Initiation of Coverage: BUY

GS Engineering & Construction

December 21, 2011

SG FENERO RESEARCH

Catch Me If You Can

We are initiating the coverage of 'GS Engineering and Construction' with a BUY rating and a price target of KRW143,000

Undervalued-implies 62% upside potential:
We derived our 12-month target price as KRW143,000 by aggregating 2 valuation method results; DCF and Multiple approach, which implies 62% upside potential from current price. Its EV/EBITDA multiple is 10.8x , which is the lowest among its peer group. Also, its current P/E ratio is 8.3x, which is average P/E of its peer group. Furthermore, the company's EPS growth rate from 2011E and 2012E is 14%, which is relatively higher than its comparable companies.

Emerging Profitable Market in Middle East:
With emerging market in the Middle East, number of Middle East's plant order and reconstruction of destroyed oil refinery provides significant order demand. In addition, rising oil price in world market can be another factor which can boost new order on oil plant construction. It is expected that increase rate of sales in plant to be about 25%.

Competitive Edge in Construction Business:
GS E&C's recently developed cable-stayed bridge technology provided competitive edge in the construction industry. Such advantage raised brand equity. Based on The favorable condition in the overseas market including Middle East and Asia, GS E&C can continuously increase its market share. Also, increasing turnkey and PFI projects in civil engineering will lead to 19.88% CAGR sales growth.

Downside Risk to Our Proposition:
We believe significant decline in fuel prices could downsize overseas orders, and Chinese and Indian construction firms recent aggressive entering oversea market would be negative risk to our call.
Fierce competition in the oversea construction business would negatively affect the profitability of business.

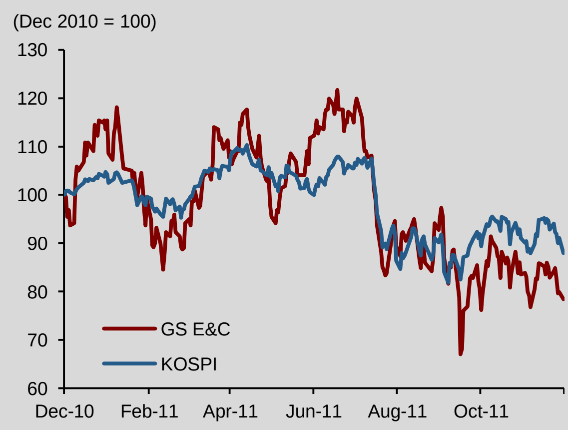
Key Ratios and Statistics

Reuters: 006360.KS **Bloomberg: 006360 KS**
South Korea Construction

Target Price:	**KRW143,000**
Shr Price (Dec 16, 2011):	KRW88,300
Mkt cap, curr (bn):	4,421
Sh out, basic, curr (mm):	51
52-Week Range:	KRW136,500-72,200
EV, curr (bn):	4,523
Net debt/cap (12E) (%):	92
ROE (12E) (%):	13.74
Shr out, basic, per-end (12E) (mm):	51
S'hldr eqty (12E) (bn):	4,354

Fiscal Year (Dec)	11E	12E	13E
Sales (bn)	8,819	9,976	11,769
Op. Prft (bn)	717	819	963
NI (bn)	523	598	702
EPS (KRW)	10,581	12,089	14,206
FCFF (bn)	674	765	892
Equity (bn)	3,848	4,354	5,136
Asset (bn)	10,633	12,029	14,191

GS E&C vs. KOSPI



Important Disclosure
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3. GS Engineering and Construction: Financial Summary

Unit: KRW Bn

Income Statement

	2010	2011E	2012E	2013E
Revenue	**8,324**	**8,819**	**9,977**	**11,769**
Architecture	1,501	1,671	1,770	1,875
Civil Engineering	1,065	1,122	1,195	1,487
Housing	2,248	1,267	1,066	897
Plant	2,545	3,586	4,523	5,782
Other revenue	966	1,172	1,423	1,728
COGS	7,203	7,564	8,557	10,094
Gross Profit	**1,121**	**1,255**	**1,420**	**1,675**
SG&A	527	538	601	712
Depreciation	21	22	24	24
Amortization	0.7	0.6	0.1	0.1
Bad debts expense	32	36	41	48
Operation Profit	**594**	**717**	**820**	**963**
Non operation revenue	464	709	802	946
Non operation expenses	516	707	800	943
Pre-tax Income	**542**	**719**	**822**	**966**
Income tax	147	196	224	263
Effective tax rate	27%	27%	27%	27%
Net Income	**394**	**524**	**598**	**703**

Unit: KRW Bn

Balance Sheet

	2010	2011E	2012E	2013E
Current assets	**6,484**	**6,027**	**6,819**	**8,044**
Cash and cash equivalents	1,464	1,284	1,452	1,713
Account receivable	208	232	263	310
Inventory	434	558	631	745
Non current assets	**3,532**	**4,048**	**4,580**	**5,403**
Tangible assets	2,791	2,980	3,372	3,978
Intangible assets	1	(10)	(11)	(13)
Investment assets	295	532	602	710
Total Asset	**10,450**	**10,634**	**12,030**	**14,191**
Current liabilities	**5,084**	**5,023**	**5,682**	**6,704**
Account payables	1,607	1,775	2,008	2,369
Short-term debt	604	1,161	1,314	1,550
Construction advances	1,577	1,501	1,698	2,003
Non current liabilities	**1,541**	**1,762**	**1,993**	**2,351**
Bonds	349	475	538	634
Long-term debt	119	149	169	199
Total Liabilities	**6,625**	**6,785**	**7,676**	**9,055**
Retained earnings	2,547	1,609	1,820	2,147
Total Equity	**3,825**	**3,849**	**4,354**	**5,136**
Total liabilities & Equity	**10,450**	**10,634**	**12,030**	**14,191**

Unit: KRW Bn

Cash Flow Statement

	2010	2011E	2012E	2013E
Cashflow from Operation	**331**	**420**	**475**	**561**
Net Income	394	524	598	703
Depreciation	43	54	61	72
Amortization	0.9	0.9	1.0	1.2
Change in NWC	(723)	330	373	440
Cashflow from Investment	**(265)**	**(329)**	**(373)**	**(440)**
Capital Expenditure	176	147	166	196
Acq of investment securities	35	48	54	64
Cashflow from Financing	**(112)**	**167**	**189**	**222**
Dividends paid	50	90	102	120
Net Cashflow	**(50)**	**267**	**302**	**356**
Cash at beginning	1,513	1,017	1,151	1,357
Cash at end	1,464	1,284	1,452	1,713

Unit: KRW Bn

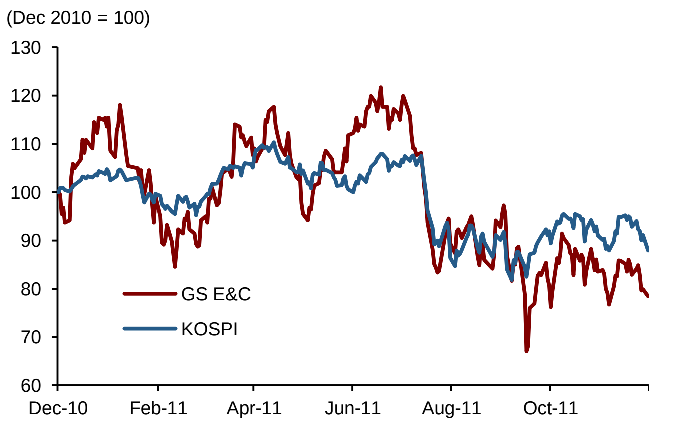
Ratio Analysis

	2010	2011E	2012E	2013E
Growth Ratios				
Sales	9.3%	6.0%	13.1%	18.0%
EBITDA	-2.6%	21.1%	14.2%	17.5%
EBIT	-2.7%	20.7%	14.3%	17.5%
Net Income	2.3%	32.8%	14.3%	17.5%
Total assets	5.6%	1.8%	13.1%	18.0%
Profitability Ratio				
Gross margin	13.5%	14.2%	14.2%	14.2%
EBITDA margin	7.7%	8.8%	8.8%	8.8%
EBIT margin	7.1%	8.1%	8.2%	8.2%
Net margin	4.7%	5.9%	6.0%	6.0%
Stability Ratio				
Debt to equity	1.73	1.76	1.76	1.76
Current ratio	1.84	1.49	1.49	1.49
Quick ratio	1.71	1.35	1.35	1.35
Performance Ratios(avg.)				
ROE	10.3%	13.6%	13.7%	13.7%
ROA	3.8%	4.9%	5.0%	5.0%
Per share ratios				
EPS	7,969	10,581	12,089	14,206
BPS	77,301	77,786	87,998	103,811
Shares outstanding('000)	49,479	49,479	49,479	49,479

E = Fenero Research Estimates
Source: Dart, Fenero Research

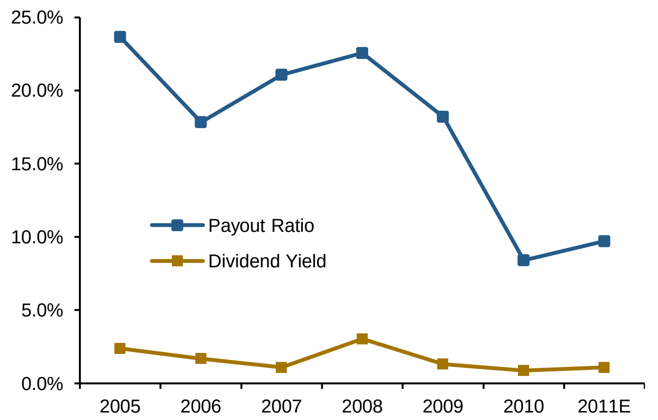
4. GS Engineering and Construction at a Glance

Chart 1
GS E&C: Stock Performance vs. KOSPI



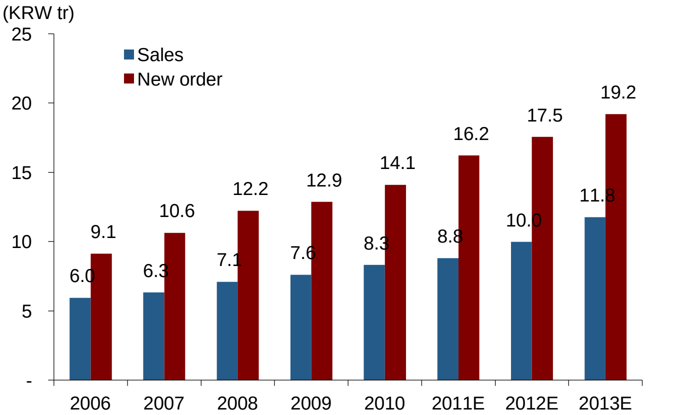
Source: Company Data, KRX

Chart 4
GS E&C: Payout Ratio and Dividend Yield



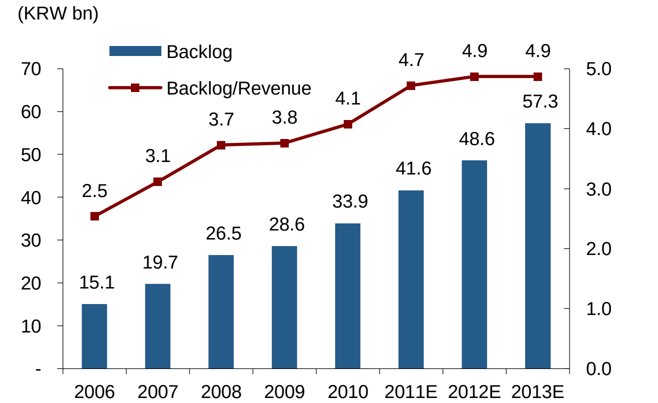
Source: Company Data, Fenero Research

Chart 2
GS E&C: Revenue and New Orders



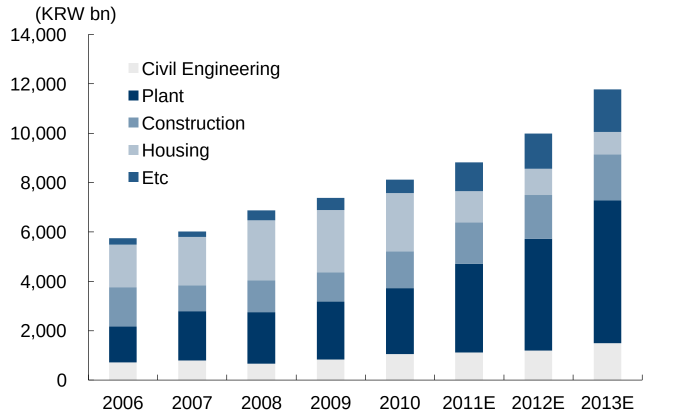
Source: Company Data, Fenero Research

Chart 5
GS E&C: Backlog vs. Backlog/Revenue



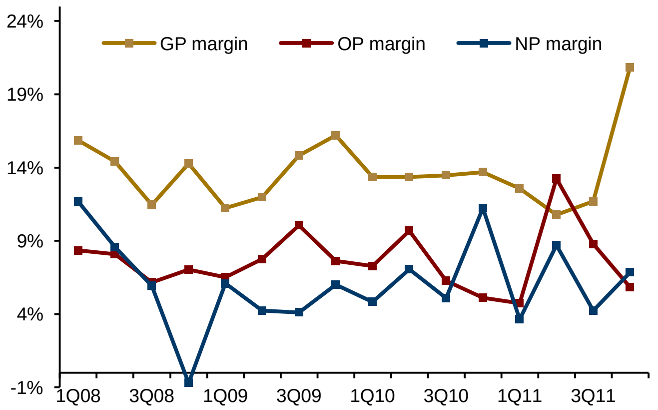
Source: Company Data, Fenero Research

Chart 3
GS E&C: Revenue Divisional Breakdown



Source: Company Data, Fenero Research

Chart 6
GS E&C: GP, OP and NP Margin Trend



Source: Company Data, Fenero Research

5. Analysis: Business Sectors

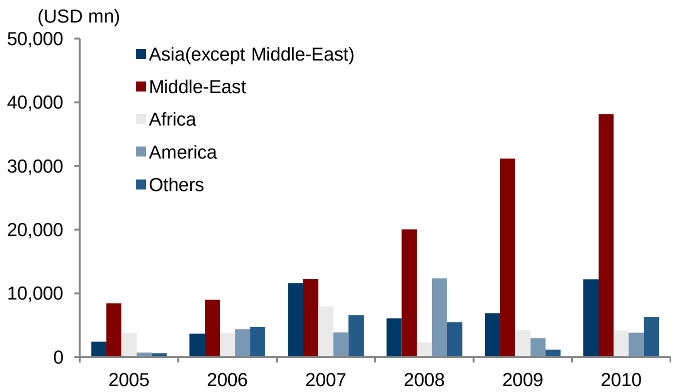
5. 1 Plant Business

■ High Energy Demand in Middle East with More Plants to be Built in the Near Future

Total order of plant construction in Middle East has sharply risen, compared to any other continents since year 2008. Weight of outside country sales in top major construction companies, such as GS E&C, Daelim Industry, Hyundai E&C, took up more than half of total sales in third quarter of 2011. Even the global economic situation was on the downturn due to sub-prime mortgage crisis, the oil price in Middle East has continuously gone up. Due to the effect of high oil price, Middle East's total order of plant construction has been consistently on high demand. With Asian and European import of oil take up 80% of Middle East's total oil export, more demand from Middle East on plant construction is highly expected. Middle East countries' two key profitable oil types, Dubai and Brant oil, are mainly consumed in Asia and Europe.

Chart 7

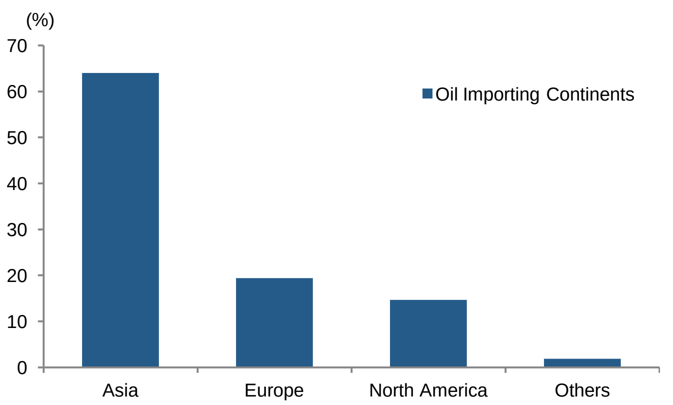
Total Order of Foreign Plant in Each Continent



Source: The ministry of Knowledge Economy, KOPIA

Chart 8

Oil Importing Continent from Middle-East

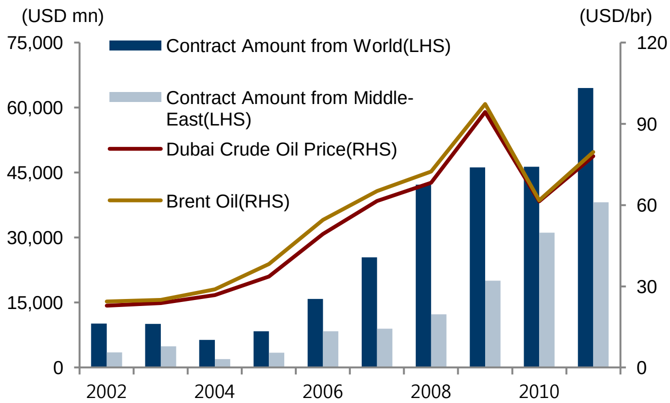


Source: OPEC

Middle East's governments have set out numerous new contracts for constructing new plants. With sharp price rise in the Dubai crude oil and Brent oil, Middle East is likely to expand their number of order for construction of new oil refinery. Compared to overall plant construction contract from the world, the Middle East region highly takes part in the total order.

Chart 9

Relation between Oil Price & Number of New Plant Contract



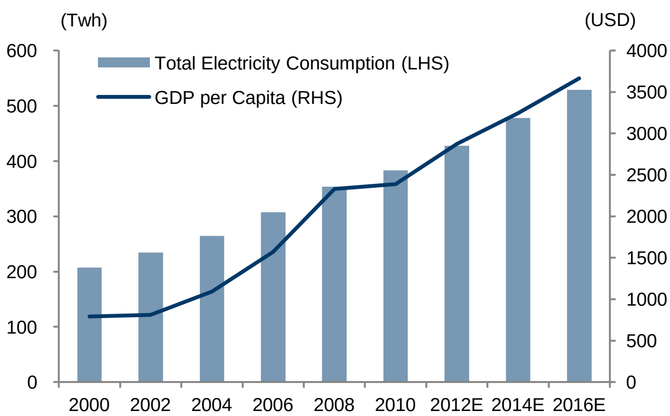
Source: Ministry of Knowledge Economy, IMF, British Petrol

■ GCC's Economic Development Provides Profitable Market for Plant Industry

Due to increase in GCC (Gulf Cooperation Council, countries including UAE, Saudi Arabia, Kuwait, Oman, Qatar, and Bahrain) GDP, countries like UAE, Saudi Arabia, and Kuwait is taking up most of the new plant order in Middle East. GS E&C is in strong market position of obtaining orders for new energy plant construction. With such market trend, it will have beneficial effect on GS E&C in the Middle East to obtain new order for plant.

Chart 10

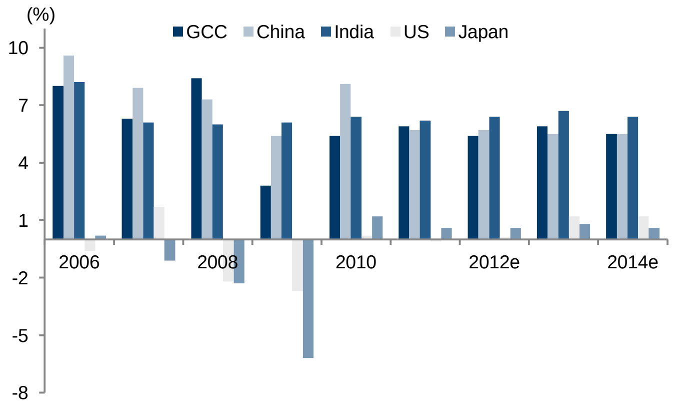
GCC: Electricity Consumption & GDP



Source: The Economist Intelligence Unit, IMF

In comparison with other countries' economic situation, the growth rate of total energy use is constantly going up. Unlike US and Japan, which have recorded negative growth rate during 2008 and 2009, the Middle East and developing countries have maintained stable growth in energy use since 2006. With new plant construction market in Middle East constantly on the rise, foreign firms are likely to expand their market share. For native firms will also have chance to expand their market share in the Middle East.

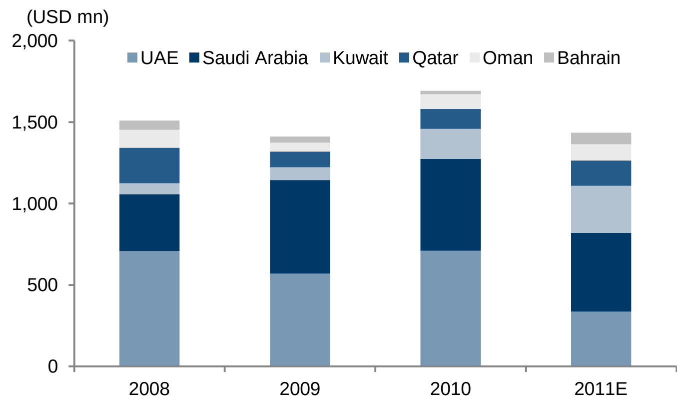
Chart 11
Stable Growth in Energy Use in GCC and Other Economies



Source: The Economist Intelligence Unit

In early 2012, GS E&C is expected to obtain new contract in Saudi Arabia and UAE with the deal size of USD2 bn and USD5.5 bn each. Oman oil and Petro-chemistry Refinery Company, OPRC, is planning to expand about USD1.5 bn sized oil refinery plant and set new EPC contract in early 2012. GS E&C has experience in petro-chemistry plant construction in Middle East and currently building new SOC plant in Sohar industry complex. Also UAE Abudabi oil refinery company, Tankreer, is planning to launch USD2 bn sized Carbon-Black plant in Ruwais industry complex. GS E&C is currently working on three construction businesses in these industrial complexes and these give upper hand for GS E&C to obtain new construction order in Ruwais. Including Middle East and Turkey refinery plant, GS E&C had competitive edge in obtaining new orders in GCC countries and it is expected to earn up to USD200 mn. Therefore, GS E&C's prospect on oil refinery construction and plant field is bright in years to come.

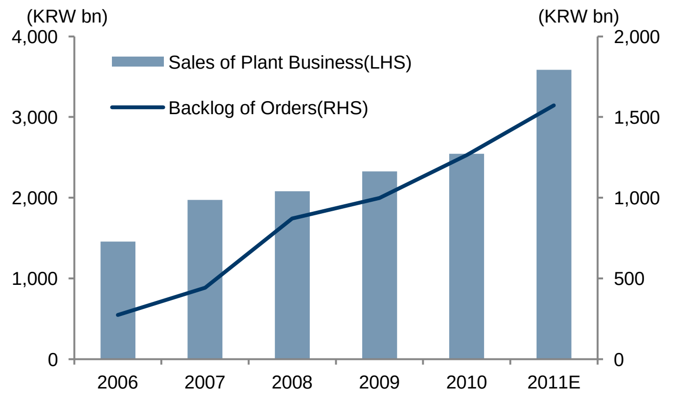
Chart 12
GCC: Proportional Plant Order in GCC countries



Source: MEED Project

From the graph, sales and backlog from foreign plant construction have been risen for last 6 years.

Chart 13
GS E&C: Backlog and Sales of Plant Business



Source: Company Data, Fenero Research

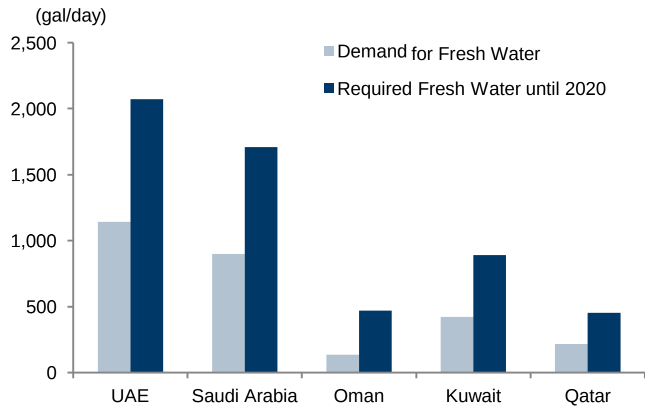
■ GS E&C's Competitive Edge on EPC Process

Foreign construction firms, like Floor, Saipem, Technip, are heavily concentrating on highly profitable construction planning. Local construction firms in the past have been focusing on comparatively low-return construction order due to lack of experience in monitoring overall construction. However, major construction firms in Korea nowadays have gone through M&A with other specialized firms and obtained key engineers. Firms like GS E&C, Samsung Engineering, Daelim Industry have raised their standard to meet with global firms.

Local firms have clear advantage in efficient construction planning with prominent engineers, obtaining raw materials, and diminishing total construction period as a key driver. Foreign firms mainly work according to FEED (Front-End Engineering Design) process, which firms only focus on construction planning and other fields are outsourced to other specialized firms. Unlike foreign firms, local firms are following EPC (Engineering, Procurement, and Construction) process, which take part in overall construction planning. EPC process has its advantage of having no worries about interest rate paid to outsourced firms and currency rate too. However, it also has entry barrier because it needs certain number of specialized engineers. In order for GS E&C to maintain strong foothold in Middle East, it is never enough to emphasize specialized engineering skills. In the current construction market, GS E&C certainly have that competitive edge.

Toward the end of 2011, GS E&C have signed a contract to acquire world's tenth ranked fresh water refinery business firm, Inima. GS E&C acquired Inima with USD350 bn. Inima has about USD250 bn yearly sales which has reverse osmosis method. As we can see from current world fresh water market trend, GCC countries are in great need of fresh water. Moreover, most of the Middle East countries are facing desertification and lack of fresh water. This indicates lucrative market in fresh water plant. Because GS E&C is currently not doing so well in water plant business compared to other firms, it plans to expand its market share up to 80% in the long run. Due to this acquisition, GS E&C can enlarge its business field from EPC process to FEED process like other major firms. With credibility built on in the Middle East from plant construction, GS E&C plans to expand its water plant business field into Middle East in the near future. With competitive edge on both Asia and Middle East, GS E&C's future prospect on plant seems highly profitable.

Chart 14
Current Demand of Fresh Water and Projected Demand for Fresh Water until 2020



Source: MEED Project, Fenero Research

5.2 Architecture Business

■ Introducing BIM (Building Information Modeling)

On November 2011, GS E&C has made a MOU of skill agreement with DPR, the leading US Company which owns the best BIM technology in the world. BIM, the current main key word in architecture field, stands for Building Information Modeling.

BIM is a technology which realizes 2D construction management information to 3D. As it is able to realize the blueprint in a virtual system, better management is expected by preventing accidents or probable problems. Every data made from the construction is stored in the system. Therefore, BIM is suitable for high value added projects such as plants or environment friendly building.

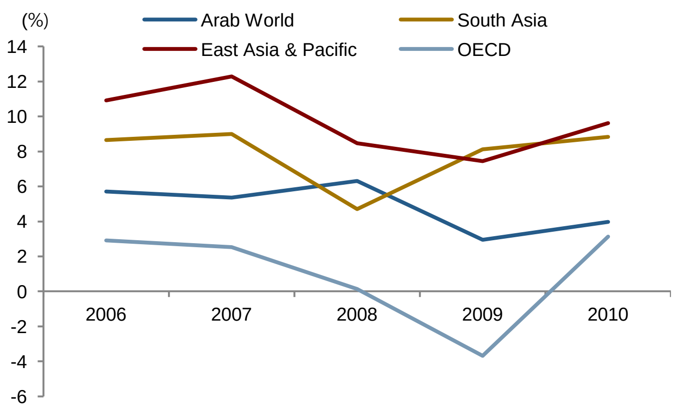
Because of the strengths BIM have, countries such as Singapore had made it a duty to use BIM technology on every project. It is also becoming a duty in Korea for every project to use BIM which is over KRW50 bn starting from next year.

While the foreign market has been developing BIM for several years, this technology has started to develop recently in Korea. Top tier construction companies such as Hyundai E&C, Daewoo E&C, SK E&C have started to use 3D blueprints on construction field as they had experience using it on plant construction. These major companies are trying their best to develop their technologies in order to gain strength in the market.

Meanwhile, as GS E&C has made a MOU of skill agreement with DPR, we believe that GS E&C has gained new strength to compete with other major companies. Moreover, we expect that GS E&C will have future competitiveness as they are in better position to develop BIM technology further on.

■ Gaining Power in Asia Market

Chart 15
GDP Growth Rate (Annual)



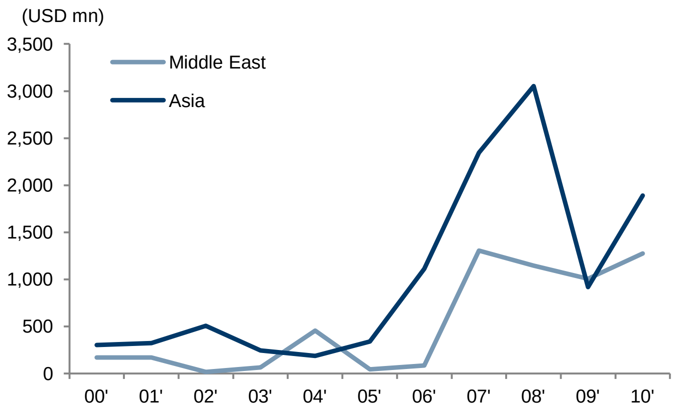
Source: World Bank, Fenero Research

Not only Middle East markets but also developing Asia countries are also a promising architecture market. Developing countries of Asia are leading the high GDP growth rate for recent years, resulting in increasing new orders.

This year, GS E&C has concentrated more on Vietnam as its market was growing rapidly, which resulted in increase in new order more than 80% than the previous year. Singapore where the new order increased more than 70%, is also a promising market.

GS E&C won the first architecture deal ever in Singapore this month, which amounts to KRW340 bn. We believe that GS E&C is recognized to have competitiveness for price and technology from the Singapore government. We expect GS E&C will increase its market share in Asia markets continuously.

Chart 16
Emerging Market: Architecture Order Trend



Source: International Construction Information Service, Fenero Research

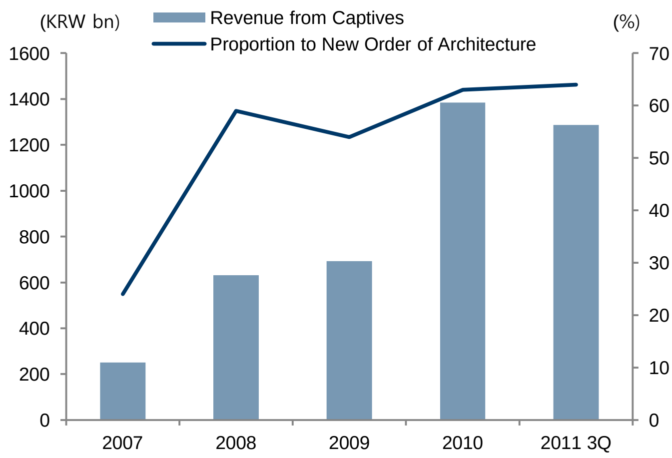
■ Stable Profit from the Captives

In 2007, 24% of GS E&C's Architecture new orders were given by related companies. This proportion increased consecutively, recording 63% in 2010. After the separation of the LG and GS groups, GS E&C has continued to win orders from the LG group, especially from LG Display. As LG Display is making profits continuously, we expect orders from LG display will be continued.

The proportion to new order of architecture has increased in 2008 and 2011, when the market condition has deteriorated. Though the new orders from other companies have decreased, orders from captives were stable. In 2010, the proportion has increased also because of the P9-project from LG Display, which costs KRW313 bn; approximately 15% of revenue from captives in 2010.

As stable revenue from captives is one of the strongest competitiveness of GS E&C, we expect GS E&C has the power to make profit even in negative market conditions.

Chart 17
GS E&C: Revenue and New Order in Architecture



Source: Company Data, Fenero Research

5.3 Housing Business

■ Decreasing PF, Strength in Reconstruction Market

GS E&C has so far proven one of the most stable and reliable builders in Korea, although its' history is relatively short, compared with other major builders, such as Hyundai E&C or Daewoo E&C. 'Xi (eXtra Intelligent)', housing brand of GS E&C, has been awarded the "First Brand Award" for five years in a row.

While GS E&C dealt with more housing business since 2007, they reduced suburban projects due to financial crisis in 2008. However, GS E&C is in process of recovery starting from its relatively weak part by selling a housing backlog in Jin Ju, Dae Gu, Shin Chun. In light of this, we expect selling to cost rate would decreased in 2012.

If the government could relax its rigorous control on reconstruction, the time duration required for order to revenue would be shortened. We believe the housing market has hit bottom and is ready for recovery. Recovery may be delayed, but further downside risk seems limited.

Also, scale of GS E&C's Project Financing has decreased remarkably. We expect that the interest cost will decrease due to downsize of PF debt, by which means profitability of GS E&C will be better off.

Table 1
GS E&C: Decrease in Scale of Project Finance

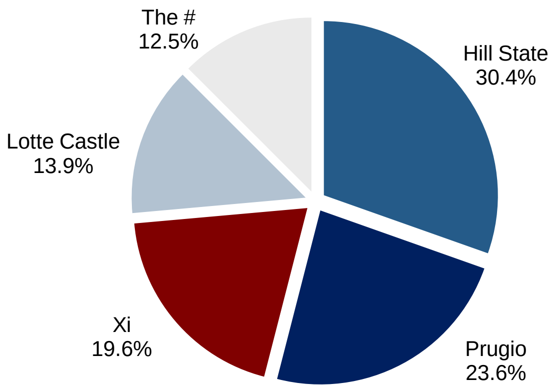
(KRW bn)

PF Scale Decrease	580
Average Interest Rate	4.04%
Decrease in Interest Expense	23
Corporate Tax Rate	27.21%
Expected Increase in NI	17

Source: Fenero Research

The most powerful factor in reconstruction and redevelopment market is brand value. However Xi, housing brand of GS E&C, is one of the top leading brands of domestic housing market despite its short history when compared with Hyundai E&C and Daewoo E&C.

Chart 18
Top-tier Companies' M/S in Domestic Reconstruction and Redevelopment Market



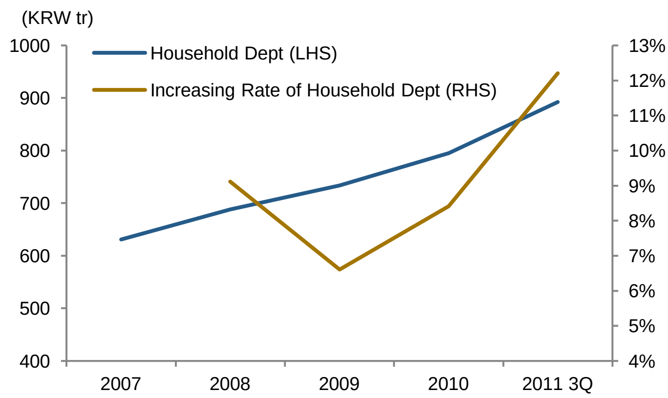
Source: Company Data, Fenero Research

Housing sales would increase from the second half year of 2012 and GS E&C's compatible ability by surging reconstruction and redevelopment orders. Hence we strongly believe sales and revenue of Domestic Reconstruction and Redevelopment market would increase from 2013.

■ Increasing Household Dept

But the amount of domestic household dept has been increasing for the last five years, and Korean government is now restricting additional loans.
Then the potential demand of real estate might stiffen, thus the housing market won't recover rapidly in the short run.

Chart 19
Scale and Increasing Rate of Domestic Household Dept



Source: Bank of Korea, Fenero Research

Even though GS E&C has competitive advantage in domestic housing market, mostly due to world economic recession and unfavorable domestic circumstances, the overall outlook of housing market is not favorable until 2012.

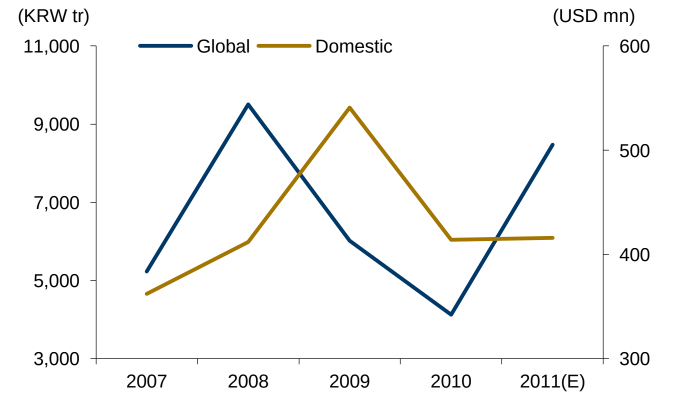
5.4 Civil-Engineering Business

Civil engineering is prospective business in the foreign market but it is stagnated domestically. The size of the overseas civil engineering market, including Middle East and Asia, continues to grow, and the position of GS E&C in the overseas market is getting stronger relative to its competitors. GS E&C will take the advantageous position for strategic market appeal in Middle East where it has dominant position in plant business and in South-East Asian markets including Singapore, India based on development plan for new urban areas in the Vietnamese market. Domestically, GS E&C is expanding to include partnership in both public and private sectors as an alternative to decreasing government-driven construction business. Also, GS E&C has grown stably by participating in new projects with increasing demand in lowest price construction and by increasing their role in its turnkey projects.

■ Limited Domestic Expansion, Overseas Market is the Key

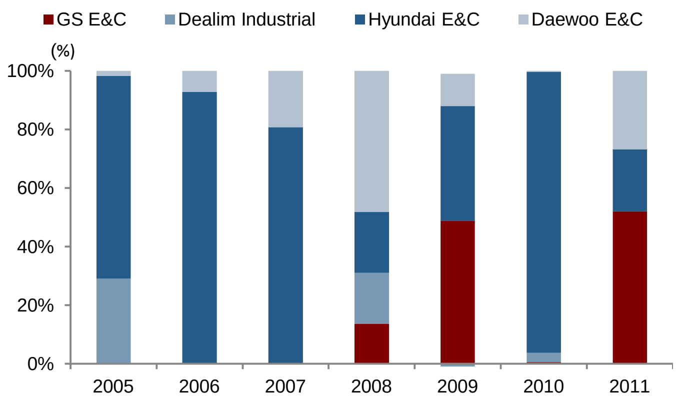
In civil engineering business, the amount of domestic order in 2011 is expected to be almost same with 2010. It can change in the short term, however, because of the government SOC budget cut, the investment of domestic civil engineering market will be limited. On the other hand, the orders from abroad have been increasing since 2010. The demand in the emerging markets, including Middle East, Asia, and South America, is expected to increase.

Chart 20
Civil Engineering: Domestic and Global Order Trend



Source: Construction Association of Korea, Fenero Research

Chart 21
Total Value of Orders

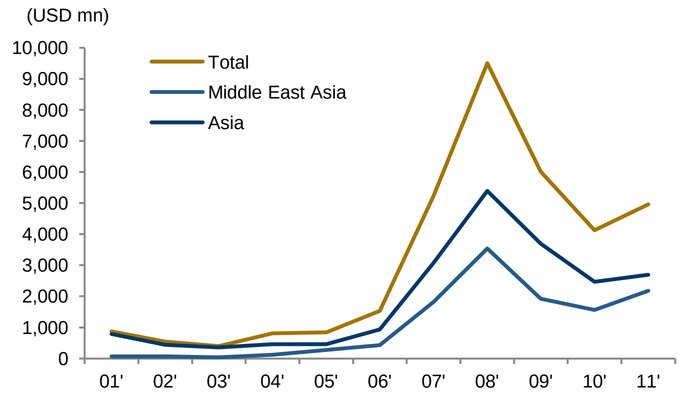


Source: International Construction Information Service, Fenero Research

Except for European financial crisis in 2010, GS E&C's market share in foreign countries has been growing since 2008. In 2011, the amount of order from overseas market of GS E&C approached USD3.4 bn. Considering the order that is highly receivable within the end of year and the other businesses that GS is waiting for its results for auction, it is estimated that the amount of receivable order will approach at least USD6 bn.

The civil engineering does not require highly-developed technology to enter the market. Thus, the low entry barriers are inducing Chinese and Indian companies to enter the market with their price competitiveness. However, GS E&C seems to enforce its competitiveness by developing highly advanced technology for the longest cable-stayed bridge recently. The construction of cable-stayed bridge is preferred by customers for its relatively short construction period, the simple building process and the advantage of its compatibility for any types of ground. With the highly-developed technology, GS E&C is expected to expand its range of civil engineering business.

Chart 22
Civil Engineering: Global Order Trend

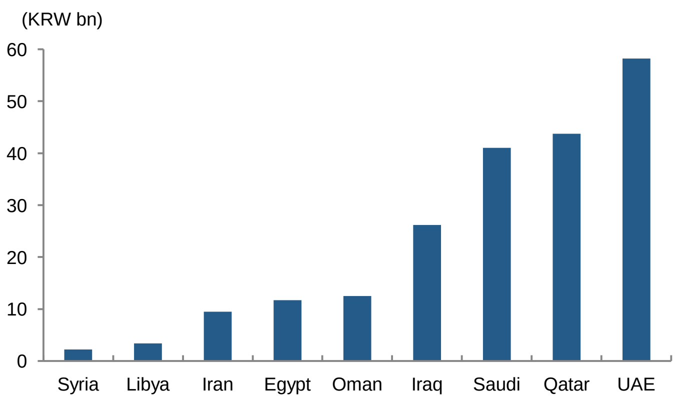


Source: International Construction Information Service, Fenero Research

Comparing the amount of demand from Middle East, Asia still has a large civil engineering market. However, considering the growth rate of Middle East market, Middle East market is a prospective market. So far, GS E&C is competing well in the construction of infrastructure including the metro and bridge in Singapore and Vietnamese market. GS E&C received 2 subway orders each in 2009 and 2011, and 4 subways are under construction that amounts to KRW840 bn. In Vietnam, GS E&C is expected to win the USD0.5 bn amount of metro construction.

Because of the impact from democratization movement and the business diversification beyond oil industry, the investment for infrastructure in Middle East is expected to increase significantly. Middle East countries have a common problem that the basic infrastructure of SOC, electricity generation, desalination could not keep up with population and economy growth. As a result, the number of business projects for the development for metropolitan areas has been poured into the market. Thus, Middle East countries need civil engineering construction of those basic infrastructures structurally.

Chart 23
SOC Construction Plan in Middle East after 2011



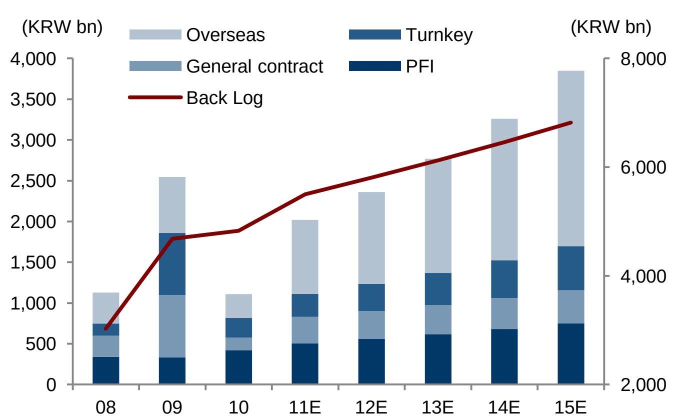
Source: Hanwha Securities, Fenero Research

The investment in infra-construction including road, railroad, and port will start to increase significantly after 2011 in Middle East. The amount of orders in 2012 is expected to approach USD147 bn. As expected, the influx of oil money induces the government to invest the money into infra-construction. UAE is expected to order USD59 bn, Qatar USD44 bn, Saudi Arabia USD41 bn, and Algeria USD38 bn. Especially, Qatar is now accelerating its investment in infra-construction to prepare for 2020 World Cup. The competition for the railway construction contract, which amounts to carry KRW40 tr, between GS E&C and domestic construction companies, has started. Also, Qatar government is planning to construct USD17 bn hotel and USD20 bn highway. GS E&C already has high brand awareness from wide experience in the oil refinery construction in UAE, Qatar, and Turkey. Therefore, based on these conditions, GS E&C can have a favorable position in overseas civil engineering market.

■ Increasing Turnkey and PFI Projects Lead to Stable Margins

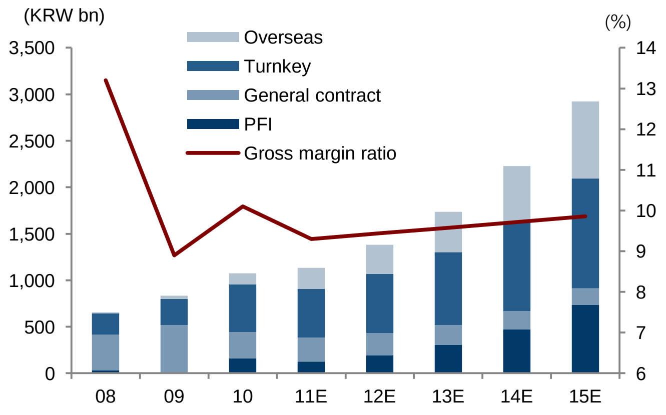
As the government has reduced the budget for new SOC businesses, which are deeply related to the new construction contract, has been cut so that the growth in the public sector seems to be unpromising.
Therefore, in order to increase revenue, GS E&C will enlarge the business in private sector such as private SOC and in turnkey project that is relatively larger in regard to the size of construction, and more profitable. Recently, the construction projects from public and private sector's partnership has increased more than government-driven construction. Also, the demand from private sector is expected to increase continuously.

Chart 24
GS E&C: New Orders and Back Log



Source: Company Data, Fenero Research

Chart 25
GS E&C: Sales and Growth Margin Ratio



Source: Company Data, Fenero Research

GS E&C has recorded 17.79% and 10.48% CAGR in new orders of turnkey and PFI respectively since 2008. These trends in new orders and back log will lead to sales growth 19.88% CAGR and growth margin ratio that will be stable after 2011. By increasing turnkey and PFI projects, GS E&C is expected to generate stable profit in civil-engineering business.

5.5 Power and Environment Business

Power plant is a business that deals with constructing electricity generating facility. Power plant business is expected to grow constantly as increase in new power plant construction along with increasing demand in electric power. GS E&C secured construction know-how by prior experiences in power plant construction. Also, GS E&C obtained EPC capability through strategic alliance with major equipment companies.

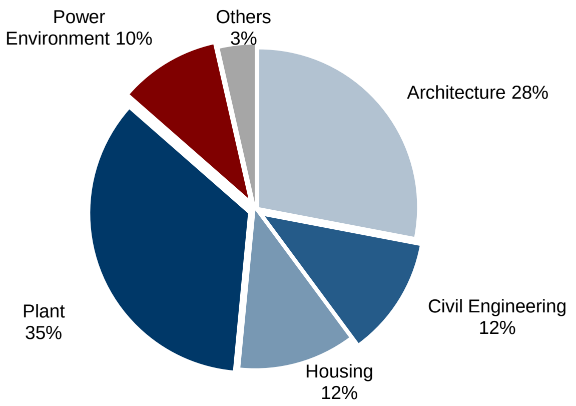
On the other hand, environment business deals with constructing water treatment and waste treatment facilities. Although many deals were postponed and canceled due to fund raising problems, orders of urgent deals started to resume. In the long term, market size is expected to grow as the need for better life quality increases. GS E&C has been increasing water related businesses, especially in Middle East and Asia. GS E&C has the power of market domination and EPC performance based on previous experience in domestic water treatment and waste treatment businesses. Currently, GS E&C got the water purifying deal from Kuwait last August. Also, GS E&C is building waste treatment facility in Bahrain, which was ordered last year.

The company plans to participate in various environment businesses such as energy generation, waste disposal, water treatment and incineration continuously.

■ Efficient Cash Cow

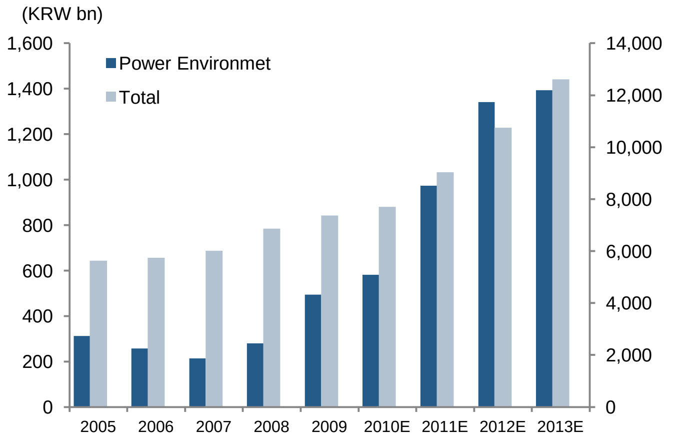
A number of deals pushed forward on a large scale were canceled or postponed due to financing difficulties in 2008; however, market circumstance has recovered recently. In 2010, revenue from power environment business amounts to 10 percent of total GS E&C's sales. Also, the sales growth rate from power environment division is higher than GS E&C's total sales growth. Revenue from power environment sector is expected to increase continuously, considering increasing demand for electricity and interest in environment.

Chart 26
GS E&C: Sales Breakdown (2010)



Source: Company Data

Chart 27
GS E&C: Sales Trend of Power Environment and Total



Source: Company Data

■ Current New Orders

GS E&C is not only known for its skills domestically, but also in foreign countries. This year, GS E&C won a KRW422 bn deal from a local company. Moreover, GS E&C has won several major deals worldwide.

Korean EPC companies are known for their strengths in GCC (Gulf Cooperation Council) countries: Cost minimizing, Schedule and Quality. Also, postponed projects in 2008 are expected to resume from 2012. Therefore, we expect that GS E&C will ace on this business, as the company is highlighting this filed recently.

Table 2
Recent Major Deals on Power Environment

(KRW bn)

Project	Contact	Payment
Samchuk Green Power #1,2	Jun-11	422
Kuwait Azzour WDC 2	Sep-11	201
Barka3 IPP Project	Jul-10	387
Sohar2 IPP Project	Jul-10	331

Source: Company Data

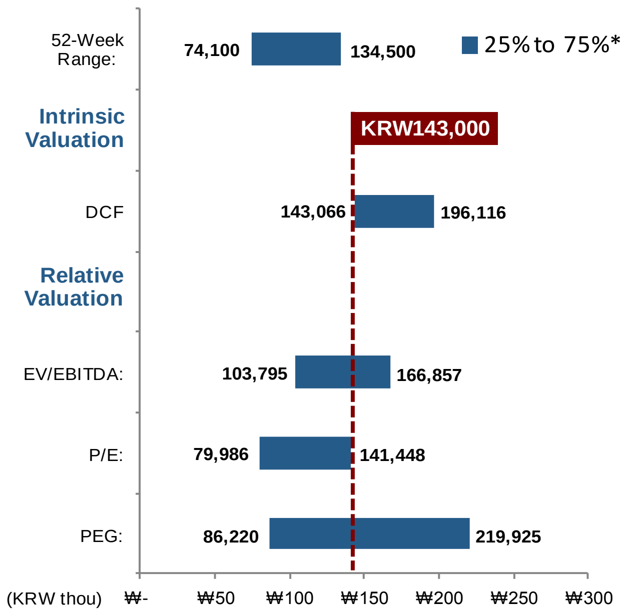
6. Valuation

■ Our 12-Month Price Target Implies 62% Upside Potential

To minimize any possible intrinsic bias derived from a certain valuation tool, we used both intrinsic and relative valuation methods to crosscheck and obtain the reasonable price range; Discounted Cash Flow valuation, EV/EBITDA, P/E, and PEG valuation approaches. Considering the results above, we concluded our 12-month target price is KRW143,000, average value of those valuation results.

DCF valuation is used as a main tool to derive intrinsic value, and as a result, DCF method shows intrinsic price range KRW137,000-211,000, which implies upside potential of 90.26% from the average KRW168,000 to current stock price as of 16 Dec 2011. As seen below, we aggregated our valuation results in one chart to compare each other, and that result implies price range of KRW105,250-168,000. In relative valuation, we utilized EV/EBITDA, PER, and PEG that implies the market price range KRW105,250-145,149.

Chart 28
GS E&C: Valuation Overview – Football Chart

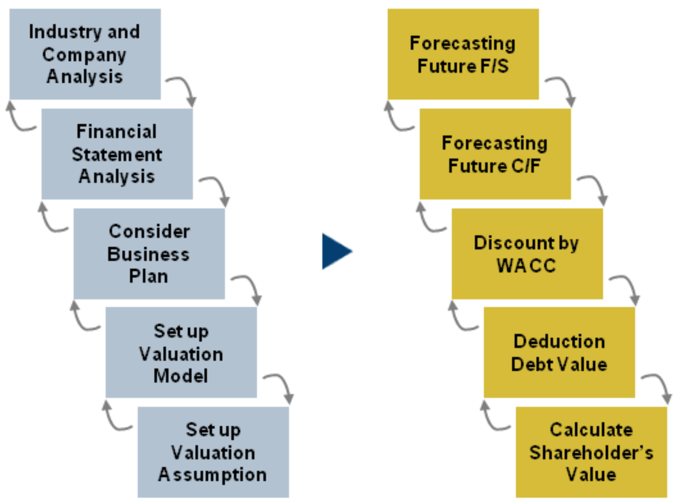


*Except for 52-Week Range
Source: Fenero Research

6.1 Intrinsic Valuation (DCF)

As explained above, DCF method is utilized as our primary tool to calculate the intrinsic value of GS E&C. To estimate future free cash flow, we analyzed each division, then aggregated each of them into one valuation basket to derive entire firm's cash flow. DCF Valuation's all-round flow is shown in Chart29.

Chart 29
Income Approach Framework (DCF)



Source: Fenero Research

For DCF method, we estimated future operation cash flow and change in net working capital, capital expenditure. This is because FCFF equals to EBIT(1-T) + Depreciation + Amortization - △NWC – CAPEX.

As analyzed in the earlier part of our report, we forecasted each division's future revenue, taking the professional market data searching firms' result of market size and company's own data from the company's IR. Then, we considered price tendency of raw materials and historical COGS ratio to estimate COGS ratio. Revenue is composed with five sectors. Except the other revenue, four sectors were forecasted by the amount orders received of last three years. Order received was analyzed by splitting each sector's composition in detail. According to forecasting, housing revenue will be gradually reduced and other sectors will increase steadily. Other revenues were forecasted from their data. Other revenue has grown because power and environment sector's growth.

Table 3
Revenue Forecasting (KRW Bn)

	2011E	2012E	2013E	2014E	2015E
Architecture	1,671	1,769	1,875	1,986	2,105
Civil Engineering	1,122	1,194	1,487	1,947	2,557
Housing	1,267	1,065	897	755	637
Plant	3,586	4,523	5,781	7,456	9,670
Other revenue	1,172	1,423	1,728	2,098	2,547
Total revenue	**8,818**	**9,976**	**11,769**	**14,244**	**17,519**

Source: Fenero Research

In calculating SG&A, we sorted each account into 2 categories; revenue driver and non revenue driver cost. Table below displays main SG&A accounts forecasted.
First of all, considering revenue driver because of the aggressive investment plans of GS E&C as announced, depreciation and amortization cost of GS E&C are expected to rise constantly. Bad debt expense was forecasted by write-off rate 3.12% (median of past write-off rate). In addition, revenue driver was forecasted by each account/revenue ratio's average in the past.

Table 4
SG&A: Main Accounts Forecasting (KRW Bn)

	2011E	2012E	2013E	2014E	2015E
Total SG&A	**562**	**628**	**745**	**885**	**1063**
Salaries	150	155	185	218	259
Advertising	35	36	43	51	60.8
Warranty expense	10	10.1	12	14	17
Taxes and dues	15	15.4	18	21	26
Rent	13	14	16	19	23
Depreciation	**21**	**23**	**24**	**22**	**26**
Amortization	**0.64**	**0.073**	**0.13**	**0.21**	**0.32**
Retirement expense	20	23	27	31	36
Bad Debt expense	**35**	**41**	**48**	**58**	**71**
Development expense	79.6	91.9	106	122	141
Employee benefit	341	40	46	53	61
Commission charge	116	146	184	233	293

Source: Fenero Research

NWC and CAPEX were calculated by each average NWC or CAPEX per revenue for last 3 years.
Next, we calculated FCFF on the basis of estimation.

Table 5
Forecasted FCFF (KRW Bn)

	2011E	2012E	2013E	2014E	2015E
EBIT	**692**	**791**	**929**	**1,141**	**1,429**
Tax expenses	188	215	253	311	389
EBIT(1-t)	**503**	**576**	**676**	**831**	**1,040**
+ Depreciation	45	49	49	45	55
+ Amortization	0.73	0.083	0.146	0.236	0.363
OCF	**550**	**625**	**726**	**876**	**1,096**
- CAPEX	45	51	60	73	90
- ∆NWC	79	89	105	127	156
FCFF	**674**	**765**	**892**	**1,077**	**1,342**
Tax rate	27.21%				

Source: Fenero Research

In order to calculate WACC as discount rate, after tax cost of debt, 4.06% and Cost of equity, 19.62% are used. Cost of equity is calculated from beta of architecture business, 3.35 by Hamada formula. Risk free ratio is 5.01%, the geometric mean of US T-Bond interest from 1928 to 2011. Also, National Default Spread 0.85bp, monthly standard deviation of KOSPI (cost of equity) and standard deviation of 10-years-Korea Treasury bond are used to calculate Korean risk premium. Target D/E ratio is figured by GS E&C D/E ratio 1.57 on Financial statements and tax rate is marginal tax rate in 2011, 27.21%.

Table 5
Calculation of WACC (KRW thou)

Risk-free rate (U.S. T-Bond Rate)	5.01%
Beta(MV)	3.35
Country Default Spread	0.85%
Country Risk Premium	1.07%
Lambda	17.73%
Tax	27.21%
Cost of Equity	19.62%
After-tax Cost of Debt	4.06%
BV of Debt	7,383,576
MV of Equity	4,695,543
WACC	10.11%
Growth rate	3%

Source: Fenero Research

Target price of GS E&C is estimated at ₩166,440. Discounted by WACC 10.11% and permanent growth ratio 3%, expected FCFF for five years and Terminal value at late 2015 estimate enterprise value. After book value of debt (interest bearing debt) is subtracted from enterprise value, it was divided by outstanding number of shares. Current stock price is ₩88,300 on Dec. 16th 2011. Thus, stock price is expected to increase by additional 88.49%.

Table 6
DCF Result (KRW thou)

PV of FCFF (2011~2015)	2,244,109
PV of Terminal Value	7,885,844
Total PV	10,129,953
Debt	1,894,711
Target Equity Value	8,235,242
Outstanding Share	49
Target Price (KRW)	**166,440**
Current Price (KRW)	88,300
Potential Growth	88.49%

Source: Fenero Research

It is possible that the result of DCF valuation would be sensitive by growth rate and WACC when estimated period is short. Analysis below was conducted depending on different growth rate and WACC slightly.

Table 7
Target Price Ratio &Sensitivity Analysis Unit: KRW Billion

	G = 2.8%	G = 3%	G = 3.2%
WACC = 9.11%	198,000	204,000	211,000
WACC = 10.11%	163,000	**168,000**	173,000
WACC = 11.11%	137,000	141,000	144,000

Source: Fenero Research

6.2 Relative Valuation

We used EV/EBITDA, P/E and PEG valuation methodologies to derive GS E&C's relative stock price.

We select five companies as comparables, based on their industry classification and our financial criteria such as revenue and EBITDA. Samsung Engineering is excluded from the peer group because of its different business portfolio.

In the business valuation, it is normally recommended to use a median value instead of a mean value because the median is more representative of the central tendency of the sample set when outliers can dramatically impact the mean. However, we used average value to perform multiple valuations of GS E&C since there is no significant outlier that has an effect on the mean value among the peer group we select. We believe the average value is more representative in this case.

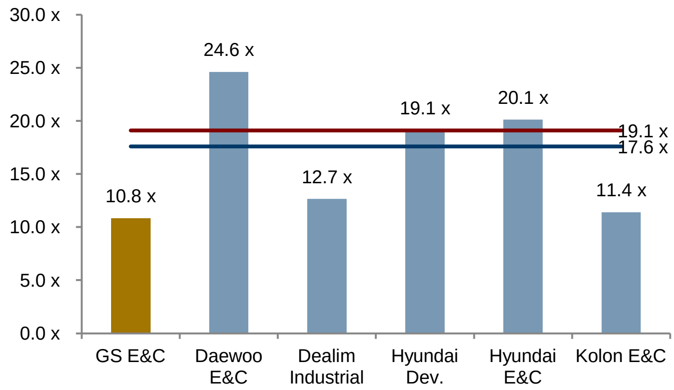
At first, the stock price would be KRW145,149 with EV/EBITDA valuation model. We set the construction industry's average EBITDA multiple of 17.6x, and applied the market price (closing price, December 16, 2011) to the company market cap.

Table 8
EV/EBITDA Valuation (as of December 16, 2011)

(KRW bn)	Mkt Cap	Net Debt	EV*	EBITDA	EV/EBITDA
GS E&C	**4,369**	**154**	**4,523**	**418**	**10.8x**
Daewoo E&C	4,014	2,379	6,393	260	24.6x
Daelim Ind.	3,139	970	4,192	331	12.7x
Hyundai Dev.	1,328	1,936	3,265	171	19.1x
Hyundai E&C	7,572	(164)	7,412	368	20.1x
Kolon E&C	115	154	318	28	11.4x
Median **					**19.1x**
Average **					**17.6x**

*EV includes the value of preferred stock
**GS E&C is excluded
Source: Company Data, Fenero Research

Chart 30
EV/EBITDA Chart (as of December 16, 2011)



Source; Company Data, Fenero Research

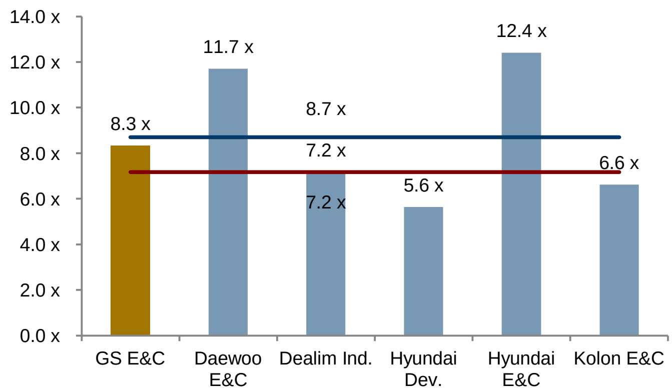
Also, we derived stock price KRW105,250 with the P/E valuation model. To get the fair price, the construction industry's average EPS multiple of 8.7x was applied to the GS E&C's expected earnings in 2012.
.

Table 9
P/E Valuation (as of December 16, 2011)

(KRW)	Stock Price	EPS*	PER
GS E&C	**88,300**	**10,590**	**8.3 x**
Daewoo E&C	9,770	835	11.7 x
Daelim Ind.	90,200	12,580	7.2 x
Hyundai Dev.	18,050	3,203	5.6 x
Hyundai E&C	68,000	5,480	12.4 x
Kolon E&C	4,175	631	6.6 x
Median **			**7.2 x**
Average **			**8.7 x**

*FY2011 (GS E&C: Fenero Research, Peer Group: Market Consensus)
**GS E&C is excluded
Source: Company Data, Fenero Research

Chart 31
P/E Chart (as of December 16, 2011)



Source: Fenero Research

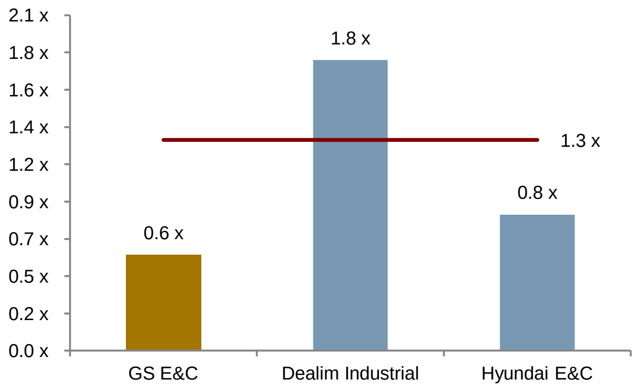
Lastly, with the PEG valuation model, we set the fair price of KRW138,548. In PEG approach, Daewoo E&C, Hyundai Dev, and Kolon E&C are excluded from the calculation due to the exceptionally low and high multiple figures. We use GS E&C's fair PER multiple of 8.3x with the company's estimated EPS in 2012 and apply the average PEG multiple of 1.3x from the peer group.

Table10
PEG Valuation (as of December 16, 2011)

	G-Rate*	PER	PEG
GS E&C	**14%**	**8.3 x**	0.6 x
Daewoo E&C	-14%	11.7 x	-0.8 x
Daelim Ind.	4%	7.2 x	1.8 x
Hyundai Dev.	-30%	5.6 x	-0.2 x
Hyundai E&C	15%	12.4 x	0.8 x
Kolon E&C	153%	6.6 x	0.0 x
Median**			**1.3 x**
Average**			**1.3 x**

*Based on expected EPS in FY2011 and FY2012
(GS E&C: Fenero Research, Peer Group: Market Consensus)
**Except for Daewoo E&C, Hyundai Dev., and Kolon E&C
Source: Company Data, Fenero Research

Chart32
PEG Chart (as of December 16, 2011)



Source: Fenero Research

With the three relative valuation models, the fair value of stock price is derived between KRW105,250-168,000.

7. Key Challenges to Our Proposition

■ Plant: Oil Price and F/X Volatility

Any significant decline in fuel prices could downsize overseas orders, which accounts for 45-50% of GS E&C's revenue in 3Q11 because rise in oil price results in increase in new plant order.

The Firm is relatively neutral to F/X volatility since investors may prefer domestic-driven construction firms if the Korean won appreciates compared to US dollars. Since all the oil trading is paid in US dollars, F/X volatility of Middle East's countries is important as well.

■ Housing: Government Policy

The household dept amount has significantly increased, and government has imposed restriction on additional housing loans. Thus, the market's demand on domestic housing will decline.

■ Civil Engineering: Increasing Competition

Recently, Chinese and Indian construction firms are entering aggressively in the overseas market with price competitiveness. Fierce competition in the overseas' civil engineering market would fuel fierce competition on price of new orders and negatively affect the profitability in the civil engineering division.

■ Architecture: High Dependence on Captive Market

The portfolio of GS E&C's architecture business is highly concentrated on their captive market, especially on LG Display and other LG group companies. Even though GS E&C is working on various construction fields, high dependence on captive market could be considered as a major risk. Though captive markets are making notable profit recently, the architecture business would be unable to make stable profit in case LG Corporation and GS Group are under difficult circumstance.

8. Appendix: Company Profile

■ Brief History: Extensive Advancement on Brand Value

'Lackhee Development', the direct ancestor of the present GS Engineering & Construction (GS E&C), was established in December 1969 as the construction arm of Lucky-Goldstar Group, and changed its name to LG construction when the group changed its CI to LG in 1995. Again, the company's name was changed to GS Engineering and Construction in March 2005, after GS Group was split off from LG Group in July 2004. GS E&C is using the brand name Xi (eXtra Intelligent) for the housing construction business.

Table 11
GS E&C: Brief History

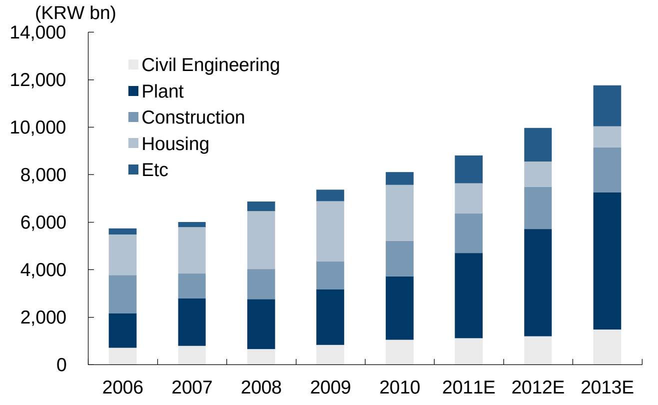
Year	Event
Dec. 1969	Lackhee Development was established
Dec. 1975	Company name has changed to Lucky Development.
Feb. 1977	Lucky International Construction was established
Jan. 1979	Merged Lucky International Construction
Aug. 1981	Lucky Development offered Initial Public Offering
Feb. 1995	Company name has changed to LG Construction
Aug. 1999	LG Engineering merged into LG Construction
Sep. 2002	Introduced apartment brand 'Xi (eXtra Intelligent)'
Dec. 2004	Xi awarded No.1 brand in the 2004 Consumer Well-being awards.
Mar. 2005	Corporate name has changed to GS Engineering & Construction
Aug. 2007	S&P revised GS E&C credit outlook to stable.
Sep. 2010	Xi apartments awarded the "First Brand Award" for three years.

Source: Company Data, Fenero Research

■ Well-Balanced Business Portfolio

Among the major Korean construction companies, GS E&C has the best balanced business portfolio. Plant has gradually accounted for the highest proportion of revenue over the past three years, mainly due to oil&gas plant and petrochemical plant in Middle East. In addition, GS E&C is trying to expand its business area from Asia to Europe and North America through acquisition of Inima, world's Top 10 Company in water treatment plant.

Chart33
GS E&C: Revenue Divisional Breakdown

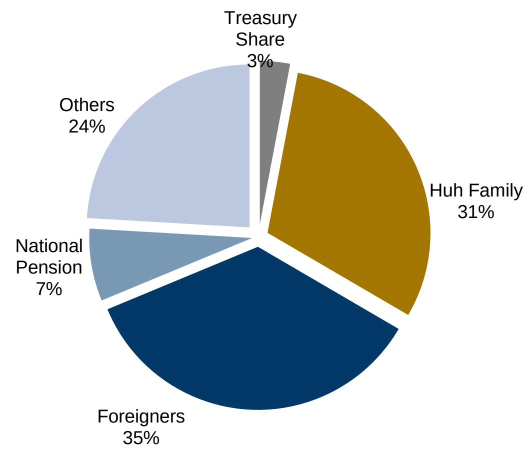


Source: Company Data

■ Shareholding Structure: Huh Family 31, Foreigner 35%

Unlike other GS Group affiliates, GS Group does not directly own any GS E&C shares. Instead, Huh Family is the major shareholder. Changsu Huh, chairman of GS group, owns 12% of GS E&C on December 19th 2011. In addition, foreign owners of GS E&C have steadily decreased to 35% since the beginning of 2011.

Chart34
GS E&C: Shareholding Structure

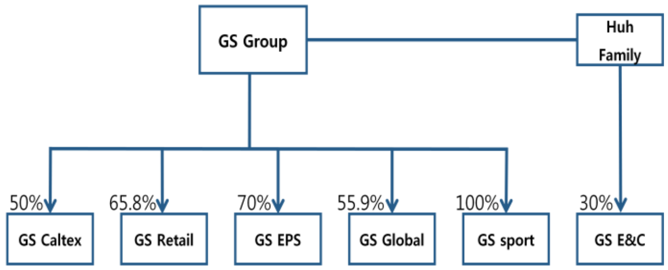


Source: Company Data, Fenero Research

■ Corporate Governance Structure: No Clear Stockholding Structure between GS Group and GS E&C

There is no clear stockholding structure between GS Group and GS E&C. Only Mr. Huh, chairman of both companies, owns 4.75% in GS Group and 11.99% in GS E&C. He has a great portion compared to other family member in GS E&C and GS Group. He can exert huge influence. Therefore, we believe GS E&C would not be placed under the holding company structure.

Chart35
GS E&C: Corporate Governance Structure



Source: Company Data, Fenero Research

Other Important Disclosures

For a discussion, if applicable, of the valuation methods used to determine the price targets included in this summary and the risks related to achieving these targets, please refer to the latest relevant published research on these stocks.
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