the medium term does not justify the additional investment.

---

^14 Petrochemical Yearbook, Deutsche Bank, April 2008
Currently, the Chemical industry in the Middle East region is focused on basic petrochemicals, polyolefins, PE and PP. With the level and intensity of capacity expansion, the Middle East is likely to become the only net exporter of polyolefins in the near future (see figure 8).

A decade ago, North America was the primary exporter and supplier of products such as PE and PP to the world, with the Middle East as the second most important exporting region. Europe was fairly well balanced between supply and demand. Trade flow patterns of polyolefins however have changed dramatically. In the last ten years, the Middle East has become the dominant inter-regional exporter of polyolefins and Europe and North America are expected to become net importers by 2010.

Although Asia is also investing in ethylene assets, it is expected to continue to be a growing net importer.

**Figure 7: Polyethylene and Polypropylene capacity expansions in the Middle East**

Source: Petrochemical Yearbook, Deutsche Bank, April 2008

**Figure 8: Middle East development to only net exporter of PE and PP**

Source: Analysis by KPMG International, 2008
2.1.2. Growth through joint ventures
Alternative growth strategies involve forming joint ventures and technology collaboration with global companies such as Dow, Basell and Borealis which provide expertise, access to technology and process innovation. This expansion however will result in overcapacity in PE and PP which global markets will not be able to absorb from 2010 onwards. This may result in lower market prices and margins which are likely to impact the competitiveness of European companies in particular.

2.1.3. Further growth – Plant investment
The Middle East is planning to expand both the scale and breadth of its Chemical industry. Backed by profits from high crude oil prices and governments keen to establish

### Table 1: Joint ventures and collaborations of ME companies with Western companies

<table>
<thead>
<tr>
<th>Company name</th>
<th>J V Partners</th>
<th>Type of assets</th>
<th>Capacity in MT</th>
<th>Status</th>
<th>Exp. On stream date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Petrochemical Co. (Sharq) - Al Jubail</td>
<td>Saudi Basic Industries Corp (SABIC) and SPOC, a Japanese consortium headed by Mitsubishi Corp and Mitsubishi Chemical</td>
<td>PP PE and others</td>
<td>1,000 (PP-PE only)</td>
<td>Construction underway</td>
<td>Q3 2008</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Saudi Polyolefins Co - Al Jubail</td>
<td>Basell and Tasnee</td>
<td>PP</td>
<td>250</td>
<td>Construction underway</td>
<td>H1 2009</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Petro Rabigh - Rabigh</td>
<td>Saudi Aramco and Sumitomo Chemical</td>
<td>PP PE and others</td>
<td>1,600 (PP-PE only)</td>
<td>Construction underway</td>
<td>Q3 2008 (PE) H1 2009 (PP)</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Qatar Petrochemical Co. (QAPCO) - Ras Laffan</td>
<td>Industries Qatar and Total Petrochemicals</td>
<td>PE, Ethylene</td>
<td>300 (PE only)</td>
<td>Planned</td>
<td>Q1 2011</td>
<td>Qatar</td>
</tr>
<tr>
<td>N/A - Messaid</td>
<td>Qatar PC/Honam PC</td>
<td>PP and others</td>
<td>700 (PP only)</td>
<td>Study</td>
<td>2012</td>
<td>Qatar</td>
</tr>
<tr>
<td>Ras Laffan Liquefied Natural Gas Company Limited (RL3) - Ras Laffan</td>
<td>Qatar Petroleum and ExxonMobil</td>
<td>PE and others</td>
<td>N/A</td>
<td>Study</td>
<td>2012</td>
<td>Qatar</td>
</tr>
<tr>
<td>QatarGas 4 (project name) - Ras Laffan</td>
<td>Qatar Petroleum and Shell Chemicals</td>
<td>Ethylene</td>
<td>1,250</td>
<td>Pending</td>
<td>2010-2012</td>
<td>Qatar</td>
</tr>
<tr>
<td>Petrochemical Industries Co (PIC) - EQUATE (project name) - Shubra</td>
<td>Kuwait Petroleum Corporation and Dow Chemical Company</td>
<td>PP</td>
<td>160</td>
<td>Planned</td>
<td>H2 2008</td>
<td>Kuwait</td>
</tr>
<tr>
<td>Oman Petrochemical Industries Co (OPIC) - Sohar</td>
<td>Oman Oil Company S.A.O.C. and DOW Chemicals</td>
<td>PE, Ethylene</td>
<td>1,200 (PE only)</td>
<td>Delayed</td>
<td>Q4 2011/Q1 2012</td>
<td>Oman</td>
</tr>
<tr>
<td>Borouge-Abu Dhabi</td>
<td>Abu Dhabi Polymers Co Ltd / Borealis</td>
<td>PP PE and others</td>
<td>1,340 (PP-PE only)</td>
<td>Construction underway</td>
<td>Q2 2010</td>
<td>UAE</td>
</tr>
</tbody>
</table>

Source: KPMG International, October 2008
new industries to diversify and grow local economies, companies have begun to expand along the chemical value chain. Plans indicate expansion beyond polymers into the manufacturing of plastic products, adhesives, coatings and others (see figure 9).

The growth ambitions of the Middle East are reflected in the capital investment levels. While investments for the 2004-2008 period reached USD180bn, they are estimated to reach USD395bn for the 2007-2011 period. Twenty percent of investments are scheduled for petrochemicals while 29 percent will be spent on mid- and upstream oil and gas projects.15

The ambitious growth plans are likely to stretch local resources. Soaring project and equipment costs are beginning to impact expansion plans of the region: Oman Petrochemical Industries Company (OPIC) had to put a multi-billion dollar olefins complex at Sohar on hold in 2007 due to construction costs that have more than doubled and feedstock issues. In Abu Dhabi construction costs for expanding the gas sector are believed to have more than doubled. The petrochemical

"Middle East projects in the feasibility study or early planning stages are likely to be delayed" 
Dr. Sami T. Salman, President of ASG Group in Saudi Arabia


Figure 9: The Chemical Value Chain


15 NBK MENA Equity Research, Petrochemical Primer, 19 September 2007
industry in Saudi Arabia is also facing delayed or cancelled projects based on questions regarding the adequacy of gas supplies and rising project costs.

Expansion in local markets is only one of two growth strategies of Middle Eastern chemical companies. They use mergers and acquisitions on a global level to expand and diversify their product base and services, for example in 2007, SABIC bought GE Plastics for USD12bn. This provided SABIC access to downstream plastics in Europe as well as serving to diversify their product base. Europe offers excellent opportunities for Middle East companies due to its mature industry, high innovation levels and expertise as well as the fragmented market space.

2.2. Growth opportunities for European companies

The European and Middle East Chemical industries are both facing issues, but at opposite ends of the spectrum. While Europe is a mature market with a highly developed industry covering a broad variety of downstream activities, it faces growth challenges. The Middle East on the other hand has high financial and natural resources but lacks technology, knowledge and personnel resources to make the transition from a growing to a developed Chemical industry.

Opportunities for European companies lie in innovation, offshoring or M&A either domestically or in high growth regions such as the Middle East.

| Table 2: Overview of the Chemical industry status in Europe and the Middle East |
|-------------------------------|-------------------------------|-------------------------------|
| **Industry lifecycle**       | **Europe Chemical Industry**  | **Middle East Chemical Industry** |
| Growth outlook                | Mature                        | Growing                       |
| Innovation levels             | Lower single digits           | High single to double digits  |
| Value chain presence          | High expertise                | Lack of people & skills       |
|                               | Strong downstream activities  | Mostly upstream               |

Asia as key market


What are the options for the European Chemical industry to preserve growth and competitiveness?
2.2.1. Growth through innovation

In a recent study on how innovation occurs in the Chemical industry, researchers found that “the ability to generate value-creating knowledge is regardless of region.” The findings also imply that multinational companies tend to be too risk averse in their quest for innovation and do not tend to use external resources that could help increase their efforts.\(^1\)

With other regions having access to cheaper resources and/or higher domestic demand, innovation is one of the key aspects of the European Chemical industry in preserving competitiveness. The Chemical industry is the third biggest industrial sector in the EU and provides almost 12 percent of the total added value.\(^2\)

For Germany, 20 percent of all supplier developed innovations come from the Chemical industry. New chemical products account for three billion euro in sales per year in other industry sectors.\(^3\)

Despite its importance for European industries, innovation levels have been decreasing. Long innovation cycles and high levels of regulation appear to be key reasons for this trend which is likely to continue.

Innovation levels however, could be reinvigorated through investments by companies from emerging countries like SABIC that are keen to expand their activities. The Saudi-Arabian company has been making strategic acquisitions to gain access to new markets. With the acquisition of GE Plastics for example, the company gained access to know-how to develop innovations. By securing access to innovation, the company can increase its chances for above-market returns on investment levels, as illustrated by figure 10.

Increasing the rate of innovation is vital for the European Chemical industry

---

\(^1\) “A map of the knowledge base for the Chemical industry”, International Journal of Technology, Policy and Management, July 2007

\(^2\) “European Chemical Industry – the past, present, and future”, 2006

\(^3\) “High Level Group on the Competitiveness of the European Chemical Industry”, Dr. Hans-Jürgen Klockner, VCI, October 2007
2.2.2. Growth through – offshoring

Offshoring has been used by many industries to shift manufacturing or services (for example call centers) to more attractive regions that offer more cost effective labor, tax benefits or closer proximity to key markets. In a study by A.T. Kearny, engineering and R&D services were identified as one of the key elements (36 percent) that are offshored by chemical companies, topped only by procurement which showed the highest offshoring levels at 53 percent.

While offshoring can include third parties (for example through partnering or joint ventures with local businesses), companies may choose to keep full control of the offshored processes. As a result companies can leverage the benefits offered by more attractive locations and gain exposure to the local business environment. In the case of innovation, offshoring parts of R&D activities to the Middle East may help to decrease time-to-market due to more favorable regulatory conditions and closer proximity to end-user related industries already present in the region. This could forge new business ties or improve existing ones and possibly result in the creation of R&D clusters to improve efficiency.

Offshoring may be a compromise to benefit from attractive locations without giving up domestic roots.

While joint ventures or M&A can help improve competitiveness, HSBC recently highlighted in a study about the Chemical industry, that in many instances, M&A can destroy value. With the risks in mind and the potential opportunities, it is even more important to use a strategic, systematic approach that considers the key elements before, during and after the process of partnerships or acquisitions.

M&A could be the best of both worlds – but it comes at a price
Based on our firms’ experience, there are four phases which may be considered as guidelines before, during and after the M&A or partnering process.

3.1 Strategic Assessment
Companies need first to assess the strategic need of searching for partnering or M&A opportunities.

Figure 13: Key strategic steps to be considered before, during and after engaging into M&A or partnering activities

Due to the economic effects of the credit crisis, stakeholders, especially banks and shareholders, have become very critical of any strategic moves requiring high levels of financial resources. Sources in the European and Middle East Chemical industries believe that it might take up to two years or even longer before markets will recover. “The U.S. imports around 35 percent of their needs from China – any slowdown in demand caused by the credit crunch will ultimately impact the Chemical industry in the Middle East since the highest demand for chemical products comes from Asia”, stated Dr. Sami T. Salman, President of Arabian Services Group (ASG) in Saudi Arabia in October 2008. Under current conditions, strategic buyers are likely to benefit from entering into partnerships or engaging in M&A activities either in the Middle East or in the European market. “Financial buyers will have a subdued presence... [and] struggle to raise financing” said Peter Young, President of New York investment bank Young & Partners in February 2008.19 For European players there may be interesting domestic opportunities as some (niche) companies may not be able to cope with a two year downturn. Executives may find it essential to establish a strong business case that details the expected benefits from such steps.

Deals involving companies in growing markets like the Middle East or Asia may be seen by stakeholders as long term steps toward securing competitiveness and benefitting from partners in high growth regions who can offer access to attractive financing, raw materials and other low cost resources. The high cash levels and government-backing of companies like SABIC could also intensify the ambitions of Middle East players to further expand in the European market “into more downstream activities like plastics and specialty chemicals” as commented by Mr. Abdullah Bin Zaid Al-Hagbani, Secretary General of the Gulf Petrochemicals and Chemicals Association (GPCA) in October 2008.20

Four phases provide guidelines before, during and after the M&A or partnering process

19 “Global chemical M&A activity needs creativity to battle credit crunch”, ICIS, February 2008
20 Interview with author, Steve Bonn, October 2008
3.2. Search and fit analysis

During the strategic assessment, the ‘search and fit’ analysis may begin once the preferred geography is selected, for example the Middle East.

Although this phase is primarily focused on finding the right partner/company, it is essential to understand that GCC countries provide differing opportunities and challenges to foreign investors.

For example Bahrain generally limits foreign ownership to 49 percent and makes it necessary to partner with a local business. Furthermore, the country recently introduced a levy on expatriate employment to incentivize the hiring of locals. The UAE on the other hand allows 100 percent foreign ownership and no corporate taxes – however this only applies to foreign companies settling down in the designated Free Zones. Apart from the economic environment and outlook, companies also need to understand the political environment. GCC member states include absolute monarchies like the Kingdom of Saudi Arabia and in UAE’s case, a coalition of emirates.

The different political environments can impact the decision-making process on a domestic level and between countries. Since 2003, the GCC has been planning to introduce a single currency in 2010, to bring member states closer together and increase combined economic development. In 2007, UAE Central Bank Governor Sultan Nasser Al-Suwaidi stated that the introduction of the currency may be delayed by several years, partially due to differing political views.

3.3. Establishing symbiotic partnerships

Often during partnering or merger discussions, all parties involved do not interact as closely and openly as they should. This may be even more the case in international, cross-cultural discussions. European parties may be too keen on driving the process while neglecting the importance local partners place on the establishment of networks, especially in the case where no full or majority foreign ownership is allowed. “The Middle East needs to learn from European players about shared infrastructure and how to build and optimize supply chains” says Mr. Hagbani from GPCA, adding “our region offers many advantages in logistics, production, scale or labor costs.” In many cases, potential commercial or operational benefits are not sufficiently explored before and during discussions. While the financial, legal and tax aspects are used to gain an understanding of how the business generated its revenues, how to carve-out units, design the combined legal structure or potential benefit from tax aspects; the current and future market environment and process improvement aspects may only be assessed on the sidelines.

Stakeholders may need to look closer at these aspects of potential deals and assess in more detail if the projected benefits can be achieved. Future business partners should therefore take the time to discuss extensively the areas and means to leverage the advantages both parties can bring to the table. Although this could be considered time-intensive, it is time well spent and is only a fraction relative to the long-term commitment.

The diverse political and economic environments between GCC companies provide differing challenges and opportunities to foreign investors.

---

21 "GCC single currency to be delayed," Arabian Business.com, October 2007
3.4. Sustained management

Local governments like Oman or Bahrain are pushing foreign companies to hire local staff instead of referring to expatriates to run the business. While the main rationale behind this move is to improve unemployment levels, local companies also highlight the frequent changes of expatriate management as a reason that makes it difficult to establish business relations. “They change management very fast”, is an observation ASG Group’s Dr. Salman has made, referring to the frequency foreign companies change their expatriate management. “Rotating managers is good … but it takes time to understand the local business environment”, adds Mr. Hagbani from GPCA. Generally, contracts last two to three years with an option to extend but companies may need to make adjustments in the early stages at least to account for the time it takes to establish business structures.

“Relationships, relationships, relationships…you have to be well connected”, is one critical cornerstone Simon Jones, VP of Business Development at Borealis sees to the success of foreign companies in the Middle East. “It is often beneficial to establish good connections with the local governments since they are keen on driving the development in the region… however the focus lies on building up domestic capabilities and expertise, which is why having control of partnerships is preferred [with the exception of businesses in the Free Zones]”, added Mr. Jones in October 2008.22

Another factor impacting sustained management is the involvement of international headquarters. Headquarters need to be careful in finding the balance between trying to enforce a remote-controlled subsidiary, run like a European entity and allowing silo-structures to emerge which act independently and possibly separately from the corporate strategy.

In the short and medium term, both European and Middle Eastern companies should carefully assess their own situation and evaluate which strategic steps need to be taken to reduce the effects of a downturn in the Chemical industry. The credit crunch has added a further layer of complexity but also provides the chance to improve success rates of partnering and M&A activities as companies need to justify their investment in more detail to satisfy stakeholders.

“Rotating managers is good … but it takes time to understand the local business environment”

Mr. Hagbani from GPCA

22 Interview with author, Steve Bonn, October 2008
Finding the Right Formula

In an interview earlier this year, Christopher Cerimele, Managing Director at Lincoln International stated that “we are continuing to see strong activity in the mid-market...most of the interest...is from large corporations going for small and mid-sized acquisitions.” Companies from the Middle East might become even more active to benefit from “bargain” opportunities in Europe. In their 2007 report, HSBC Global Research predicted that “the strategic rationale for further involvement of GCC-based firms in cross-border chemical M&A remains strong, while the ability of firms to finance large transactions is set to grow further.” Since the credit crisis will impact financial buyers in the market, GCC and selected Western companies could be in a position to secure market access, new technologies and diversify their portfolios.

“Margins are being squeezed and it is crucial to have a competitive edge” says Mr. Hagbani from GPCA. While Simon Jones from Borealis recognizes India and especially China as the markets for growth, he sees the need for European companies to act in order to stay in the game: “Shipping costs from Europe to Asia are high...”

Looking into the near future, it will be difficult to predict how global economies will digest the credit crisis and subsequent effects on the Chemical industry in Europe and growth markets like the Middle East or Asia. In Europe, especially the mid-market may continue to consolidate.

Conclusion

In an interview earlier this year, Christopher Cerimele, Managing Director at Lincoln International stated that “we are continuing to see strong activity in the mid-market...most of the interest...is from large corporations going for small and mid-sized acquisitions.” Companies from the Middle East might become even more active to benefit from “bargain” opportunities in Europe. In their 2007 report, HSBC Global Research predicted that “the strategic rationale for further involvement of GCC-based firms in cross-border chemical M&A remains strong, while the ability of firms to finance large transactions is set to grow further.” Since the credit crisis will impact financial buyers in the market, GCC and selected Western companies could be in a position to secure market access, new technologies and diversify their portfolios.

“Margins are being squeezed and it is crucial to have a competitive edge” says Mr. Hagbani from GPCA. While Simon Jones from Borealis recognizes India and especially China as the markets for growth, he sees the need for European companies to act in order to stay in the game: “Shipping costs from Europe to Asia are high...”

23 “Global chemical M&A activity needs creativity to battle credit crunch”, ICIS, February 2008
24 “GCC Chemical Firms to Increase M&A Activity”, ICIS, June 2007
European players have a disadvantage compared to the companies in the Middle East."

Global chemical markets may transform even further as Simon Jones adds "China wants to be independent and not rely on other markets in the long run" – a thought which could have European players re-think their Middle East ambitions altogether?

Under current market conditions European companies and players in the Middle East should be seeking the right formula to identify and implement successful strategies. Despite an uncertain economic outlook in the short term and ongoing challenges in the long term, there should continue to be opportunities for chemical companies to operate sustainable businesses in the global markets. While markets will be keeping a much closer and critical eye than before, partnering for growth with the right parties can be one promising way for chemical companies of both European and Middle East regions to remain competitive.
Bahrain is the smallest of the GCC members with a population of 0.72 million people. Manama is the constitutional monarchy’s capital. After Qatar, Kuwait and the UAE, Bahrain has the fourth largest GDP per capita with US$ 32,100. The economy is expected to have increased by around 6.6 percent in 2007 and the country has the lowest inflation compared to other GCC members with an estimated 3.4 percent.

Bahrain’s petroleum and refining activities (excluding allied industries) make up only 11 percent of the GDP. Financial and construction industries are two key segments of the economy that helped the country reduce the dependency on natural resources.

The FTA signed with the U.S. in 2006 further aids in strengthening ties with Western countries and forming partnerships to attract further multinationals to set up businesses in the country. The country is ranked 18 regarding ease of doing business. There is no corporate tax (except for oil companies at 46 percent) but investment restrictions on foreign companies are imposed, for example foreign ownership is limited to 49 percent and there is the need for a local partner. Since 2008, the government also imposed a levy on the employment of expats, raising wage costs by 11 percent, to make the employment of local nationals more attractive. Apart from the U.S., Saudi Arabia and the UAE are two other major export partners for Bahrain.

In the future, the monarchy is keen on expanding its activities in petrochemicals and aluminium industries which fuel the country’s search for new natural gas supplies to act as feedstock.
Kingdom of Saudi Arabia

Population: 28.1m
GDP (PPP): USD23,200 (2007e)
Growth: 4.1 percent (2007e)
Inflation: 4.1 percent (2007e)
FDI: USD24.32bn (2007e)
Exports: USD230bn (2007e), primarily petroleum and petroleum products (90 percent)
Imports: USD81.2bn (2007e), machinery & equipment, foodstuffs, chemicals, motor vehicles, textiles
Ease of doing business (rank): 16

The Kingdom of Saudi Arabia is a monarchy with a population of 28.1 million people with the capital located in Riyadh. Saudi Arabia is the largest economy in the Middle East which is due to its large oil reserves, amounting to a global share of 25 percent. The world's leading oil producer and exporter generates 45 percent of its GDP from oil. Saudi Arabia is keen on further growing its economy and reducing its dependency on oil. The GDP per capita of USD23,200 is around 40 percent below that of the UAE and the kingdom is facing a high unemployment rate of around 13 percent, although some sources believe it may be as high as 25 percent. In 2005, Saudi Arabia became a member of the World Trade Organization (WTO) and the government has been taking steps to attract more foreign investments. In 2007, the country attracted more than USD24bn in FDI with the USA, Japan, South Korea, China and Taiwan being key export partners. Especially power generation, telecoms, natural gas exploration and expansion of the petrochemical sectors, are key points of focus to diversify the economy and create jobs. In 2006, the kingdom contributed 49 percent of the Gulf's total petrochemical capacity. The share in global chemical production is estimated to grow from 8 percent in 2007 to 15 percent in 2012.

While there is no corporate tax, foreign companies investing in the country require a license from the government prior to setting up a business. Saudi Arabia's 16th rank in the World Bank's "Ease of Doing Business" report and the government's announcement of planning to create six economic cities in different regions of the country to promote development and diversification further demonstrate the kingdom's decisiveness. This might be the reason why Saudi Arabia is considered by some to provide the highest business potential in the Middle East region over the next three to five years.
Kuwait

Kuwait is an institutional monarchy with a population of 2.6 million people. The country’s has 10 percent of world oil reserves which account for almost 50 percent of the GDP. GDP per capita is the second highest among GCC members with USD39,300. Compared to other countries in the Middle East, Kuwait does not seem to push for economic reforms and a reduction of the dependency from oil as quickly as its neighbors. Exports are basically oil and refined products as well as fertilizers. Export partners are mostly Asian countries, i.e. Japan, South Korea, Taiwan, Singapore and China.

The country has been experiencing power outages due to lack of investments to expand energy generating capacities in order to keep up with high population growth. Reports quote that USD50bn have been earmarked for upgrading oil and gas production. The Chemical industry is represented by state-owned, independent company Petrochemicals Industries Company (PIC) whose focus lies on petrochemical products like olefins and aromatics. The company also engaged in a JV with Dow Chemical called Equate Petrochemical Company which is expected to boost the local production of olefins and plastics.

In December of 2007, the government reduced the corporate tax from 55 percent down to 15 percent and abolished capital gains tax in an effort to attract more foreign investors. Investment restrictions still exist in the petroleum and gas sectors. Kuwait is ranked 52 regarding ease of doing business.

Population: 2.6m
GDP (PPP): USD39,300 (2007e)
Growth: 4.6 percent (2007e)
Inflation: 5.0 percent (2007e)
FDI: USD0.12bn (2005)
Exports: USD61.43bn (2007e), oil and refined products, fertilizers
Imports: 19.4bn (2007e), food, construction materials, vehicles and parts, clothing
Ease of doing business (rank): 52
Oman

Oman is a monarchy of 3.3 million people and Muscat is the country's capital. The country has a GDP per capita of USD24,000 and is heavily dependent on its dwindling oil reserves. While there is a strong industry focus on crude oil production and refining and the production of LNG, Oman set a goal to reduce the contribution of oil to the GDP down to 9 percent by 2020. Substantial investments in infrastructure, energy and tourism sectors have been made but the country's gas production might not suffice to provide unlimited cheap feedstock to energy-intensive businesses. A key petrochemical project in Sohar by Oman Petrochemical Industries had been postponed in 2007. Reasons were almost doubled project costs (from USD2.6bn to USD4.5bn) and questions about the availability of sufficient quantities of natural gas feedstock.

Apart from an early accession to the WTO in 2000, the monarchy signed a Free Trade Agreement (FTA) with the U.S. in 2006 and is seeking similar agreements with the EU, China and Japan. Oman's economic plans are to push industrial developments toward gas-based industries and encourage investments in petrochemicals, telecoms and other industries. The country has a corporate tax of maximum 12 percent and is ranked 57 globally in terms of ease of doing business. Oman imposes minimum quotas for the employment of local nationals as well as limits on foreign ownership levels. Asian countries like China, South Korea, Japan and Thailand represent the key export partners of Oman.

Population: 3.3m
GDP (PPP): USD24,000 (2007e)
Growth: 6.4 percent (2007e)
Inflation: 5.5 percent (2007e)
FDI: USD2.38bn (2007e)
Exports: USD22.89bn (2007e), petroleum, re-exports, fish, metals, textiles
Imports: USD11bn (2007e), machinery and transport equipments, manufactured goods, food, livestock
Ease of doing business (rank): 57
Qatar

Qatar is one of the smallest countries in the Middle East with a population of only 0.82 million people. The emirate’s capital is located in Doha. With a GDP per capita of USD80,900, Qatar is ranked number one globally before countries like Norway (USD53,000) or Singapore (USD49,700).

Most of the wealth is based on the country’s natural resources with oil and gas accounting for over 60 percent of the GDP. In fact, Qatar has the third largest natural gas reserves with a global market share of 15 percent. This also explains that liquefied natural gas (LNG) and petroleum products are the two major export products. Key export partners of the country are Japan, Singapore, India, Thailand and the UAE.

Like other countries in the Middle East, Qatar has also been active in diversifying its economy. Qatar is ranked 37 regarding ease of doing business which results from several factors. Generally, the government states its commitment toward liberalization and making life easier for foreign investors. As such, Qatar plans to reduce the top corporate tax rate from 35 percent to 12 percent and set up taxfree as well as industrial zones. However, investment restrictions exist, imposing a 49 percent cap on foreign ownership for many industry sectors (except for example health, education, tourism and manufacturing) and the subsequent use of local agents.
The United Arab Emirates (UAE)

- Population: 4.6m
- GDP (PPP): USD73,300 (2007e)
- Growth: 7.4 percent (2007e)
- Inflation: 11 percent (2007e)
- FDI: USD13.25bn (2007e)
- Exports: USD156.6bn (2007e), primarily crude oil, natural gas, re-exports, dried fish
- Imports: USD101.6bn (2007e), machinery and transport equipments, chemicals, food
- Ease of doing business (rank): 46

The UAE is a constitutional federation with a population of around 4.6m. The federation consists of seven Emirates, Abu Dhabi (capital), Dubai, Sharjah, Ras Al Khaimah, Ajman, Umm Al Qaiwain and Fujairah. Combined, the UAE is the second largest economy in the Middle East after Saudi Arabia and accounts for the fifth largest oil reserves and largest natural gas reserves globally. The economic strength of the UAE is also reflected in a GDP per capita of USD37,300 which is higher than that of France at USD33,200.

While oil and gas still represent about 35 percent of the GDP (5 percent in Dubai), the UAE has successfully diversified its economy to reduce its dependency on natural resources. Free Trade Zones offer 100 percent ownership and zero taxes to attract foreign businesses. In 2007 the UAE attracted over USD13bn in Foreign Direct Investments (FDI) which are estimated to remain at this level for the next few years. Major export trading partners include Japan, South Korea, Iran, China, India, Germany, U.K. and the USA.

Dubai, the second largest Emirate, has established itself as a regional hub, attracting international companies to set up their regional headquarters and benefit from low bureaucracy and attractive investment conditions. Main growth areas for the economy lie in manufacturing (especially petrochemicals and metals). The UAE accounts for about 11 percent of chemical sales in the region, behind Saudi Arabia.

Several challenges affect the UAE and impact local and foreign businesses. Investment restrictions exist outside of the free zones: Foreign companies face taxation, for example 55 percent on foreign oil companies, while minimum 51 percent of the business needs to be owned by a UAE national. High demand for experienced staff has created a shortage and is driving up salaries as well as attrition levels. A similar trend is affecting the blue collar workforce. Supply problems in the construction industry delay housing and business projects and cause cost overruns. The UAE is ranked 46 in the World Bank Group’s 2009 “Ease of doing business” ranking, which is low compared to other GCC members but still better than some European members like Spain (49) or Luxemburg (50).
KPMG’s Strategic and Commercial Intelligence Services (SCI)

Strategic and Commercial Intelligence (SCI) is KPMG’s dedicated transaction strategy advisory unit. We help our firms’ clients understand the strategic, commercial, and operational issues in businesses they are active in and which they want to acquire by means of a Commercial and Operational Due Diligence, Separation and Business Integration and Value-based Pricing and Business Model.

The commercial Due Diligence, for example, is designed to answer the following questions:

- How attractive is the target market?
- What is the target’s competitive position?
- Are the projections in the business plan achievable?

Typical services in Commercial Due Diligence can include:

- Market interviews: in many markets, publicly available information is insufficient and may, in the worst case, be misleading. Desk research is therefore supported by primary research such as customer and industry expert interviews.
- Business plan review: the findings of our market and commercial intelligence research are tied into an objective opinion of a business plan, with a clear link to historic performance. More detailed models can be in some cases useful to quantify sensitivities as well as risks and opportunities, which may be important for the valuation of the target.

For further information please contact:

Olga-Tatjana Rauch
KPMG in Germany
Tel: +49 69 9587 2846
e-Mail: orauch@kpmg.com

Gloria Diana Glang
KPMG in Germany
Tel: +49 69 9587 1365
e-Mail: gglang@kpmg.com
Authors

Steve Bonn
Venkat Raju Erigila
Gloria Diana Glang
Olga-Tatjana Rauch
Julie von Zitzewitz
For further information about KPMG’s Global Chemicals practice, please contact:

**John Morris**  
Global Head of Chemicals  
KPMG LLP (U.K.)  
Tel: +44 20 7311 8522  
e-Mail: john.morris@kpmg.co.uk

**Chris Stirling**  
European Head of Chemicals  
KPMG LLP (U.K.)  
Tel: +44 20 7311 8512  
e-Mail: christopher.stirling@kpmg.co.uk

**Dr. Ekkehart Hansmeyer**  
Head of Chemicals  
KPMG in Germany  
Tel: +49 221 2073 6342  
e-Mail: ehansmeyer@kpmg.com

**Norbert Meyring**  
Head of Chemicals  
KPMG in China  
Tel: +86 (21) 6288 2298  
e-Mail: norbert.meyring@kpmg.com.cn

**Michael J. Shannon**  
Head of Chemicals  
KPMG LLP (U.S.)  
Tel: +1 973 912 6312  
e-Mail: mshannon@kpmg.com

---

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.