

# **ENGINEERING & CONSTRUCTION RISK INSTITUTE**

**OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS**

**A MIDDLE EAST PERSPECTIVE**



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# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## A MIDDLE EAST PERSPECTIVE

- ❖ FORECAST OF ME OIL & GAS MARKET GROWTH
- ❖ MARKET CONDITIONS AND RISKS
- ❖ CONTRACTORS' MAJOR CURRENT RISKS
- ❖ RISKS DUE TO OWNER'S STRATEGY
  - CONTRACTUAL RISKS
  - TECHNICAL RISKS
  - FINANCIAL RISKS
- ❖ RISKS TO OWNERS
- ❖ MITIGATING SHARED RISKS





# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## FORECAST OF MIDDLE EAST OIL & GAS PRODUCTION CAPACITY

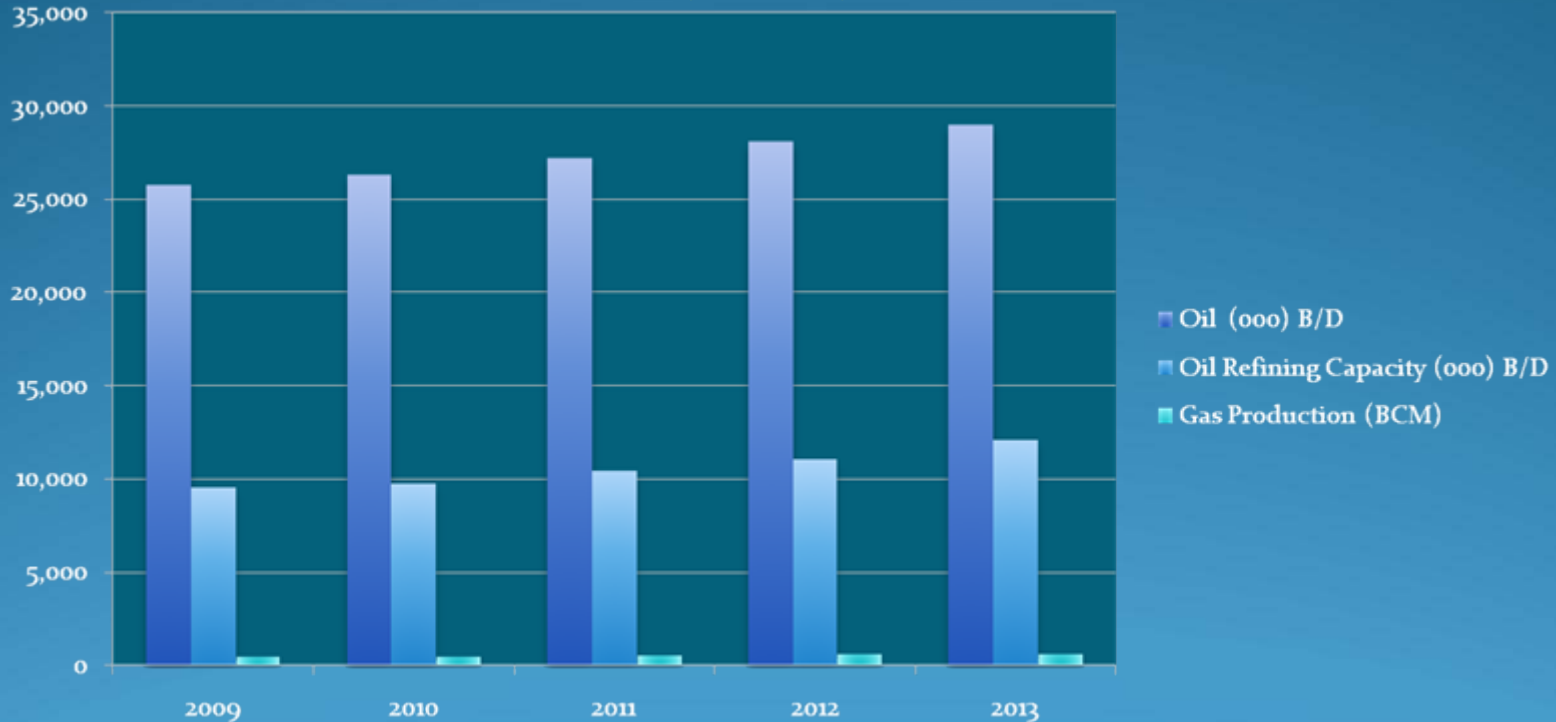
Year	2009	2010	2011	2012	2013	%
Oil (000) B/D	25,773	26,337	27,204	28,084	28,988	12%
Oil Refining Capacity (000) B/D	9,535	9,715	10,415	11,033	12,110	27%
Gas Production (BCM)	458	490	527	574	617	35%

Source: Business Monitor Int'l.- UAE Oil & Gas Report Q2-2009



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## FORECAST OF MIDDLE EAST OIL & GAS PRODUCTION CAPACITY



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# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## MARKET CONDITIONS AND RISKS A MIDDLE EAST PERSPECTIVE

- THE OIL AND GAS PRICES ARE THE MAIN DRIVERS OF PRODUCERS TOWARD NEW INVESTMENTS. HENCE, VOLATILITY OF OIL AND GAS PRICES EXPOSED INVESTMENT PLANS TO SOME RISK OF MISSING THE CAPACITY EXPANSION TARGETS.
- PROJECT'S PRICING IS HIGHLY RESPONSIVE TO OIL & GAS PRICES.
- RISK SHARING AMONG OWNERS AND CONTRACTORS IS YET TO BE DEVELOPED.
- UNRESTRICTED ENTRY TO E&C MARKET AS A RESULT OF OPEN COMPETITION.
- SPECIALIZED PROFESSIONALS MAY BE DIFFICULT TO RETAIN.





OIL & GAS ENGINEERING & CONSTRUCTION  
INDUSTRY RISKS;

A MIDDLE EAST PERSPECTIVE

## CONTRACTOR'S MAJOR CURRENT RISKS

THE SHARP FLUCTUATIONS OF OIL AND GAS PRICES DURING 2008 AND 2009 MADE PROJECTS' BUDGETING AND PRICING EXTREMELY A DIFFICULT TASK. THE SUDDEN DECLINE IN OIL & GAS PRICES IN 2009 AFTER THE HISTORIC INCREASE IN 2008 (US\$ 147 P/B) DROVE CONTRACTORS TO LOW PRICING BUT IMMEDIATELY OPPOSED BY A STEADY INCREASES WHILE APPROACHING THE CONTRACT AWARD STAGE. THIS LEFT CONTRACTORS IN A DILEMMA OF RECONCILING THE CURRENT ASCENDING COST WITH TIGHT CONTRACT PRICE .





# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## A MIDDLE EAST PERSPECTIVE

### RISKS DUE TO OWNERS

#### CONTRACTUAL RISKS

- FAST TRACK EXECUTION
- TRANSFERRING ALL MAJOR RISKS TO CONTRACTORS THROUGH THE FIXED LUMP SUM TURNKEY MODEL (LSTK).
- LIABILITIES: MAKE GOOD, EXTENDED WARRANTY, DEFAULT, ETC. IN MOST INSTANCES THEY ARE UNLIMITED.
- INSURANCE COVERAGE: EXCLUSION RISKS OF FAULTY DESIGN, CONSEQUENTIAL LOSSES, AND WORKMANSHIP, ETC. WITH HIGH DEDUCTIBLES.
- HIGH RATE OF LIQUIDATED DAMAGES.





# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## A MIDDLE EAST PERSPECTIVE

### TECHNICAL RISKS

- ENDORSEMENT / OWNERSHIP OF FRONT END ENGINEERING DESIGN (FEED) AT TENDERING STAGE.
- DESIGN DEVELOPMENT, GROWTH, AND MAJOR CHANGES
- STRINGENT SPECIFICATIONS
- RESTRICTIVE APPROVED VENDORS LISTS, IN MANY CASES LISTS ARE OUTDATED. RISKS OF VENDORS' DEFAULT ARE ON THE CONTRACTOR'S EXPENSE.





# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## A MIDDLE EAST PERSPECTIVE

### FINANCIAL RISKS

- FIXED PRICE
- NO ESCALATION RIGHT DUE TO CHANGES IN THE DOMESTIC AND INTERNATIONAL ECONOMIC INDICES
- NO DIRECT LINK TO COMODITY MARKETS
- FINANCING COST; HIGH BORROWING COST
- CURRENCY FLUCTUATION
- NO COMPENSATION FOR DELAYED PAYMENTS





# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## A MIDDLE EAST PERSPECTIVE

### RISKS TO OWNERS

- DELAYS TO MEET PRODUCTION TARGETS
- IMPACT ON COST OF FUTURE PROJECTS
- DEPARTURE OF GOOD EPC CONTRACTORS FROM OIL AND GAS SECTOR DUE TO FREE ENTRY TO MARKET
- CONTRACTORS' CARTELLING





# OIL & GAS ENGINEERING & CONSTRUCTION INDUSTRY RISKS;

## A MIDDLE EAST PERSPECTIVE

### MITIGATING SHARED RISKS

- SET REALISTIC PROJECT COMPLETION SCHEDULE
- IMPROVE CONTACTOR'S FINANCIAL TERMS SUCH AS INTRODUCING MULTI CURRENCY CONTRACTS, LINK TO ECONOMIC INDICES ETC.
- CONSIDER OTHER CONTRACTING MODELS SUCH AS THE COST PLUS, REIMBURSABLE ETC.
- REASONABLE CAP TO AGGREGATE LIABILITIES
- INCENTIVES / BONUS SCHEMES
- PROMOTING TEAM WORK SPIRIT AS OWNER AND CONTRACTOR ARE STRATEGIC BUSINESS PARTNER
- CONDUCT JOINT LESSONS LEARNT AT PROJECT COMPLETION.



*Thank You*

