Korea Investment
& Securities Co., Ltd.

Construction

September 6, 2010

Overweight (Maintain)

Company	Rating	TP (won)
• Samsung C&T	BUY (-)	71,000 (-)
• Hyundai E&C.	BUY (-)	82,000 (-)

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Claire Lee 82-2-3276-6155
kyungja.lee@truefriend.com

Yongsok Song 82-2-3276-6184
songyongsok@truefriend.com

Lights on in the global IPP market

What's new? Financial market recovery boosts IPP

Korean companies' overseas power plant orders have surged since the beginning of 2010. Although the Middle East and emerging countries have chronic power shortages, the power plant market has not seen as many new projects as it deserves due to financing difficulties caused by the global financial crisis. But as the financial market is recovering, the private-funded independent power plant (IPP) market is gaining vigor and breathing new life into power deals. Saudi Arabia closed USD20bn in project finance (PF) deals in June alone, writing a new chapter in the Middle East financial market. We believe a combination of big demand and stable financial market builds an ideal platform for the power plant market to expand.

Lights on in the IPP market

The petrodollar-rich Middle East prefers the private-funded IPP as it can maximize leverage effects and attract foreign capital and technology, which should help modernize its socio-economic systems and raise its international profile. In contrast, Southeast Asia and Africa seek IPPs mainly due to their lack of financial resources. We expect Korean companies to have good opportunities in the Middle East, Africa and India given their electricity demand, market size and willingness to invest. In particular, we believe the Middle East is the next big market given: 1) strong electricity demand from industrial development, 2) Korea's proven track record in the region, and 3) its high understanding of the PF structure.

Power plant boom, fresh growth engine for contractors

We believe Korean contractors should ride the IPP market boom thanks to: 1) growing support from export credit agencies, 2) their superb engineering, procurement & construction (EPC) capacity, and 3) potential partnerships with PF-capable Japanese trading firms and European utilities. As power plant projects are tendered on a more regular basis than the hydrocarbon counterparts thanks to little costs volatility and low sensitivity to market conditions, it should provide stable growth momentum for contractors. Power plants amounted to USD5.4bn or 9% of total overseas orders in 2000 but this figure swelled to 51% or USD49.4bn at end-August 2010. Although the Middle East plant market may see heated competition, Korean contractors should extend their reach across the global infrastructure market on the back of aggressive diversification efforts since early 2010.

Largest beneficiaries are Samsung C&T and Hyundai E&C

The IPP market sees a number of ongoing projects where Japanese trading companies join as financially powerful developers and Korean contractors offer competitively priced EPC. We believe Korean EPC players can grow beyond construction to become developers that make equity investments and raise project financing. We maintain Samsung C&T as our top pick and maintain BUY on Hyundai E&C, the largest beneficiary of the power plant market expansion. We also recommend BUY on Samsung Engineering as a promising entrant to the power plant market.

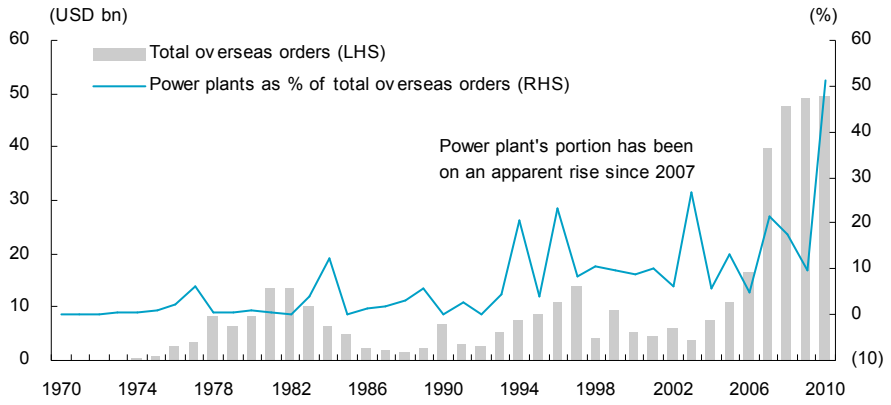
I. Power plant leaders to have more opportunities

1. Power projects, to emerge as a stable source of revenue with low COGS-to-sales volatility

Korean contractors' overseas power plant orders approach 51% of total overseas orders YTD at end-August

Korea's construction companies have inked multiple contracts to build power plants abroad, which include the UAE power plant, Riyadh PP11 in Saudi Arabia, Gautami combined cycle power plant in India, and Norte 2 project in Mexico. Globally, there have been steady tenders for small and midsize power plants worth USD200mn-300mn as well as large-scale projects worth USD1bn or more since the beginning of 2010. Korean companies' overseas power plant orders totaled USD25.4bn YTD at end-August, which represent 51.3% of total overseas orders received for the period. Even if we exclude the UAE power plant order worth USD18.6bn obtained in early 2010, the power plant portion still accounts for 13.8% of the total, which is higher than the past five-year average. We expect power plant orders growth to accelerate in 2H10.

Korean contractors' power plant orders and portion of total overseas orders



Note: As of end-August 2010.
Source: ICAK

Korean contractors' overseas power plant orders in 2010

(USD bn)

Project	Company	Issuer	Country	Project value	Construction period
UAE nuclear power plant (pkg)	Hyundai E&C	ENEC (KEPCO as a main contractor)	UAE	3.1	'10.03.26-'20.05.01
UAE nuclear power plant (pkg)	Samsung C&T	ENEC (KEPCO as a main contractor)	UAE	2.5	'10.03.26-'20.05.01
Riyadh PP11 independent power project (IPP)	Hyundai Heavy	Dhuruma Electricity Co.	Saudi Arabia	1.6	'10.06.15-'13.03.20
Tripoli West 1400MW steam power station	Hyundai E&C	GECOL	Libya	1.4	'10.09.19-'15.01.18
Raipur-Chhattisgarh coal-fired power plant	Doosan Heavy	GMR Energy	India	1.1	'10.01.22-'14.02.21
Santa Maria II coal-fired power plant	POSCO E&C	Colburn	Chile	0.7	'10.08.31-'14.03.12
Zwitina 750MW combined-cycle power plant	Daewoo E&C	GECOL	Libya	0.4	'10.11.01-'13.05.01
GAUTAMI combined-cycle plant, stage II	Hyundai NG	GVK	India	0.3	'10.10.01-'13.10.31
Chilca Uno combined-cycle power plant	POSCO E&C	Enersur	Peru	0.3	'10.06.15-'12.12.15
Merak coal-fired power plant (2x60MW)	Daewoo ENG	Merak Energy	Indonesia	0.2	'10.04.08-'12.10.07
Koniambo Nickel power plant project	Doosan Heavy	Koniambo Nickel SAS	New Caledonia	0.1	'10.05.21-'12.05.30
NRC 85MW diesel power plant	STX Heavy	Iraqi Drilling Co.	Iraq	0.1	'10.09.26-'12.11.25

Source: ICAK

Power plants' margin not as high as hydrocarbon plants'

As the financial market is recovering, the private-funded independent power project (IPP)[1] market is gaining vigor and breathing a new life to the plant market. Power plant projects are not a high-margin business for EPC contractors. In the past, Korean EPC firms enjoyed high margins in hydrocarbon plant projects, but that is not the case with power plant projects. As fewer power generators are required for power plants, generator fabrication leaves fewer corners left for cost reduction.

Stable margin guaranteed thanks to minimal cost fluctuation

But such marginal cost changes also provide downside protection for EPC margin. Power plant projects should become a stable source of revenue which generates a gross margin at the low 10% level for contractors. As the power plant market has just entered its growth phase, contractors should see fast top-line growth which will drive down the SG&A expenses ratio, a fixed-cost component. Accordingly, even if the portion of power plant projects in overseas sales increases, contractors should see only a marginal impact on their operating margins. We advise investors to focus on operating profit growth alongside the top-line growth.

Power plant projects is positive for construction firms' cash flow thanks to high rate of advance payment

As power plant projects are part of national infrastructure, some countries such as Saudi Arabia's make advance payments worth 20% of the project value (about 10% for hydrocarbon plant projects), which smoothes out cash flow for project participants. In the case of state-run projects, EPC contractors may have difficulties in collecting progress payments depending on project funding sources. But, under the IPP structure, it is the consortium which makes progress payments to EPC contractors on a regular basis.

Contract award expected to increase for companies diversified in regions and types of construction

The table below shows expected major power plant projects in the Middle East from 2H10 to 1H11. The value of these projects totals at least USD60bn. Considering power plant markets outside the Middle East such as Mexico and Southeast Asia, we believe there are huge IPP opportunities on the way. Given this, we expect major contractors which have diversified their markets and construction types to enjoy strong order momentum in 2H10.

Middle East power plants scheduled for 2H10-1H11

(USD bn)

Project	Issuer	Country	Project value	Scheduled tender	Scheduled completion
Maaden - Ras Al Zour power	SWCC	Saudi Arabia	3.0	Q3 2010	Q4 2013
Shuweihat 3 IPP	ADWEA	UAE	2.5	Q3 2010	Q4 2013
Al Zour North hydropower (phase I)	MEW	Kuwait	3.1	Q4 2010	Q4 2013
Al Zour North hydropower (phase II)	MEW	Kuwait	2.7	Q4 2010	Q4 2013
Yanbu Interim hydropower	Marafiq	Saudi Arabia	0.9	Q4 2010	Q4 2013
Al Zour South power plant extension	MEW	Kuwait	0.4	Q4 2010	Q4 2013
Marafiq - Yanbu power (phase III)	SWCC	Saudi Arabia	2.0	Q4 2010	Q4 2013
Arabiyah-Hasbah development program power	Aramco	Saudi Arabia	0.5	Q4 2010	Q4 2014
Shuqaiq IPP (phase I)	SEC	Saudi Arabia	1.2	Q1 2011	Q4 2013
Al Zour IWPP	Kuwait Ministry of Finance	Kuwait	2.0	Q1 2011	Q4 2014
Rabigh thermal power extension (phase II)	SEC	Saudi Arabia	0.7	Q1 2011	Q1 2014
Sur IPP	Oman MEW	Oman	2.0	Q1 2011	Q1 2014
Jizan economic city hydropower	MMC	Saudi Arabia	3.0	Q2 2011	Q2 2014
Qurayyah IPP	SEC	Saudi Arabia	2.2	Q2 2011	Q4 2014
PP10 steam turbines power	SEC	Saudi Arabia	1.0	Q2 2011	Q2 2014
Hassyan IWPP	DEWA	UAE	3.0	Q2 2011	Q1 2014
Rabigh IWSPP extension	RAWEC	Saudi Arabia	0.5	Q2 2011	Q1 2014
Taweelah C IWPP	ADWEA	UAE	2.5	Q3 2011	Q4 2014
Al-Muzahimiyah power plant	SEC	Saudi Arabia	0.8	Q3 2011	Q4 2013
Hassyan hydropower station PII (station P, phase II)	DEWA	UAE	3.0	Q3 2011	Q3 2014
Pan-Arab grid (Saudi Arabia-Egypt undersea link)	Egypt & Saudi Arabia Gov.	Saudi Arabia	8.5	Q3 2011	Q3 2015
King Abdullah economic city power plant	Emaar/EMAL	Saudi Arabia	2.0	Q3 2011	Q3 2014
Deba IPP (phase I)	SEC	Saudi Arabia	0.7	Q3 2011	Q4 2014
Lehbab power plant	DEWA	UAE	5.5	Q4 2011	Q1 2015
Al Zour North hydropower (phase III)	MEW	Kuwait	1.4	Q4 2011	Q4 2014
Al Zour North hydropower (phase IV)	MEW	Kuwait	1.2	Q4 2011	Q4 2014
Shuwaikh power plant	MEW	Kuwait	1.2	Q4 2011	Q4 2014

Source: Industry data

[1] Most power projects are independent power plants (IPP) where a developer covers capital investment, construction and post-construction operation. For some projects, a host places orders directly in an engineering, procurement and construction (EPC) contract, which are popular for petrochemical plants.

2. Largest beneficiaries are Samsung C&T and Hyundai E&C

Given financial investors' clout, financially healthy EPC players should have more room of maneuver

As the global economy is still struggling with the lingering effects of the financial crisis, we believe financial investors are better positioned than EPC service providers. Financial investors make a selective approach to power generation projects and prefer EPC service providers that can sweeten their offers and have amicable relations and good records with financial institutions. The largest beneficiaries of the power plant market boom should be EPC service providers that have established track records, marginal undertaking risks and sound financials.

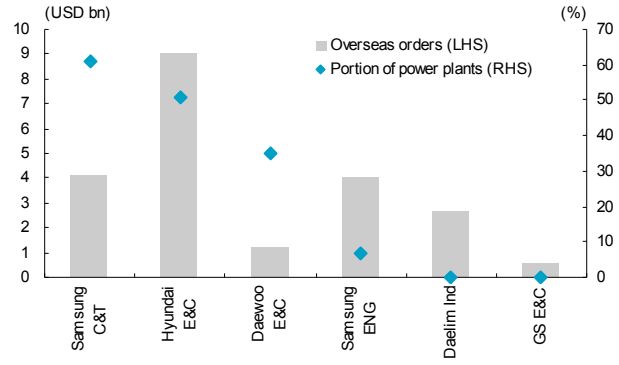
Hyundai E&C, Samsung C&T and Daewoo E&C with proven track record in the power plant segment:

Contractors with most experience in power plant projects are Hyundai E&C, Samsung C&T, and Daewoo E&C in that order. Hyundai E&C and Daewoo E&C have traditionally excelled in the power plant segment and thus accounts for the largest portion of overseas order receipts. Meanwhile, Samsung C&T can also act as a developer on the back of its solid financials and high credit standing, which gives the contractor easy access to the EPC market.

Fast overseas order book growth for contractors with large power plant portion

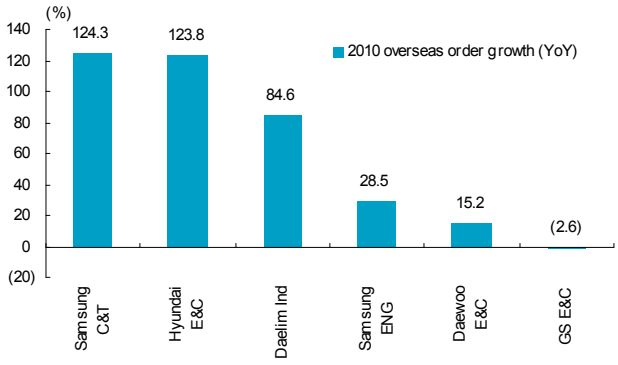
Looking at Korea's overseas order receipts at end-Aug 2010, major power plant project winners are Samsung C&T, Hyundai E&C, Daewoo E&C, and Samsung Engineering. Their overseas order book growth was driven by an increase in power plant projects in 2010, and we believe their overseas order growth should accelerate in 2H10. Given that Korea should extend its market reach to the power plant segment, we believe competitive power plant players should demonstrate strong growth potential.

Major contractor's overseas order receipts and portion of power plants (at end-Aug)



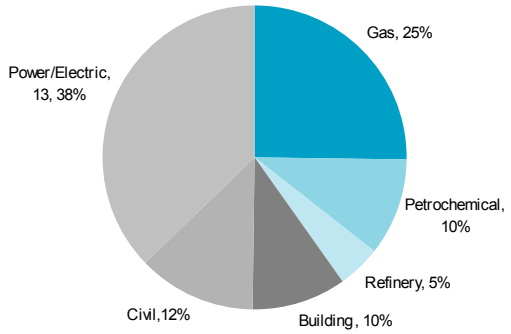
Source: ICAK

Major contractor's overseas orders growth (YoY) in 2010



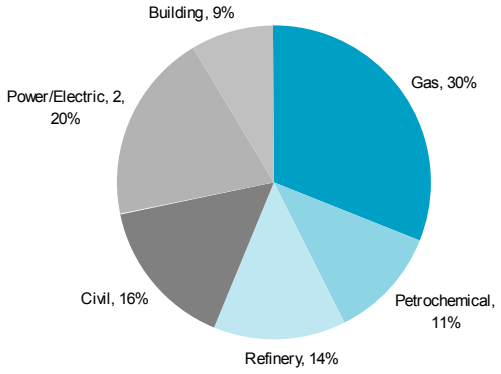
Source: ICAK

Hyundai E&C's overseas orders by construction type (from 2000)



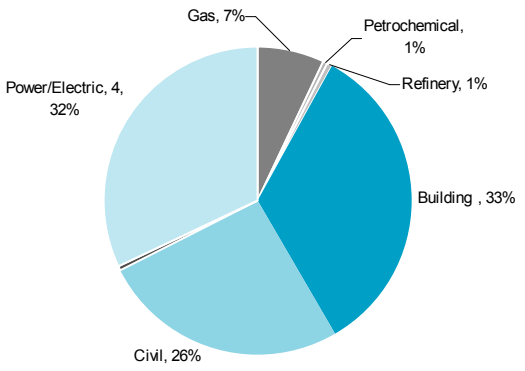
Source: ICAK

Samsung C&T's overseas orders by construction type (from 2000)



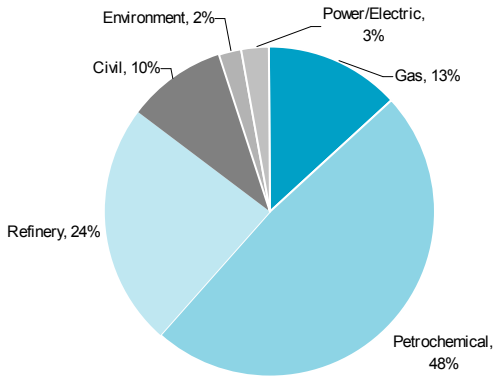
Source: ICAK

Daewoo E&C's overseas orders by construction type (from 2000)



Source: ICAK

Daelim Ind.'s overseas orders by construction type (from 2000)



Source: ICAK

Samsung C&T and Hyundai E&C with plenty of experience to benefit the most

As the power generation plant market expands with the recovery of the financial market, the door should open for newcomers which lack experience. But the primary beneficiaries should be Samsung C&T and Hyundai E&C. We maintain Samsung C&T as our top-pick and favor Hyundai E&C as well. We also maintain BUY on Samsung Engineering, which should be the most promising new player in the power generation market.

Samsung C&T: EPC expertise and financing capacity

Given that Samsung C&T is an experienced EPC player in the power generation segment and has solid financing capacity, which should be the key to the IPP business in long-term, we believe the contractor is closer to the criteria required for IPP business than any other domestic EPC players.

Hyundai E&C: most experienced player and potential investments in IPP after the disposal deal

Hyundai E&C should carve out its place in the power generation plant market because it has undertaken power plant projects in a larger number of countries than its rivals and demonstrated historic strength in SOC projects. Hyundai E&C has won global recognition, ranking second place in the 2009 edition of *Engineering News-Record* (ENR) magazine's top-25 firms performing in the power plant segment. Moreover, we believe Hyundai E&C has the potential to become a successful IPP power plant developer because the contractor should leverage its healthy financials to take part in overseas IPPs once it finds a new owner.

Samsung Engineering: most promising new entrant in the power generation segment

The IPP plant boom should favor Samsung Engineering as well. The company inked a Mexico power plant project contract on Aug 2, which marks its successful entry to the power generation/desalination market. We believe the contractor's expertise in the hydrocarbon plant segment helped its diversification to the power plant segment.

The ultimate winner of the global IPP market: superb EPC capacity and PF capacity

The expansion of the overseas IPP market should create a golden opportunity for Korean contractors, which have established their EPC record in the power plant segment. Unlike cyclical hydrocarbon plants, the power plant segment is a mid- to long-term growth market and insensitive to market conditions. The ultimate winner of the global IPP market should be contractors which not only demonstrate superb EPC capacity but also independently raise PF.

Valuations of contractors in the KIS Universe

(W bn, x, %, won)

		Samsung C&T	Daelim Ind	Samsung ENG	Hyundai E&C	Daewoo E&C	GS E&C	Hyundai Dev.
Code		000830	000210	028050	000720	047040	006360	012630
Recommendation		Buy	Buy	Buy	Buy	Buy	Neutral	Neutral
Target price (won)		71,000	91,000	171,000	82,000	13,000	90,000	30,000
Current price (9/2, won)		56,500	77,800	132,500	66,700	10,250	87,700	29,150
Upside (%)		25.7	17.0	29.1	22.9	26.8	2.6	2.9
Market cap. (W bn)		8,826	2,707	5,300	7,427	3,339	4,473	2,197
Sales	2009	10,876	6,275	3,471	9,279	7,097	7,377	2,163
(W bn)	2010F	11,964	6,776	4,279	10,483	7,348	7,826	2,717
	2011F	13,720	8,030	5,898	11,918	8,064	8,268	3,784
	2012F	15,851	8,991	7,137	13,348	8,661	9,216	3,041
OP	2009	281	431	316	419	219	568	150
(W bn)	2010F	387	441	406	581	233	592	298
	2011F	485	546	524	661	324	594	552
	2012F	520	626	657	762	381	654	382
EBIT	2009	401	437	336	587	133	508	99
(W bn)	2010F	714	582	426	791	26	566	237
	2011F	639	603	564	795	340	565	513
	2012F	762	720	703	947	374	647	372
NP	2009	308	343	259	457	80	383	49
(W bn)	2010F	541	441	323	599	29	429	180
	2011F	484	457	427	603	257	428	389
	2012F	578	546	533	718	283	490	282
EPS	2009	2,088	8,886	6,829	4,110	250	7,737	668
(W)	2010F	3,587	11,446	8,575	5,377	90	8,676	2,440
	2011F	3,215	11,867	11,271	5,407	804	8,657	5,289
	2012F	3,836	14,164	14,058	6,438	885	9,910	3,836
EPS CAGR %	2009~2012F	22.5	16.8	27.2	16.1	52.4	8.6	79.1
PER	2009	26.9	9.4	15.8	17.3	51.2	14.0	56.5
(x)	2010F	15.8	6.8	15.5	12.4	114.5	10.1	11.9
	2011F	17.6	6.6	11.8	12.3	12.7	10.1	5.5
	2012F	14.7	5.5	9.4	10.4	11.6	8.8	7.6
PBR	2009	1.2	0.9	4.7	2.6	1.3	1.6	1.2
(x)	2010F	1.1	0.7	4.6	2.1	1.1	1.2	0.9
	2011F	1.1	0.6	3.6	1.8	1.0	1.1	0.8
	2012F	1.0	0.6	2.8	1.6	0.9	1.0	0.7
EV/EBITDA	2009	26.9	8.1	9.4	15.8	17.7	7.7	24.3
(x)	2010F	20.2	7.1	9.5	11.0	15.7	6.0	10.8
	2011F	15.7	5.8	7.2	9.5	12.8	6.5	4.9
	2012F	13.4	4.9	5.5	8.5	11.0	5.8	7.1
ROE	2009	5.0	9.8	38.7	15.4	2.5	12.1	2.1
(%)	2010F	7.0	11.0	36.2	18.2	0.9	12.3	7.6
	2011F	6.0	10.3	36.7	15.8	8.0	11.1	14.9
	2012F	6.7	11.0	35.1	16.4	8.1	11.5	9.7
OP margin	2009	2.6	6.9	9.1	4.5	3.1	7.7	6.9
(%)	2010F	3.2	6.5	9.5	5.5	3.2	7.6	11.0
	2011F	3.5	6.8	8.9	5.5	4.0	7.2	14.6
	2012F	3.3	7.0	9.2	5.7	4.4	7.1	12.6
NP margin	2009	2.8	5.5	7.5	4.9	1.1	5.2	2.3
(%)	2010F	4.5	6.5	7.5	5.7	0.4	5.5	6.6
	2011F	3.5	5.7	7.2	5.1	3.2	5.2	10.3
	2012F	3.6	3.6	7.5	5.4	3.3	5.3	9.3

Note: Closing prices on Sep 2.
Source: Korea Investment & Securities

II. What's new?

Electricity demand always existed; Financials the main issue

Power plant industry left in an orders vacuum due to the financial crisis

What has spurred the recent growth of overseas power plant orders? There is nothing new in knowing that demand for electricity is growing fast in the Middle East and other emerging countries and this has raised demand to build more power plants. Expectations were great that there would be additional power plant orders during 2006-2007 when the plant and infrastructure projects were booming in the Middle East. In flagrant contrast with the expectations, the booming industry environment did not lead to full-scale order flows as the financial crisis swept the globe. With few projects in sight, the power plant industry was left in an orders vacuum for quite some time.

Financial market recovery gives a boost to IPPs

If the electricity demand has always been in place, then what change has occurred in the industry? The financial market recovery and the subsequent boom of independent power plants may be an answer. Saudi Arabia successfully closed a total USD15bn in project financing (including the Jubail refinery and Riyadh PP11 power plant worth USD10bn and USD3.5bn, respectively) in June alone. This is a strong signal that the financial market conditions are turning for the better in the Middle East, particularly compared to the PF deals worth a mere USD20bn for all of 2009. In Saudi Arabia alone, about USD30bn in PF deals will likely be completed in 2010 and this also hints at the financial market recovery in the Middle East.

Power plants require a lengthy investment and thus are susceptible to financial market conditions

Despite the financial crisis, the petrochemical plant orders were robust in some countries like UAE and Saudi Arabia in 2H09. The reason is national oil companies with a strong capital base like Aramco and Abu Dhabi National Oil Co. (ADNOC) moved forward with their capex plans as part of the economic stimulus efforts. In contrast, the power plant orders were delayed. We attribute the preference for IPPs among Middle East power producers, which let them rely on the private sector to fund the projects. As power plant construction is a costly affair, it is susceptible to the financial market's conditions. On the financial institutions' side, the power plant projects are burdensome to provide backing, particularly when the global financial crisis was still playing out, because they have a longer investment payback period than the oil and gas projects. As such, delayed power plant orders were inevitable amid the global financial crisis. For example, among the power plant PF deals made in 2009 are the Shuweihat S2's USD2.2bn limited recourse finance for 22 years, Rabigh IPP's USD1.9bn for 20 years and Al Dur IWPP's USD1.3bn for eight years.

Strong electricity demand and stable financial market will boost plant orders

We believe more than 10 years of investment payback period was too long to endure for financial institutions during 2008-2009 when they were biased toward risk-averting behavior. Better financial market conditions in Europe, Japan and the Middle East bode well for future PF deals and order flows as the European and Japanese financial companies have worked as financial advisors (FA) to secure funding for the Middle East projects. We believe a combination of strong demand and stable financial market environment provides the optimum conditions for the power plant orders growth.

Saudi Arabia's PF deals scheduled to complete in 2010 – If there is ample demand, future orders placement will be determined by financial market conditions

Project	Sponsor	Project value (USD bn)
Jubail refinery	Saudi Aramco, Total	10
Yanbu refinery	Saudi Aramco	10
PP11 (IPP)	Saudi Electricity Co.	3.5
Aluminium smelter	Saudi Arabian Mining Co.	7
Total		30.5

Source: MEED Projects

2. Why is the power market important?

Power plants represent 35% of the world's plant market

According to the International Energy Agency and the Engineering News Record, the world's plant market size was USD1.6trn in 2009, of which 46% (or USD730bn) was put up for open bidding (estimate). The power plant projects represented 35% of total, the biggest followed by oil & gas and water treatment.

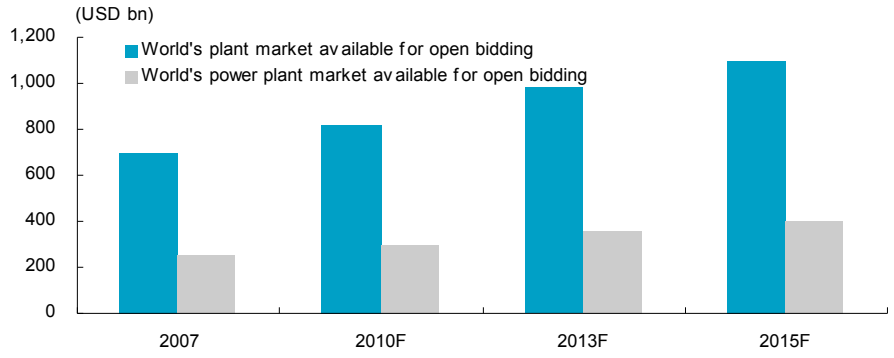
World's power generation market size estimated at USD300bn-400bn

The world's plant projects available for open bidding are estimated at USD820bn in value in 2010F, USD980bn in 2013F and USD1.1trn in 2015F. This translates to the creation of a power generation market worth USD300bn-400bn annually although the power plants' portion should not rise from the current level. Most of the power plant projects will likely be IPPs led by the Middle East and emerging countries. Korean construction companies' target markets were oil & gas and petrochemical plants (which were onshore only) but they together represent only 9% of the total. We believe the power plant market's growth will provide a key growth opportunity for Korean companies.

Power plant and industrial infrastructure markets expand following the petrochemical boom

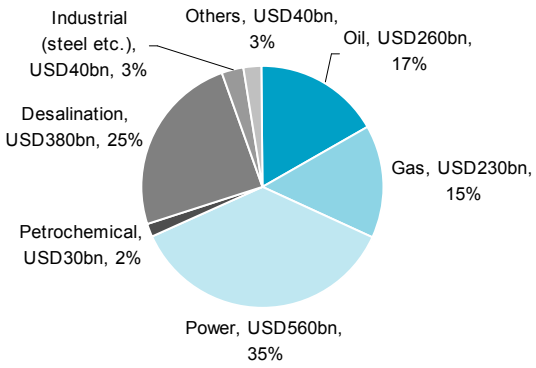
Korean companies are entering the growth phase of the power and industrial plant market in 2010 after passing the boom periods for petrochemical plant and oil refinery construction during 2004-2007 and 2008-2009, respectively. Korean contractors have built a reputation on building power plant infrastructure in the Middle East since the 1980s and are now seeing power plant orders growth backed by market share expansion in the petrochemical plant segment. Greater power plant orders will help boost the long-term growth of Korean construction companies.

World's plant and power plant markets available for open bidding



Source: ENR, IEA

World's plant market breakdown by type



Note: As of 2009.
Source: ENR, IEA

III. Power plant market dynamics

1. IPPs suited to meet strong demand for electricity

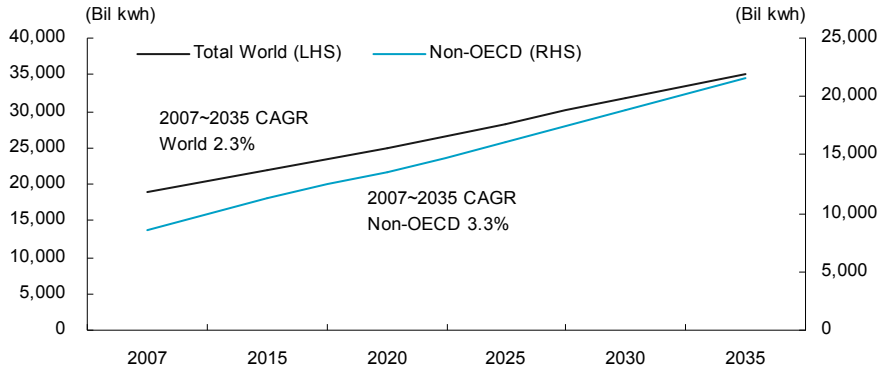
Electricity shortage is a long overdue issue in GCC countries

The outlook for the global economy remains uncertain but what is apparent is that the Gulf Cooperation Council (GCC)[2] member countries are committed to boost their economies to lower the jobless rate. Countries in the Middle East have tried to add petrochemical plants and diversify the industry as oil price jumped since 2006. The subsequent electricity shortage is a long overdue issue in the region.

Power generation capacity expansion sizeable in the Middle East and emerging countries

The world's power generation market size averages more than USD300bn annually and the capacity additions are getting sizeable in the Middle East and emerging countries. Non-OECD countries' power generation is expected to post a 3.3% CAGR during 2007-2035F, much more than the world's CAGR of 2.3%. Korean companies are extending their reach from the Middle East to Africa and Asia to reflect the market's development. Korean contractors' efforts to diversify market exposure, which continued since 2009, appear to be bearing fruit given significant power plant orders growth in regions other than the Middle East.

World's power generation market outlook



Source: International Energy Outlook Jul 2010

Most Middle East and emerging countries prefer IPPs

Most of the power plant projects in the Middle East and emerging countries are IPPs. This is originally a method used when there is insufficient capital or resources to carry out the projects but is now widely used by deep-pocketed oil-producing countries as well for their power plant projects, which have a simple investment payback structure. They opt for an IPP because, on the surface, it reduces the costs of financing with the leverage effects, but more importantly it must be understood in the picture of international politics.

Middle East countries prefer IPPs for international political reasons and emerging countries do so due to weak capital

International credit rating agencies do not include some Middle East countries in their evaluation system due to political reasons. In order to overhaul their reputation as democratic nations with advanced systems, the Middle East countries wish to attract foreign capital and gain technologies through IPPs. This is the reason why oil-rich Saudi Arabia funds only 20% of its power plant projects internally whereas it relies for the rest on external borrowings or PF. Abu Dhabi's internal financing was greater than Saudi Arabia's 20% but is increasingly more dependent on overseas financing. In contrast, countries in Southeast Asia and Africa prefer IPPs due to their weak capital bases.

[2] The Gulf Cooperation Council (GCC) comprises six oil-producing member states: Saudi Arabia, Kuwait, Bahrain, United Arab Emirates, Oman and Qatar.

2. Dynamics of IPP power projects

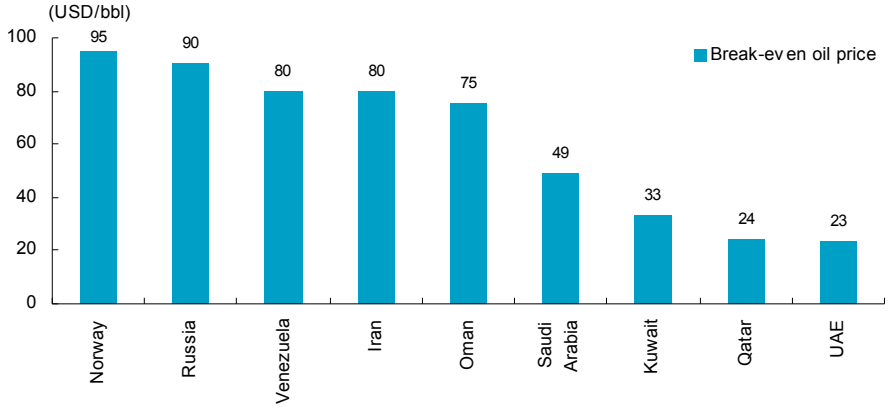
IPP is a joint project between developer, EPC contractor and FA

The ground-breaking for an IPP starts with the establishment of a special purpose company (SPC) as a project firm and its signing of a power purchase agreement with the government. After completion of the project, the power plant will operate under the build-own-operate (BOO) or build-own-transfer (BOT) method, where the investment is recouped over 20-30 years of the contract period. An SPC participant leads the IPP and the project involves a developer, an engineering, procurement and construction (EPC) contractor as a contractor, and a financial advisor who works to raise funds for the project.

Middle East has a break-even oil price of USD47/bbl, justifying the power plant order placement

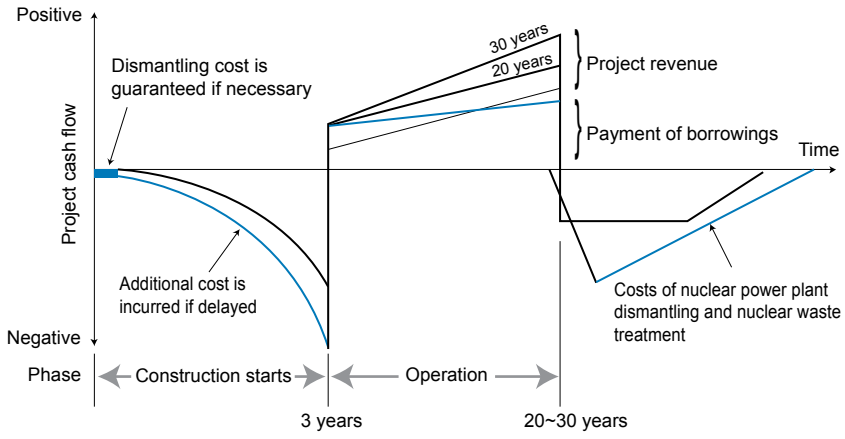
Generally, the petrochemical plant order environment is gauged by the break-even oil price for major oil-producing countries. Power plant construction is an infrastructure work and therefore does not directly correlate with the oil price. But we can judge the power plant order environment indirectly from the oil price since petrodollars fund the power plant projects among major oil producers in the Middle East. Given that the countries' break-even price averages USD47/bbl, we can see the current oil price is sufficient for them to start building power plants.

Break-even oil prices by major oil-producing country



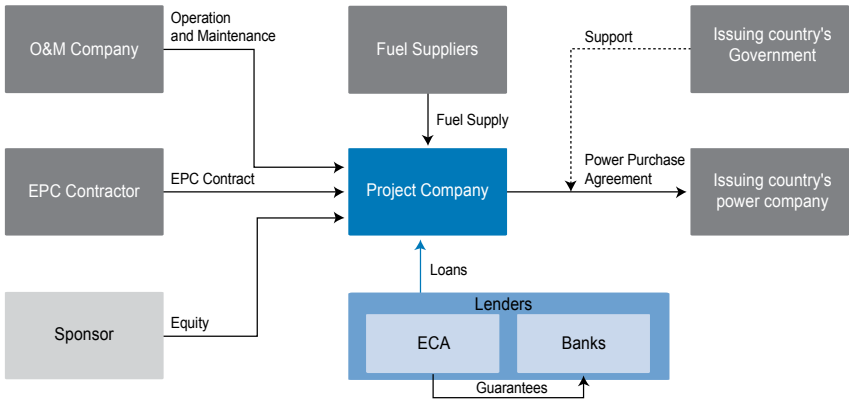
Source: Su Sentanyu- Japan Middle East Cooperation, Middle East analysis

IPP profit structure (based on cash flow cycle)



Note: Not to scale
Source: Korea Investment & Securities

Power plant business structure



Source: Korea Investment & Securities

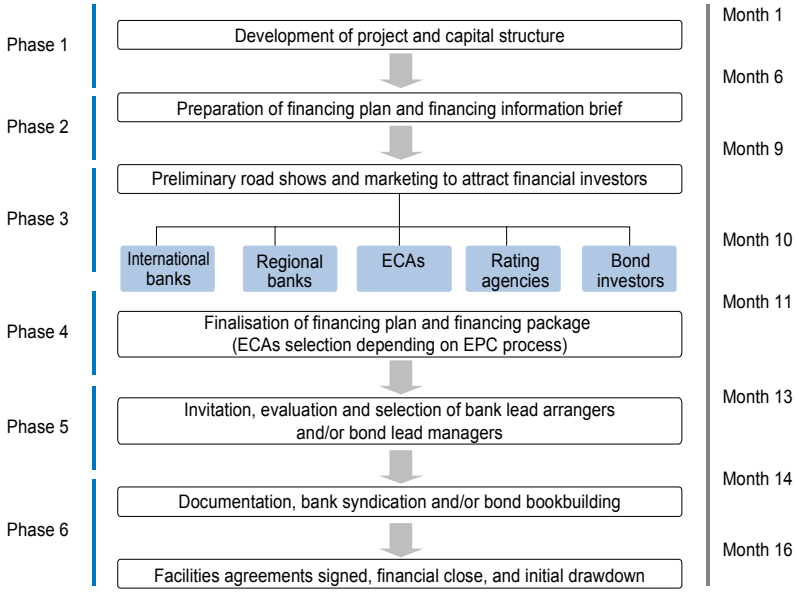
Host selects a successful bidder considering cost and technology

In an IPP, the consortium comprising a developer, FA and EPC company (contractor) submit their tender and the contracting authority (host) chooses a bid by comparing price and technological competitiveness of the applicants. The price competitiveness is determined by the power purchase rate, meaning which bidder proposes the lowest rate to the host for the power purchase agreement. As the EPC cost is a variable of the power purchase rate, the price competitiveness of a construction company is also crucial in winning the project.

FA works with an ECA to fund the project

Once the FA is selected in the tender procedure, it raises project financing. The FA works with an export credit agency (ECA) to secure funding. When the FA obtains a promise from the ECA to offer the covered loans (meaning payment guarantee) or direct loans (a form of direct investment), the FA participates in the bid with a lead developer or EPC company. If the consortium wins the project, the FA completes the funding with the ECA's guarantee or commercial borrowing through a syndicate of financial institutions.

FA's project financing procedure



Source: HSBC

3. Better financial market conditions boost IPPs – money tree overview

Power plant PF merits include stability of investment and diverse funding sources

Power plant PF merits include stability of investment and diverse funding sources For financial investors, the power plant PF is a low default risk investment because it has the infrastructure as an underlying asset. For a PF bond issuer, the power plant project requires a large-scale PF and thus a general bank alone cannot fund the project. Hence, the project receives funding from diverse sources and this is the merit of power plant PF.

Merits of PF bond investment and issue

Investors	Issuers
Predictable cash flow; Inflation hedging	Effective for a large-scale project
Long asset life → good for insurers to invest	Diverse funding sources
Low default risk (with infrastructure as underlying asset); Loose correlation with the capital market conditions	Easy asset-liability matching → matches due date with the project schedule

Source: Korea Investment & Securities

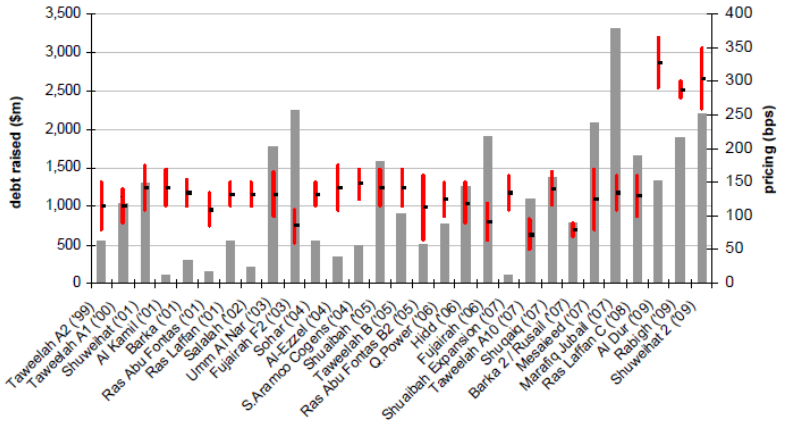
As Dubai woes ease, financial businesses in the Middle East are pursuing greater profits

A major change is that commercial banks, as well as ECAs, are resuming financial investment in the power generation infrastructure projects after cleaning up the mess from the financial crisis. In particular, the financial market is expected to recover in the GCC countries in 2H10. As the financial woes caused by a series of debt moratoriums among Dubai World, Nakheel, Saad Group and AH al-Gosaibi & Brothers abate, the Middle East financial businesses are shifting their focus from risk control to profit creation.

Absolutely low Libor bodes well for PF

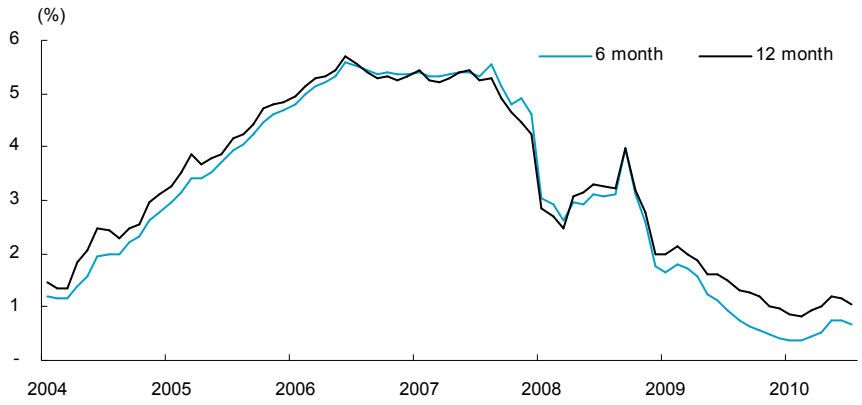
The PF rate in the GCC countries has been raised substantially since the beginning of 2009 and will not likely dip fast in the near term. As it is premature to predict a full-fledged recovery of the financial market, prospect of the investment return is crucial in making investment decision. Therefore, PF investors use strict scrutiny to evaluate commercial viability of the project. Nevertheless, it appears that financial institutions are loosening their PF investment guidelines given a longer PF payback period. The refinancing outlook after construction completion is positive as well. The absolutely low Libor and easing financial risks will work in favor of the PF environment in the long run.

Funding rates for GCC IPP/IWPP PF



Source: MEED

Absolutely low Libor trend



Source: Bloomberg

Major funding sources are an export-import bank from a participant's country, commercial banks and capital markets

A developer or an EPC contractor may secure funding for the IPP through PF and participate in the bid as well. Their major funding sources are export-import banks from the respective home countries of a developer or an EPC contractor (multilateral), the world's commercial banks (both international and regional) and capital markets (i.e., the Islamic bond market, or sukuk in the Middle East). Details of the funding sources are as follows.

PF funding sources' strengths and weaknesses, and 2010 outlook

Funding source		2010 trend
ECA & multilaterals	**Strength**	Ample liquidity (related with the government)
	Abundant capacity; Long payback period	Loans and debt payment guarantee (both direct or covered loans)
	Weakness	Cover most of the capital demand
	Low flexibility; Slow progress	Very sensitive to ECA and external issues
Commercial banks	**Strength**	Localization and ample liquidity
(International + regional)	Faster progress than ECA	High price (possible refinancing after completion)
	Flexibility allowed in the borrowed amount, payment schedule and hedging strategy	Selective approach
	Weakness	(Different approach by project and host)
	Lack of capacity; Politically risk-averting	
Capital markets	**Strength**	Alterative funding sources (incl. bond issue)
(Bonds and sukuks)	Long payback period	PF bond is focused on the MENA areas
	(Conventional or Shariah-compliant)	Very sensitive to construction risk
	Weakness	Selective approach for projects with great technological difficulty (incl. GTL)
	Carry costs during construction	
	Burdensome contract breakage cost	
	Strict criteria (credit rating and documentation for public announcement)	

Source: Korea Investment & Securities

Multilaterals and ECAs

Local ECAs for EPC contractors are the biggest funding sources

Considering the cost of an EPC mainly comes from procurement services, local export credit agencies (ECA) for EPC contractors or equipment companies are the biggest funding sources. ECAs usually function as a public institution that helps the export activities of local companies by providing direct funding and participating in project financing as a guarantor for commercial banks. ECAs recoup their investment through gains from dividends over the long-term or they earn income from guarantee fees if they back commercial banks.

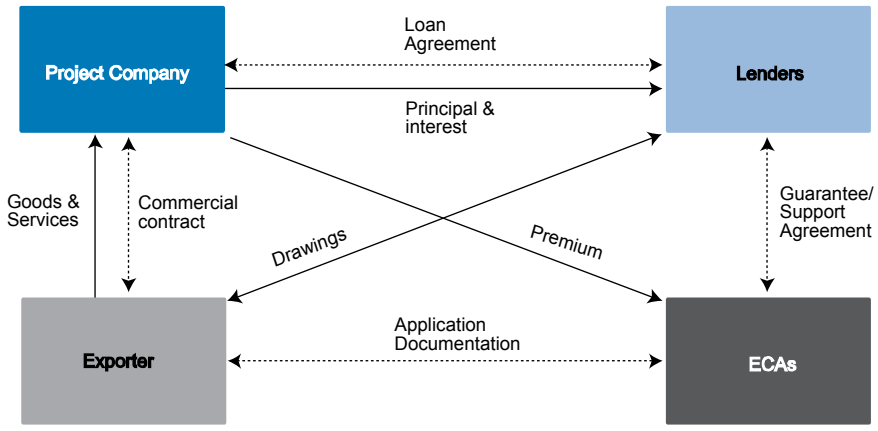
When ECAs provide financial support, more commercial banks join in

In terms of PF structure, ECA funding must be considered first because most projects in the Middle East with high credit ratings have favorable export credit borrowing conditions. Thus, when ECAs provide financial support for a project, they can procure funds under favorable conditions as more international and commercial banks participate in the project. We think about 40% of the projects currently in progress in the Middle East are enjoying cost reductions thanks to the participation of commercial banks through financial support from ECAs. At present, funding rates are set at a general level of Libor plus 2bp.

International funding organizations' actual contribution is low due to strict internal regulations

The role of multilateral agencies is also becoming very important. These agencies take part in providing funds to projects independently (their governments are not involved) and they include the African Development Bank, European Investment Bank and Islamic Development Bank. Like ECAs, multilateral agencies participate in project financing by directly borrowing and financing capital. But these agencies cover limited regions and participate in projects that are beneficial to their own countries' economical development in the long-term. In addition, the projects must meet strict requirements such as environmental friendliness and they must not cause social problems; Therefore, their actual funding contribution is not considered large.

ECA funding structure



Source: Korea Investment & Securities

International and regional banks and the Middle East capital market (sukuk)

Middle East banks swimming in liquidity

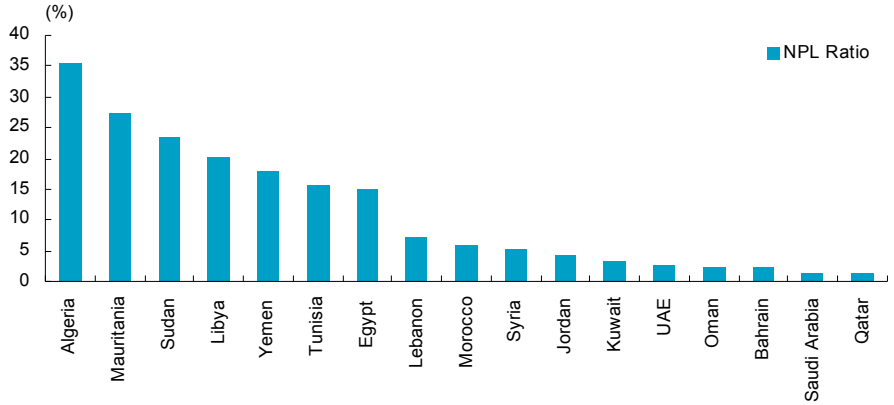
As concerns abated regarding the financial risks in the Middle East such as the downturn of Dubai's property market, banks in the Middle East, especially in Saudi Arabia, currently have very large levels of liquidity. The Middle East banking sector has recently got back on a growth track after the global financial crisis sapped momentum in 2009. For instance, Qatar National Bank's net profit and total assets were up 31% YoY and 27%, respectively, in 1H10 and it plans to open additional branches in Oman, Sudan and Syria. National Commercial Bank, the bank with the largest assets in Saudi Arabia, posted an 18% YoY increase in net profit in 1H10.

As seen in the graph below, the NPL[3] ratio of some Middle East countries such as Qatar and Saudi Arabia is very healthy, so we believe financing in these countries will pick up.

Order issuers are making requests for financing to be localized

Recently, some order givers have started to make specific requests for financing to be localized. We believe the growth potential, sound financials and wider market reach of banks in major Middle East countries will help spur PF deals there in 2010.

NPL ratio in MENA region

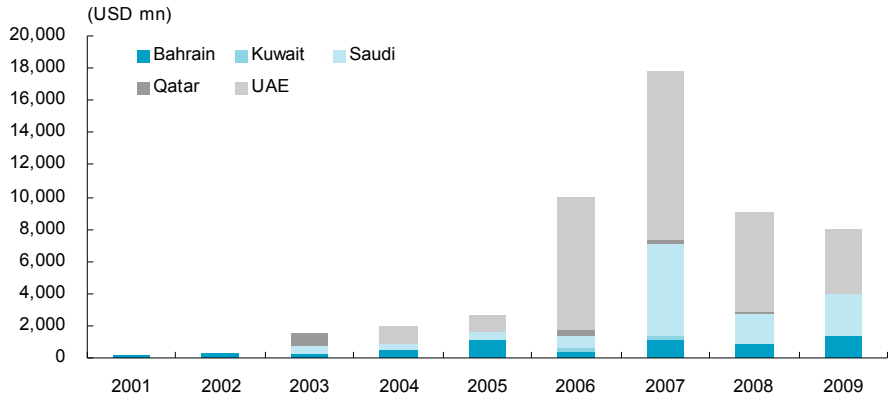


Source: International Monetary Fund

Recovering sukuk market is spurring plant orders

The sukuk (Islamic equivalent of bonds) market, which is a main PF method in the Middle East, is also recovering. In the Islamic world, charging interest on loans is prohibited by religious law (Sharia) and rewards or risks from investments in the real economy must be distributed proportionately. Especially for power plants, which have a long payback period, a significant portion of project financing comes from longer-term sukuk investments. Of the total sukuk issues worth USD20bn in 2009, utility plant funding represented about 50% or USD10bn. As interest-taking through deposits is not allowed in much of the Middle East, surplus capital is put toward investments, which is fueling the rise in the amount of sukuk issues.

Amount of sukuk issues



Source: Desktop research

[3] Non-performing loan

4. Gov't support should open more doors for Korean EPC contractors

Support for developers needed at the national level, as developers select EPC contractors

In a consortium with Saudi Arabia's Zenel, KEPCO won a USD460mn IPP project (Al Katrana) and selected Lotte E&C as the EPC contractor. If a developer wins an IPP project, it has a big say in selecting EPC contractors. Given this, Korea needs to support IPP developers at the national level.

ECAs in Korea still remain as guarantee providers; their fund increase and willingness to support are positive developments

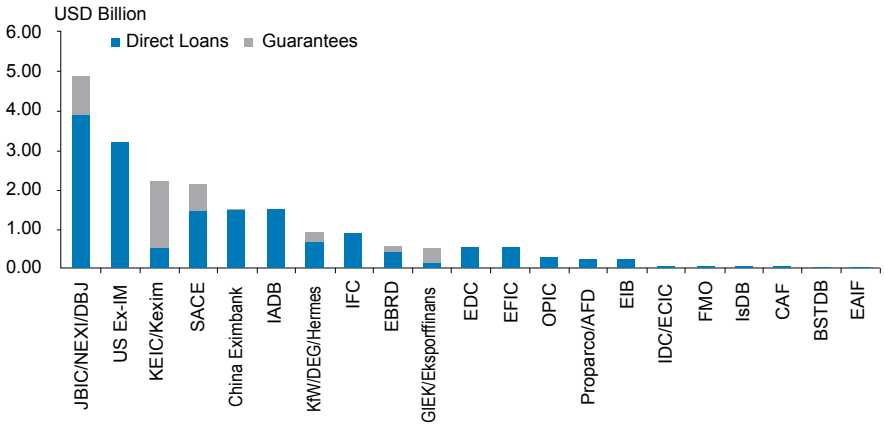
Since the Ilian project (Daelim Industrial as contractor) in the Philippines ten years ago, KEPCO has aggressively sought overseas IPPs. It takes both technological competitiveness and national support for Korean companies to seize IPP market expansion opportunities. Korea's Export Credit Agency (ECA) has participated in project financing by providing guarantees rather than direct loans. Recently, however, Korea Trade Insurance Corporation (former Korea Export Insurance Corporation), which provides most of the guarantees for overseas projects, is increasing funding and establishing numerous equity funds for overseas plants and construction projects.

Plans for vitalization of overseas construction

1) Create a W2trn global infrastructure fund by 2012 to vitalize private investments (Government W40bn, public institutions W160bn, private W1.8trn)
2) Continue expanding financial support for overseas construction and provide additional support for mega projects (Support for overseas construction, plants: '08- W6.8trn→'09- W8.7trn→'10- W9.0trn planned)
3) Hold strategic meetings between KEXIM and major contractors at early stages before bidding; Activate financial package support for each step of the process (USD270mn of support in the form of production funds, bridge loans, guarantees, and PF loans was provided to KEPCO for the Philippines Cebu IPP)
4) Increase provision of insurance against financial risks and expand guarantees to small to midsize contractors

Source: Ministry of Strategy and Finance, 2010/01/15 83rd Minister of International Economy meeting

Amount of multilateral/ECA PF in 2009



Source: HSBC

IV. Lights on in the IPP market

Contractors aim for potential markets with big demand for electricity and willingness to invest Potential markets are the Middle East, Africa and India

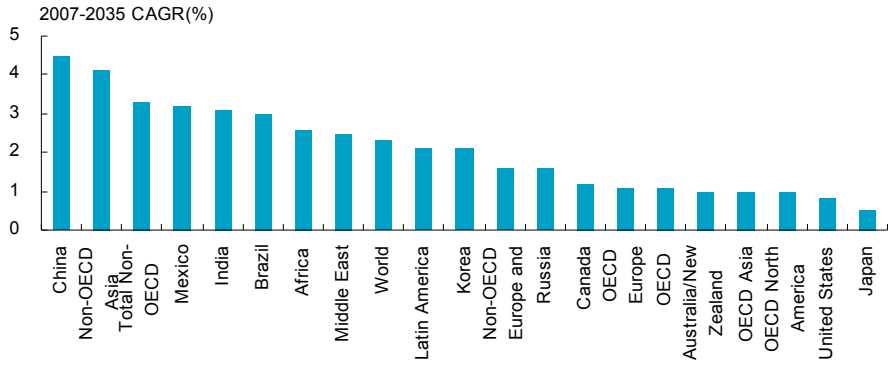
So where are good markets for Korean contractors? They are eyeing regions with skyrocketing demand for electricity and that offer big potential to win orders (markets with concrete plans and the willingness to build power plants) and to recoup investment over the long-term.

We believe such potential markets are countries in the Middle East and Africa, and India. Middle East countries are safer in terms of recovering investment for IPPs as they have big demand for electricity and abundant financial resources. Korean contractors' familiarity with hydrocarbon plants in the Middle East offers a greater chance of gaining entry to the market. Although countries in Africa lack order givers with financial resources, their demand for electricity is very large and the continent offers great potential thanks to the vigor of IPPs that has been gaining attention recently. As for India, demand for electricity is expected to skyrocket over the next 20 years at least and the market is the second-largest in the world after China. In addition, Korean contractors will have great entry potential with the signing of the Comprehensive Economic Partnership Agreement (CEPA) between Korea and India.

High entry barriers protect China's electricity market

The Chinese electricity market, the world's biggest, is driven by the government rather than IPPs due to abundant financial resources available internally. Therefore, we excluded China from the list of potential targets as the market is protected by high entry barriers against overseas EPC contractors.

Annual avg. growth rate of power generation from 2007 to 2035



Source: International Energy Outlook Jul 2010

Electricity demand and generation in MENA region (MW, GWh)

Country	2007		2010		2015	
	Peak demand	Generated electricity	Peak demand	Generated electricity	Peak demand	Generated electricity
Saudi Arabia	32,688	201,241	37,235	245,217	45,721	339,410
Egypt	19,640	123,065	23,650	148,538	29,860	188,087
UAE	12,837	69,077	17,240	92,277	31,941	171,074
Iraq	10,900	67,000	14,900	91,400	19,500	119,600
Kuwait	9,775	52,367	13,004	69,694	21,326	114,758
Syria	6,711	40,753	8,454	51,337	12,422	82,003
Algeria	6,567	37,171	7,802	44,530	10,672	61,866
Libya	4,644	26,443	5,850	33,311	8,596	48,944
Morocco	3,835	22,800	4,815	28,640	7,095	42,275
Sudan	1,901	9,658	4,550	22,820	6,693	34,162
Lebanon	2,320	10,700	3,558	14,913	4,658	20,609
Tunisia	2,330	12,970	2,710	15,180	3,390	18,920
Bahrain	2,020	10,434	2,558	12,913	3,658	18,609
Jordan	2,071	12,847	2,545	15,819	3,267	20,105
Yemen	1,155	5,977	1,537	8,100	2,196	11,680

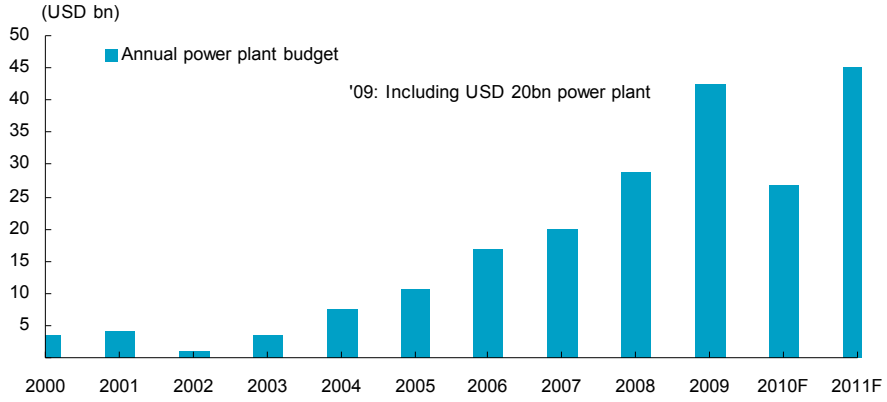
Source: International Energy Outlook Jul 2010

1. Middle East: notable markets in Saudi Arabia and UAE

GCC states' budget for power plants should reach USD26.7bn this year

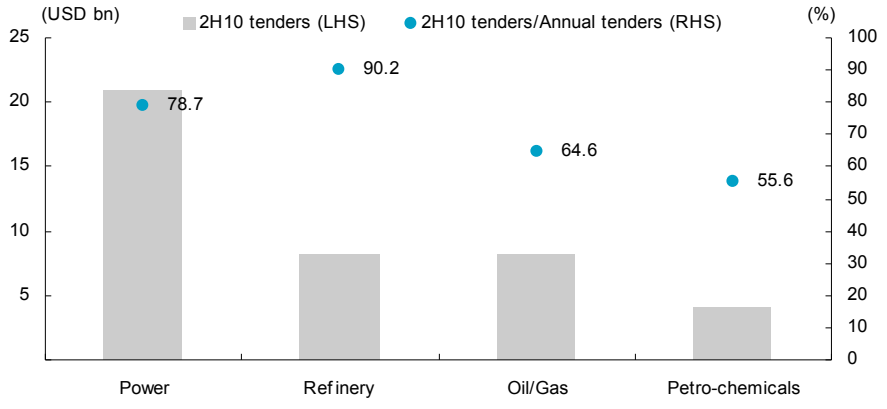
The power plant budget of the six GCC states has grown annually by more than USD10bn since 2005 and the amount is increasing significantly every year. In 2009, UAE tendered a USD20bn nuclear power plant project, which is much greater than in the past, and it is estimated the emirates' total tender for power plants was worth USD42.5bn in 2009. UAE's tender for power plants is expected to reach USD26.7bn in 2010 and as only 21.3% of the tenders have been allocated in 1H10, 2H10 should offer relatively significant upside for bidders. In addition, the budget for GCC's onshore plants is primarily focused on power plants in 2H10.

Six GCC states' budget for power plants



Source: MEED Project

Comparing tender amount of GCC plants in 2H10 and annual budget rate by sector



Source: MEED Project

Saudi Arabia will have the largest budget for power plants among GCC states

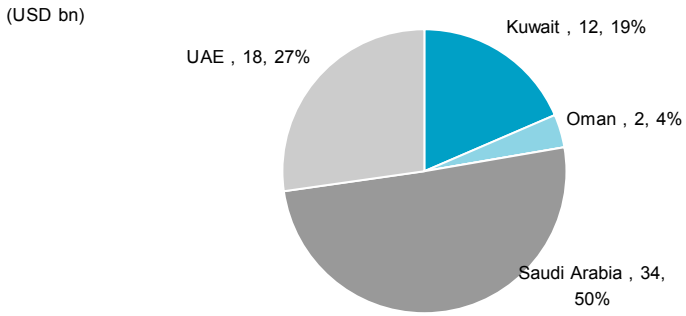
Among the GCC states, Saudi Arabia will have the largest budget for power plants from 2H10 to 2012, which represents 50% of all GCC states combined. UAE and Kuwait will have the second and third-largest budgets, respectively. Kuwait has recently stepped up efforts to develop the economy as political tensions have eased in the country.

Saudi Arabia

Saudi Arabia will need to triple the current electricity generation capacity by 2023

Saudi Arabia is perhaps the most significant in the Middle East power plant market. This is attributed to the Saudi government's industry diversification policy, which began during the middle of this decade, to transform the country into a post-petroleum economy. Saudi Arabia's peak demand is soaring as basic industries such as the manufacturing sector are achieving rapid growth. According to estimates by Saudi Arabia's Electricity and Cogeneration Regulatory Authority, electricity demand will reach 58GW in 2023, which is a 90.7% jump from 2007. In order to meet such big demand, Saudi Arabia must double the current electricity generation capacity within 15 years. If Saudi Arabia achieves greater-than-expected economic growth, the required electricity capacity will reach 94GW in 2023, so electricity generation capacity must inevitably be at least triple the current capacity.

GCC states' power plant market size (2H10-2012)



Source: MEED Project

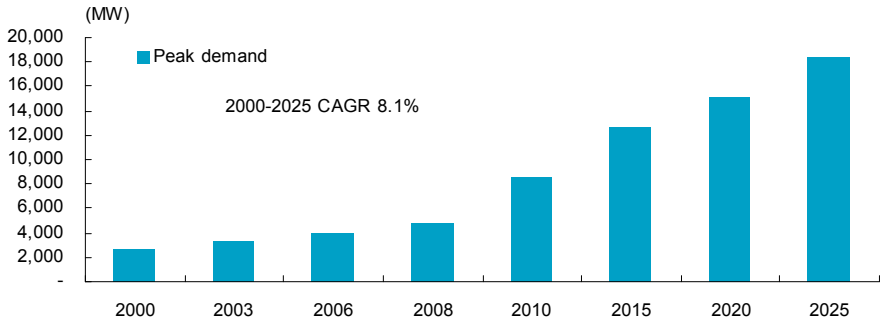
Saudi Electric to build six IPP plants by 2018, investing about USD100bn

In order to meet the high demand of electricity, the Saudi government is urging foreign investors and the private sector to lead independent water and power plant (IWPP) projects. The Saudi Electric Co. plans to build six IPP plants capable of adding 20,000MW by 2018. This project is significant in that a total investment of about USD100bn will open the door for the IPP market, which translates to USD10bn growth per annum. The details of the power plants planned by 2018 are seen in the table.

Large advance payments in Saudi Arabia give favorable environment for Korean EPC contractors

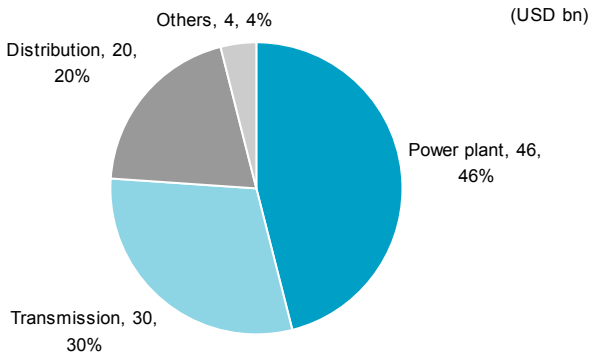
In particular, it is customary in Saudi Arabia to pay 20% of the total contract fee as advanced payment for government projects, which provides the most favorable business conditions for Korean EPC contractors. We expect Korean EPC contractors making aggressive forays into the Saudi market in the mid to long-term.

Expected peak demand in Saudi Arabia



Source: International Energy Outlook Jul 2010

Saudi Arabia's IPP investment from 2007 to 2018 (USD10bn growth per annum)



Source: Electricity & Cogeneration Regulatory Authority, Saudi Arabia

Saudi Arabia's planned power plants (MW)

Project	Capacity	Expected tender date	Completion
Tabuk extension	120	2010	2012
Al-Wajh extension	30	2010	2012
Tabrajal extension	25	2010	2012
Rabigh steam power plant extension phase II	630	2010	2013
PP10 steam turbines	990	2010	2013
Shuqaiq steam power plant	1,200	2010	2014
Deba phase I	500	2010	2014
Al-Qurayat extension	25	2011	2013
Al-Wajh extension	30	2011	2013
Jeddah South steam	630	2011	2015
Al-Shuqaiq steam phase II	400	2011	2015
Al-Jubail/Ras al-Zour phase I	630	2011	2015
Rafha extension	30	2012	2014
Al-Jubail/Ras al-Zour phase II	1,260	2012	2015
Al-Shuqaiq steam phase III	400	2012	2016
Jeddah South steam	630	2012	2016
Deba phase II	500	2012	2016
Tabarjal extension	25	2013	2015
Sharoura extension	15	2013	2015
Al-Jubail/Ras al-Zour phase III	630	2013	2017
Al-Uqair South	1,260	2013	2018
Jeddah South steam phase III	630	2013	2018
Al-Shuqaiq phase IV	400	2014	2018
Jeddah South steam phase IV	630	2014	2019
Al-Uqair South phase II	1,260	2014	2019
Al-Qurayat extension	25	2015	2016
Al-Uqair South phase III	1,260	2015	2017
Al-Shuqaiq phase V	400	2015	2019
Sharoura extension	30	2016	2018
Al-Jubail/Ras al-Zour phase IV	1,890	2016	2020
Jeddah South phase V	1,260	2016	2021
Al-Shuqaiq phase VI	800	2017	2021
Al-Uqair South phase IV	1,260	2017	2022
Jeddah South phase VI	1,260	2018	2023

Source: MEED

Kuwait

Kuwait's electricity consumption per capita is the sixth-largest worldwide

Kuwait's electricity consumption is sizeable due to not only to its industrial sector but its extensive use of air conditioners in the private sector. Demand for electricity is expected to increase 7-9% annually. According to the CIA's *World Factbook 2010*, Kuwait's electricity consumption per capita ranks sixth worldwide and is double that of Korea. In June, the Kuwaiti parliament passed a bill to shorten the summer working hours for public sector employees to save electricity. In addition, the Kuwaiti government sends out text messages to ask residents to conserve electricity as the country struggled to cope with power shortages.

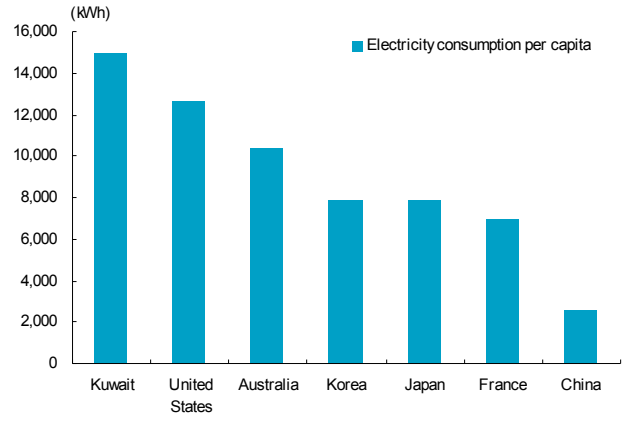
Kuwait to invest USD80bn in power plants by 2012

In early 2009, Kuwait's Ministry of Electricity and Water (MEW) announced plans to tender water and power plant projects worth USD11.2bn, which was recently lifted to USD17.4bn. Moreover, the MEW plans to raise the current electricity generation capacity by 132.1% before 2020. As shown in the table, Kuwait is set to issue tenders for major power plants worth more than USD8bn by 2012.

Kuwait launched its first IWPP thanks to easing political tensions

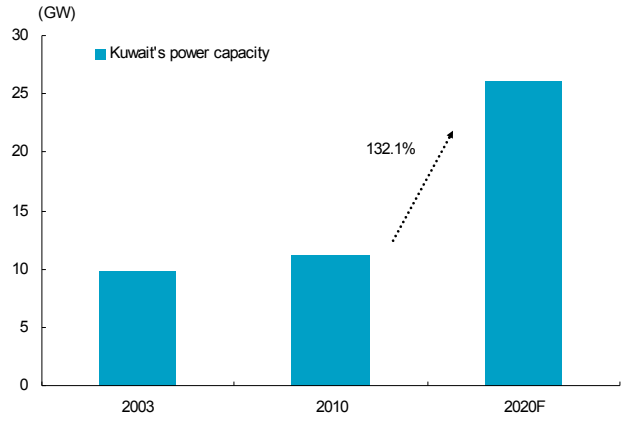
Until now, the Kuwaiti government managed most of the utility-related projects. Compared to Kuwait's sound financials, its power plant orders were few because political trouble such as the conflict between the government and parliament tied down public funds. But as liberal politicians started to gain power after winning parliamentary elections in May 2009, Kuwait has been stepping up efforts to develop the economy. Along with the political change, Kuwait launched its first IWPP, the al-Zour plant (1,500MW). Moreover, in March, Kuwait's Partnerships Technical Bureau appointed Germany's Lahmeyer International as a project consultant, which bodes well for IPPs in the country. Kuwait will likely become a major plant market in the Middle East thanks to the improving political environment, big demand for electricity and sound financials, and we believe many Korean contractors are preparing for tenders next year.

Electricity consumption per capita



Note: Numbers indicate world ranking in terms of electricity consumption per capita
Source: CIA's *The World Fact book 2010*

Kuwait's electricity generation capacity



Source: CIA World Fact book 2010

Power plant projects planned in Kuwait (2010-2018)

(MW, USD mn)

Project	Capacity (MW)	Expected tender amount	Project	Capacity (MW)	Expected tender amount
Subiya	2,000	2,400	Al-Zour IWPP	1,500	n/a
Al-Zour North 1	1,500	1,800	Jelaiaa	1,000	n/a
Al-Zour Noth 2	1,500	1,800	Shuwaikh	1,000	n/a
Al-Zour North 3	800	968	Doha East	2,300	n/a
Al-Zour North 4	900	1,090	Shuaiba South	1,400	n/a

Source: CIA's The World Fact book 2010

2. Africa: lacks financial resources and needs government backing

South Africa, Egypt and Nigeria to lead power plant investments

While African countries' demand for electricity is growing rapidly, power shortages are becoming worse as brownouts caused by dilapidated electricity infrastructure are cutting the continent's GDP by 2% and major firms' sales by 6% (according to the World Bank). Africa's electricity consumption per capita is only one-fifth the global average and is the least worldwide. African countries plan to invest more than USD80bn by 2012 to expand electricity infrastructure, thereby creating an enormous market worth more than USD20bn annually. In particular, countries such as South Africa, Egypt and Nigeria are expected to invest the most with US75bn.

Nigeria implementing the IPP method; Daewoo E&C has completed numerous projects in Nigeria

Since 2006, Nigeria has been implementing the IPP method to resolve its power shortages. Multinational power plant companies such as Germany's Siemens, Switzerland's ABB, South Africa's Eskom, China's Gezhouba Group and the US' AES dominate the Nigerian power plant market. As for Korean contractors, Daewoo E&C has completed numerous projects in the region and is looking forward to winning orders for major power plants in the next three to four years.

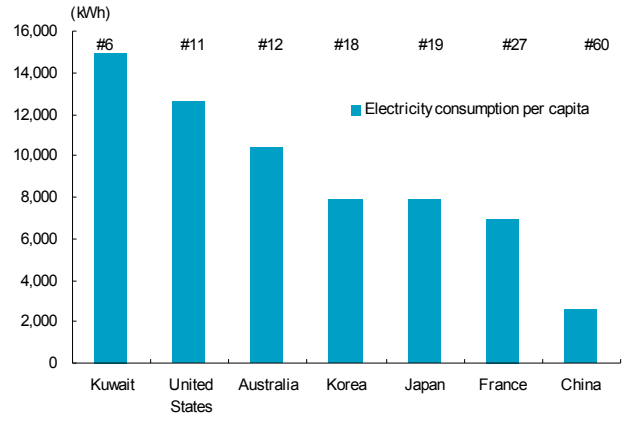
Egypt favors companies eager to provide financing

Among the African countries, Egypt has considerable access to electricity and exports its surplus. Egypt plans to add 32,979MW in electricity generation capacity by 2020. At present, multinational power plant companies such as GE, Alstom, Mitsubishi and Siemens are active in Egypt's power plant market. As Egypt lacks financial resources, it relies mostly on financing by foreign governments, international financial institutions and multinational companies. Thus, it is customary in Egypt for companies from the countries that provided financing to participate in projects as well. In addition, most projects are signed as package deals rather than turnkey as Orascom, an Egyptian contractor, or other Middle East contractors set out on joint ventures with foreign companies to promote the projects. As such, Korean contractors will need government backing to enter the Egyptian power plant market.

South Africa offers limited opportunities to Korean contractors

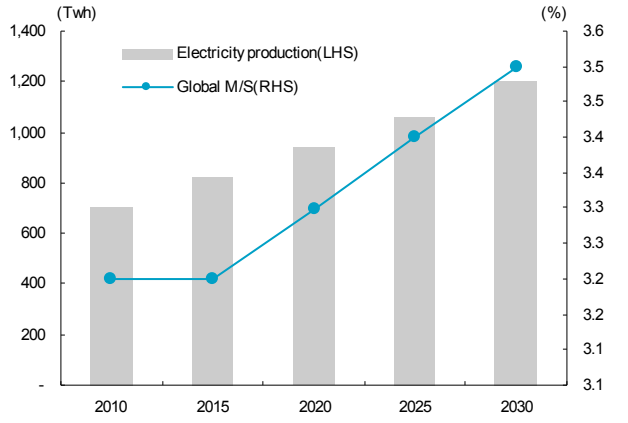
Although South Africa is the largest electricity producer in Africa as it supplies more than 60% of total electricity in the continent, industries have been limited to 90% of their power needs. Although South Africa plans to double the current electricity generation by 2025, the country's power plant market will offer limited opportunities to Korean contractors as they lack experience in the region.

Africa with the least electricity consumption per capita



Source: CIA World Factbook 2010

Africa's electricity production



Source: CIA World Factbook 2010

3. India: the world's second-biggest power market must be approached with patience

India's power plant market should grow USD14bn annually until 2035

India's demand for electricity is skyrocketing as we speak. India's electricity generation capacity is expected to reach 339GW by 2035, doubling the capacity of 150GW in 2007. Assuming it costs USD2bn to add 1GW of electricity, the Indian power plant market is expected to grow USD14bn annually. India will achieve the third-biggest electricity capacity growth after China and Mexico and rank second after China in terms of absolute market size.

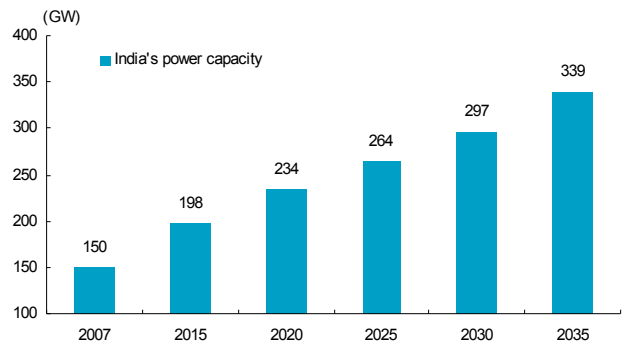
India's power plant equipment companies flourishing as of late

The Indian government is focusing on the expansion of power plant infrastructure by implementing the 10th to 12th Economic Development Plans from 2002 to 2017. According to the 11th Five-Year Plan from 2007 to 2012, the current electricity generation capacity will grow by 27.8%. Under such conditions, India's power plant equipment companies are currently enjoying an unprecedented surge in orders and the trend should last until at least 2017 when the 12th Economic Development Plan is set to finish.

Reliance on IPP plants expected to rise rapidly

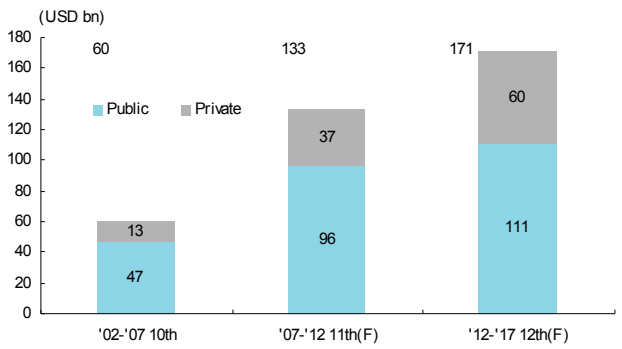
According to the Economic Development Plan, investments in the Indian power plant market are expected to reach USD60bn for term 1 (2002-2007), USD133bn for term 2 (2007-2011) and USD171bn for term 3 (2012-2017). From these, private investment, mostly for IPPs, will make up 22% of the investment in term 1 and rise to 35% in term 3, thereby accelerating the reliance on IPP. India introduced the IPP method in 1991 and the private sector accounts for 13.5% of electricity generation in India and 16% in terms of facilities. With the launch of the Electricity Reform and Promotion Committee in 2007, India is stepping up efforts to develop its electricity sector and investment in IPPs will grow more than ever.

India's power plant market (USD14bn growth per annum)



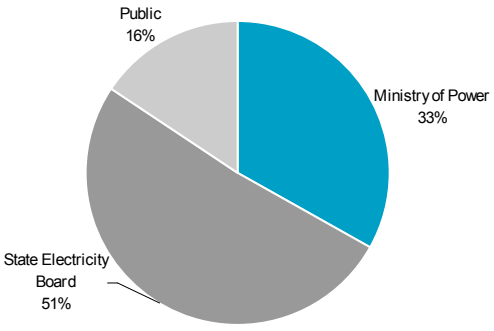
Source: International Energy Outlook Jul 2010

Investments in India's power plant market



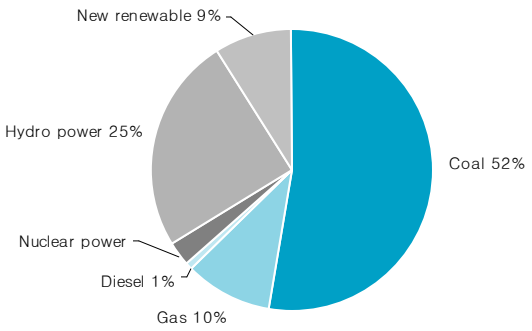
Source: Ministry of Power, India (powermin.nic.in), as of 2009

India's power plants by ownership



Source: Ministry of Power, India (powermin.nic.in), as of 2009

India's power plants by type of energy



Source: Ministry of Power, India (powermin.nic.in), as of 2009

Doosan Heavy Industries and KPS have made entries to India

Korean EPC contractors and power plant equipment companies that have made entries to India's power plant market include Doosan Heavy Industries, KPS, KEPCO, and Hyundai E&C. As for contractors, Daewoo E&C is the only Korean firm with a track record in India (USD90mn deal for the Dhauliganga hydroelectric power plant stage 1 signed in 2000) because it is difficult for contractors to enter the country's construction market independently.

Korean companies and businesses in India's power plant market (USD bn)

	Project	Amount	Construction period
Doosan Heavy Industries	Raipur-Chattisgarh coal-fired power plant	1.1	'10.01.22-'14.02.21
	Mundra thermal power plant	1.2	'07.09.01-'12.07.01
KPS	Wardha thermal power plant O&M	0.1	'09.12.31-'20.11.30
	Balco thermal power plant O&M	0.1	'09.04.01-'14.03.31
	Jharsuguda thermal power plant O&M	0.1	'09.05.15-'14.12.14
Hyundai ENG	Gautami combined cycle power plant stage II	0.3	'10.10.01-'13.10.31
Total		**2.7**	

Source: ICAK

Competitors in India's power plant market

Country	Company	Main activities
Japan	Kajima, Taisei, Shimizu	- Participated in JBIC funded projects - Not very eager to enter the Indian market
	Mitsubishi	- Metro rail projects, electricity EPC segment
US	Jacobs H&G	- Dominates the Indian construction market, industrial facilities (includes petroleum/petrochemical/power generation)
Germany	Siemens	- Metro rail projects, electricity EPC segment

Source: KOTRA, Korea Investment & Securities

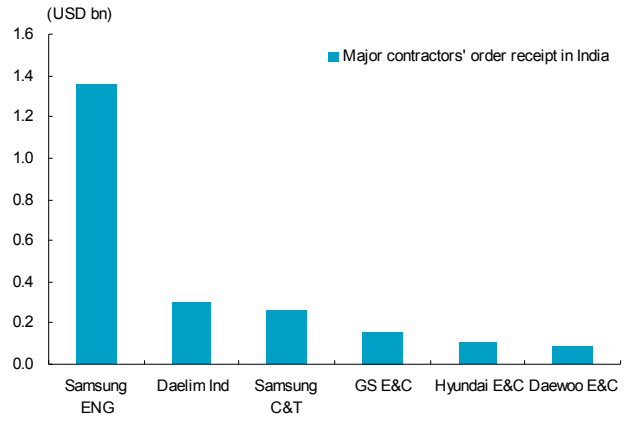
Korea East-West Power inked MOA for an IPP in India, as a Korean EPC contractor will likely join the project

In July, Korea East-West Power inked an MOA with Sahara India Power to build and operate a coal-fired power plant for USD1.6bn, which bodes wells for Korean companies set to enter India's IPP market. The EPC contractor for the project will be selected early next year and it is likely a Korean EPC firm will join Korea East-West Power in the deal. In addition, Doosan Heavy Industries mainly supplies power plant equipment to coal-fired power plants and KPS already made entry to India's power plant operations and management market some time ago. India accounts for 73% of KPS' overseas orders backlog and the firm has an estimated 3% share of India's operations and management market.

Korean companies will likely gain entry to India thanks to CEPA and low labor costs

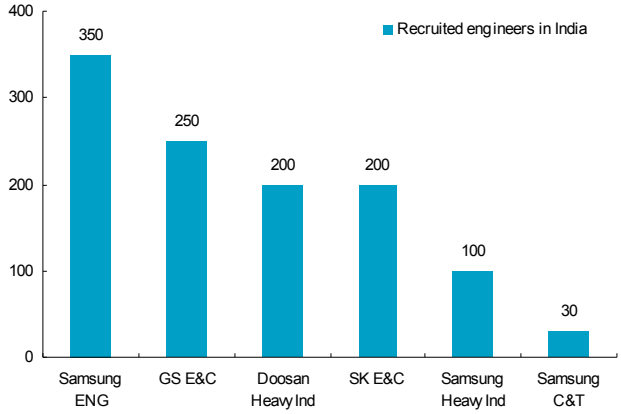
We believe the future will be bright for Korean companies trying to enter the Indian power plant market for the following two reasons. First, the signing of CEPA will have a positive effect on Korean companies' chances of gaining entry, as it will be easier for the companies to bring in high-tech construction equipment used by Korean contractors and lead to large cost reductions. Second, the Indian engineering sector's rich human resources will also offer cost reductions. We estimate the annual salary for a fifth-year construction worker in India equals about one-fourth a Korean worker's salary.

Major contractors' order receipts in India (from 2000)



Source: ICAK

Engineers from Korean engineering centers in India



Source: Company data

Korean companies will use political tie-ups and price edge to enter India

Accordingly, Korea EPC contractors could gain easier access to the IPP market by establishing a consortium with KEPCO or a global developer if the contractors acquire political tie-ups and price competitiveness. Among Korean contractors, Samsung Engineering has the biggest presence in India. Along with Samsung Engineering, numerous Korean contractors have established engineering centers in India, which also means they have acquired Indian engineers. Thus, we believe Korean companies are fundamentally prepared for India.

Korean power plant equipment companies eager to enter India thanks to capacity shortages at BHEL

We are also looking forward for Korean power plant equipment companies to enter the market, although individual firms need to put in a great deal of time and effort as Indian law obliges companies to register as vendors. A positive change in the Indian market is that a recent surge in electricity generation facilities is causing production capacity shortages for the largest equipment manufacturer in India, BHEL (Bharat Heavy Electricals Ltd., 70% market share). The Indian government had granted a 15% cost subsidy for equipment made by BHEL but recently opened the market to equipment from overseas, in particular China, due to production capacity shortages. Meanwhile, Japanese and European companies are looking to enter India through aggressive joint ventures with local power plant equipment firms. We believe the most effective route for Korean equipment companies to enter the market is to register as vendors for Indian equipment sourcing companies.

India has huge potential but requires patience

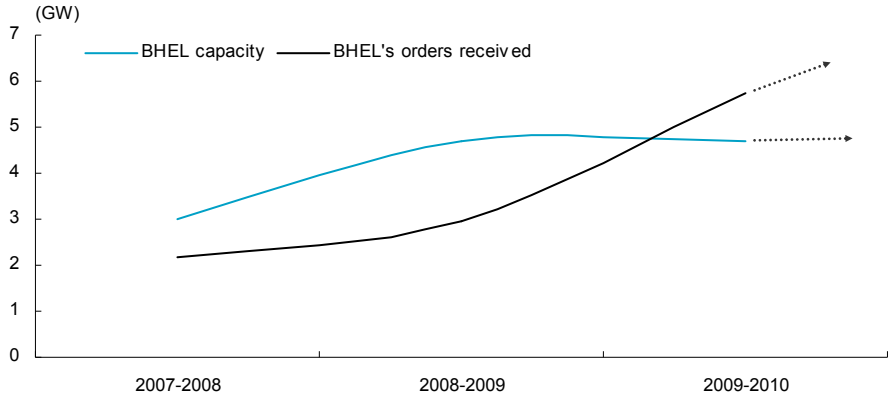
Although Korean companies have yet to commence entry to the Indian market, in terms of size, it offers huge potential. We believe Korean companies must be patient as the market offers great opportunities in the mid to long-term when all aspects are considered.

Indian power plant equipment companies' joint ventures with foreign companies

Japan, Toshiba	+	India, JSW
Italy, Ansaldo	+	India, GB Engineering
Japan, MHI	+	India, L&T
France, Alstom	+	India, BharatForge

Source: KOTRA

Production capacity shortages at BHEL's coal-fired power plants



Source: BHEL

IV. Analysis of IPP developers

1. Leading developers in the IPP market- Japanese trading firms and European power companies

Outstanding IPP developers: European utilities and Japanese trading companies

Currently, Japanese trading firms and European utilities are emerging as major developers in the global independent power plant (IPP) market. In particular, Japanese trading companies are enjoying a head start as: 1) it is difficult for rivals to beat Japan's low interest rates, which allows easy access to funding sources, 2) the Japan Bank for International Cooperation (JBIC) offers strong financial backing, and 3) they can leverage their extensive networks. Japanese trading firms bear low risks thanks to their project structure, which creates long-term purchase commitment with local power companies and passes the raw material cost burden on to electricity consumers. In partnerships with these Japanese trading companies, Korean engineering, procurement & construction (EPC) contractors are joining numerous IPP projects as contractors.

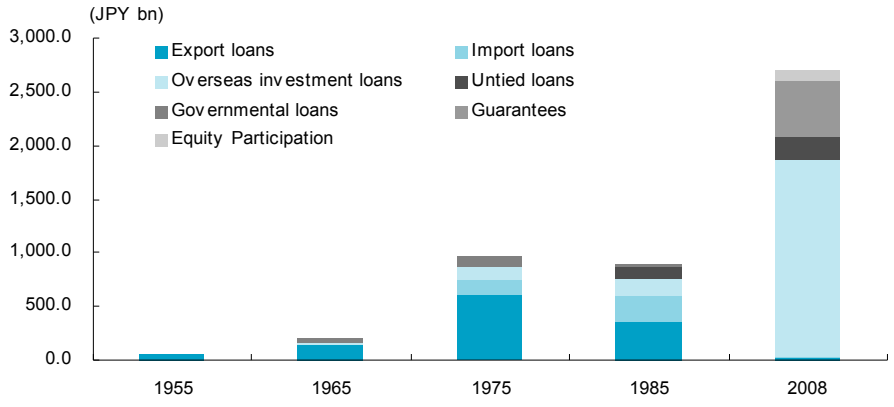
Japanese trading companies escaped a long recession based on IPPs

Japanese trading companies had struggled with shrinking margins, their traditional source of revenue, from the 1990s to the early 2000s. But, they made a strong comeback from end-2004 thanks to aggressive, successful investments in energy and IPPs that were dated back to the late-1990s. In FY08, when the financial crisis swept the world, Japan's top seven general trading companies together posted JPY1.1trn net profit, 80% of which came from energy divisions.

Japan's superb financing capacity backed by JBIC

We attribute Japan's dominant presence as an IPP developer to its superb financing capacity or, more strictly speaking, financial backing from JBIC, a major export credit agency. JBIC has expanded its market reach from export financing to direct overseas investment since the 2000s. As of 2008, JBIC's direct overseas investment stood at JPY1.8trn or 67% of the organization's total investments.

JBIC's funding trend



Source: JBIC

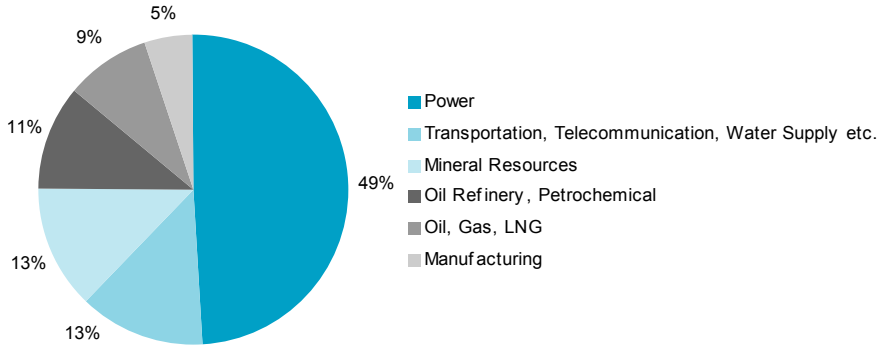
JBIC is expanding its investments in IPP projects in the Middle East

Currently, JBIC invests 49% of its project-financing in IPPs because the power generation business has a shorter payback period and involves a marginal risk of loss. Given that its regional exposure to Middle East doubled to 21% in 2009 from 10% in 2005, we believe JBIC is fast increasing its investments in IPP projects located in the region.

European power companies aggressively seeking overseas IPP markets, as a breakthrough to domestic market saturation

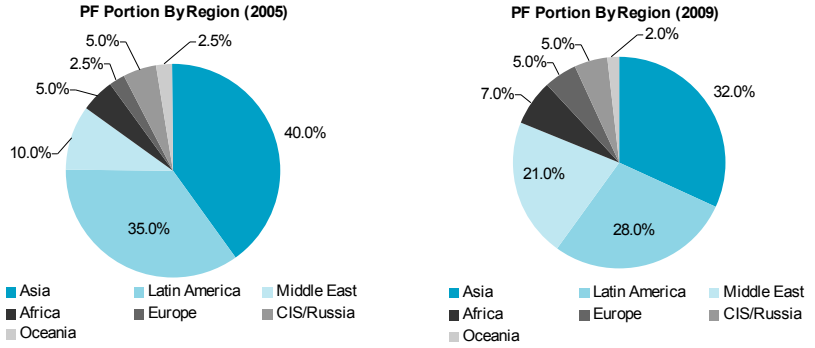
Global power producers and Korea Electric Power Corp. (KEPCO) are advancing to the global IPP market. In particular, financially-stable European power producers are aggressively seeking IPP opportunities in search of a breakthrough to their saturated domestic markets. GDF Suez of France has the largest IPP facility capacity and is engaged in diverse projects in cooperation with Korean EPC contractors.

JBIC's PF breakdown by sector



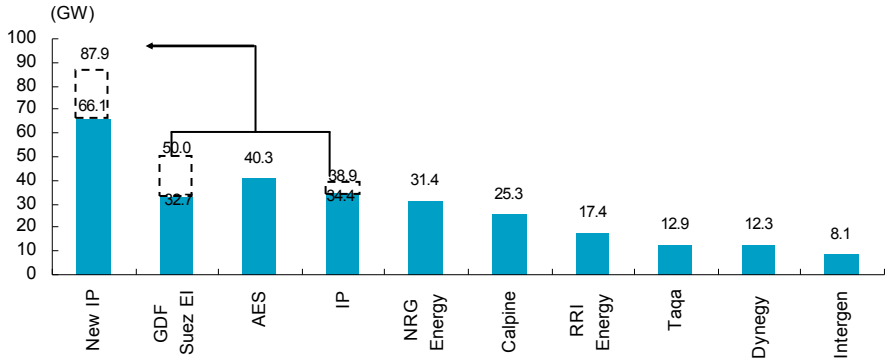
Source: JBIC

Change in JBIC's PF proportion by region



Source: JBIC

IPP generating capacity comparison of global IPP developers



Note: New IP, a merger entity, is based on sum of capacity of GDF Suez EI and IP (Co-owned 1GW Al Hidd Plant taken into account)
GDF Suez Energy International is GDF Suez's energy business outside Europe (dotted box indicate capacity in development)
Source: Company data

2. Case study A: GDF Suez

GDF Suez, the world's second-largest utility

The merger between French government-owned gas company GDF and private energy company Suez created GDF Suez. As the French government holds a 35% voting stake in the company, GDF Suez is a de-facto state-run company. In August 2010, the company acquired Britain's International Power and became the world's second-largest utility.

After the merger, GDF Suez became the world's largest IPP developer

After the merger, GDF Suez has the second-largest generating capacity (107GW) following a French-based energy company EDF (136GW). In addition, GDF Suez has emerged as the world's largest IPP developer with 14% of its sales generated outside Europe, and is expanding its operations across the world.

Largest markets are the Middle East and Asia

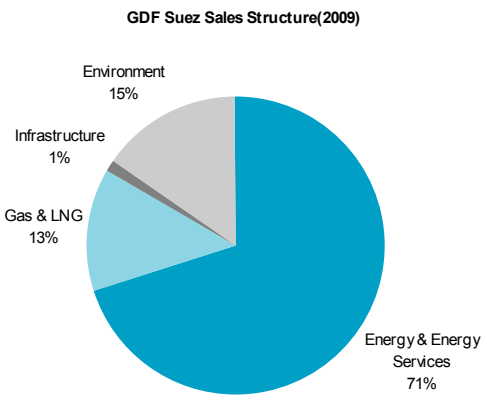
In the Middle East, GDF Suez is mainly engaged in Independent Water and Power Production (IWPP). Middle East operations account for 14% and 22% of the company's total EBITDA and generating capacity, respectively. The company's generating capacity in the region is expected to grow from 15.6GW in 2009 to 27.1GW in 2013. Asia occupies 14% of both the company's total EBITDA and generating capacity. We think the company's market share gains are due to its long-established expertise in the power industry and knowhow in IPP development.

GDF Suez's key financials (EUR mn, %)

	2006	2007	2008	2009	1H10
Sales	44,289	47,475	83,053	79,908	42,346
YoY	NA	7.2	74.9	(3.8)	0.3
Operating profit	4,497	5,175	8,561	8,347	5,215
YoY	NA	15.1	65.4	(2.5)	5.1
Operating margin	10.2	10.9	10.3	10.4	12.3
Net profit	4,194	4,616	7,415	5,231	4,145
YoY	NA	10.1	60.6	(29.5)	14.3
Net margin	9.5	9.7	8.9	6.5	9.8

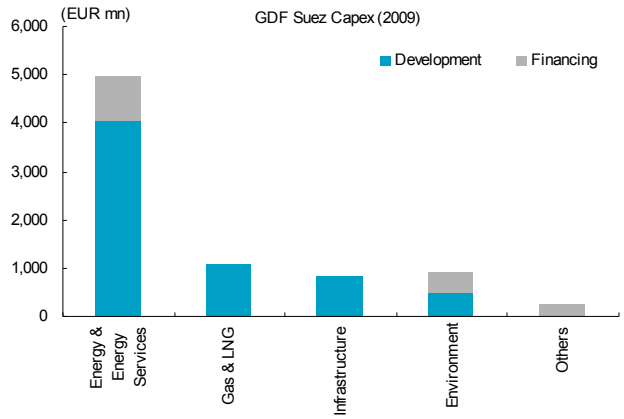
Note GDF and Suez Group were merged in July 2008; data for 2006-2007 are based on Suez Group's consolidated financial statements
Source: Company data

Sales breakdown (as of 2009)



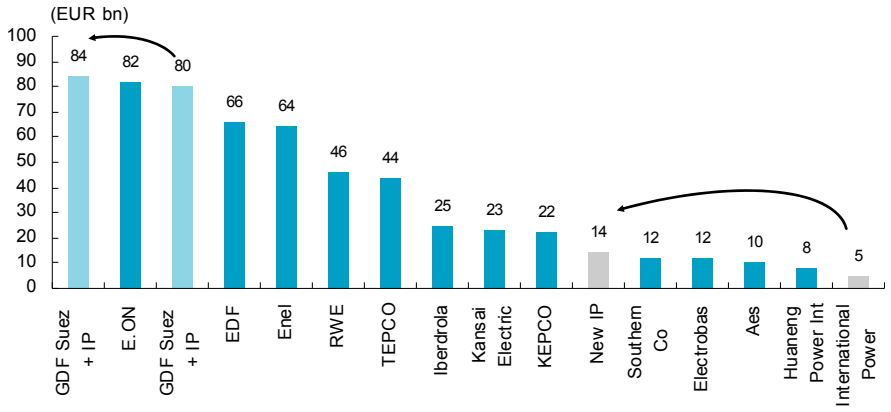
Source: Company data

Capex in 2009



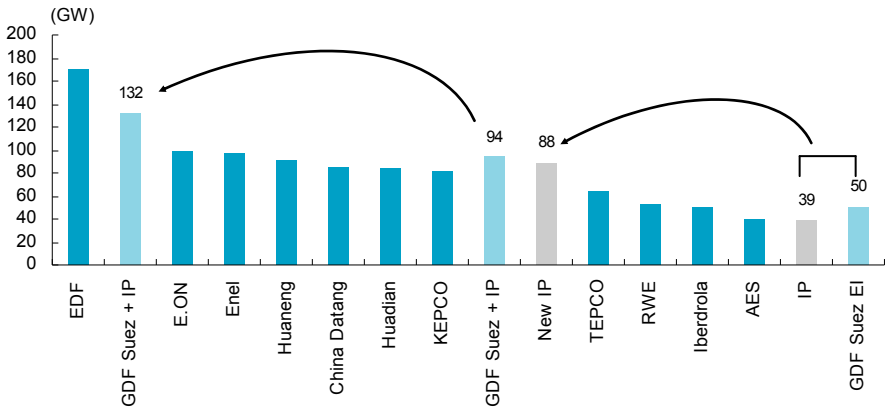
Source: Company data

Global utilities' sales



Note: New IP, a merger entity, is based on sum of capacity of GDF Suez EI and IP (Co-owned 1GW Al Hidd Plant taken into account)
GDF Suez Energy International is GDF Suez's energy business outside Europe (dotted box indicate capacity in development)
Source: Company data

Global utilities' generating capacity



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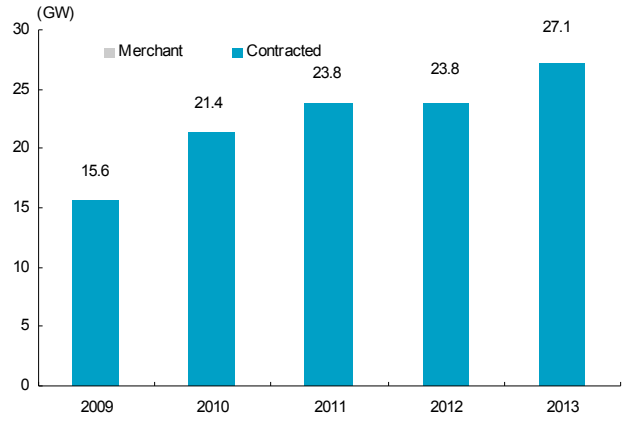
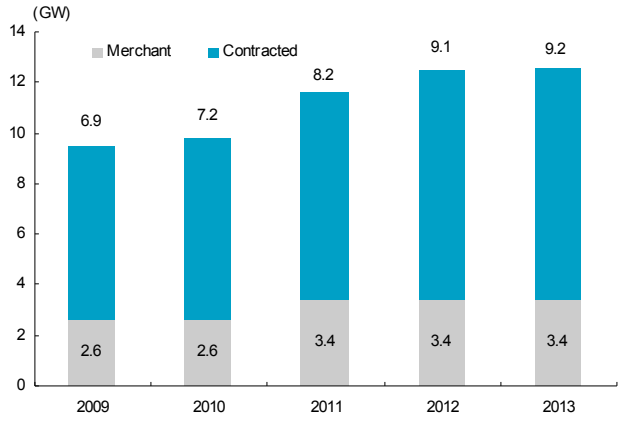
GDF Suez Energy International is GDF Suez's energy business outside Europe (dotted box indicate capacity in development)
Source: Company data

GDF Suez's contracted IPP capacity in the Middle East



Source: Company data

GDF Suez's contracted IPP capacity in Asia



Source: Company data

3. Case study B: Marubeni

Marubeni excels at negotiating with EPC contractors, as it has an EPC arm within the company

Marubeni is a Japanese general trading company and its business structure encompasses energy, chemicals, textiles and machinery. As the company provides heavy financial backing for the IPP division, the IPP business has emerged as a major source of revenue for the company. Marubeni has been involved in diverse IPP projects in the Middle East and emerging nations, backed by government funding (including JBIC). Not only has the company a proven track record in power business development since the 1960s but it has also independently implemented EPC contracts. As a result, the company enjoys a better position than other Japanese trading companies when negotiating with EPC contractors.

Holds the largest overseas IPP capacity among Japanese trading companies

The company's overseas IPP projects have a total of capacity of 23,413MW or 7,474MW on a net basis or equity-stake basis. The sheer size of IPP contracted capacity makes Marubeni the largest IPP investor among Japanese general trading firms. The company's recent investments in power transmission networks mark its foray to the more-lucrative retail power business. In addition, it has a long-term plan to increase investments in its five priority regions – China, India, Asia ex-Japan, North America and South America.

Has pursued diverse IPP projects with Korean companies; A case in point is the S2 Project with Samsung C&T

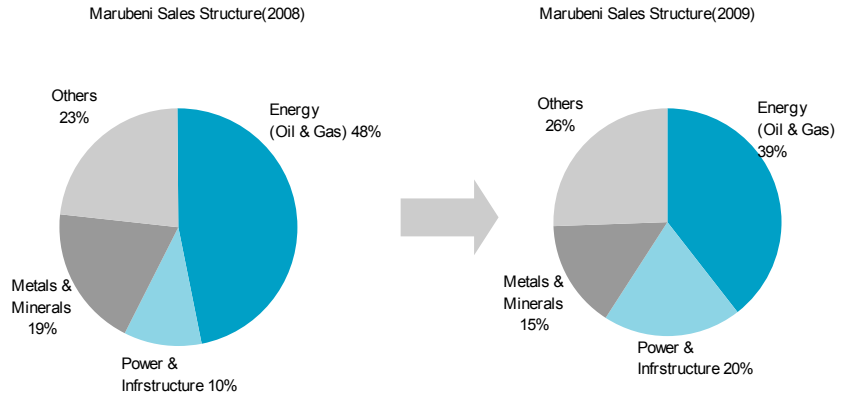
Marubeni has also pursued diverse IPP projects with Korean companies. A case in point is Shuweihat S2 IPP in the UAE, where Samsung C&T is participating as an EPC contractor. Although Marubeni Group has an in-house EPC service provider, it formed a consortium with overseas EPC contractors to generate more profits from IPP projects. We believe such flexibility is the company's strength in the IPP business.

Marubeni's key financials (JPY bn, %)

	2006	2007	2008	2009	1Q10
Sales	3,659	4,166	4,002	3,280	852
YoY	16.5	13.9	(3.9)	(18.0)	11.0
Operating profit	165	200	234	119	28
YoY	15.2	21.3	16.9	(49.2)	19.8
Operating margin	4.5	4.8	5.8	3.6	3.3
Net profit	119	147	111	95	31
YoY	61.7	23.4	(24.5)	(14.3)	14.2
Net margin	3.3	3.5	2.8	2.9	3.6

Note: Marubeni's fiscal year ends in March.
Source: Company data

Change in net profit breakdown at Marubeni



Source: Company data

4. Case study C: Mitsui

Mitsui, Japan's third-largest trading company, recently focusing on IWPP

Mitsui & Co., Ltd. was established in 1947 and is now one of top three general trading companies in Japan together with Mitsubishi Corporation and Sumitomo Corporation. Mitsui & Co., Ltd., a member of Mitsui Group, is concentrating on water and IWPP businesses. Its IPP investments amounted to JPY240bn as of 2009, taking the largest portion of the company's total capex.

Diversified regional presence; The most familiar IPP developer for Korean EPC contractors

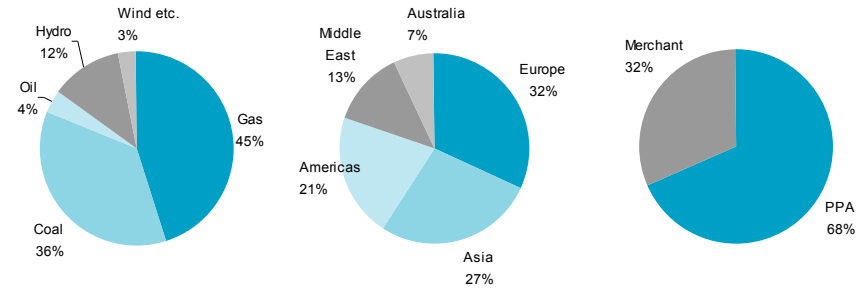
Mitsui's IPP projects have a total of 20GW capacity worldwide or 4.4GW on a pro rata basis. Its IPP projects are centered on thermal plants running on fossil fuels such as gas and coal but the regional profile is well diversified, with 27% of its plants located in Asia and 13% in the Middle East. Mitsui is the most familiar IPP developer for Korean EPC contractors including Hyundai E&C, Daewoo E&C and Samsung C&T, which have participated in a number of IPP projects.

Mitsui's key financials (JPY bn, %)

	2006	2007	2008	2009	1Q10
Sales	4,794	5,739	5,535	4,096	1,098
YoY	16.5	19.7	(3.6)	(26.0)	12.4
Operating profit	281	371	383	145	90
YoY	5.5	32.2	3.0	(62.2)	172.7
Operating margin	5.9	6.5	6.9	3.5	8.2
Net profit	302	410	178	150	103
YoY	49.3	36.0	(56.7)	(15.7)	80.7
Net margin	6.3	7.1	3.2	3.7	9.4

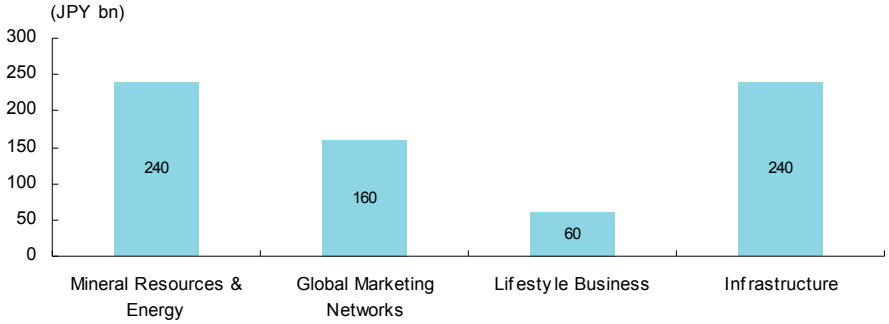
Note: Mitsui's fiscal year ends in March.
Source: Company data

Mitsui's IPP project breakdown (by region, type of energy and type of contract)



Source: Company data

Capex in 2009



Source: Company data

5. Implication

Korean contractors should sharpen their capacity as a IPP project developer

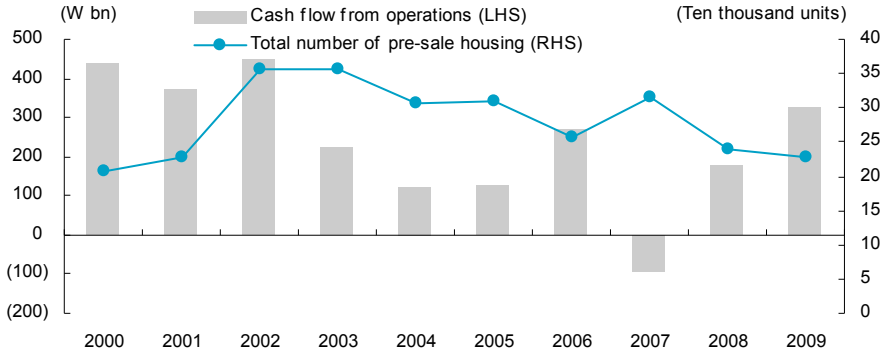
Developers can create a stable cash flow

Some European utilities and Japanese trading companies are enjoying stable cash flows over the long term thanks to their strong presence in the IPP market. In contrast, Korean contractors endure fluctuating cash flows because the housing business accounts for an average 30% of the business lineup for large contractors. In particular, their operating cash flow tends to dwindle in years when the pre-sale rate is low and the housing market is swamped with new pre-sale homes. We believe Korean contractors should transform themselves into equity investors or developers in overseas IPP projects over the long term to smooth out cash flow, the biggest concern for Korean contractors.

Through equity investments in IPP projects, Korean construction companies will gain the upper hand

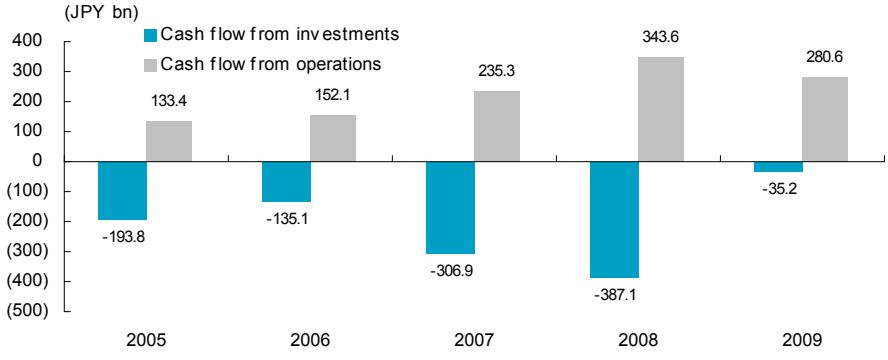
For example, global contractor Bechtel Corp. has a financial affiliate, Bechtel Enterprises Holdings, which offers project development and financing to the Bechtel Corp., makes investments in areas related to Bechtel's projects, connects project participating companies with financial institutions and provides investment opportunities for financial institutions. Due to the importance of financing, financial investors has taken the upper hand in IPP projects. However, if Korean construction firms are armed with financing and service capabilities, the tables should turn. In particular, they will be better situated to win EPC contracts, if they make equity investments in those projects. Thus, we believe EPC contractors will also take this route.

Average operating cash flow of six major developers



Source: Company data, Real Estate 114

Cash flow at Marubeni



Source: Company data

Win-win strategy: Foreign developers + Korean EPC contractors

Foreign developers prefer Korean EPC contractors because of their ability to reduce project costs

Foreign developers prefer Korean EPC contractors. To win a power plant project, developers choose EPC partners who can bring in competitive price quotes. As EPC contracts represent 70-80% of the total project cost, the amount of cost savings that an EPC contractor can bring is crucial. EPC contractors can prove their price competitiveness by meeting the project schedule and saving costs. Given that project owners are tightening their selection criteria and demand specific qualifications from EPC contractors, we believe Korean EPC contractors should stand out from the pack thanks to their price competitiveness and established track record.

Korean EPC contractors: networks with project owners, understanding of electricity market and price competitiveness

Construction companies and heavy industries companies usually participate in IPP consortiums as EPC service providers. Regardless of nationality, developers prefer Korean EPC contractors due to price competitiveness, business relations with plant owners around the world, including the Middle East, and their in-depth understanding of local electricity markets.

China to present challenges to Korea

But, Korean players should face competitive challenges in the overseas IPP market. When Saudi Electric Co.'s Rabigh IPP project selected a Chinese EPC contractor in late-2008, it was a wake-up call about looming competition. The consortium included Saudi Arabia's Acwa (main developer), Korea's KEPCO (co-developer), Shangdong Electric Power (Chinese EPC contractor) and Dongfang Electric Corp. (power generator manufacturer). Although Korea participated in the project as a developer, its EPC contract was awarded to a Chinese company, not a Korean company, which was unprecedented.

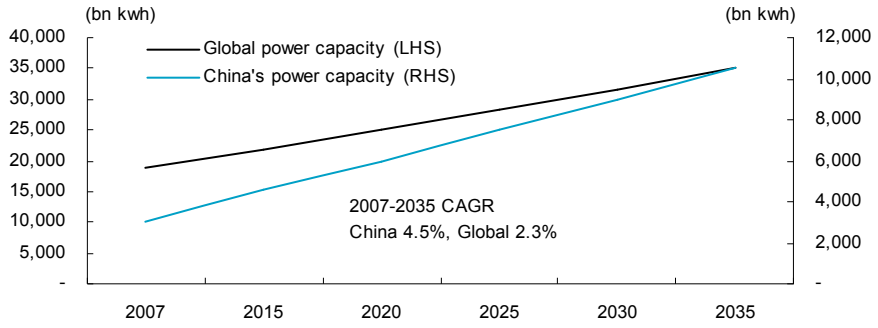
Chinese EPC contractors rarely has experience in overseas projects, while there is ample opportunity in domestic market

Shangdong Electric Power has a long list of projects, but its track record is limited to China. Despite its lack of overseas presence, the company was selected because the main developer voiced strong support for the Chinese company, which offered competitive prices. The issue at stake is whether the operation of the power plant is delayed. The consortium will likely take a heavy blow, while the Saudi Electric Company should remain unscathed, passing the buck to the private project operator. Due to the high risk, it is premature to say that Chinese EPC contractors have successfully entered the overseas IPP market. Moreover, as the Chinese electricity market is colossal, Chinese companies' capacity is insufficient to cover their domestic market alone (see the chart below).

Korean firms can cover weakness in government financial support with strong EPC capabilities and cooperation with Japanese developers

Although the strong financial backing of Chinese ECAs for Chinese EPC contractors is a matter of concern, we believe Korean firms can overcome weak government support, as 1) they have a stronger track record in EPCs than Chinese counterparts and 2) they can cooperate with Japanese developers.

Power generation volume and its growth rate, highest in the world



Source: Desktop research

Company

Samsung C&T (000830) 36

Hyundai E&C (000720) 39

Samsung C&T (000830) BUY (Maintain), TP: W71,000 (Maintain)

Break boundaries to become Korea's Bechtel

Samsung C&T is moving in the right direction: We believe the contractor is taking the correct steps to become a power plant player as state-run power projects scale down their EPC contracts but privately-funded IPP projects increase in number. Samsung C&T has transformed itself since 2007 from a power plant EPC player to an investor and developer in IPP projects.

IPP projects require participants to conduct feasibility studies, examine local institutional frameworks, develop relations with key counterparts, coordinate with other joint project undertakers, and raise large-scale project financing. We believe Samsung C&T will make the most out of the market trend by bringing its EPC expertise in the power generation and IPP capability proven in the trading businesses. The contractor has demonstrated its superb financing capacity and global networks through a series of projects including Kazakhstan's Balkhash power generation project (W4trn) where the company and KEPCO were named as joint developers in 2009, Mexico 'Norte 2' power generation project (project valued USD420mn, construction costs of USD330mn, Samsung Engineering's stake worth USD270mn). The company's Mexican power plant project is meaningful in that it marks the first Korean winner against competition with Spanish and Japanese rivals and gives the company easy access to the US.

Global plant giant Bechtel has an investment subsidiary, Bechtel Enterprise Holdings, which structures projects and financing, seeks related investments, builds bridges between project undertakers and financial institutions, and offers investment opportunities for financial institutions. Financial investors hold the upper hand because financing is decisive to the plant project business. But if Samsung C&T can secure financing capacity and service qualities comparable to Bechtel, the tables should be turned toward the contractor.

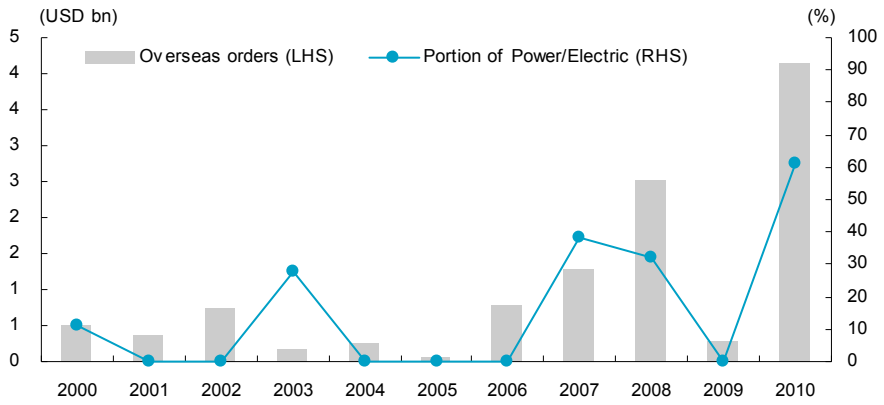
We maintain Samsung C&T as our top-pick with a price target of W71,000: The contractor has the longest list of project records, following Hyundai E&C. We believe the company will be the most versatile player in the power plant market thanks to its expertise as a contractor, IPP capacity and developer. As IPP development projects generate stable cash flow over the long term, it will enable steady new investments.

The stock stagnated due to uncertainties over the Yongsan project. But the government's real estate market stimulation measures announced on Aug 28 should ease concerns and benefit the contractor, albeit indirectly.

September 2, 2010 / W56,500 / Mkt cap: USD7,476.8mn, W8,826bn

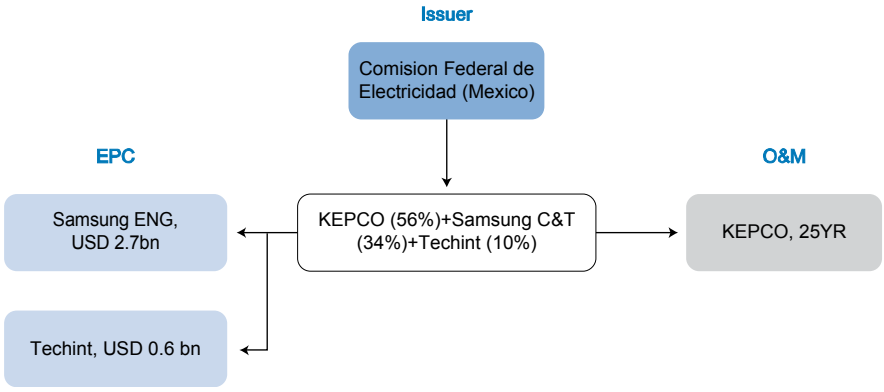
Yr to Dec	Sales (W bn)	OP (W bn)	EBT (W bn)	NP (W bn)	EPS (won)	% chg. (YoY)	EBITDA (W bn)	P/E (x)	EV/EBITDA (x)	PBR (x)	ROE (%)
2008A	11,812	364	441	345	2,340	(28.5)	401	17.0	16.0	1.2	7.0
2009A	10,876	281	401	308	2,088	(10.8)	319	26.9	26.9	1.2	5.0
2010F	11,964	387	714	541	3,587	71.8	425	15.8	20.2	1.1	7.0
2011F	13,720	485	639	484	3,215	(10.4)	522	17.6	15.7	1.1	6.0
2012F	15,851	520	762	578	3,836	19.3	557	14.7	13.4	1.0	6.7

Samsung C&T's overseas orders breakdown: power plant's portion



Note: As of Aug 2010.
Source: ICAK

Mexico 'Norte 2' power generation project structure



Source: Korea Investment & Securities

Balance Sheet

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
Current assets	4,977	4,353	4,767	5,376	6,760
Cash & cash equivalent	1,166	755	778	755	872
Accounts receivable	2,029	1,541	1,595	1,759	2,439
Inventory	325	122	150	172	198
Fixed assets	6,297	9,532	9,989	10,494	11,049
Investments	5,058	8,152	8,594	9,080	9,614
Tangible assets	638	629	621	617	614
Intangible assets	35	29	30	30	31
Total assets	11,274	13,885	14,756	15,870	17,808
Current liabilities	4,532	3,639	3,864	4,735	6,434
Accounts payable	1,460	1,389	1,841	2,287	2,642
Short-term borrowing	812	51	42	34	27
Current portion of LT debt	103	120	180	245	297
Long-term debt	1,847	2,791	2,971	2,804	2,542
Debentures	609	891	1,091	891	591
Long-term borrowings	414	308	208	158	108
Total liabilities	6,379	6,430	6,835	7,540	8,976
Paid-in capital	804	804	804	804	804
Capital surplus	1,002	1,001	1,001	1,001	1,001
Capital adjustments	(323)	(319)	(319)	(319)	(319)
Retained earnings	1,253	1,485	1,951	2,360	2,863
Shareholders' equity	4,895	7,455	7,921	8,330	8,832

Income Statement

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
Sales	11,812	10,876	11,964	13,720	15,851
Gross profit	1,159	1,036	1,172	1,335	1,420
SG&A expense	795	756	785	850	900
Operating profit	364	281	387	485	520
Non-op. profit	858	742	759	603	682
Interest income	63	93	79	90	107
FX gains	568	355	230	264	305
Equity gains	77	174	191	172	189
Non-op. expense	781	621	432	449	440
Interest expense	67	131	116	100	82
FX losses	592	383	170	195	195
Equity losses	22	69	76	84	92
Earnings before tax	441	401	714	639	762
Income taxes	96	94	173	155	185
Profit from discontinued	0	0	0	0	0
Net profit	345	308	541	484	578
EBITDA	401	319	425	522	557

Cash Flow

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
C/F from operating	47	532	257	842	1,193
Net profits	345	308	541	484	578
Depreciation	36	39	38	37	37
Amortization	0	0	0	0	0
Net incr. in W/C	(365)	187	(42)	410	682
Others	30	(2)	(281)	(90)	(104)
C/F from investing	(454)	(389)	(391)	(682)	(791)
Capex	(56)	(24)	(33)	(37)	(36)
Decr. in fixed assets	22	3	3	3	3
Net incr. in current assets	47	(157)	(175)	(228)	(296)
Incr. in investment	(273)	(26)	(163)	(398)	(438)
Others	(195)	(184)	(23)	(23)	(24)
C/F from financing	984	(554)	156	(183)	(285)
Incr. in equity	0	0	0	0	0
Incr. in debts	1,183	(531)	161	(182)	(288)
Dividends	(76)	(75)	(75)	(75)	(75)
Others	(123)	52	71	74	78
Increase in cash	576	(411)	22	(23)	117

Key Financial Data

Fiscal year ending Dec.	2008A	2009A	2010F	2011F	2012F
per share data (won)					
EPS	2,340	2,088	3,587	3,215	3,836
BPS	32,243	48,146	51,036	53,573	56,691
DPS	500	500	500	500	500
SPS	79,902	73,675	79,153	90,908	105,025
Growth (%)					
Sales growth	21.4	(7.9)	10.0	14.7	15.5
OP growth	28.8	(23.0)	38.0	25.2	7.3
NP growth	(29.2)	(10.9)	76.0	(10.5)	19.3
EPS growth	(28.5)	(10.8)	71.8	(10.4)	19.3
EBITDA growth	28.0	(20.3)	33.1	22.8	6.6
Profitability (%)					
OP margin	3.1	2.6	3.2	3.5	3.3
NP margin	2.9	2.8	4.5	3.5	3.6
EBITDA margin	3.4	2.9	3.6	3.8	3.5
ROA	3.2	2.4	3.8	3.2	3.4
ROE	7.0	5.0	7.0	6.0	6.7
Dividend yield	1.3	0.9	0.9	0.9	0.9
Stability					
Net debt (W bn)	480	31	(15)	(413)	(1,131)
Int. coverage (x)	5.5	2.1	3.3	4.9	6.3
D/E ratio (%)	39.6	18.4	19.2	15.9	11.6
Valuation (x)					
PER	17.0	26.9	15.8	17.6	14.7
PBR	1.2	1.2	1.1	1.1	1.0
PSR	0.5	0.8	0.7	0.6	0.5
EV/EBITDA	16.0	26.9	20.2	15.7	13.4

Hyundai E&C (000720) BUY (Maintain), TP: W82,000 (Maintain)

Realize its potential in 2010

Overseas order receipts of USD15bn within reach: Hyundai E&C has set its overseas order goals for 2010 at USD12bn early this year, but the figure is approaching USD15bn. The contractor has already won overseas orders worth USD10bn and many new projects should be up for grabs in 2H10. We believe the company's stellar performance in overseas markets is attributed to the expansion of the power generation market and the company's established track record.

The company has won overseas power plant orders worth USD11.3bn. Power plant projects account for 38% of the company's overseas orders since 2000, which is higher in number and scale than its rivals.

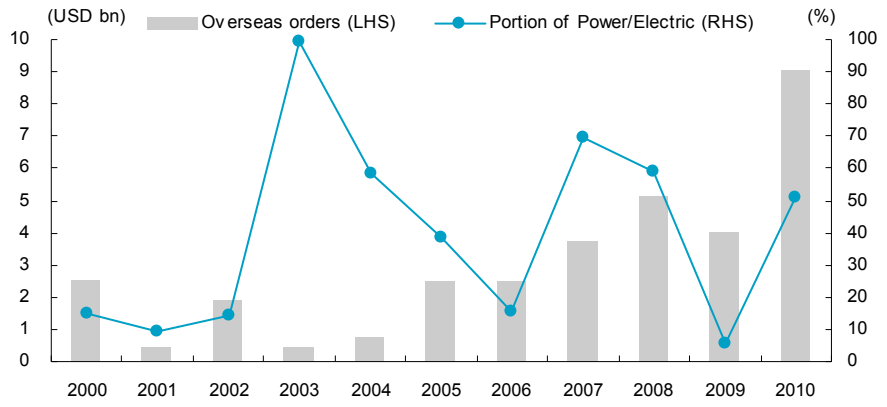
A big IPP project investor in the waiting: The contractor has advanced to the power generation market as an EPC contractor, rather than an investor in overseas IPP projects. If the contractor finds a new owner who takes over managerial rights from creditors, its debt-free, stable financials will enable Hyundai E&C to aggressively invest in overseas IPP projects. If its newfound IPP capacity combines with its expertise as Korea's leading EPC contractor, the company should catapult itself to the center of the global IPP project market.

The largest beneficiary of the power plant market boom, maintain TP of W82,000: The contractor should benefit the most form the power plant market expansion thanks to its time-proven EPC expertise in the power plant and other infrastructure projects and extensive customer base. Given that power plants are less sensitive to cycles than hydrocarbon plants, it should ensure growth momentum over the mid- to long-term. We maintain BUY and our price target of W82,000.

September 2, 2010 / W66,700 / Mkt cap: USD6,291.8mn, W7,427bn

Yr to Dec	Sales (W bn)	OP (W bn)	EBT (W bn)	NP (W bn)	EPS (won)	% chg. (YoY)	EBITDA (W bn)	P/E (x)	EV/EBITDA (x)	PBR (x)	ROE (%)
2008A	7,271	480	548	373	3,366	34.4	514	17.0	12.4	2.2	14.4
2009A	9,279	419	587	457	4,110	22.1	486	17.3	15.8	2.6	15.4
2010F	10,483	581	791	599	5,377	30.8	653	12.4	11.0	2.1	18.2
2011F	11,918	661	795	603	5,407	0.6	733	12.3	9.5	1.8	15.8
2012F	13,348	762	947	718	6,438	19.1	833	10.4	8.5	1.6	16.4

Hyundai E&C's overseas orders breakdown: power plant's portion



Note: As of Aug 2010.
Source: ICAK

Balance Sheet

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
Current assets	5,282	5,010	5,353	6,143	6,690
Cash & cash equivalent	698	1,048	1,048	1,192	1,068
Accounts receivable	1,537	1,583	1,747	1,986	2,301
Inventory	722	734	699	851	953
Fixed assets	2,862	3,081	3,286	3,535	3,739
Investments	1,684	1,758	1,891	2,104	2,271
Tangible assets	697	676	720	724	729
Intangible assets	0	0	0	0	0
Total assets	8,144	8,091	8,639	9,677	10,429
Current liabilities	4,372	4,311	4,322	4,818	4,935
Accounts payable	1,179	1,266	1,436	1,633	1,829
Short-term borrowing	508	378	328	278	266
Current portion of LT debt	412	349	380	409	437
Long-term debt	878	754	765	788	800
Debentures	338	199	189	189	178
Long-term borrowings	46	46	41	37	32
Total liabilities	5,251	5,066	5,086	5,605	5,734
Paid-in capital	555	557	557	557	557
Capital surplus	807	828	828	828	828
Capital adjustments	(3)	(4)	(4)	(4)	(4)
Retained earnings	1,087	1,488	2,015	2,534	3,157
Shareholders' equity	2,893	3,026	3,553	4,072	4,694

Income Statement

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
Sales	7,271	9,279	10,483	11,918	13,348
Gross profit	748	725	917	1,027	1,148
SG&A expense	267	306	336	366	386
Operating profit	480	419	581	661	762
Non-op. profit	601	591	470	399	466
Interest income	53	58	53	64	65
FX gains	169	184	73	84	94
Equity gains	84	122	163	210	265
Non-op. expense	534	422	261	265	281
Interest expense	81	66	55	53	53
FX losses	103	199	100	114	127
Equity losses	161	21	22	23	23
Earnings before tax	548	587	791	795	947
Income taxes	175	131	191	192	229
Profit from discontinued	0	0	0	0	0
Net profit	373	457	599	603	718
EBITDA	514	486	653	733	833

Cash Flow

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
C/F from operating	776	856	269	413	37
Net profits	373	457	599	603	718
Depreciation	34	67	72	72	72
Amortization	0	0	0	0	0
Net incr. in W/C	395	435	(295)	(108)	(550)
Others	(26)	(103)	(107)	(153)	(202)
C/F from investing	(231)	(146)	(156)	(154)	(57)
Capex	(175)	(156)	(140)	(96)	(96)
Decr. in fixed assets	18	24	24	20	20
Net incr. in current assets	15	130	(17)	(20)	(20)
Incr. in investment	(144)	(147)	5	(26)	72
Others	56	3	(28)	(31)	(33)
C/F from financing	(264)	(360)	(112)	(116)	(103)
Incr. in equity	0	0	0	0	0
Incr. in debts	(245)	(319)	(51)	(44)	(21)
Dividends	(28)	(56)	(67)	(72)	(84)
Others	8	14	6	0	1
Increase in cash	280	349	1	143	(124)

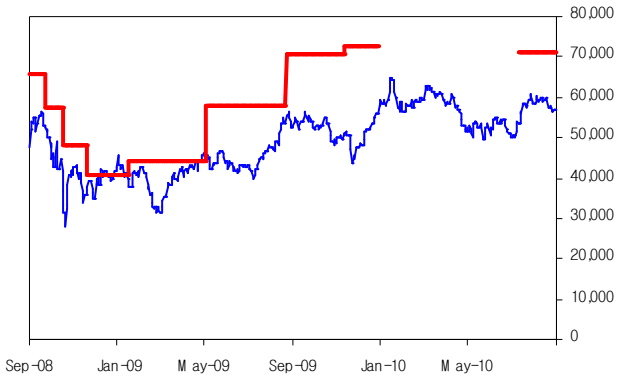
Key Financial Data

Fiscal year ending Dec.	2008A	2009A	2010F	2011F	2012F
per share data (won)					
EPS	3,366	4,110	5,377	5,407	6,438
BPS	26,041	27,147	31,874	36,531	42,119
DPS	500	600	650	750	850
SPS	65,533	83,514	94,054	106,928	119,765
Growth (%)					
Sales growth	28.7	27.6	13.0	13.7	12.0
OP growth	32.6	(12.8)	38.7	13.8	15.2
NP growth	34.6	22.3	31.2	0.6	19.1
EPS growth	34.4	22.1	30.8	0.6	19.1
EBITDA growth	33.7	(5.5)	34.4	12.3	13.7
Profitability (%)					
OP margin	6.6	4.5	5.5	5.5	5.7
NP margin	5.1	4.9	5.7	5.1	5.4
EBITDA margin	7.1	5.2	6.2	6.2	6.2
ROA	5.0	5.6	7.2	6.6	7.1
ROE	14.4	15.4	18.2	15.8	16.4
Dividend yield	0.9	0.8	1.0	1.1	1.3
Stability					
Net debt (W bn)	37	(207)	(259)	(449)	(345)
Int. coverage (x)	5.9	6.4	10.5	12.4	14.4
D/E ratio (%)	45.1	32.1	26.4	22.4	19.5
Valuation (x)					
PER	17.0	17.3	12.4	12.3	10.4
PBR	2.2	2.6	2.1	1.8	1.6
PSR	0.9	0.8	0.7	0.6	0.6
EV/EBITDA	12.4	15.8	11.0	9.5	8.5

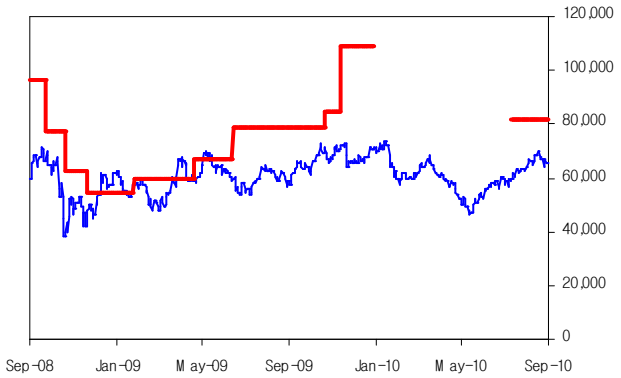
Changes to recommendation and price target

Company (Code)	Date	Recommendation	Price target	Company (Code)	Date	Recommendation	Price target
Samsung C&T(000830)	09-29-08	Hold	W57,200	**Hyundai Eng. &**	09-29-08	BUY	W77,500
	10-24-08	Hold	W47,900	**Constr.(000720)**	10-27-08	BUY	W62,700
	11-26-08	Hold	W40,600		11-26-08	BUY	W54,800
	01-23-09	Hold	W44,400		01-30-09	Hold	W59,400
	05-10-09	BUY	W58,000		04-26-09	Hold	W66,800
	08-28-09	BUY	W70,700		06-19-09	BUY	W78,600
	11-18-09	BUY	W72,700		10-27-09	BUY	W84,300
	01-04-10	NM	W0		11-18-09	BUY	W109,000
	07-19-10	BUY	W71,000		01-04-10	NM	W0
					07-19-10	BUY	W82,000

Samsung C&T(000830)



Hyundai Eng. & Constr.(000720)



■ **Guide to Korea Investment & Securities Co., Ltd. stock ratings based on absolute 12-month forward share price performance**

- BUY: Expected to give a return of +15% or more
- Hold: Expected to give a return between -15% and +15%
- Underweight: Expected to give a return of -15% or less

■ **Guide to Korea Investment & Securities Co., Ltd. sector ratings for the next 12 months**

- Overweight: Recommend increasing the sector's weighting in the portfolio compared to its respective weighting in the Kospi (Kosdaq) based on market capitalization.
- Neutral: Recommend maintaining the sector's weighting in the portfolio in line with its respective weighting in the Kospi (Kosdaq) based on market capitalization.
- Underweight: Recommend reducing the sector's weighting in the portfolio compared to its respective weighting in the Kospi (Kosdaq) based on market capitalization.

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Prepared by: Claire Lee

Korea Investment & Securities Co., Ltd.

HEAD OFFICE
WON-JAE RHEE, Executive Managing Director (wonjae@truefriend.com +822 3276 5660)
PAUL CHUNG, Sales Trading (pchung@truefriend.com +822 3276 5843)
27-1 Yoido-dong, Youngdeungpo-ku, Seoul 150-745, Korea
Toll free: US 1 866 258 2552 HK 800 964 464 SG 800 8211 320
Fax: 822 3276 5681~3
Telex: K22966

NEW YORK
DONG KIM, Managing Director (dkim@kisamerica.com +1 201 592 0631)
ELAINE AN, Head of Sales (Elaine@kisamerica.com +1 201 592 9161)
JU KIM, Sales (jukim@kisamerica.com +1 201 592 6473)
Korea Investment & Securities America, Inc.
400 Kelby Street, 11th Floor
Fort Lee, NJ 07024 USA
Fax: 1 201 592 1409

HONG KONG
STEVE KIM, Managing Director (steve.kim@kisasia.com +852 2530 8900)
SANGME LEE, Managing Director, Head of Asia Sales (sangme.lee@kisasia.com +852 2530 8910)
DAN SONG, Sales (dan.song@kisasia.com, +852-2530-8900)
Korea Investment & Securities Asia, Ltd.
Room Suite 2110 Jardine House
1 Connaught Place, Central, Hong Kong
Fax: 852-2530-1516

SINGAPORE
SUNG NAMGOONG, Managing Director (snamgoong@truefriend.com +65 6501 5601)
TERRY SHIN, Sales (terryshin@truefriend.com +65 6501 5602)
Korea Investment & Securities Singapore Pte Ltd
1 Raffles Place, #43-04, OUB Center
048616 Singapore
Fax: 65 6501 5617

LONDON
JJ MOON, Managing Director (jamesmoon@kiseurope.com +44 207 065 2765)
BRANDON JUNE, Sales (brandonjune@kiseurope.com +44 207 065 2767)
Korea Investment & Securities Europe, Ltd.
2nd Floor, 35 Moorgate
London EC2R 6AR
Fax: 44-207-236-4811
Telex: 8812237