

OVERWEIGHT

China oilfield equipment & services sector

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Riding on the oil market up-cycle

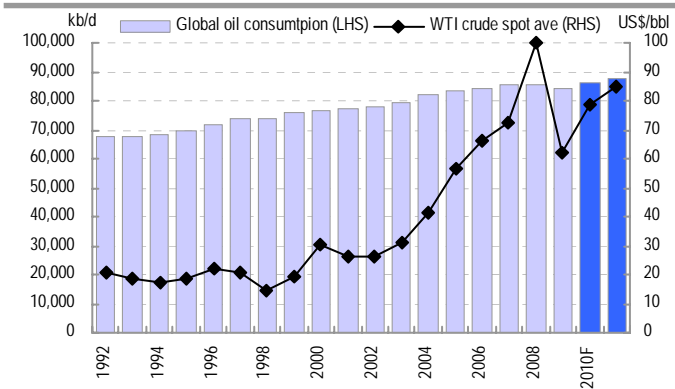
*In the face of global economic recovery and the easing monetary environment in the OECD countries, we are bullish over the crude oil price and global crude oil consumption. This in turn will drive global oil and gas (O&G) E&P spending higher and benefit the E&P equipment and service providers. We are particularly bullish on PRC-based E&P equipment and service companies as the Chinese NOCs will likely to spend more to boost their reserves in order to support their long-term production growth on the back of high oil price. As such, we assign an **OVERWEIGHT** rating to the sector. We believe offshore E&P will be a growth spot in 2011 and **TSC Offshore (206 HK)** is our top pick. We also believe natural gas (NG) transmission pipe makers will come back strongly in 2011 on the boom of national pipeline network construction. We maintain **BUY** on **Shengli Oil & Gas (1080 HK)**.*

- ◆ **High oil price encourages E&P spending.** We forecast crude oil price to hover above US\$80/bbl in 2011 as long as the greenback remains weak. Oil price should gain more support on better-than-expected global consumption, mainly driven by the emerging markets. Recently, IEA has raised the 2010 global oil consumption growth forecast by 0.2mb/d to 2.3mb/d.
- ◆ **Aggressive O&G E&P spending by Chinese NOCs.** Given the recovery of global economy and the crude oil market, **PetroChina (857 HK)** and **CNOOC (883 HK)** had already budgeted a higher E&P capex for 2010. Owing to their low reserves-to-production (R/P) ratios, the Chinese NOCs are eager to build up their oil reserves via both foreign acquisitions and organic growth.
- ◆ **Offshore O&G E&P capex to grow faster under the 12th Five-year Plan.** We believe the growth of offshore E&P capex will be greater than that of onshore as China's offshore resources are deeply under-developed. Compared to RMB120bn capex for offshore oil and gas E&P during the 11th Five-year Plan period, it is expected that the 12th Five-year Plan would substantially boost the capex to RMB250-300bn to double the offshore O&G production capacity by 2015.
- ◆ **China to enter NG pipeline construction boom from 2011.** Since the central government greatly encourages the usage of NG and the excess demand for NG in China, CNPC plans to double its total pipeline network to 100,000km by 2015 from current 50,000km. Therefore, we believe CNPC to resume its aggressive capex in national NG pipeline construction in 2011 and this should benefit the national steel pipe makers.
- ◆ **TSC Offshore is our top pick. Also positive on other local E&P equipments and services and O&G transmission pipes.** Most of the Hong Kong-listed E&P equipments and services and transmission pipe companies have attractive valuations, which have not yet reflected our positive sector outlook. TSC Offshore is our top pick as it will benefit from global recovery in E&P capex and the forthcoming 12th Five-year Plan. We also like **China Oilfield Services (COSL) (2883 HK)**, **Anton Oilfield Services (3337 HK)**, **Chu Kong Petroleum and Natural Gas Steel Pipe (1938 HK)** and **Shengli Oil & Gas Pipe**.

High oil prices encourage E&P spending

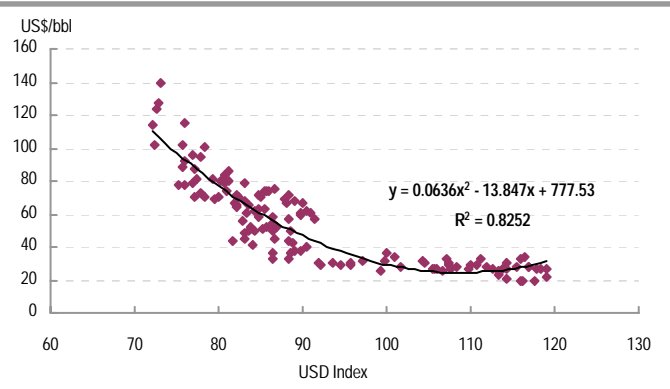
High oil price encourages E&P spending. We forecast crude oil price to trend higher in 2011, largely driven by the recovery in global oil demand, lower OECD inventory and US dollar depreciation. Recently, IEA has raised the 2010 global oil consumption growth forecast by 0.2mb/d to 2.3mb/d. We also expect US dollar to remain weak in 2011 as the Federal Reserve will maintain its loose monetary policies (low interest rate and increase money supply) to keep the greenback at a relatively low level. Based on the short-term forecasts of EIA, crude oil price would head to US\$85.2/bbl in 2011, up 8% or US\$6.4/bbl yoy. Based on our regression model compiled on monthly data from Jan2000 to Nov2010 (refer to figure 2), the theoretical oil price would hit US\$96.8/bbl if the independent variable — US Dollar Index, stands at 75. On the backdrop of high oil price, oil companies' E&P activities will increase and likely add E&P spending in 2011 and this would benefit the O&G equipment and service providers.

Figure 1: Higher oil consumption and price in 2011



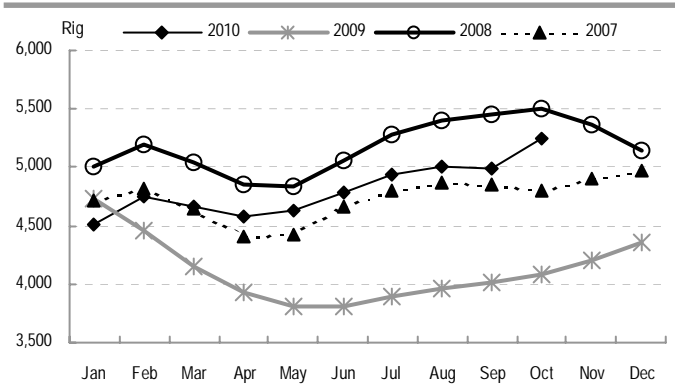
Source: BP Statistical Review and EIA

Figure 2: Strong correlation between oil price and USD



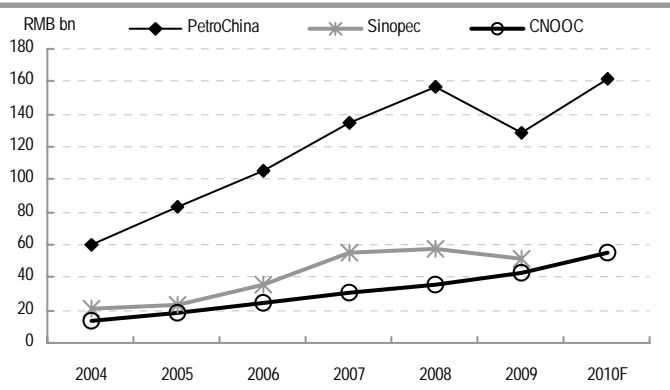
Source: Bloomberg and Core Pacific-Yamaichi

Figure 3: Worldwide active rig count rebounded in 10M10



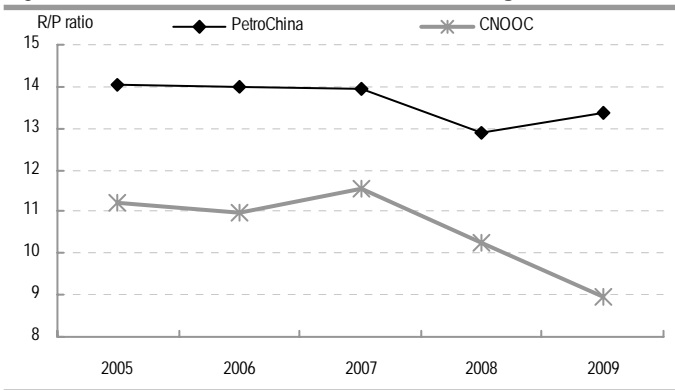
Source: Schlumberger

Figure 4: E&P capex for Chinese NOCs would rebound from 2009 trough



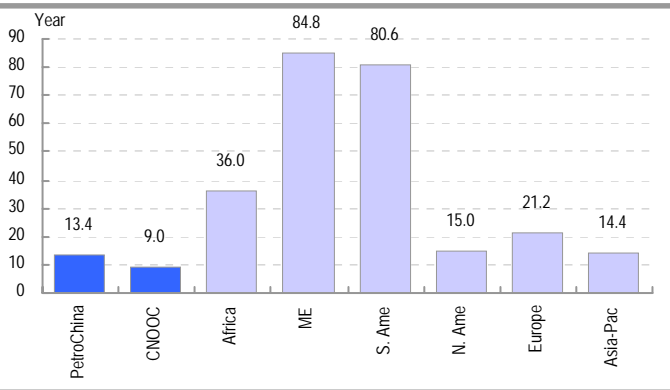
Source: respective companies

Figure 5: PRC NOC's reserves were declining



Source: respective companies

Figure 6: PRC NOCs' oil R/P ratios were low (end-2009)



Source: respective companies, BP

Higher O&G E&P and pipeline capex in China in 2011

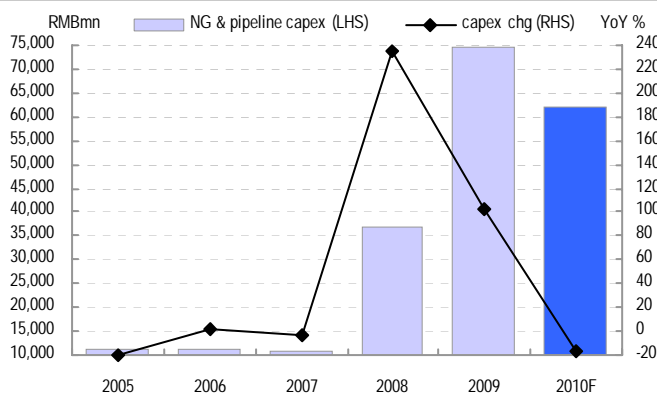
Aggressive O&G E&P spending by Chinese NOCs. Given the recovery of global economy and the crude oil market, PetroChina and CNOOC had already budgeted a higher E&P capex for 2010 (figure 4). Owing to their low R/P ratios, the Chinese NOCs are eager to build up their oil reserves via both foreign acquisitions and organic growth. As such, China-based E&P equipments and services companies are likely to have greater chance to win orders from the Chinese NOCs.

Offshore O&G E&P capex to grow faster under the 12th Five-year Plan. We believe the growth of offshore E&P capex will be greater than that of onshore as only ~12% of offshore crude reserve and ~11% of offshore gas reserve have been discovered in China, far below the world's average of 73% and 60.5% respectively. Compared to RMB120bn capex for offshore oil and gas E&P during the 11th Five-year Plan period, the "Offshore Engineering Equipment Development Plan during the 12th Five-year Plan" aims to boost the capex to RMB250-300bn for building 2-3 deepwater oil and gas fields to boost offshore O&G production capacity from current 50mn tons to 100mn tons by 2015. The 12th Five-Year Plan has also proposed to develop seven key emerging industries, of which ocean engineering equipment is under the category of "high-end equipment manufacturing industry".

Pipeline capex in China would rebound in 2011. Given CNPC's dominant position in China's pipeline market, the decline in capex for pipeline construction has substantial impact on the pipeline industry. In order to help reduce CO₂ emission by 40-45% in 2020 from 2005 levels, the central government targets to boost the NG consumption to 8.3% of total energy consumption in 2015 from current 3.9% and only 2.8% in 2005. To attain this national target, CNPC plans to double its pipeline network to 100,000km by 2015 from 50,000km (which accounted for 70% of China's crude oil pipelines, 90% of its gas pipelines and 50% of its fuel pipelines) at end-2009. Therefore, we believe CNPC to resume its aggressive capex in national NG pipeline construction in 2011 and this should benefit the national steel pipe makers. A number of new major trunk lines including West-East Pipelines III, IV and Shaanxi-Beijing Pipeline IV will enter into construction in 2011-12.

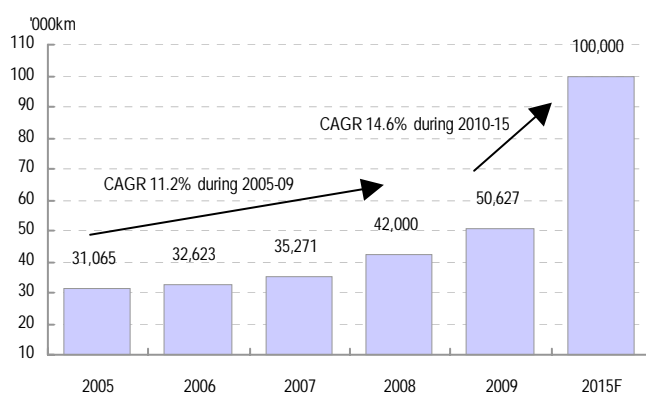
Signs of improvement in pipeline market. Starting from 4Q10, we have already witnessed some signs of recovery for trunk-line construction in the domestic market with the start-up of the China section of the China-Myanmar pipelines in September. Also, the construction of Shaanxi-Beijing Pipeline III, which was suspended in 1H10 by the Ministry of Environmental Protection, is being expedited to target a start-up by the end of 2010.

Figure 7: PetroChina's capex in pipeline construction



Source: company data

Figure 8: CNPC's historical and future pipeline length



Source: company data

Bullish on E&P equipments & services plays; Positive on O&G transmission pipes

COSL – benefit from parent's aggressive capex in offshore. To keep up with its rapid production growth, CNOOC is keen to boost its reserves and E&P capex is likely to rise again in 2011 following the 29.5% increase in 2010. China Oilfield Services (COSL) should be able to satisfy its parent's need of increasing E&P activities as COSL has expanded its offshore drilling fleets this year. The first of COSL's three new semi-sub, COSL Pioneer, was delivered in Oct2010 and is expected to win a drill contract in late 2010 or early 2011. Besides the drilling fleet expansion, we also expect the offshore dayrate to rise further in 2011 and this will expand COSL's margin substantially.

TSC Offshore (206 HK) – a recovery play in global and China offshore E&P industry. With its global network, competitive product pricing and high product quality, we believe TSC Offshore is poised to rebound strongly in 2011 on the resumption of global offshore E&P investment. South America (mainly Brazil) would be one of the huge offshore E&P spending countries in 2011 as Petrobras has already opened the bid packages for 28 ultra-deepwater rigs, which should be delivered from 2013 to 2018. In addition, we expect TSC to receive government policy support and high priority of receiving domestic offshore rig equipment orders under the 12th Five-year Plan. We have a **BUY** rating and TP of HK\$2.33 on the counter.

Anton Oilfield Services (3337 HK) – a proxy of CNPC's surging O&G E&P capex. With >70% revenue generated from CNPC Group (including PetroChina), we expect Anton Oilfield Services to benefit. As the difficulties of exploring and developing onshore O&G wells are increasing, demand for Anton's high-end oilfield services, including drilling, downhole operation and well completion, will soar in 2011. Moreover, PetroChina plans to boost its NG output substantially to 120bn m³ by 2015 from 75bn m³ in 2009. Such NG investment boom should benefit Anton, whose ~70% is derived from Chinese NOCs' NG E&P activities. We also expect the higher land dayrate to benefit Anton as well.

Shengli (1080 HK) and Chu Kong Pipe (1938 HK) – strong comeback in 2011 pipeline construction boom in China. Hit by the delay of national pipeline construction, Shengli and Chu Kong Pipe experienced a disastrous year in 2010. Nevertheless, we expect CNPC to expedite its national pipeline construction projects in 2011 in order to meet the strong downstream demand for NG and central government's target of increasing the NG consumption weighting. Therefore, we believe Shengli, which is the largest SSAW pipe maker in China, and Chu Kong Pipe, which is the largest LSAW pipe producer in China, will recover strongly in 2011. Although we slash our FY10/11/12 profit forecasts by 31/16/13% after its 2H10 profit warning, we maintain **BUY** on the counter with 12-TP cutting from HK\$2.2 to HK\$1.92. Nevertheless, we believe there is lack of upside catalyst in the next few months; investors need to be patient.

Table 1: Peer valuation comparisons (as at 30 November 2010)

Company	Bloomberg code	Closing (HK\$)	Mkt cap (HK\$mn)	PER (x)			PBR (x)			Yield (%)		PEG (x)
				09	10F	11F	09	10F	11F	10F	11F	
O&G E&P equipments & services												
TSC Offshore Group	206 HK	1.59	1,079	Na	12.9	8.9	1.0	0.9	0.8	0.0	0.0	0.3
China Oilfield Services	2883 HK	14.20	97,546	12.8	13.9	12.8	2.7	2.5	2.2	1.2	1.4	1.3
Honghua Group	196 HK	1.21	3,901	Na	103.9	20.8	1.0	0.9	0.9	0.6	0.9	0.5
Anton Oilfield	3337 HK	0.77	1,612	27.6	8.9	8.9	1.0	1.0	1.0	3.1	5.2	0.9
Shandong Molong	568 HK	9.45	7,520	10.7	8.6	6.9	2.3	1.4	1.2	1.4	1.6	0.4
Anhui Tianda Oil Pipe	839 HK	3.33	2,703	12.9	11.4	5.6	1.7	1.6	1.3	2.0	2.9	0.2
Sub-average				16.0	26.6	10.7	1.6	1.4	1.2	1.4	2.0	0.6
O&G transmission pipe												
Shengli Oil&Gas Pipe	1080 HK	1.57	3,909	4.5	9.7	6.5	1.9	1.7	1.4	2.1	3.9	0.2
Chu Kong Petroleum	1938 HK	3.17	3,205	12.0	9.5	7.5	3.7	1.4	1.3	1.8	2.9	1.0
Sub-average				8.2	9.6	7.0	2.8	1.6	1.3	1.9	3.4	0.6

Source: Bloomberg and Core Pacific-Yamaichi estimates (for TSC Offshore and Shengli Pipe)