ABSTRACT

The initiative that began in the late 1970s to add value to the gas flared at the crude oil well head in Saudi Arabia, became the cornerstone of the extremely competitive and robust Middle Eastern petrochemical industry we see today. After witnessing this success story, other countries in the region followed suit, promoting projects based on ethane extracted from associated gases. The availability and cost of this ethane, therefore, formed the main driver for developing petrochemical projects in the region as shown below.

ETHYLENE CAPACITY GROWTH IN THE MIDDLE EAST

The region has already embarked on what can be termed as the 4th Phase, however, a number of fundamental changes have occurred in the overall industry structure. Going forwards the industry faces a number of challenges:

- Almost all the ethane available from current sources is fully utilised. The availability of ethane for the almost 9 million tons per year of planned/announced capacity is questionable.

- The pressure on the governments for social reforms is increasing the pressure on State resources in almost all the countries. In order to tackle this issue, the States are attempting to promote/enhance private sector involvement.

- The bulk of the developments being witnessed in the region focus around enhancing production of natural gas (Gas Initiative (Saudi Arabia), North Field Development (Qatar), South Pars field Development (Iran), Mediterranean Sea area Development (Egypt) etc.) essentially to provide gas for the substantial increase in power demands.
Are there any synergies between this enhanced gas production and potential petrochemical plants? In addition to these regional factors, external factors will continue to influence the overall profitability of the industry as shown below:

With this as a backdrop, it is pertinent to ask:

- What is the likely direction of development of the Middle East petrochemical industry?
- What steps should be taken to ensure that a robust industry continues to develop in the 21st century?
- Is there a need to re-structure the industry to reflect likely future developments?
- What are the key factors that will impact local production in the region, and what are the “critical success factors” for the regional producers in the future?
- Will commodity petrochemicals continue to remain the key to the regions dominance?

The region will represent a significant investment opportunity for many, and a potential threat to others. How this region develops and how it takes advantage of its sources of competitive advantage, should be of prime importance to planners globally. The changes and evolution of the Middle East petrochemical industry created the need for this strategic analysis.
This study, which was concluded in April 2002, has been designed to be of benefit to all such organisations in meeting the challenges they face in participating or dealing with this fast-developing industry. It provides the necessary insight required by existing producers to plan for the future; by global companies intending to invest in the region, for companies considering the region’s global impact and for planners; which may include Banks, Financial Institutions, and Agencies responsible for addressing regional policy issues.

In this environment of change and opportunity, Chem Systems (based in London, UK) and Gulf Organization for Industrial Consulting (GOIC, based in Doha, Qatar) are offering this recently concluded, in-depth study of the Middle Eastern Petrochemical Industry. This synergistic teaming of Chem Systems and GOIC has ensured that both regional “on the ground” issues, and their impact on the overall global industry have been examined.