



An overview of the GCC hydrocarbons projects market

Dutch Energy Solutions Meeting

Angus Hindley, Research Director, MEED

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Introduction

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Agenda

- The GCC energy sector in the global context
- The characteristics of the GCC energy projects market
- Recent developments in the GCC energy projects market
- The rise of the Korean contractor
- The outlook for the GCC energy projects market in 2010-12
- Closing remarks



The GCC hydrocarbons market in the global context

The GCC accounts for:

- 21 per cent of global oil production, with Saudi Arabia the largest exporter
- 9 per cent of global gas production, with Qatar now the largest LNG producer
- 5 per cent of refining capacity
- 15 per cent of polyolefins capacity

But what really sets the GCC producers apart are:

- reserves, with the economic bloc accounting for 37 per cent of global crude and 25 per cent of gas reserves
- a significant cost advantage, with onshore Saudi Arabia and Kuwait having among the world's lowest oil production costs at \$3-4 a barrel, Qatar the lowest LNG costs, and the region as a whole, a significant cost advantage in petrochemical production



Characteristics of the GCC projects market

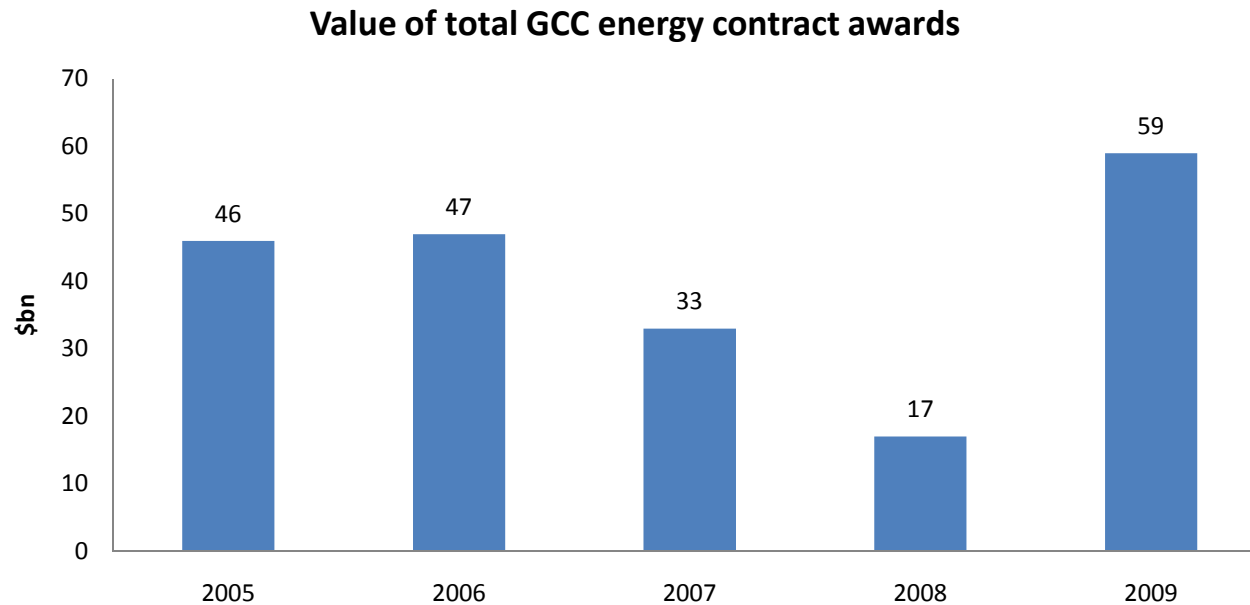
- Blue chip clients, dominated by NOCs
- All the leading international EPC contractors are active in the market, with Western and Japanese contractors traditionally the market leaders
- Lump-sum turnkey contracts are the favoured procurement model, with the risk heavily on the contractors
- Projects are generally financed through equity with the exception of some petrochemical and refinery schemes which are project financed
- A growing degree of local capability on the subcontractor and supply levels
- Both size and number of large-scale projects have surged in recent years



Characteristics of the GCC projects market

A strong feature of the last five years has been the mega-project:

- The Khurais oil increment programme in Saudi Arabia added 1.2 million b/d of crude capacity and cost over \$10bn, making it the largest in Aramco's history
- Qatar has built six LNG trains of 7.8 million t/y each, 50 per cent bigger than conventional units, under an estimated \$30bn programme
- Pearl GTL in Qatar is the largest gas-to-liquids scheme in history and is costing \$16-18bn
- The world's biggest ethylene cracker is under construction in Abu Dhabi

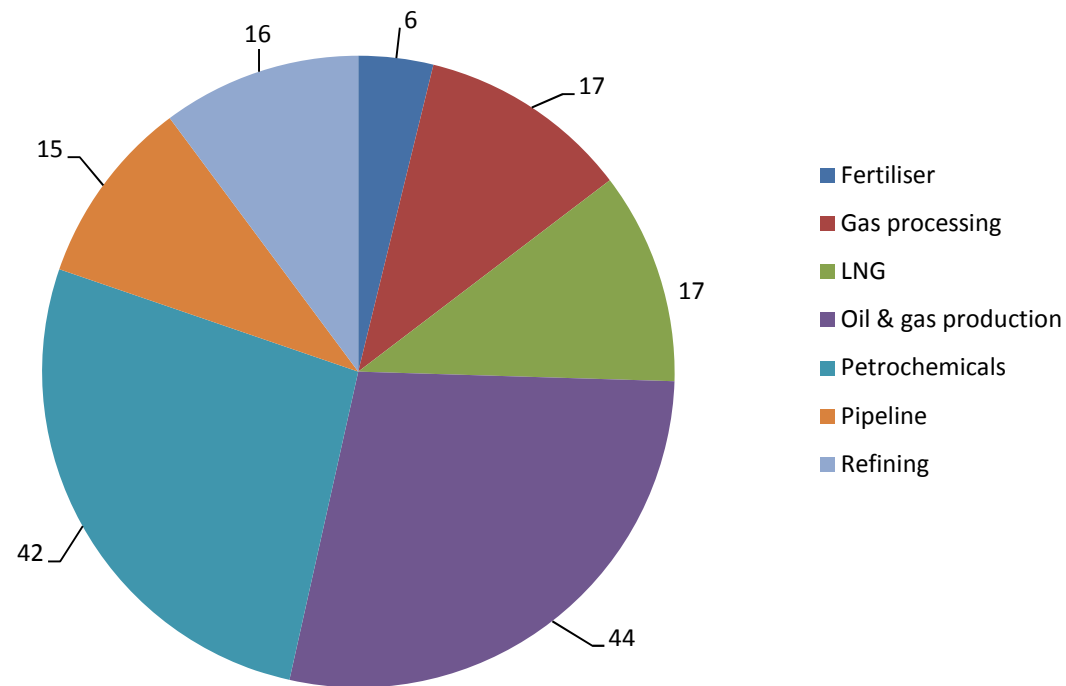


Source: MEED

The past five years have seen volatility in contract awards, with a historic low in 2008 being followed by a record high in 2009

The GCC energy projects market by sector

Breakdown of contracts by sector, 2004-08 (\$bn)

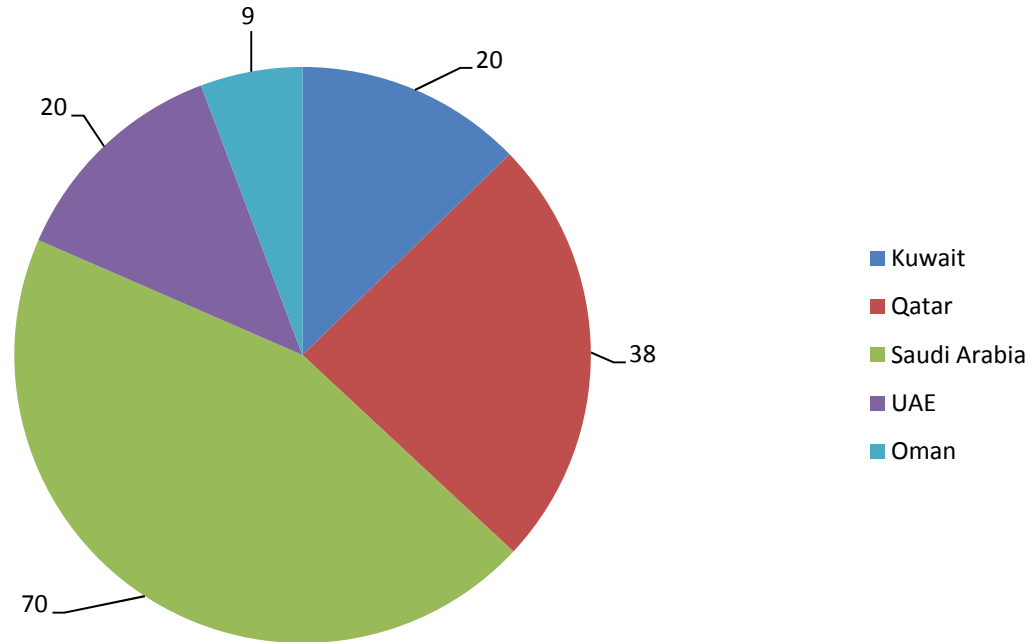


Source: MEED

Upstream oil and gas was the largest segment, closely followed by petrochemicals

The GCC energy projects market by country

Breakdown of contracts by country, 2004-08 (\$bn)

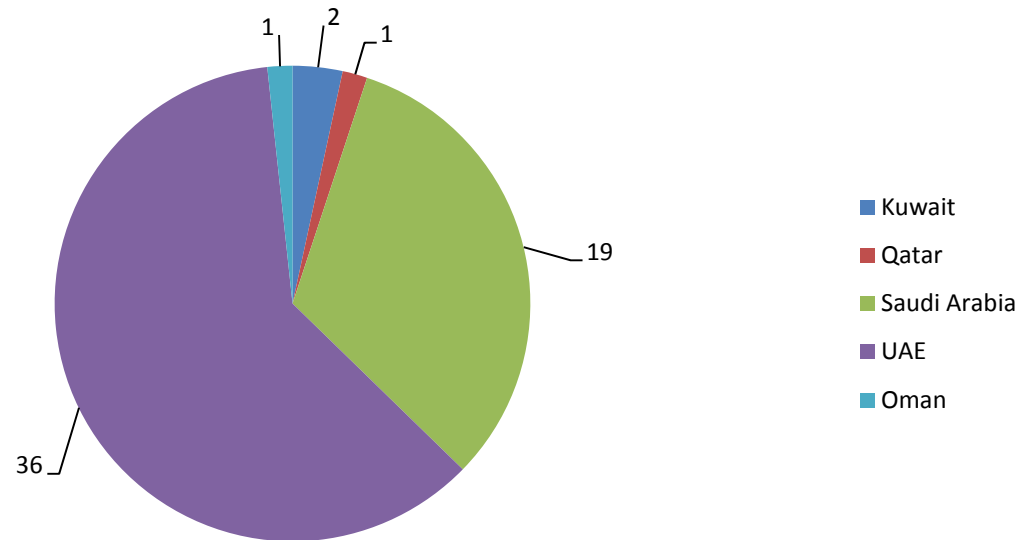


Source: MEED

Saudi Arabia has traditionally been the largest projects market, being twice as large as second-ranked Qatar in the period 2004-08

The GCC energy projects market in 2009

Breakdown of contract awards by country, 2009 (\$bn)



Source: MEED

The record value of contract awards in 2009 was driven by unprecedented activity in the UAE and Abu Dhabi.

Features of the 2009 market

- The meteoric rise of Abu Dhabi
- The return to domination of the lump-sum turnkey contract model
- Growing competition for contract awards following the downturn in 2008
- A 20-30 per cent fall in the cost of projects
- The dominance of the Korean contractor at the expense of the Western companies:
 - Korean firms won an estimated 60 per cent of major contracts
 - GS was the most successful energy contractor in 2009, winning \$5.5bn worth
 - SK, Samsung Engineering and Hyundai E&C all won major contracts
 - Contracts were won in markets right across the GCC and in countries where Korean contractors had little track record, such as Abu Dhabi



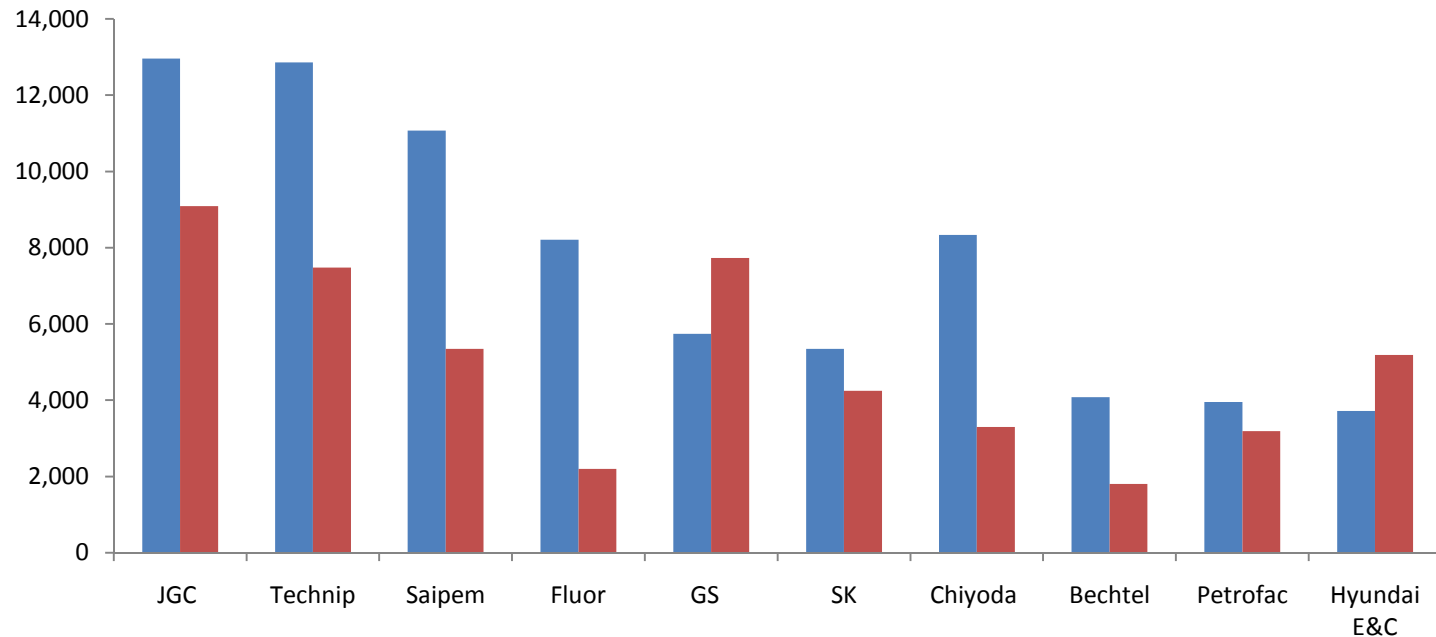
The rise of the Korean contractor

The history of Korean contractors in the GCC

- 1970s/80s – Korean contractors undertook some of the largest civil projects in the region, in the road, hospital, ports and hotel sectors
- Late 1980s – many left the region as a result of the oil price crash and greater opportunities in South East Asia
- Late 1990s-2005 – following the 1997 Asian crisis, the major Korean EPC contractors returned to the GCC in force, but with the exception of Kuwait, were unable to get on oil and gas prequalification lists due to clients still viewing them as civil contractors
- 2006 – Hyundai Heavy Industries wins the \$1.6bn offshore Umm Shaif contract in Abu Dhabi
- 2006-08 – Faced with limited contractor capacity and rising project costs, Abu Dhabi and Saudi clients began prequalifying Koreans
- 2009 – The Korean domination was highlighted in Abu Dhabi with the award of all the packages on the \$10bn Ruwais refinery expansion and the \$40bn Emirates nuclear programme

The rise of the Korean contractor

Workloads of leading EPC contractors, 2008-09 (\$m)

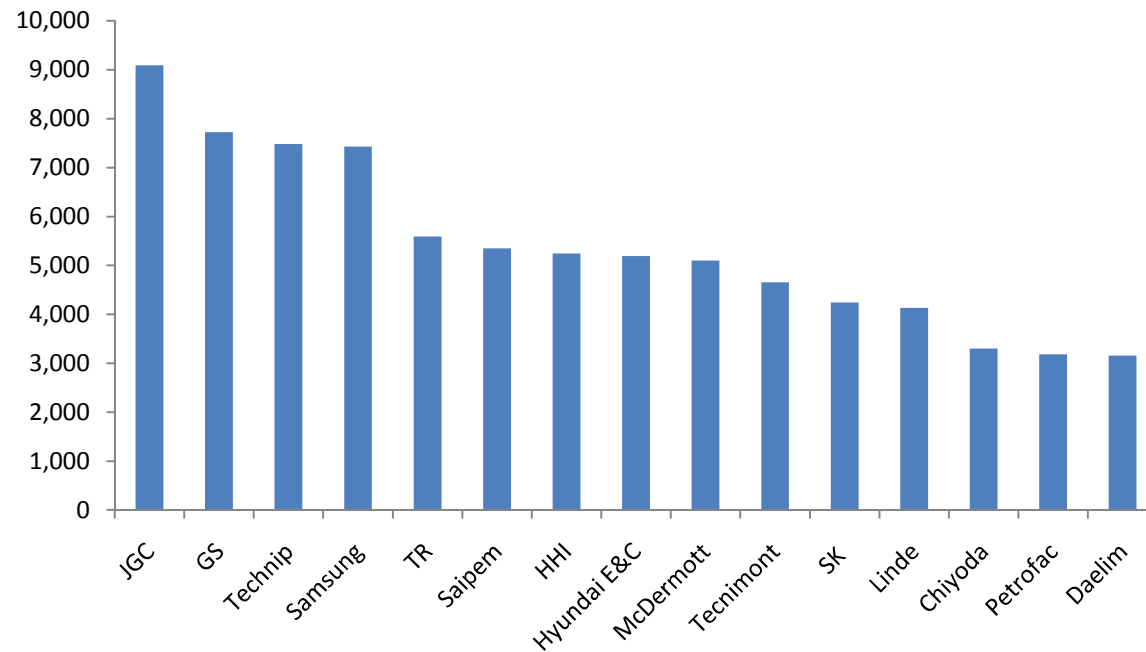


Source: MEED

In the period 2008 and 2009, GS and Hyundai were the only two contractors among the top 10 in the GCC to increase their workloads

The rise of the Korean contractor

Workload of leading EPC contractors, 2009 (\$m)



Source: MEED

As of December 2009, Koreans were the largest national grouping in the top 15 EPC contractors with five companies

GCC energy projects market in 2010

- In 2010, an estimated \$36bn of major awards were placed, with the UAE (\$15bn) and Saudi Arabia (\$13.5bn) being the biggest markets
- Major projects have continued to dominate the market, with awards being placed on Shah gas in Abu Dhabi and Yanbu refinery in Saudi Arabia, both valued at \$8-10bn
- While Korean contractors remained strong, European firms have been much more aggressive, reflecting declining backlogs and concerns about future prospects
- Saipem, Petrofac, Tecnimont and TR all won major awards
- With competition intensifying, pricing came under even greater pressure and as a result, bids were frequently well under budget

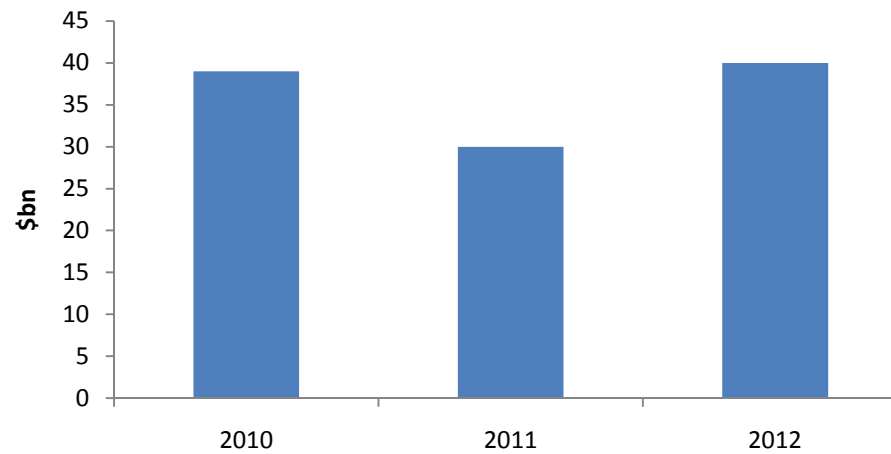
GCC energy projects market in 2010

Country	Project	Client	Lowest/winning bidder	Low/winning bid (\$m)	Estimated budget (\$m)	Difference between low bid and budget (%)
Kuwait	Acid gas removal plant	KNPC	Tecnimont	399	500	-20
	Effluent water injection	KOC	Petrofac	380	740	-49
Neutral Zone	Upgrade of offshore production facilities	KJO	McDermott	285	350	-18
UAE	Borouge 3 infrastructure	Borouge	Hyundai E&C	937	1,100	-17

Source: MEED

A snapshot of selected projects tendered in May 2010 showed the extent of the price pressure.

The GCC energy projects market, 2010-12



Source: MEED

Compared to 2009, there will be a significant reduction in contract awards going forward with Kuwait and Saudi Arabia set to be the biggest markets

The GCC energy projects market, 2010-12

Country	Project	Client	Estimated cost (\$bn)	Expected tendering date
Kuwait	Fourth refinery project	KNPC	15	2011
	Clean fuels programme	KNPC	18	2011
Oman	Duqm refinery	OOC/IPIC	10	2012
Saudi Arabia	Jubail petrochemicals	Aramco/Dow	10	2011/12
	Jizan refinery	Aramco	10	2012
UAE	Chemaweyaat petrochemical complex	IPIC, ADNOC/ADIC	10	2011/12
	Upper Zakum field expansion	Zadco	15	2011

The level of project activity in 2011/12 will largely depend on a handful of mega-projects proceeding



Closing remarks

- Project activity is set to decline over the next three years from the highs of 2009 and the reduction could be steep if the handful of remaining mega-projects fail to proceed
- Areas of highest activity are expected to be offshore, refining and gas processing, with Kuwait and Saudi Arabia potentially being the biggest markets
- Margins will remain under intense pressure as European and Japanese contractors attempt to build up workloads
- Koreans will remain a major force expanding their regional presence into the offshore sector
- The more multi-disciplined EPC contractors will look to offset the decline in GCC energy projects by targeting the regional power sector
- The regional EPC market needs a new market, with hopes pinned on Iraq