

## Chu Kong Petroleum and Natural Gas Steel Pipe

### Catching the next cyclical ride

**Chu Kong Pipe (CKPNG)** is the leading LSAW steel pipe producer, and one of the four approved LSAW suppliers for national pipeline projects. LSAW steel pipe is a type of welded pipe that is mainly used as transmission pipe for petroleum products. The major up-coming upside for the company is the next cycle of rapid length expansion of the national pipeline network during the 2<sup>nd</sup> to 4<sup>th</sup> year of 12<sup>th</sup> five year plan. LSAW denotes roughly 25% of steel pipe use in national pipeline. CKPNG will also benefit from the accelerating development of CNOOC's south sea deep sea project, as being currently the only domestic producer with capability to produce LSAW deep sea pipe at 1,500m depth. CKPNG's steel pipe products are recognized in the overseas market with customers in diversified regions. We are bullish on the pipeline industry with CKPNG as the top pick among peers.

#### Investment summary

- Three key grow drivers: 1) commencing next up-cycle for national pipe sector 2) accelerating offshore development 3) emerging demand from power tower.
- Company's products are more defensive and less sensitive to the national pipeline projects down cycle.
- Demand for CKPNG products peak in next two year, management expects net import of steel pipe products in 13F and 14F.
- Planned capacity expansion, capacity releases in 12F and 13F to capture the up-coming opportunity. We model CKPNG net profit increases by 26% CAGR (11A-14F) to RMB464.9m in 14F.
- Sounds interim result, turnover increased by 26% YoY to RMB2,057.5m, adjusted net profit increased by 24% YoY to RMB132.5m.
- Initiates BUY at target price HK\$3.78, implied target 12F P/E of 8.9x and 12F P/B of 1.3x.

**Cyclical story, market re-rating ahead.** The overall domestic pipeline industry will be benefited from the acceleration of national pipeline expansion. The national pipeline expansion during the rest of 12<sup>th</sup> five year might induce more than 2.1m tonnes demand for company's products, which will mainly allocate in the 13F and 14F. The development national pipeline will also accelerate development of regional pipeline network, and hence benefit the overall pipeline industry.

**Two unique opportunities differentiated CKPNG from pure cyclical story.** Apart from demand from national projects, CNOOC's deep sea projects and State-grid power tower projects are newly raising demand for LSAW. Of which, the CNOOC's South Sea projects will be another highlight of company long term development.

**1H result highlights.** Delivered 240,900 tonnes of steel pipe during the period, turnover was up by 26%, while core net profit up by 24%. Continuous increase in average per tonne profit, average gross profit per tonnes increased to RMB1,473.5t resulted from increased sales to higher margin national projects.

**Our view and valuation.** CKPNG is not only a pure national up-cycle story, but also will be benefited from other two new merging demands, while it has a strong overseas angle which potentially offsets the down-side concern raised from domestic demand fluctuation. The solid track record and high reputation of company's brand name demonstrate quality of products and management capability. Despite the strong result in 1H FY12/12A, the growth yet fully reflects the up-side potential as mentioned in the report. We initiates BUY coverage at target price HK\$3.78. Target price HK\$3.78 implied target 12F P/E of 10.7x and 12F P/B of 1.3x.

Ticker	1938 HK
Rating	BUY
Price (HK\$)	2.7
Target Price (HK\$)	3.78(+40%)
12m Price Range (HK\$)	1.05-3.41
Market cap. (US\$m)	350.0
Daily t/o (US\$m)	0.7
Free float (%)	30.4

#### Financial summary

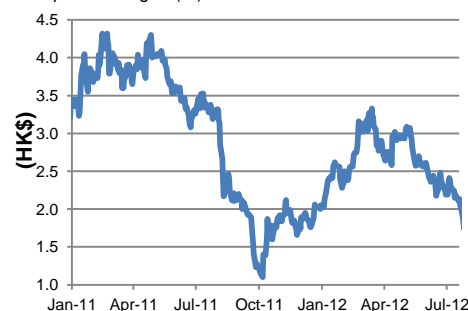
Year to Dec	11A	12F	13F	14F
Turnover (RMBm)	3,377	4,153	5,888	6,080
Net Profit (RMBm)	231	289	415	465
EPS (RMB)	0.23	0.29	0.41	0.46
P/E (x)	9.6	7.7	5.4	4.8
P/B (x) pre-CB	1.0	0.9	0.8	0.7
EV/EBITDA (x)	8.7	7	4.9	4.1
Yield (%)	2	3	4	4
ROE (%)	5	11	12	16
ROCE (%)	5	9	10	11
N. Gear. (%)	52	71	59	36

Source: SBI E2-Capital

	12F	13F	14F
Consensus EPS (RMB)	0.3	0.4	-
Previous earnings (RMB)	-	-	-
Previous EPS (RMB)	-	-	-

#### Price performance

Year to Dec	1m	3m	12m
Relative to HSI (%)	43.6	(1.1)	31.8
Actual price changes (%)	41.4	3.4	25



Source: Bloomberg

#### Isaac Lau

(852) 2533 3723

IsaacLau@sbie2capital.com

**Context page**

<b>Investment thesis</b> .....	<b>3</b>
China factor, demand pull growth potential driven by 12 <sup>th</sup> five year plan.....	3
Industry pioneer, leading position in LSAW segment.....	3
Products with wide range applications as well as diversified customer base in over 50 countries.....	3
Volume growth expansions, potential capture market growth opportunity.....	4
Cyclical thesis with further re-rating opportunities, Target price HK\$3.78 representing 40% potential upside.....	4
<b>Business analysis</b> .....	<b>5</b>
Types of pipeline CKPNG produced.....	5
Diverse demand applications, less sensitive to the national pipeline project cycle.....	5
Pipe processing service provider, low correlation between cost of goods sold and profit.....	6
Back to back purchase agreement for inventory purchased.....	6
<b>Domestic market</b> .....	<b>7</b>
Accelerating capex of national pipeline network to meet 12 <sup>th</sup> five-year plan.....	7
Emerging demand from CNOOC deepwater project.....	8
New infrastructure demand, backbone of State-grid HVAC power tower.....	8
<b>Overseas market</b> .....	<b>9</b>
Extensive overseas sales network with long track record.....	9
Strong sales force with solid track record.....	9
Overseas market expansion, JV in Sandi.....	9
Exposure on Macro factors.....	10
<b>Our hypothesis in next 5 year</b> .....	<b>11</b>
<b>Valuation</b> .....	<b>13</b>
Valuation assumptions & Valuation.....	13
Peer comparison.....	14
Key risks.....	14
<b>Interim result breakdown and review</b> .....	<b>15</b>
<b>Company overview</b> .....	<b>16</b>

**China factor, demand pull growth potential driven by 12<sup>th</sup> five year plan.** Pipeline industry development attaches great importance to central government under 11<sup>th</sup> and 12<sup>th</sup> five year plan. Up to date, coal fire power plant dominates the nation energy consumption with market share over 70%, followed by oil consumption of 18%. It is emphasized under both 11<sup>th</sup> and 12<sup>th</sup> five year plan to promote alternative energy consumption. It was set under the 12<sup>th</sup> plan to increase energy consumption in natural gas from 2010 around 4.4% to 8.3% of total primary energy consumption by 15F. Using pipelines are the most economical way to transport large quantities of oil and natural gas over long distance. The consumption of gas energy will highly depend on the comprehensiveness of pipeline networks. Pursuant to 12<sup>th</sup> five year plan, the total length of national oil and gas transport pipeline will increase to 150,000km by 2015 from 82,500km at the end of 2011, equivalent to total increase of 67,500km in the next 4 years. The key national gas pipeline projects are outlined in the table1 below:

**Table 1. Key national gas pipeline projects in next four years**

National pipeline projects	Total Length (km)	National pipeline projects	Total Length (km)
Third West-to-East Gas Pipeline	7,000	Xinjiang-Guangdong-Zhejiang Pipeline	7,373
Fourth West-to-East Gas Pipeline	7,000	Xinjiang-Shandong	4,463
Central Asia Double Line	1,500	Guangdong Natural Gas Pipeline Network	3,200
Sino-Russian Gas Pipelines	6,000		

Source: SBI E2-Capital

**Industry pioneer, leading position in LSAW segment.** Chu Kong Petroleum and National Gas (CKPNG) is the leading LSAW producer in China. It is the first LSAW producer, first to introduce UOE method for LSAW pipes, first developed deep sea LSAW steel pipes with 1,500m depth and first Chinese brand recognized by Shell in China. CKPNG's research and development team develops customized machinery and equipment and mechanical expanding equipment independently. The success in R&D enables CKPNG to construct and produce manufacturing facilities at lower cost and lower capital expenditure under the same volume as compared to peers, which also meets international advanced technology standard. So far, CKPNG has registered 50 utility patents including 5 invention patents in relation to steel pipe production machineries and methods. The company brand 'PCK' was awarded and obtained numerous certifications while the company was also recognized and awarded by the government authorities. The CKPHG's strong brand reputation provides better position in tenders, when bidding state construction projects. The case can be proved by the long-standing nationwide track record. For example, it participated in Phase II of West to East Gas Pipe line Project, Kazakhstan-China Pipeline, etc. Table 2 below illustrates some of the awards and recognitions from government authorities with respect to the company or products:

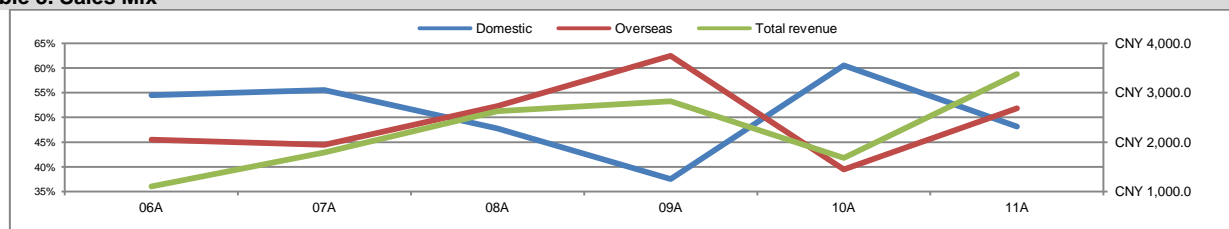
**Table 2. Awards and Recognitions**

Awards and Recognitions	Year
Registered Compliant with the Shell Global Solutions' Design and Engineering Practices	2009
High-tech Enterprise Certificate	2008
First Prize for Sci-Tech Achievement in Guangzhou City	2007
Best Original Product of Innovative Record for Guangdong Enterprise	2007
China Well-Known Mark	2006
China Top Brand	2006
China Metallurgical Product Actual Quality Cognizance	2005
The top ten private enterprise with most Vitality	2005
China Reserved Petroleum Pipeline Manufacturing Industry – Top 10 Enterprises	2004

Source: CKPNG

**Products with wide range applications as well as diversified customers base in over 50 countries.** Different from its Chinese competitors, CKPNG's customers' base is globally diversified with over 600 customers in over 50 regions. The strength in overseas market demonstrates the quality and reputation of PCK products and the strength in sales team. The industrial know-how and quality assurance also induced JV cooperation with AHQ, the third largest coating manufacturer in the world, to construct LSAW and ERW manufacture base in the Middle East with maximum production capacity of 300ktpa. CKPNG products can be scoped with a wide range of application. Despite the majority uses as pipelines for transmission of oil, petrochemicals and natural gas, they can also be used for infrastructural purposes, such as steel tubular piles/towers and hollow structures for buildings bridges and stadiums that can be customized to meet its customers' specifications. For example, the company entered a contract agreement with State Grid to produce LSAW steel pipes for construction of new ultra-high-voltage tower in 2011. Table 3 below illustrates the percentage allocation of sales in domestic and overseas countries:

**Table 3. Sales Mix**



Source: SBI E2-Capital

**Volume growth expansions, potential capture market growth opportunity.** CKPNG is the largest LSAW manufacturer in China, followed by SOEs or subsidiary of SOEs namely Shanghai Baosteel, Julong Steel Pipe, Shashi Steel pipe BSS Petro Pipe. In 2011A, CKPNG's LSAW maximum achievable capacity was 1.3m tones, representing roughly 20% of market share by production volume. In order to capture the potential market upside in next few years, CKPNG has been expanding the production capacity in LSAW steels pipe and diversifying its production facilities into SSAW steel pipes in 12F and 13F. According to company management, they estimated that the total capital expenditure in 12F is roughly RMB800m and total pipeline maximum achievable capacity will increase by 960k tones, out of 960k tones new capacity, 360k tones are new SSAW production line in Lianyungang. The RMB800m capex includes establishment of a new production base in Lianyungang, Jiangsu, Zhuhai Guangdong Province as well as part of JV investment in 300m tones LSAW manufacturing facility in Saudi. CKPNG will further increase its steel pipe production capacity by 600k tones, and complete construction of 2m tones steel processing plant capacity by the end of 2013. We estimate that the 13A capex will be around RMB200m to RMB300m. Table 4 below illustrates our hypothesis on future maximum production volume in next 2 years.

**Table 4. Production facilities layout**

Location	Production line	Production Capacity	Commencement date
Jiangyin	LSAW - JCOE	300,000	Sept 2009
Panyu	LSAW – Infrastructure	300,000	June 2010
	LSAW – UOE	400,000	Sept 2002
	LSAW- JCOE	300,000	Nov 1998
	ERW	150,000	July 1995
Zhuhai	LSAW - JCOE	300,000	June 2012
	SSAW*	300,000	1Q 2013
Lianyungang	SSAW*	360,000	3Q 2012
	LSAW – COE*	300,000	4Q 2012
	Steel plate processing*	2,000,000	End of 2013
JV at Saudi	LSAW JCOE*	300,000	Mid 2013

Source: CKPNG \*new production line

**Cyclical thesis with further re-rating opportunities, Target price HK\$3.78 representing 40% potential upside.** We estimated 5-year cash flow to equity holder of CKPNG to 2016F, followed by a terminal value at 2% grow rate. We believe the CKPNG is in well position to capture the next national pipeline capex up-cycle. We believe the CKPNG has the execution ability to benefit the up-side potential driven from the new 12<sup>th</sup> Five year plan. We recommend CKPNG as a good mid-term investment thesis with China story, and value at Target price HK\$3.78 (+40%). Initiates BUY. Our target price HK\$3.78 implied 12F P/E of 8.86x and 12F P/B of 1.28x, which is more aggressive than the street estimate of 12F P/E of 6.91x and 12F P/B of 0.84x.

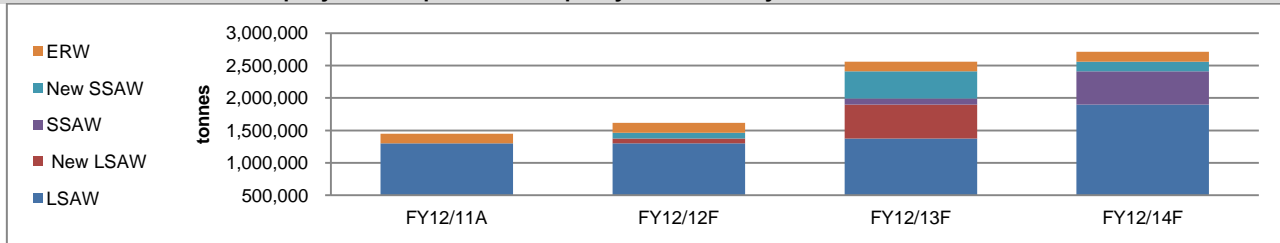
**Our forecast key financial projection**

P&L RMBm	FY12/11A	FY12/12F	FY12/13F	FY12/14F
Revenue	3,376.9	4,153.4	5,888.0	6,080.0
Gross Profit	510.3	679.6	972.9	964.8
EBIT	344.7	480.4	664.1	672.0
EBITDA	387.0	563.8	797.6	822.0
Profit attributable to Owners	230.7	289.5	413.0	464.9
Working Capital:				
Current Assets				
Inventories	1,190.24	1,427.57	2,019.90	2,102.14
Trade and Bill Receivables	803.32	796.54	1,096.93	1,082.74
Prepayments and other receivables	462.36	512.06	725.91	749.59
Cash and Bank Balances	981.78	1,012.74	1,902.71	1,869.20
Current Liabilities				
Trade and bills Payables	666.58	713.78	1,009.95	1,051.07
Interest-bearing bank loans and other borrowings	1,434.82	1,736.87	2,457.55	2,557.60

**Business analysis:**

**Types of pipeline CKPNG produced.** Line pipe is generally used for transporting crude petroleum and refined petroleum products in transmission lines, distribution lines and offshore pipeline systems. Line pipe diameter and wall thickness and raw material control the hardness, resistance to abrasion and tolerance of pressure. Two classifications of line pipe are welded pipe and seamless. Seamless pipes (839 HK) are pipe with no seam that is commonly used as short distance oil and gas transfer pipes and drilling pipes with diameters from 48.3mm to 273mm. In contrary, welded pipes are made from steel plate or steel coils to circular steel pipes and seamed by welding. Three types of weld pipes classified by their method of manufacturing are Longitudinally Submerged Arc Welded (LSAW), Spiral Submerged Arc Welded (SSAW) and Electric Resistance Welded (ERW). CKPNG is the leading LSAW steel pipe maker in China and produced 415k tonnes of LSAW pipe in FY12/11A. Company also engaged in small portion of ERW steel pipe manufacturing and newly began SSAW steel pipes business in 3Q FY12/12F. LSAW regards as a high-end within the welded pipe family in respect of safety, pressure tolerance and entry level due to the way of weld seams. It is said the weld seams of LSAW is generally up to 40% shorter than SSAW, and hence minimized the risk of mechanical failure. Majority of weld pipes is used as long distance transmission pipes for hydrocarbon products. Typically, the use of SSAW steel pipe dominates in national pipe network representing 70% of pipes used, while LSAW and ERW steel pipe captures roughly 25% and 5% of share respectively. We expect proportion allocation of LSAW in national project will increase due to higher safety awareness as well as urbanization in China. CKPNG is set to capture next industry up-cycle via capacity expansion in both LSAW and SSAW steel pipes. LSAW maximum achievable capacity will increase by 600ktpa to 1.9mtpa from 1.3mtpa by end of 12F, and will further increase by 300ktpa to 2.2mtpa by end of 13F. Two new SSAW steel pipe production lines of total capacity of 660ktpa are coming online in 3Q 12F and 1Q 13F. Table 5 illustrates our forecast of company's production capacity, while Table 6 denotes brief summary of the three welded pipes and CKPNG's capacity allocation in next two years:

**Table 5. Our forecast of company's actual production capacity in next three years**



Source: SBI E2-Capital

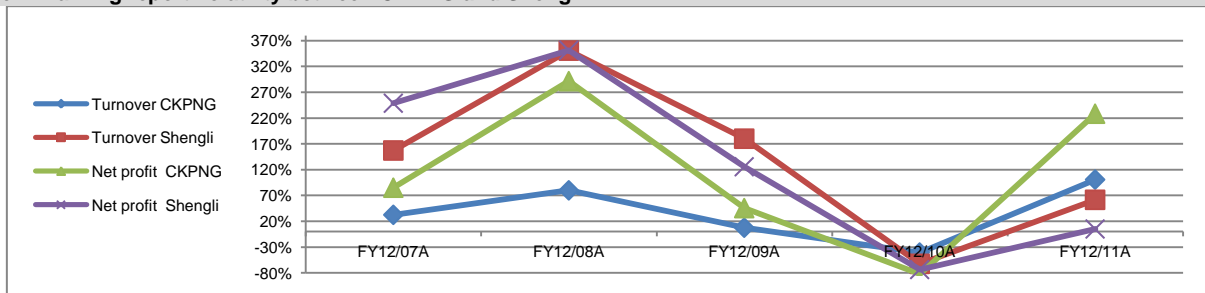
**Table 6. Types of Welded pipe**

Welded pipe	National Project Share	CKPNG's capacity allocation			Features and Characteristics
LSAW	25%	90% 11A	79% 12F	73% 13F	Ideal for high pressure and long distance and offshore project Often used in developed urban cities
SSAW	70%	0% 11A	15% 12F	22% 13F	Lower cost than LSAW, also use for long distance pipeline Often used in less developed regions
ERW	5%	10% 11A	6% 12F	5% 13F	Small-diameter pipes used as sub-pipeline

Source: CKPNG

**Diverse demand applications, less sensitive to the national pipeline project cycle.** Weld pipe sector is highly correlated to capex and development of oil and gas industry in general. Domestic demand for weld pipes largely depends on SOEs' capital expenditure budgets on onshore oil and gas national pipe network, which are set to strictly follow the five-year plan guidance. Pursuant to historical performance, pattern of net increase of length of national pipe tends to sluggish in the 1<sup>st</sup> and 5<sup>th</sup>, rapid ramps up in the 2<sup>nd</sup> and peak between the 3<sup>rd</sup> and 4<sup>th</sup> year. As a result, earnings of weld pipe sector volatilizes during the national capex cycle. Compared to SSAW, LSAW steel pipes have wider appliances than national pipeline, yet are more commonly used in developed companies. Other appliances of LSAW pipes are 1) transmission pipe for deep-sea project, 2) construction/ infrastructure 3) city gas networks, etc. For instance, CKPNG secured first deep pipeline contract with CNOOC in 11A, being the current sole Chinese LSAW maker able to produce 1,500m deep-sea pipes. LSAW pipes are also more suitable for regional pipeline and city gas network due to the high standard of safety requirement in urban regions. CKPNG's proved track record and 'PCK' brand name recognition give CKPNG a higher exposure to the overseas market, and hence less impact from national pipeline down-cycle. Compared to Shengli (1080 HK), who is the leading SSAW producer, Shengli's earnings was more volatilized than CKPNG, while CKPNG smoothed its earnings volatility by diverse into overseas and city gas network during 10A, and 11A:

**Table 7. Earning report volatility between CKPNG and Shengli**



Source: SBI E2-Capital

**Pipe processing service provider, low correlation between cost of goods sold and profit.** CKPNG adopts a cost plus pricing model and charges a fixed fee plus the cost of raw materials to determine the total contract value. Pipe contracts, especially for domestic national pipe projects, are usually via the invitation of bid for tenders. Followed by a successful bid, CKPNG subsequently enters into back to back purchase agreement with supplier to order specific steel plate/coils in accordance to contract requirement. For overseas sales, contracts are made free-on-board (FOB) or cost, insurance and freight (CIF). In other words, customers incur most direct expenses. Yet, cost of steels accounts for over 90% of CKPNG's cost of sales. As a result, CKPNG can pass most risk of steels price volatility to its customers and the margin fee can vary depending on the specification of diameter and thickness. For example, margin fee for offshore pipe project can be over RMB2,000/t whereas average margin fee for onshore project is between RMB1,000~RMB1,500/t. Table 8 illustrates CKPNG's historical margin performance and our two years forecast:

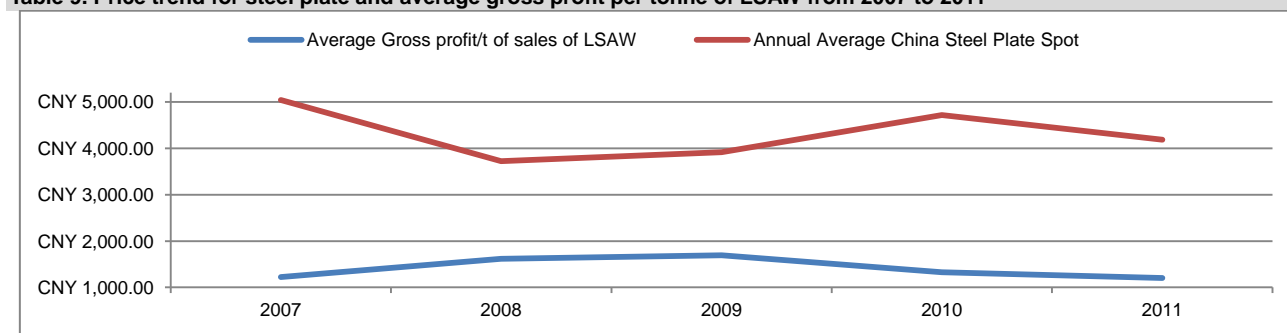
**Table 8. Company gross margin per ton**

RMB	FY12/09A	FY12/10A	FY12/11A	FY12/12F	FY12/13F
LSAW GP per ton	1,695	1,327	1,205	1,388	1,453

Source: CKPNG

The high gross profit of RMB1,695 per tonne in 2009 was largely due to high portion of overseas offshore orders during the period, while the gross margin per tonne declined to RMB1,327 in 10A and further to RMB1,205 in 11A resulting from increase in sales to lower margin city gas pipeline to offset the decline sales demand from national pipeline projects. We expect the average gross profit per ton will increase in next two years due to the change in product mix by 1) increase in sales of higher margin national pipeline 2) increase in orders from CNOOC (883 HK)'s deep sea projects. Table 9 illustrates the price trend for steel plate and CKPNG's average gross profit per tonne:

**Table 9. Price trend for steel plate and average gross profit per tonne of LSAW from 2007 to 2011**



Source: SBI E2-Capital

**Back to back purchase agreement for inventory purchased.** Followed by the successful tender, CKPNG will enter into purchase agreement with suppliers to order steel plate with specified mineral composition. Clients will deposit 30% of contract value as up-front payment, meanwhile CKPNG will borrow roughly 70% of cost of raw material from banks to finance the steel plate/ steel coil purchase. For example, the overall gross profit margin for sales of LSAW was approximately 16%, i.e. if the total contract value is RMB1,190, the COGS will be RMB1,000. 30% of the contract value, RMB357, will be paid up front as deposit, while 70% of COGS, RMB700, will be financed by bank loan facility. Effectively, 106% of COGS will be financed by external sources. The back to back purchase agreement minimizes the company's working capital requirement, but the highly operational and financial leverage might raise the short-term liquidity concern in tight financial environment. Table 10 illustrates the sales simulation at 16% margin and 5% short-term interest rate:

**Table 10. Effective sales margin under back to back purchase agreement**

Item		RMB
Sales		1,190
Direct COGS	1,000	
Direct finance cost	50	
Total direct cost		1,050
Gross profit		140
Implied gross profit margin		11.8%
External financing		
30% deposit of contract value	357	
70% of material purchase - bank loan	700	
Total		1,057
Assumption:		
Gross profit margin		16%
Short-term interest rate		5%

Source: SBI E2-Capital

**Domestic market - Three key grow drivers, 1) commencing next up-cycle for national pipe sector 2) accelerating offshore development 3) emerging demand from power tower.** Domestic market accounted for average 50% of CKPNG's revenue contribution in five years average; we expect higher domestic sales proportion allocation in next few years as a result of tighter supply of LSAW steel pipe in China. CKPNG's major customers are the three oil and gas SOEs, namely PetroChina (857 HK), CNOOC (883 HK) and Sinopec (386 HK). One of them accounted for 36% of CKPNG's sales that is to say over 70% of domestic sales in FY12/11A.

**Accelerating capex of national pipeline network to meet 12<sup>th</sup> five-year plan.** First of all, LSAW suppliers for national pipeline network are regulated. According to the management, there are four authorized LSAW steel pipe producers for national pipeline network in China. They are either state-owned enterprise or subsidiary of SOEs. Being the only private enterprise of LSAW national pipe supplier, CKPNG demonstrated the recognition of company's products as well as pioneer position in domestic market. CKPNG is 1) first LSAW producer 2) first to introduce the UOE production method 3) first and currently the only developed deep-sea LSAW pipe with 1,500 depths. However, the domestic pipe project allocation is via the invitation of bid for tenders that invited by PetroChina (857 HK), CNOOC (883 HK) and Sinopec (386 HK), while the non-SOE related status might be less competitive than the peers. Proved track record in national pipeline can cease part of the concern. Table 11 illustrates the four authorized LSAW makers and their current production capacity:

**Table 11. Authorized LSAW suppliers for national pipeline network**

Company name	Ownership	LSAW Capacity (ktpa)*
Shanghai Baosteel	SOE	500
Julong Steel Pipe	Subsidiary of CNPC	400
Shashi Steel Pipe	Subsidiary of Sinopec	300
Sub-total		1,200
CKPNG	Privately owned	1,300*

Source: CKPNG, \*maximum achievable capacity

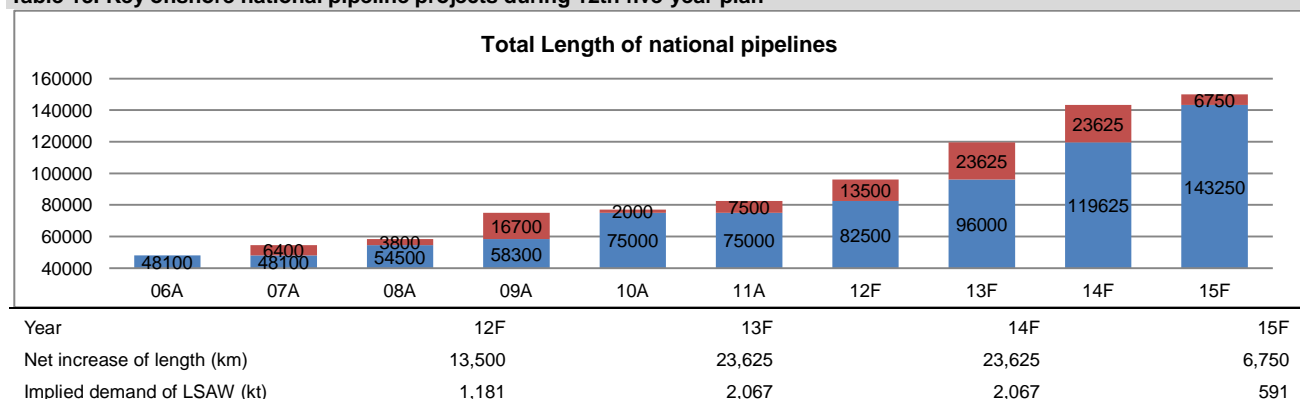
**Table 12. Long track record of national pipeline project**

Project name	SOE	Year completed	Total volume (kt)
West to East Gas Pipe line Project II	CNPC	2010-2011	118
Kazakhstan-China Pipeline	CNPC	2009	77
Southwest Oil and Gas Pipeline	CNPC	2007-2008	40
Sichuan-East China Gas Pipeline	Sinopec	2008-2009	200
Guangdong National Gas Pipe Network	CNOOC	2010-2011	110

Source: CKPNG, SBI E2-Capital

Pursuant to the 12<sup>th</sup> five-year plan, it was set to increase the total length of PRC national pipeline by 95% to 150,000km. By the end of 2011, the total national length was 82,500km representing a short of 67,500km. If we assume that 1km of steel pipeline requires 350/t of steel pipe while 25% of national pipeline is formed by LSAW steel pipe, total demand steel pipe of national pipe for the LSAW in 12<sup>th</sup> Five-year plan will be 5.9m tonnes. Meanwhile, we expect the development of regional and city gas pipeline network will increase correspondingly to cope with development of the national pipe network with some time lag. Table 13 illustrates our forecast changes of the total length of national pipeline during the 12<sup>th</sup> five-year plan.

**Table 13. Key onshore national pipeline projects during 12th five-year plan**



Source: CKPNG, SBI E2-Capital

Table 13 suggests that potential supply short of LSAW during the peak in 13F and 14F. We forecast the net increase of national pipe length will be 23,625km in 13F and 14F, implied 2,067k tonnes demand of LSAW steel pipe. Assuming there is no capacity expansion of peers and the effective full unitization rate of CKPNG is 50%, the total supply of LSAW in China will be 2,150k tonnes (950k tonnes + 1200k tonnes). At the same time, raising offshore demand of CNOOC's offshore projects, transmission demand of city gas network along with orders arise from overseas market will dilute the supply of CKPNG's LSAW products to national pipeline project, resulting in supply shortage. Furthermore, the above hypothesis is yet to take into account of potential higher proportion of LSAW steel pipe apply in national pipe projects. As a result and demand from regional projects, we expect CKPNG will directly and indirectly benefit from the coming up-cycle of national pipe development. Table 14 lists the some of the key onshore national pipe projects for the 12<sup>th</sup> five-year plan:

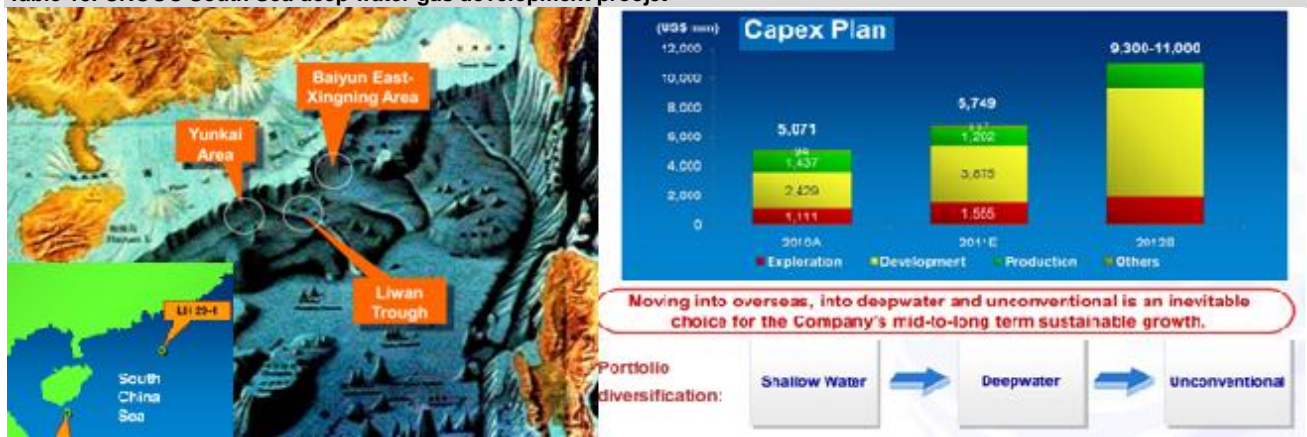
**Table 14. Key onshore national pipeline projects during 12th five-year plan**

Project name	SOE	Length	Potential demand for LSAW (kt)
Myanmar – China	CNPC	1,717	150
Urumqi – Honghu	CNPC	3,225	282
Fushun – Shijiazhuang – Zhengzhou	CNPC	2,100	184
Manzhouli – Daqing – Changchun – Shenyang	CNPC	1,427	125
West – to – East Pipeline III	CNPC	7,000	613
Fourth Shaanxi – Beijing Gas Pipeline	CNPC	950	83
West – to – East Pipeline IV	CNPC	7,000	613
Xinjiang – Guangdong – Zhejiang Pipeline	Sinopec	7,373	645
Xinjiang – Shandong Pipeline	Sinopec	4,463	391
Total		35,255	3,086

Source: CKPNG, SBI E2-Capital

**Emerging demand from CNOOC deepwater projects.** CNOOC commenced the early development of the deepwater oil and gas resource since the beginning of the 11<sup>th</sup> five-year plan. It was set in the CNOOC overall development plan that developing into deepwater is an inevitable choice for the company's mid-to-long term sustainable growth. In the past few years, the exploration result suggested the deepwater area in South China Sea is under-explored and with huge potential. Since 2010, CNOOC ramped up the exploration scale. Pursuant to FY12/11A report, exploration and development of deepwater was the 2nd primary object for the year. We believe CKPNG will benefit from the CNOOC's deepwater development, because 1) CNOOC is currently the only domestic LSAW maker capable to produce 1,500m deep LSAW steel pipe (in process to develop 3,000 depths), 2) South China deepwater projects situates near CKPNG's manufacturing base, while CNOOC is building new office in Chu Kong region to cope with fast development of the deepwater project, 3) competitive pricing advantage with domestic synergy effect, CKPNG is able to provide comparable standard deep-sea pipe at lower cost than international peers. In fact, CKPNG awarded the first deep pipeline project in China and produced 66.2k tonnes of deep-sea pipe for Liwan offshore project part of the south sea deep water gas development project in 1H FY12/11A. In 2012, CKPNG further secured deep sea pipe contract with CNOOC to produce 51.3k tonnes of LSAW steel pipe. Deep-sea LSAW pipe also earns a higher average gross profit per tonne. Company management said the gross profit per tonne for deep-sea LSAW pipe is approximately RMB2,000 while the average gross profit per tonne of LSAW for other usage is roughly RMB1,300, which denotes 54% higher in gross profit. Assuming gross profit of RMB2,000/t for deep water pipe, sales volume of 51.3k tonnes can contribute RMB102.6m of gross profit, which accounted for roughly 20% of company's FY12/11A total gross profit.

**Table 15. CNOOC South Sea deep water gas development project**



Source: CNOOC

**New infrastructure demand, backbone of State-grid HVAC power tower.** As a result of strong physical characteristic, LSAW steel pipes are often used in infrastructure and construction projects, such as high voltage, wind power, bridges, high-speed rail steel construction etc. In 2009, company established new business relationship with State Grid, the largest and sole electric utilities company in China, to deliver 67k tonnes of steel pipe for the construction of high voltage AC power tower. Traditionally, HVAC power tower is commonly built by angled steel. During the winter season, snowstorm in China does greatly damage to angled steel made power tower even caused collapses. Company proposed to State Grid to use LSAW steel pipe as main body of the power transmission towers to strengthen tower construction and reduce possibility of collapse. During the 12<sup>th</sup> five year plan, State Grid was set to increase net tower length by 10,000km with total investment over RMB200b. If we assume 1) 20% of tower power uses LSAW as construction material and 2) 200t/km of LSAW use, the total use of LSAW will be 400k tonnes during the 12<sup>th</sup> five year plan. According to the management, the average gross profit per tonne for infrastructure LSAW pipe was roughly RMB1,000/t, which means the total consumption of 400k tonnes or represents roughly RMB400m gross profit during the 12<sup>th</sup> five-year plan.



**Overseas market - Extensive overseas sales network with long track record.** Being domestic LSAW pipe producer, CKPNG also has large exposure in overseas markets. Overseas sales accounted for 63%, 39% and 52% of total sales from 09A to 11A orderly. Company's customers cover various regions and countries including Middle East, European Union, America, and Southeast and Central Asia. Steel pipe products are marketed under the brand name 'PCK'. The brand 'PCK' is recognized as products with quality and standards in the industry. It is also currently the sole domestic maker recognized by Shell and qualified as one of the steel pipe suppliers for Shell projects. Normally, overseas orders are received via core distributors from all over the world, while contract value is set, similar to domestic market, based on cost-plus pricing model. The exposure of the overseas market services both advantage and disadvantage to the company. The upside is that company is less affected by the domestic pipeline capex cycle, whereas the downside is that CKPNG is more influenced by the changes of certain macroeconomic elements, such as changes of international oil price. In our view, an angle in the overseas market provides more flexible sales strategies to adjust sales mix to services for the best interest of the company as well as earnings are less volatilized than the peers. Table 16 illustrates the geographical proportion allocation of overseas sales in the past six years:

**Table 16. Overseas sales allocation from 06A to 11A**

Regions	06A	07A	08A	09A	10A	11A
America	29%	36%	51%	13%	33%	91%
European	43%	1%	5%	8%	0%	6%
Middle East	3%	28%	27%	56%	12%	6%
Other Asian countries	16%	19%	24%	53%	41%	6%
Others	9%	14%	7%	7%	0%	5%

Source: CKPNG, SBI E2-Capital

**Strong sales force with solid track record.** CKPNG has a strong sales team to cope with overseas orders. The team makes up of around 35 people who are employed specially for overseas clients. CKPNG has an extensive network with distributors all over the world. It is said that CKPNG has the strongest sales forces among peers. CKPNG has also recently recruited a former shell's procurement manager to strengthen in sales team. Table 17 illustrates some of the key projects delivered and working in process:

**Table 17. Key orders for the overseas market**

Hist.	Total Volume (kt)
Columbia and Peru Gas projects – A	77.4
Columbia and Peru Gas projects – B	117.9
Shell Canada	27.0
Sell Nigeria	9.3
<b>In process.</b>	
Peru National Gas project	29.2
Western Siberia	10.1
Colombia Gas project – A	82.2
Colombia Gas project – B	61.0

Source: CKPNG, SBI E2-Capital

**Overseas market expansion, JV in Sandi.** For the period between 07A and 09A, sales volume to the Middle East area increased domestically as a result of rapid development of oil and gas sector. In June 2011, CKPNG set up a 50:50 JV Company with a Sandi Arabian company to engage in manufacture of ERW and LSAW steel pipe in Sandi Arabian in order to capture the growth of oil and gas development in nearby regions. The processing plant will consist of 2 production lines with production capacity of 1) 300kpta of LSAW and 2) 200kpta of ERW. Pursuant to the JV agreement, the total investment commitment by the CKPNG will not exceed US\$53m (RMB334m). According to the management, the budgeted capex for the JV Company is RMB150m in 12F. If we assume 1) the total capex for the JV project is RMB300m, 2) the LSAW production line commences in 1H 13F, and 3) the ERW production line in 15F at the average effective utilization rate of 40%, our implied project valuation of the JV to CKPNG has NPV of RMB99.8m and IRR of 27%, as shown in table 18:

**Table 18. JV valuation**

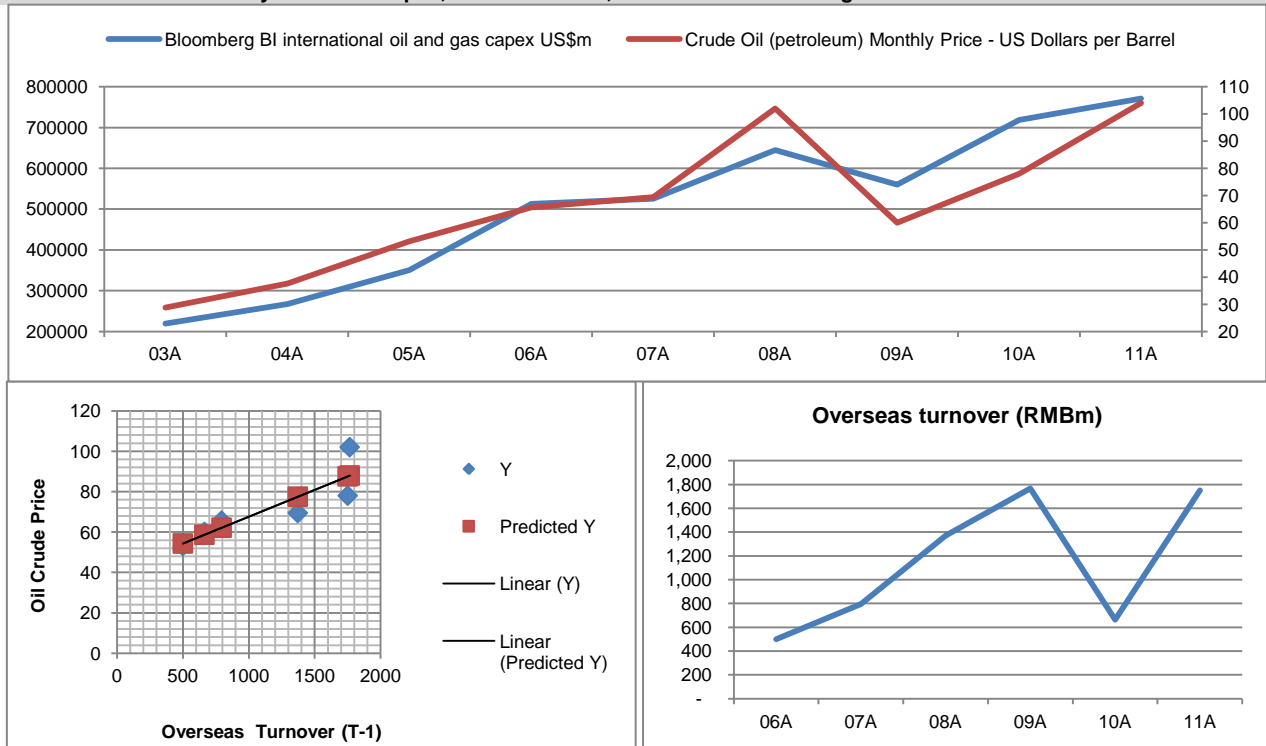
RMB	12F	13F	14F	15F	16F	17F
Total Turnover to Group		423,529,412	847,058,824	1,143,529,412	1,143,529,412	1,143,529,412
FCF to CKPNG		27,000,000	54,000,000	72,900,000	72,900,000	72,900,000
Terminal value						455,625,000
Capex RMB	(200,000,000)	(100,000,000)				
NPV	99,830,482					
IRR	27%					
Assumptions:						
discount rate	16%					
Actual LSAW sales volume	120,000					
Actual ERW sales volume	120,000					
Average LSAW GP/t (RMB)	1,200					
Average ERW GP/t (RMB)	600					

Source: CKPNG, SBI E2-Capital

**Background information of the JV partner:** Being established in 1940s, Abdel Hadi Abdullah Ai- Qahtani (AHQ) is a diversified Saudi Arabian company engaged in various business segments with more focus on pipe corrosion services, manufacturing of SSAW, water treatment chemicals, nails, galvanized wire manufacturing, industrial and medical gases, water bottling, engineering and construction and bulk food packaging. AHQ owned the third largest pipe coating factory in the world. AHQ also established close relationship with many different government agencies as well as the private sector in nearby regions. AHQ supplies equipment, services to Saudi Armco, Saudi Consolidated Electric Company, Saudi Basic Industries Corporation, and Saline Water Conversion Corporation, etc.

**Exposure on Macro factors.** The international pipeline capex is sensitive to the macro-economic factors, because the economic cycle affects energy consumption, while change in energy consumption affects the oil price leading to impact on earnings of oil and gas companies. Ultimately, oil and gas companies adjust their expansion plans base on the expectation of the future oil and gas prices, and hence, this affects the forward expax and the orders for transmission steel pipes. We have examined the relationship between annual international crude oil price and company overseas sales performance with 1 year time lag. Pursuant to the regression result, the R square vale and p-value are 75% and 2.5% respectively, which statistically supports our analysis. Therefore, we can conclude that there is evidence supporting that the CKPNG's one year forward sales performance is positive correlated to the changes in historical international crude oil price. We concern the uncertainty of the global economy outlook as a result of Europe debt crisis as well as China slow down that might affects the global oil and gas related expax expansion which might adverse CKPNG's overseas market performance. Table 19 illustrates the historical global industry capex and average annual crude oil price for the period between 03A and 11A, the company overseas sales volume as well as the linear relationship between crude oil price and CKPNG's overseas sales with one year time lag.

**Table 19. Historical Industry Oil & Gas capex, Crude Oil Price, CKPNG's overseas segment turnover**



Source: CKPNG, SBI E2-Capital, Bloomberg

**Our hypothesis in next 5 year.** CKPNG has been rapidly expanding its capacity in recent years to capture the next up-cycle of domestic steel pipe market. Capacity expansion is not only limited to LSAW steel pipes, but also SSAW steel pipes and upstream steel plate processing plant so as to diversify products portfolio as well as to achieve 'integrated plate and pipe production' (板管一體化). Table 20 below summarizes the production facilities breakdown:

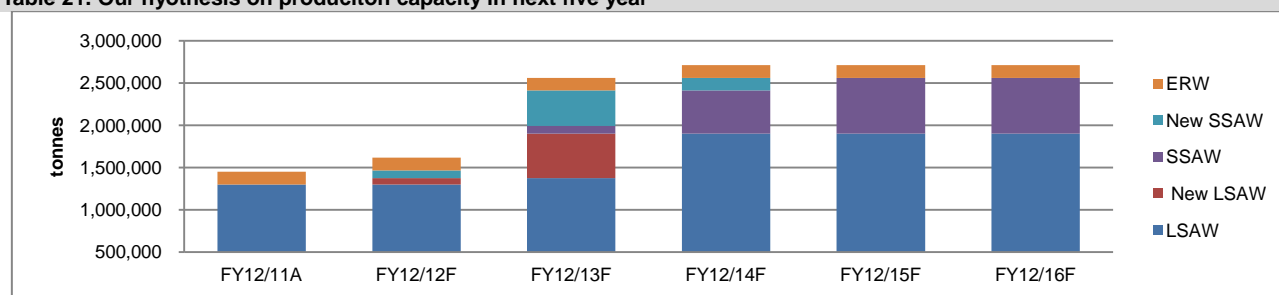
**Table 20. Production facilities layout**

Location	Production line	Production Capacity	Commencement date	Our forecast commencement date
Jiangyin	LSAW - JCOE	300,000	Sept 2009	
Panyu	LSAW - Infrastructure	300,000	June 2010	
	LSAW - UOE	400,000	Sept 2002	
	LSAW - JCOE	300,000	Nov 1998	
	ERW	150,000	July 1995	
Zhuhai	LSAW - JCOE	300,000	June 2012	
	SSAW*	300,000	1Q 2013	2Q 2013
Liangyungang	SSAW*	360,000	3Q 2012	4Q 2012
	LSAW - COE*	300,000	4Q 2012	Begin of 2014
	Steel plate processing*	2,000,000	End of 2013	Begin of 2014
JV at Saudi	LSAW JCOE*	300,000	Mid 2013	3Q 2013

Source: CKPNG \*new

Table 21 below illustrates our forecast of maximum annual production capacity as well as effective utilization rate in next five year: As can be seen on the table, our anticipated overall production capacity increased substantially in 2013 by 59% YoY to 2,560k tonnes resulted from increase in both LSAW and SSAW production lines.

**Table 21. Our hypothesis on production capacity in next five year**



Effective utilization rate	FY12/12F	FY12/13F	FY12/14F	FY12/15F	FY12/16F
LSAW	70%	70%	70%	50%	30%
SSAW	30%	40%	40%	30%	30%
ERW	70%	65%	60%	40%	30%

Source: SBI E2-Capital

**In terms of domestic and overseas sales allocation,** we expect that the sales from China region will substantial increases as a result of the three growth drivers mentioned. In contrary, overseas sales performance might be sluggish due to the global economy uncertainty.

**In terms of average gross profit per tonne for LSAW pipe.** We expect an overall increase in the next three years as a result of higher sales portion to 1) high-margin deep-seas pipe 2) national pipe projects as compared to high sales volume to lower margin regional pipeline projects. The margin improvement might be limited by State-grid HVAC power tower. We assume the average gross profit of power tower for LSAW is 8% lower than average of RMB1,100/t. Table 22 below illustrates our estimate of operating matrix in the next five year:

**Table 22. Key operating estimate**

	FY12/11A	FY12/12F	FY12/13F	FY12/14F	FY12/15F	FY12/16F
<b>Gross Profit per tonne:</b>						
LSAW	1,205	1,388	1,453	1,405	1,367	1,367
SSAW	-	660.00	660.00	670.00	680.00	680.00
ERW	44.96	120.00	120.00	120.00	120.00	120.00
<b>Total Production Volume:</b>						
LSAW	650,000.00	687,500.00	950,000.00	950,000.00	950,000.00	950,000.00
SSAW	-	45,000.00	255,000.00	330,000.00	330,000.00	330,000.00
ERW	75,000.00	75,000.00	75,000.00	75,000.00	75,000.00	75,000.00
Steel plate:	-	-	-	1,000,000.00	1,600,000.00	18,000,000.00
<b>Sales allocation:</b>						
% of Oversea Sales	52%	38%	27%	27%	48%	48%
% of Domestic Sales	48%	62%	73%	73%	53%	53%
<b>Utilization rate:</b>						
LSAW	66%	70%	70%	70%	50%	30%
SSAW	-	30%	40%	40%	30%	30%
ERW	35%	70%	65%	60%	40%	30%

Source: SBI E2-Capital

Table 23. Key financial estimate

P&L (RMBm)	FY12/10A	FY12/11A	FY12/12F	FY12/13F	FY12/14F
Revenue	1,681.5	3,376.9	4,153.4	5,888.0	6,080.0
Gross Profit	264.4	510.3	679.6	972.9	964.8
EBIT	111.7	344.7	480.4	664.1	672.0
EBITDA	153.9	387.0	563.8	797.6	822.0
Profit attributable to Owners	70.2	230.7	289.5	413.0	464.9
Gross margin	16%	15%	16%	17%	16%
EBITDA margin	9%	11%	14%	14%	14%
EBIT margin	7%	10%	12%	11%	11%
Net margin	4%	7%	7%	7%	8%
ROE	5%	11%	12%	16%	16%
B/S(RMBm)					
Non-Current Assets	1,270.8	1,945.5	2,913.0	2,630.7	2,480.7
PPE	1,071.2	1,420.4	2,137.1	2,203.6	2,053.6
Goodwill	4.4	0.2	4.1	4.1	4.1
Other	195.2	525.0	771.8	423.0	423.0
Current Assets	2,344.5	3,485.2	3,874.4	5,793.0	5,851.2
Inventories	977.5	1,190.2	1,427.6	2,019.9	2,102.1
Trade and Bill Receivables	355.0	803.3	796.5	1,096.9	1,082.7
Prepayments and other receivables	360.9	462.4	512.1	725.9	749.6
Cash and Bank Balances	599.2	981.8	1,012.7	1,902.7	1,869.2
Other	51.9	47.5	125.5	47.5	47.5
Current Liabilities	1,344.8	2,464.4	3,116.9	4,410.1	4,589.7
Trade and bills Payables	204.0	666.6	713.8	1,010.0	1,051.1
Interest-bearing bank loans and other borrowings	727.0	1,434.8	1,736.9	2,457.6	2,557.6
Other	413.8	363.0	666.2	942.6	981.0
Non-current Liabilities	279.5	768.7	1,230.1	1,230.1	597.2
Interest-bearing bank loan and other borrowings	240.0	732.3	1,132.9	1,132.9	500.0
Other	39.5	36.4	97.2	97.2	97.2

Source: SBI E2-Capital

Valuation

**Valuation assumption.** We estimated 5-year cash flow to equity holder of CKPNG to 2016F, followed by a terminal value at 2% grow rate. The key valuation matrix is outlined in 'our hypotheses in next five year'. The potential cost reduction from the steel processing plant is not included in the financial model, because the cost effect is uncertain, while we reserve it as a potential catalyst to future share price. We believe the CKPNG has the execution ability to benefit the up-side potential driven from the new 12<sup>th</sup> five year plan. We recommend CKPNG as a good mid-term investment thesis with China story, and value it at Target price HK\$3.78 (+40%). Initiates BUY. Our target price HK\$3.78 implied 12F P/E of 10.7x and 12F P/B of 1.28x, which is more aggressive than the street estimate of 12F P/E of 6.91x and 12F P/B of 0.84x. Tables below include key financial and valuation results summary, valuation multiples of our target price and Bloomberg PE and PB band:

**Table 24. Implied Multiples of our target price**

	FY12/10A	FY12/11A	FY12/12F	FY12/13F	FY12/14F
Implied P/B (x)	1.57	1.42	1.28	1.13	1.00
Implied P/E (x)	36.52	11.12	8.86	6.21	5.52
Implied EV/EBITDA (x)	18.72	9.57	8.13	5.35	4.58

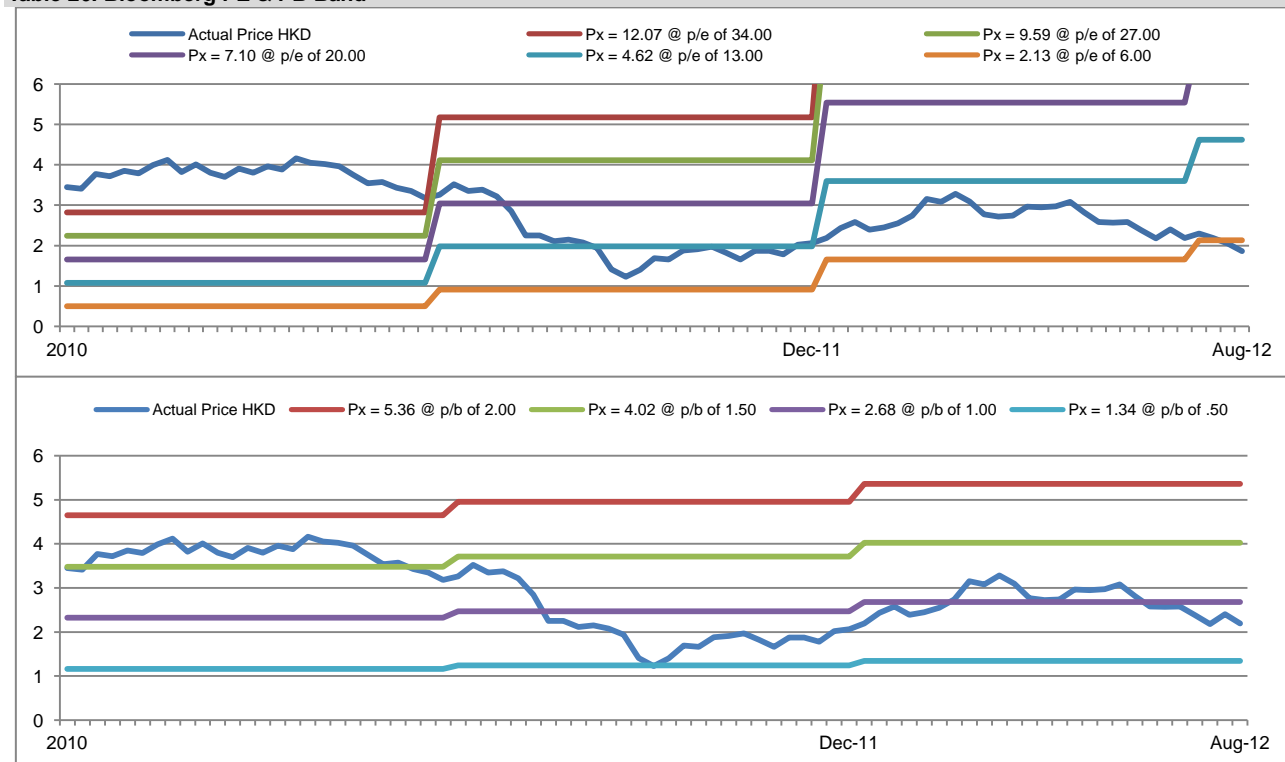
Source: SBI E2-Capital

**Table 25. Our Target price**

Discount Rate	14%	16%	18%
Market cap (RMB)	RMB2,563.7m	RMB2,244.8m	RMB2,006.3m
CNY / HKD	1.22	1.22	1.22
Market cap (HK\$)	HK\$3,129.8m	HK\$2,740.5m	HK\$2,449.3m
number of shares	1,011.14	1,011.14	1,011.14
Target price	4.24	3.78	3.44

Source: SBI E2-Capital

**Table 26. Bloomberg PE & PB Band**



Target Price Valuation (HK\$)	FY12/12F	FY12/13F	FY12/14F	FY12/15F
PE @ 6x	2.10	2.99	3.37	2.84
PE @ 13x	4.54	6.48	7.30	6.15
PB @ 1x	2.95	3.36	3.79	4.13
PB @ 1.5x	4.42	5.04	5.69	6.19

Source: SBI E2-Capital

**Peer comparison.** There are no direct peers that engaged in LSAW steel pipe listed on HKEx. Market often compares CKPNG (1938 HK) with Shengli (1080 HK) as they are exposed to similar domestic macro factors. Shengli is the largest approved SSAW suppliers of national pipe, has total production capacity of 1.15m tonnes. SSAW steel pipe dominates in steel pipe use in national pipe project, representing roughly 75% of steel pipe used. However, we are more favour to CKPNG's LSAW than Shengli's SSAW due to several reasons: 1) Higher than barrier 2) Benefit from CNOOC deep-sea project development, rather than pure 12<sup>th</sup> five years thesis, 3) stronger marketing team that CKPNG was able to partially offset the demotic down-cycle via increase sales in overseas market. 4) Better management continuity, that Major shareholder of Shengli has recently sold 24.99% of his holding which induce uncertainty of company prospect. Overall, we believe welded pipe sector will be benefited from the up-coming rapid expansion of national pipeline network with CKPNG as our top pick in stocks.

**Table 27. Peer comparison**

HK\$m	Ticker	Mkt Cap	Gross Margin 10A	Gross Margin 11A	Gross Margin 12F	Net Margin 10A	Net Margin 11A	Net Margin 12F
<b>Chu Kong</b>	<b>1938 HK</b>	<b>2,558.2</b>	<b>15.7</b>	<b>15.1</b>	<b>16.2</b>	<b>4.2</b>	<b>6.8</b>	<b>7.0</b>
	Shengli	1,538.0	13.1	7.9	9.7	7.9	5.1	2.5
	Anhui	967.3	8.2	6.5	8.2	3.2	1.4	3.0
	Liansu	11,411.6	26.4	24.2	25.1	14.7	12.4	12.3
	Hilong	2,800.8	41.0	41.0	39.5	13.1	16.6	16.0
	Average		22.2	19.9	20.6	9.7	8.9	8.4

Ticker	P/B 10A	P/B 11A	P/E 09A	P/E 10A	P/E 11A	P/E 12F	P/E 13F
<b>1938 HK</b>	<b>1.5</b>	<b>0.8</b>		<b>41.8</b>	<b>7.3</b>	<b>7.0</b>	<b>5.4</b>
1080 HK	1.6	0.8	6.0	34.7	17.0	21.2	9.3
839 HK	1.4	0.5	13.9	24.0	15.1	5.4	7.9
2128 HK	4.0	1.6		12.3	6.5	7.0	6.1
1623 HK		0.9			5.2	6.3	5.4
Average	2.3	1.0	10.0	23.7	10.9	10.0	7.2

Source: SBI E2-Capital

**Table 28. Liquidity ratio analysis**

Company	FY12/09A		FY12/10A		FY12/11A	
	CKPNG	Shengli	CKPNG	Shengli	CKPNG	Shengli
Current Ratio	1.5	4.4	1.7	11.2	1.4	2.2
Quick Ratio	0.9	3.8	1.0	9.8	0.9	1.7
Cash Ratio	0.6	2.7	0.5	2.9	0.4	0.4

Source: SBI E2-Capital

**Key risks**

1) New orders fail to catch up with rapid capacity expansion 2) slower-than-expected national pipeline development 3) failure in national pipeline tenders 4) adverse movement of international oil price 5) liquidity risk (high S-T liabilities) 6) fail to obtain bank loan financing

**Shareholding**

Name	%
Chen Chang (Chairman, CEO)	69.6
Public	30.4
Total	100

Source: SBI E2-Capital

### Interim result breakdown and review:

Company announced sounds interim result for 1H FY12/12A. During the period, company delivered 240,900 tonnes of steel pipe with 314,500 tonnes of order on hand, which consists of 288,900 tonnes of LSAW, and 25,600 tonnes of ERW. The delivered orders are mainly outstanding orders brought forward from the last year which majority of them was domestic orders. As a result, revenue from domestic region increased by 21.4pp YoY to 63.8%/RMB1,312.8m and remaining 36.2% was overseas of RMB744.8m. The overall turnover improved by 26% YoY to RMB2,057.5m. Yet, gross profit increased, at a fast pace than turnover, by 31.5% YoY to RMB355.0m with gross profit margin increased by 0.8 pp YoY to 17.3%. The improvement in profit margin was attributed to changes in allocation of product mix: 1) decrease sales to low margin city gas pipeline, as a result of sluggish market demand during the industry down-cycle in 1H FY12/11A, 2) new order from high margin deep-sea project from Liwan Offshore project. During the period, company delivered 66,200 tonnes of high margin LSAW deep sea pipe. The average gross profit per tonne for the deep-sea contract was roughly RMB2000/t, which denoted roughly 37% of total gross profit in 1H FY12/12A or roughly 60% higher than average LSAW gross profit per tonnes of RMB1,250. Table 29 summarizes key performance indicators:

Table 29. key performance indicators			
RMBm	1H FY12/12A	1H FY12/11A	Change
Turnover	2,057.5	1,633.1	+26%
Gross Profit	355.0	269.9	+32%
Gross Profit margin	17.3%	16.5%	+0.8pp
Net Profit	170.3	113.2	+51%
Net Profit margin	8.3%	6.9%	+1.4pp
Average Gross Profit (RMB/t)	1,473.5	n/a	
Sales volume (tonnes)	240,900	n/a	

Source: CKPNG, SBI E2-Capital

Further analysis in P&L, company reported a substantial increase in subsidy income from government by RMB47.2m YoY to RMB51.2m and fair value loss on derivative financial instrument of RMB7.7m. Net profit adjusted for these non-core business expenses, adjusted net profit increased by 24% YoY to RMB132.5m, with adjusted net profit margin dropped by 0.1pp YoY to 6.4%. Table 29 below illustrates key expense items and there allocation change in terms of % of total revenue.

Table 29. Further breakdown of expenses			
% of revenue	1H FY12/12A	1H FY12/11A	Change
Other income and gains*	2.7%	0.5%	+2.2%
Selling and distribution costs	-2.3%	-1.7%	-0.6%
Administrative Expenses	-4.6%	-5.3%	+0.7%
Changes in fair value of derivative*	-0.5%	-0.1%	-0.4%
Exchange gain/(loss), net	0.0%	-0.1%	+0.1%
Interest Expenses	-2.5%	-1.3%	-1.2%
RMBm			
Other income and gains	55.7	8.8	+46.8
Subsidy income	51.2	4.0	47.2
Changes in fair value of derivative	-7.7	-	-7.7
Adjusted net profit	132.5	106.9	+24%
Adjusted net profit margin	6.4%	6.5%	-0.1pp

Source: CKPNG, SBI E2-Capital

### Capacity expansion update:

Company completed the Zhuhai new production plant with annual production capacity of 300,000 tonnes of LSAW in June 2012, which is in line with company expectation. Yet, the construction of Liangyungang new production plant is also in track with expectation. The new plant will have three production lines with designated annual capacity: 1) 360,000 tonnes of SSAW, 2) 300,000 tonnes of LSAW and 3) 2,000,000 tonnes of steel plate. According to the management, the construction of the 360,000 tonnes SSAW production line has been completed and is pending for production license, while company is confident to complete construction of LSAW production line in 4Q 12F and steel plate processing line by end of 13F.

**Company overview:**

Chu Kong Petroleum and Natural Gas (CKPNG) is a leading steel pipe manufacturer in China. Key operating facilities are situated in Guangdong province, originated in Panyu region. CKPNG was established in June 1993 that primarily engaged in manufacture of ERW steel pipes. In 1998, CKPNG introduced LSAW steel pipe to China and became the first LSAW producer in China. CKPNG was also the first to introduce the UOE production method for LSAW pipes in China. Nowadays, CKPNG is the largest LSAW pipe producer with annual production capacity of 1.45m tons. Its brand name, 'PCK', is reputable good quality in the industry and currently is the only Chinese LSAW steel piper company recognized by Shell. CKPNG adopted product-originated business model due to the natural of the business. Its key customers are geographically diversified with over 50 counties and regions. The main focus country is China, represented slightly below 50% of total sales. Major Chinese customers are three main oil and gas SOEs, namely PetroChina (857 HK), CNOOC (883 HK), Sinopec (386). The list below illustrates the milestone development of the company:

- June 1993: Established, initial engaged in manufacturing of ERW steel pipes
- 1998-1999: First LSAW producer in China
- 2002: First to introduced UOE method for LSAW pipes in China
- 2008-2009: First Chinese piper recognized by Shell as compliant with their design and engineering practices
- 2010: Successful listed on HKEx offer price HK\$4.5, raised HK\$1.35b
- 2011: JV with Suadi working partner to build 300ktpa LSAW in plant in Suadi Arabia

**Table 30. Approval Certificates**



Source: CKPNG

**Chu Kong's key products:**

CKPNG produces high-end steel pipes customized for clients' specification. CKPNG's products are widely used in petroleum industry for onshore and offshore oil and gas projects, and are also applied in infrastructure, such as water, irrigation and sanitation pipes, towers, hollow structural sections for buildings, bridges etc. CKPNG focuses on producing LSAW steel pipe, which is for demanding applications. They also produce ERW steel pipe and are going to manufacture SSAW steel pipe. The features of different categories:

**LSAW**

Longitudinal Submerged Arc Welded (LSAW) is known as high-end segment in pipe industry with high entry barriers. LSAW steel pipe is designated for high pressure applications, for example, deep sea project. LSAW is safer than SSAW, hence cross city pipelines are often made of LSAW. PCK's steel pipes are used in energy related applications, such as 1) oil and gas pipe transmission pipe lines, 2) deep sea pipelines, 3) city gas networks, 4) petrochemicals, 5) construction and infrastructure.

CKPNG is ranked as the largest LSAW steel pipes manufacturer in China, dominates roughly 50% of LSAW market share. CKPNG is also known as the first mover in the Chinese LSAW segment. The company is currently the only LSAW pipe producer adopted UOE production method and deep sea LSAW steel pipe manufacturer with 1,500m depth.

**Table 31. PCK's LSAW Specification**

LSAW steel pipe	Outside diameter (mm)	Wall thickness (mm)	Features
UOE production line	508-1,118	6.4-25.4	<ul style="list-style-type: none"> <li>▪ High End Product Segment, High entry barriers</li> <li>▪ High Technicians</li> </ul>
JCOE production line	406-1,829	6.0-60.0	<ul style="list-style-type: none"> <li>▪ High pressure and long distance O&amp;S pipelines</li> <li>▪ High CAPEX</li> <li>▪ Made from customized steel plates</li> </ul>

Source: CKPNG



**ERW**

Electric Resistance Welded (ERW) steel pipes are classified as low-end pipe products and are highly competitive in the Chinese market. CKPNG initiated in pipes business as an ERW steel pipe producer with a production line capacity of 150ktpa. ERW steel pipes are categorized by low cost of production and high dimensional precision. These steel pipes are widely used in onshore or shallow offshore application in smaller scale projects, for example, pipe structure in wells drilling, and line pipes for transmission tubes and city tube network. CKPNG only maintains a small portion due to the low entry barrier of the products.

**Table 32. PCK's ERW Specification**

ERW steel pipe	Outside diameter (mm)	Wall thickness (mm)	Features
ERW production line	114-356	3.0-12.7	<ul style="list-style-type: none"> <li>Small-diameter pipes used as sub-pipelines in the transmission of oil and gas</li> <li>Lower entry barrier, high competition</li> </ul>

Source: CKPNG

**SSAW (In construction)**

Spiral Submerged Arc Welded (SSAW) steel pipes are classified as mid-end pipe products. SSAW pipes are suitable for transporting large volumes of oil and gas and have been commonly used in Russia, Canada and Asian countries in high pressure gas pipelines. It is said that around 70% of national pipelines in China was SSAW and the remaining was LSAW. CKPNG planned to engage in SSAW manufacturing business and is constructing two production facilities located in Liangyungang and Zhuhai with maximum achievable capacity of 360ktpa and 300ktpa respectively. The new production plants are scheduled to commence production in 3Q 2012 and 1Q 2013 respectively.

**Table 33. PCK's SSAW Specification**

SSAW steel pipe	Outside diameter (mm)	Wall thickness (mm)	Features
SSAW production line	508-3,000	6-25.4	<ul style="list-style-type: none"> <li>Oil and gas pipelines to transport crude oil, petroleum products and natural gas</li> <li>Made from hot-rolled steel coils</li> <li>Commonly used in national pipe projects</li> <li>Market dominated by SOE</li> </ul>

Source: CKPNG

**Other Services**

CKPNG also provides pipes related services to its customers, such as manufacturing, coating and fittings services. These services contributed less than 2% of turnover in 2011A and around 4% of revenue in 2010A:

- **Manufacturing services.** Manufacturing services are charged as processing fees for pipe manufacture which customers provide raw material for the production. This business model is often adopted by national pipe project that SOE customers will provide CKPNG steel plates for the processing. It also provides better gross margin as compared to transitional sales at around 50~60%.
- **Coatings services.** CKPNG provides comprehensive coating services from single lay fusion bond epoxy coating to internal liquid coating. Coating can prevent the steel pipes from corrosion and rust and improve the durability of the pipes.
- **Fittings.** Provide an array of fittings such as induction bend, elbow, reducer, tee, cross, which are used as ancillary components of the pipelines.

**Chu Kong's clients:**

CKPNG's clients base can be divided into 2 group, China and overseas. Around 40% of sales is contributed by China market, of which the key clients are CNPC (857 HK), CNOOC (883 HK), and Sinopec (386 HK). The remaining 60% is overseas customers from over 50 countries and regions in the Middle East, European Union America, etc. CKPNG's strong sales forces and high quality reputation led the company become the leading Chinese brand in the world market. Its clients are mainly oil field operators, oil companies, gas companies, petrochemical companies, such as Shell, NOC, and Western Crude Oil.

**Table 34. Chu Kong's clients**



Source: CKPNG

## Appendix - Infopage.

P&L (RMBm)	10A	11A	12F	13F	14F	Cash Flow (RMBm)	10A	11A	12F	13F	14F	
<b>Year to Dec</b>						<b>Year to Dec</b>						
Turnover	1,681	3,377	4,153	5,888	6,080	EBIT	112	345	480	664	672	
% chg	(40)	101	23	42	3	Depre./amort.	(42)	(42)	(83)	(134)	(150)	
<b>Operating Profit/(loss)</b>	155	382	564	798	822	Net int. paid	(23)	(65)	(127)	(158)	(111)	
EBITDA	154	387	564	798	822	Tax paid	(21)	(32)	(64)	(91)	(95)	
Depre./amort.	(42)	(42)	(82)	(134)	(150)	Chgs. in working cap	(699)	(350)	94	(456)	(12)	
EBIT	112	345	480	664	672	Other	90	118	771	168	506	
Net int. income/(exp.)	(23)	(65)	(127)	(158)	(111)	<b>Operating cashflow</b>	(573)	26	1,071	(7)	810	
Exceptionals	-	-	-	-	-	Capex	(361)	(461)	(800)	(200)	-	
Jointly-controlled entit.	-	-	-	27	54	<b>Free cashflow</b>	(934)	(435)	271	(207)	810	
<b>Pre-tax profit</b>	89	280	353	507	561	Dividends paid	-	(22)	(47)	(72)	(104)	
Tax	(19)	(49)	(64)	(91)	(95)	Net distribution to MI	-	-	-	-	-	
<b>Net profit</b>	70	231	289	415	465	Investments	-	-	-	-	-	
% chg	(82)	228	25	43	12	Disposals	2	-	-	-	-	
Dividends	22	47	72	104	22	New shares	-	-	-	-	-	
Retained earnings	70	231	289	415	465	Change in bank loans	297	1,071	703	721	(533)	
EPS (RMBcent) - Basic	7	23	29	41	46	Others	(47)	(685)	(672)	169	499	
EPS (RMBcent) - F.D.	7	23	29	41	46	<b>Net cashflow</b>	250	386	31	890	(34)	
DPS (RMBcent)	7	23	29	41	46	Cash reserve - Beg.	349	599	982	1,013	1,903	
No. sh.s o/s (m) - W.A.	2,528	2,528	2,528	2,528	2,528	Cash reserve - End.	599	982	1,013	1,903	1,869	
No. sh.s o/s (m) - Y.E.	2,528	2,528	2,528	2,528	2,528							
No. sh.s o/s (m) - F.D.	2,528	2,528	2,528	2,528	2,528	<b>Interim Results (RMBm)</b>		<b>1H 11A</b>	<b>2H 11A</b>	<b>1H 12A</b>		
						Revenue		1,633	1,744	2,058		
						% chg		100	7	18		
<b>Margins (%)</b>						Gross profit		270	240	355		
Gross	16	15	16	17	16	S&D expenses		(28)	(43)	(47)		
EBITDA	9	11	14	14	14	Administrative expenses		(87)	(79)	(95)		
EBIT	7	10	12	11	11	Shares result from JV		-	-	-		
Pre-tax	5	8	9	9	9	Other		27	82	69		
Net	4	7	7	7	8	Operating profit		182	200	282		
						EBIT		161	184	259		
						EBITDA		180	207	281		
						Net Profit		113	118	170		
						% chg		513	4	44		
<b>Balance Sheet (RMBm)</b>	<b>10A</b>	<b>11A</b>	<b>12F</b>	<b>13F</b>	<b>14F</b>							
<b>Year to Dec</b>						<b>Shareholding Structure</b>						
Goodwill	4	0	4	4	4							
PPE	1,071	1,420	2,137	2,204	2,054							
Investment Properties	2	2	2	2	2							
Deposit	188	515	413	413	413	Chen Chang				703.5	70	
Prepaid Land	4	4	351	4.1	4.1	Public				307.6	30	
DTA	1	4	5	4	4	Total				1011.1	100	
Inventories	978	1,190	1,428	2,020	2,102	<b>Background</b>						
Trade and Bill Receivables	355	803	797	1,097	1,083	Chu Kong Pipe (CKPNG) is the leading LSAW steel pipe producer, and one of the four						
Prepay. & other Rece.	361	462	512	726	750	approved LSAW suppliers for national pipeline projects. LSAW steel pipe is a type of						
Pledged deposit	52	47	126	47	47	welded pipe that mainly use as transmission pipe for petroleum products. The major						
Cash and Bank Balances	599	982	1,013	1,903	1,869	up-coming upside for the company is the next cycle of rapid length expansion of the						
Total Assets	2,334	5,431	6,787	8,424	8,332	national pipeline network during the 2nd to 4th year of 12th five year plan. LSAW denotes						
L- term Borrowings	280	769	1,230	1,230	597	roughly 25% of steel pipe use in national pipeline. CKPNG will also benefit from the						
T&P	204	667	714	1010	1051	accelerating development of CNOOC's south sea deep sea project, as being currently the						
Other payables	414	363	666	942	981	only domestic producer with capability to produce LSAW deep sea pipe at 1,500m depth.						
S-term Borrowings	727	1,435	1,737	943	981	<b>Key Ratios</b>						
Other	-	-	-	-	-	Net gearing (%)		16	52	71	59	36
Total Liabilities	1,624	3,233	4,347	5,640	5,187	Net ROE (%)		5	11	12	16	16
						EBIT ROCE (%)		5	9	10	11	11
						Dividend payout (%)		36	25	25	25	25
						Effective tax rate (%)		21	17	18	18	17
						Net interest coverage (x)		4.9	5.3	3.8	4.2	6.0
						A/R turnover (days)		68	63	70	68	6
						A/P turnover (days)		77	55	75	75	75
						Stock turnover (days)		193	138	150	150	150
Share capital												
Reserves	89	89	89	89	89							
Treasury shares	-	-	-	-	-							
Acc losses/ profit	1,881	2,062	2,279	2,591	2,940							
Proposed final Divid	22	47	72	104	116							
Total Equity	1,991	2,198	2,440	2,783	3,145							
Net debt	316	1,138	1,732	1,640	1,141							

---

SBI E2-Capital is a dedicated small/mid cap investment banking/ stockbrokerage house. Find our research on: [sbie2capital.com](http://sbie2capital.com), [thomsononeanalytics.com](http://thomsononeanalytics.com), [factset.com](http://factset.com) and [multex.com](http://multex.com)

**SBI E2-Capital stock ratings:**

**STRONG BUY** : absolute upside of >50% over the next three months

**BUY** : absolute upside of >10% over the next six months

**HOLD** : absolute return of -10% to +10% over the next six months

**SELL** : absolute downside of >10% over the next six months

Investors should assume that SBI E2-Capital is seeking or will seek investment banking or other related businesses with the companies in this report.

**Analyst certification:** The views expressed in this report accurately reflect the analyst's personal views of the subject securities and that the analyst has not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

**Disclaimer:** This research report is not an offer to sell or the solicitation of an offer to buy or subscribe for any securities. The securities referred to in this report may not be eligible for sale in some jurisdictions. The information contained in this report has been compiled by the Research Department of SBI E2-Capital Financial Services Limited ('SBI E2-Capital') from sources that it believes to be reliable but no representation, warranty or guarantee is made or given by SBI E2-Capital or any other person as to its accuracy or completeness. All opinions and estimates expressed in this report are (unless otherwise indicated) entirely those of SBI E2-Capital as of the date of this report only and are subject to change without notice. Neither SBI E2-Capital nor any other person, accepts any liability whatsoever for any loss howsoever arising from any use of this report or its contents or otherwise arising in connection therewith. Each recipient of this report shall be solely responsible for making its own independent investigation of the business, financial condition and prospects of the companies referred to in this report. SBI E2-Capital and their respective officers, directors and employees, including persons involved in the preparation or issuance of this report, may from time to time (1) have positions in, and buy or sell, the securities of companies referred to in this report (or related investments); (2) have a consulting, investment banking or broking relationship with any company referred to in this report; and (3) to the extent permitted under applicable law, have acted upon or used the information contained or referred to in this report including effecting transactions for their own account in an investment (or related investment) in respect of any company referred to in this report, prior to or immediately following its publication. This report may not have been distributed to all recipients at the same time. This report is issued only for the information of and may only be distributed to professional investors and dealers in securities and must not be copied, published, reproduced or redistributed (in whole or in part) by any recipient for any purpose. This report is distributed in Hong Kong by SBI E2-Capital. Any recipient of this report who requires further information regarding any securities referred to in this report should contact the relevant office of SBI E2-Capital located in such recipient's home jurisdiction.

Copyright © SBI E2-Capital Financial Services Limited. All rights reserved.

---