

2018年5月8日

买入  
维持

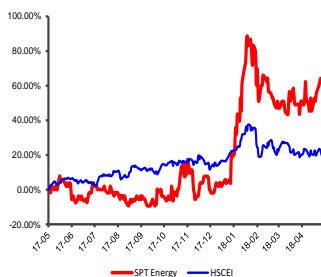
## 气势如虹

### SPT Energy Group (1251 HK)

#### Market Data: 7 May 2018

Closing Price (HK\$)	0.83
Price Target (HK\$)	1.49
HSCEI	11,967
HSCCI	4,503
52-week High/Low (HK\$)	1.05/0.48
Market Cap (RMB Mn)	1028
Market Cap (HK\$ Mn)	1275
Shares Outstanding (Mn)	1535
Exchange Rate (RMB-HK\$)	1.24

#### Price Performance Chart:



Source: Bloomberg

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#### Related Reports

"SPT Energy Group (1251:HK) –sharing the good time" 27 April 2018

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#### Financial summary and valuation

	2016	2017	2018E	2019E	2020E
Revenue (Rmbm)	818	1,137	1,604	2,275	2,770
YOY (%)	-22.84	39.01	41.02	41.86	21.74
Net income (Rmbm)	-292	6	120	220	299
YOY (%)	-	-	2,058.89	84.18	35.80
EPS (Rmb)	-0.19	0.00	0.06	0.12	0.16
Diluted EPS (Rmb)	-0.19	0.00	0.06	0.12	0.16
ROE (%)	-31.08	0.33	9.50	14.89	16.81
Debt/asset (%)	50.86	50.84	41.79	42.34	37.54
Dividend Yield (%)	-	-	-	-	-
P/E (x)	-	192.10	10.68	5.80	4.27
P/B (x)	1.16	1.21	1.02	0.87	0.72
EV/EBITDA (x)	-	14.17	7.17	4.79	3.80

华油能源集团是一家中国民营的综合油田服务企业，提供一系列油气开发方案与技术，服务领域涵盖钻井、完井和油藏检测与维护等板块。17年公司实现收入人民币11.4亿元（同比增长39%），录得净利润人民币550万元；油藏服务的收入占比达56%，钻井服务为29%，完井服务为15%。受油价强势复苏、中国天然气市场快速发展和公司战略升级等利好因素推动，华油未来增长潜力巨大，我们对公司未来发展保持乐观。我们维持18/19/20年稀释后每股收益预测为人民币0.06/0.12/0.16元。我们维持目标价1.49港元，对应18/19年20.0/10.0倍PE。现价距目标价有80%上行空间，维持买入评级。

**油价强势复苏。**自17年6月OPEC减产延期协议签订以来，全球钻机数不断回升，布伦特原油远期价格于同年10月再一次站上60美元/桶。受OPEC成员国减产执行率不断提升，叠加中东地缘政治风险加剧的影响，布伦特原油远期价格在18年保持强劲，自14年油价暴跌以来首次触及75美元/桶。在油价强势复苏的大背景下，我们强调上游油服企业华油能源的订单流和经营业绩将持续改善。

**天然气市场快速发展。**在中国政府的大力支持和下游需求急剧扩张的拉动下，中国天然气市场实现快速发展，华油能源是主要受益者之一。相比于其主要竞争对手安东油田服务（3337:HK-买入）80%的天然气业务国内比重，华油能源近100%的国内收入来自天然气相关业务，17年国内业务的收入占比达58%。在反向路演中，华油能源管理层给予收入指引，预计19年地下储气库相关业务将带来人民币2-3亿元的收入。在2亿元收入增量和40%毛利率的保守假设下，19年收入和净利润预测分别提振了10.2%和24.2%。

**战略升级。**华油能源实现战略重心转移，转向以技术为导向、轻资产的商业模式，旨在提振公司运营和财务灵活性的同时提供高附加值。战略升级显著改善了公司的运营效率。总资产周转率由15年12月的0.35上升至17年12月的0.56，固定资产周转率由1.82上升至3.07。假设当下行业景气周期的净利润率和财务杠杆达到前一次景气周期水平，资产周转率的改善将进一步提振公司的业绩弹性。

**维持买入。**受油价强势复苏、中国天然气市场快速发展和公司战略升级等利好因素推动，华油未来增长潜力巨大，我们对公司未来发展保持乐观。我们维持18/19/20年稀释后每股收益预测为人民币0.06/0.12/0.16元。我们维持目标价1.49港元，对应18/19年20.0/10.0倍PE。现价距目标价有80%上行空间，维持买入评级。

SPT Energy Group is a Chinese private oil & gas services company, with a comprehensive portfolio of products and services, ranging from drilling and well completion to reservoir monitoring and maintenance services. SPT Energy Group reported full-year 2017 revenue of Rmb1.1bn (39% YoY) and net profit of Rmb5.5m. Reservoir services accounted for 56% of its revenue, while drilling services represented 29% and well completion services, 15%. We are positive on the firm's growth outlook on the back of recovering oil prices, China rapid natural gas development and strategic shift. We maintain our diluted EPS forecasts at Rmb0.06 in 18E, Rmb0.12 in 19E (+100% YoY) and Rmb0.16 in 20E (+6.7% YoY). We maintain our target price at HK\$1.49, representing 20.0x 18E PE and 10.0x 19E PE. With 80% upside, we maintain our BUY rating.

**Oil price recovery.** After declining for two years, Brent futures arrived at US\$60/bbl at end-October 2017, catching the uptrend of global rotary rig count. As Organization of Petroleum Exporting Countries (OPEC) members adhered to a tight supply schedule, Brent futures have remained strong, above US\$60/bbl, since the beginning of the year, topping US\$75/bbl for the first time since 2014, amid growing tensions in the Middle East. We highlight improving order flow and operational performance for upstream oil and gas services businesses such as SPT Energy.

**China rapid natural gas development.** The China market contributed over half of SPT's revenue in 2017. We highlight rapid growth in the natural gas market in China, with strong support from the Chinese government, and sharp growth in downstream demand. Nearly 100% of SPT's domestic revenue comes from gas-related business, vs 80% for Anton Oilfield Services Group (3337:HK – BUY), making SPT the key beneficiary of the current rapid natural gas development. In the reverse roadshow, SPT management guided revenue from underground gas storage tanks in 19E of Rmb200m-300m. A conservative assumption of Rmb200m in revenue will boost our 19E revenue forecast by 10.2%; such a revenue at a conservative 40% gross margin would increase our 19E net profit forecast by 24.2%.

**Strategic shift.** SPT shifted towards technology-oriented and asset-light business model that provides the company with increasing operating and financial flexibility, as well as high value-added, which facilitates order inflow, improving asset efficiency. As a result, total asset turnover increased from 0.35 in December 2015 to 0.56 in December 2017, while fixed-asset turnover rose from 1.82 to 3.07 over the same period. Assuming the same profit margin and financial leverage as during the previous oil price uptrend, an improvement in asset turnover will push up the firm's profitability.

**Maintain BUY.** We are positive on the firm's growth outlook on the back of recovering oil prices, strategic shift, and China rapid natural gas development. We maintain our diluted EPS forecasts at Rmb0.06 in 18E, Rmb0.12 in 19E (+100% YoY) and Rmb0.16 in 20E (+6.7% YoY). We maintain our target price at HK\$1.49 (20.0x 18E PE and 10.0x 19E PE). With 80% upside, we maintain our BUY rating.

## SPT Energy at a glance

SPT Energy Group is a Chinese private oil & gas service company. Over the past decade, the firm has developed a comprehensive portfolio of products and services covering the entire process of oilfield development as shown in figure 1. Its service and products can be divided into the following three business lines:

**Drilling services:** mainly include the provision of vertical drilling, cementing, directional drilling, sidetracking, drilling fluids, FMPD, workover and other services. The service revenue comes from oil company’s Capex.

**Well completion services:** mainly include the provision of wellhead, completion string, sand control, acidising and fracturing services. The service revenue comes from oil company’s Capex.

**Reservoir services:** mainly include the provision of well testing, artificial lifting, dynamic monitoring, slickline operations, oilfield chemistry and reservoir research services. The service revenue comes from oil companies’ routine operating expenditures.

Fig 1: The process of oilfield development



Source: Company website, SWS Research

SPT is one of the few non-state-owned providers of oilfield services in China that has the capability to provide integrated oilfield services ranging from drilling to production. Its technical strength lies in well completion services. According to Spears and Associate, SPT completed the largest number of high-end and technically challenging wells in the Tarim Oilfield where well development is notoriously difficult, and holds the largest market share, of approximately 75% of the high-end well completion market.

Fig 2: Business comparison between Non-state-owned oilfield service providers

	SPT Energy	Anton	Jereh	Honghua	Hilong
Well logging	✓	✗	✓	✗	✗
Drilling	✓	✓	✓	✓	✓
Downhole Operation	✓	✓	✓ Advantages	✗	✗
Well completion	✓ Advantages	✓	✓	✗	✗
Oil recovery & Workover (Stable workload)	✓	✓	✓	✗	Only workover
Integrated project (large workload)	✓	✓	✓	✗	✗

Source: Company website, SWS Research

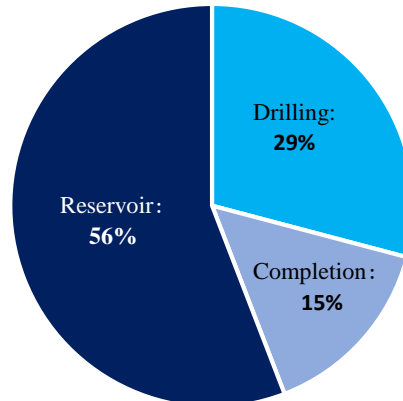
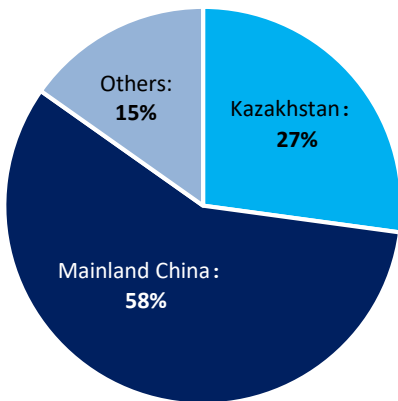
SPT generated 58% of its revenue from the domestic market in 2017. We view the company as the key beneficiary of China’s rapid natural gas development as we note that nearly 100% of its domestic revenue comes from gas-related businesses. Approximately 50% of domestic revenue is generated from the Tarim Oilfield in 2017 where deep and high temperature & pressure gas wells establish high entry barriers for SPT Energy’s potential competitors.

Kazakhstan is SPT’s largest overseas market. In 2017, 43% of the firm’s revenue was generated overseas, Kazakhstan alone accounting for 23% of total revenue. Approximately 50% of SPT’s revenue in Kazakhstan comes from oil-related businesses. According to Spears and Associate, SPT Energy has a market share of approximately 13% of the oilfield service market segments in Central Asia including Kazakhstan, Turkmenistan, Uzbekistan and Azerbaijan.

On the back of recovering oil prices, SPT reported full-year 2017 revenue of Rmb1.1bn (39% YoY) and net profit of Rmb5.5m. Reservoir services accounted for 56% of its revenue, while drilling services represented 29% and well completion services 15%.

Fig 3: Revenue breakdown by geographical area in 2017

Fig 4: Revenue breakdown by business segment in 2017



Source: Company data, SWS Research

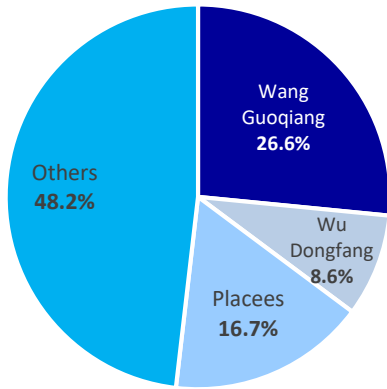
Source: Company data, SWS Research

On 26 April 2018, to satisfy increasing short-term project financing needs for advance payments against the backdrop of improving order inflow, SPT announced a plan to allot 307m shares to a maximum of six investors at a price of HK\$0.78, representing 20.0% of the firm’s share capital before the placement (16.7% after the issue). After completion, CEO Wang Guoqiang’s stake will be diluted by 16.6% to 26.56%, and Director Wu Dongfang’s shareholding will be diluted to 8.63% respectively.

According to Bloomberg, two major investors Greenwoods Asset Management will hold 6.5% after the placement and Fidelity China will hold 3.6% of total share capital. The weighted average cost of carry for Greenwoods Asset Management was HK\$1.95 and for Fidelity China, HK\$1.0. At current stock price levels, the firms have no foreseeable financial motivation to insist upon large position changes.

The firm issued US\$15m in convertible bonds in 2012 with a conversion price of HK\$1.69, accounting for 9.2% of the market capitalisation on 2 May 2018. The convertibles mature in 2018.

Fig 5: Ownership structure after placing



Source: Company data, SWS Research

Fig 6: Institutional investors' cost of carry

Greenwoods asset management	Holding Period	Position	Position Change	Average VWAP (HK\$)
	2012 Q3	71,126,000	71,126,000	1.53
	2012 Q4	88,126,000	17,000,000	2.95
	2013 Q2	93,514,000	5,388,000	4.18
	2013 Q4	90,718,000	(2,796,000)	4.55
	2014 Q1	22,450,000	(68,268,000)	4.55
	2014 Q4	120,062,000	97,612,000	1.95
<b>The average cost of carry (HK\$)</b>				<b>1.95</b>

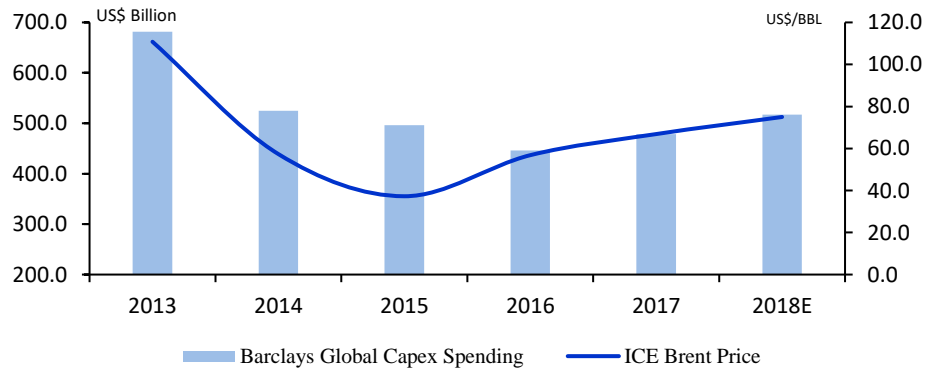
Fidelity China	Holding Period	Position	Position Change	Average VWAP(HK\$)
	2013 Q1	29,288,000	29,288,000	3.63
	2014 Q1	0	(29,288,000)	4.55
	2015 Q1	33,062,000	33,062,000	1.42
	2016 Q1	57,358,000	24,296,000	0.61
	2017 Q1	66,174,000	8,816,000	0.73
<b>The average cost of carry (HK\$)</b>				<b>1.00</b>

Source: Bloomberg

## Strengthened oil price support

SPT's drilling and well completion services revenue come from oil companies' Capex. Oil price is one of the main triggers of Capex changes. We note global Capex peaked as oil prices were at record-high levels in 2013, while plummeting sharply when oil prices tumbled in 2014-15. As such, we reiterate that the current oil price recovery is the growth catalyst for SPT.

Fig 7: Global capex and oil price



Source: SWS Research

Fig 8: The impact of oil price recovery on oilfield service firms

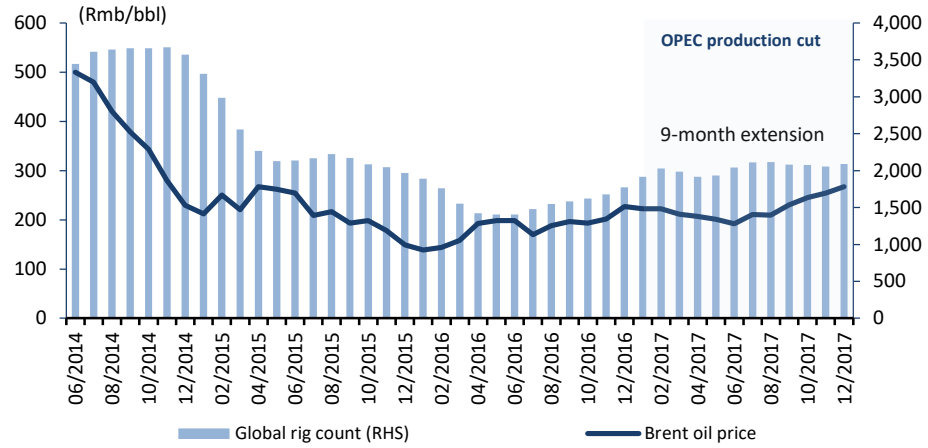


Source: SWS Research

**Strong and sustainable oil price recovery**

Oil price recovery accelerated in late-2017 after the Organisation of the Petroleum Exporting Countries (OPEC) extended its production cut pact. After declining for two years, Brent futures arrived at US\$60/bbl in end-October 2017, catching the uptrend of global rotary rig count. As Organization of Petroleum Exporting Countries (OPEC) members adhered to a tight supply schedule, Brent futures have remained strong above US\$60/bbl since the beginning of the year, topping US\$75/bbl for the first time since 2014, amid growing tensions in Middle East.

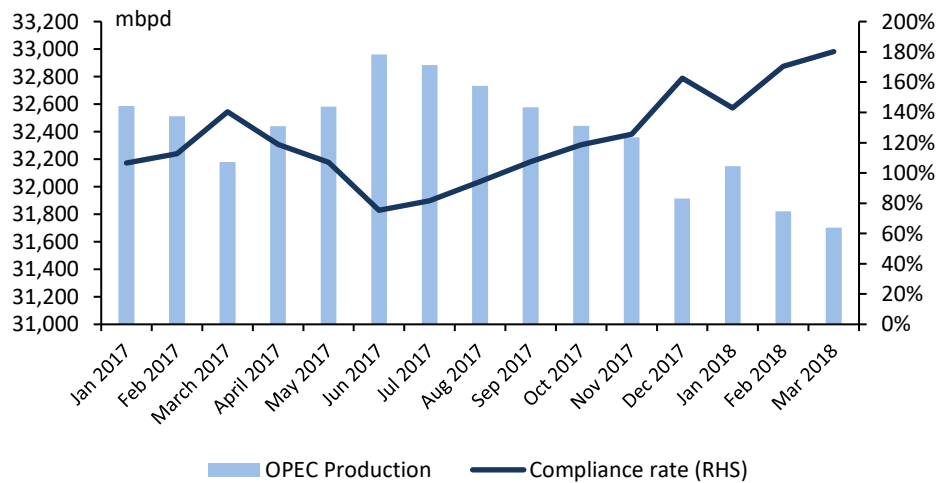
**Fig 9: Recovery in Brent oil price and worldwide rig account**



Source: Baker & Hughes, Wind, SWS Research

OPEC countries account for 40.5% of the global oil supply. To support oil prices, which OPEC economies heavily rely on, 11 of the 13 active OPEC members signed a production cut pact in October 2016, and agreed to extend the pact to mid-2018 in June 2017 and to end-2018 in November 2017. After the first extension was signed in June 2017, driven by Saudi Arabia's (31% of total OPEC production) pursuit of high IPO valuation for its NOC Aramco and other OPEC countries' resolve to stabilise their economies, the compliance rate towards the 1.2mmbpd production cut target increased from 75% in June 2017 to record high 180% in March 2018. As Aramco will not get listed before 2019 and it will take time for oil-dependent economies to recover, we expect OPEC's crude oil supply to remain tight in the long term, thus supporting continued oil price recovery.

**Fig 10: OPEC production and compliance rate**

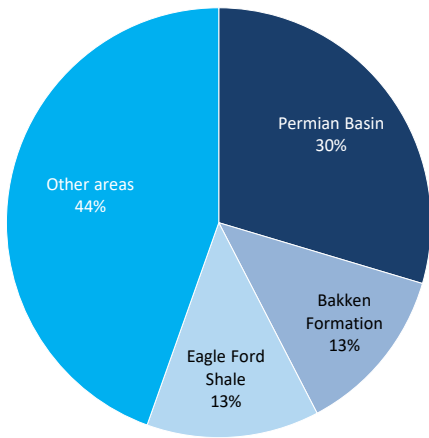


Source: OPEC, SWS Research

It is widely believed that fast-growing US shale oil supply will compensate the decrease in OPEC production to a large extent, relieving the upward pressure OPEC’s production-cut scheme exerts on oil prices. We doubt the extent of potential suppressions on current oil price recovery.

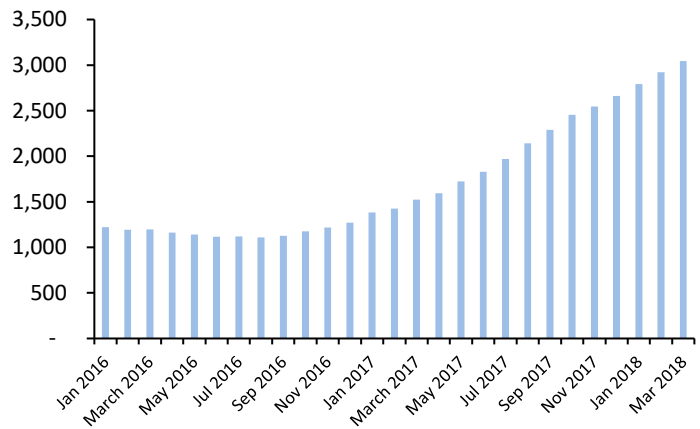
In the Permian Basin, which accounts for 30% of US total crude oil production and is the country’s largest shale oil production region, Reuters reported that there was a shortage of fracturing crews and equipment against the backdrop of increasing production activities. As fracturing is an integral part of well completion which is the key process before production, the bottleneck leads to continued growth in the number of drilled but uncompleted (DUC) wells, suppressing Permian production growth rate to under 3% since the oil price pickup in June 2017 (1H17 average: 6%). As it normally takes nine months to get a drilling rig or fracturing equipment ready for production due to licensing requirements, the fracturing bottleneck cannot be solved in the short-term, posting threats to the sustainability of future production growth. A 40%-plus natural decline rate of existing shale wells in the first year of production is another inherent threat to production growth we cannot ignore.

Fig 11: US Crude oil production breakdown



Source: EIA, SWS Research

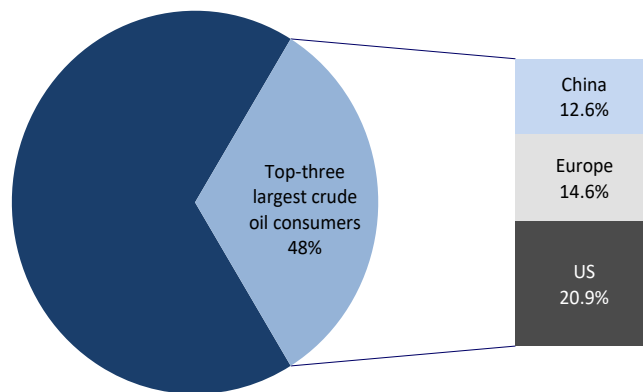
Fig 12: The number of DUC Wells in Permian Region



Source: EIA, SWS Research

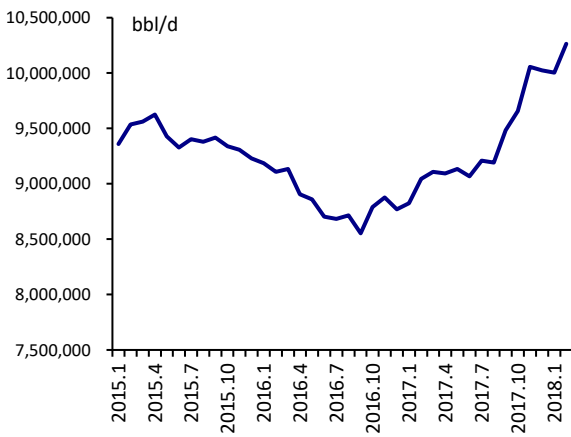
Stronger-than-expected US economic growth boosts crude oil demand, further weakening the influence of fast-growing US shale oil supply on global oil prices. We note that the US is one of the main consumers of crude oil and related products, accounting for 20.9% of the world’s total crude oil consumed in 2016, vs 14.6% for Europe and 12.6% for China. After a weak first quarter in 2017, the US beat GDP growth consensus in the following two quarters, while being in line with market consensus in 4Q17. Stronger-than-expected US economic growth drives up crude oil demand. We note that although US field crude oil production continues to grow since 2Q17, commercial crude oil inventories gradually decrease during the same period.

Fig 13: Global demand breakdown in 2016



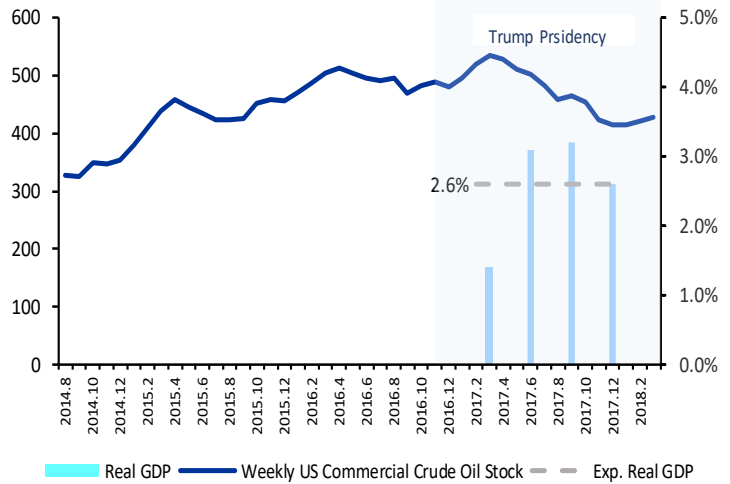
Source: OPEC, SWS Research

Fig 14: U.S. Field Production of Crude Oil



Source: EIA, SWS Research

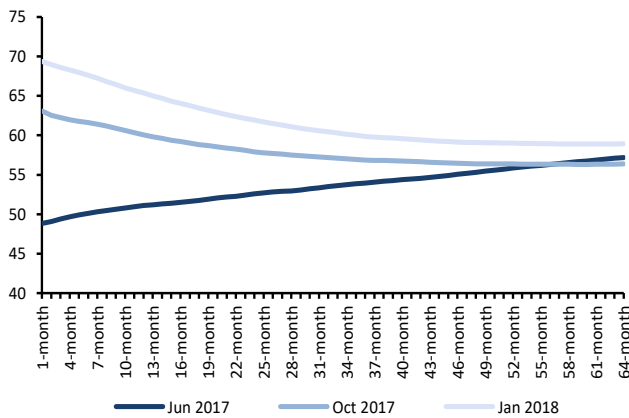
Fig 15: US GDP growth and crude oil inventories



Source: EIA, SWS Research

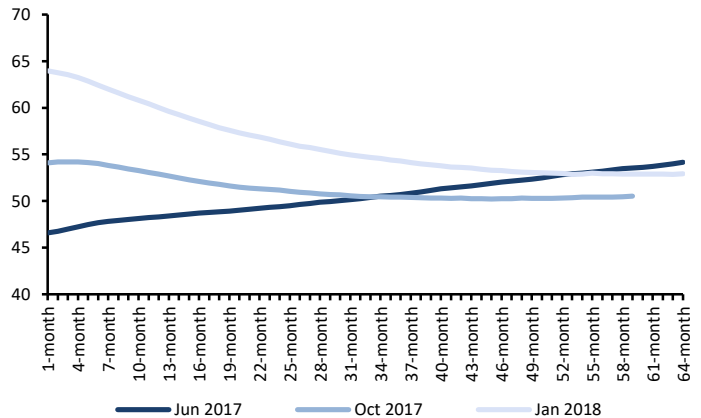
Besides US, global crude oil demand is also flourishing. As shown in Figure 16 and Figure 17, there is a change in shape of the forward curve of ICE Brent and WTI crude oil futures contracts, a change from contango, where longer-dated futures are traded at a higher price than shorter-dated contracts, in June 2017 to backwardation, where longer-dated futures are exchanged at a lower price than shorter-dated contracts, in January 2018. We attribute this change to the oil spot price rally of 2H17 and the growing short-term demand for crude oil, which further weighs on fast-growing US shale oil supply.

Fig 16: ICE Brent forward curve



Source: Bloomberg, SWS Research

Fig 17: WTI forward curve



Source: Bloomberg, SWS Research

According to a survey conducted by Reuters in January 2018, based on responses from over 1,000 oil & gas professionals, Brent prices are expected to average US\$65/bbl in 2018F. Backed by increasing geopolitical concerns and the strong commitment from Opec members to complying with production cuts, the price recovery is expected to be strong and sustainable. We highlight improving order flow and operational performance for upstream oil and gas services businesses such as SPT.

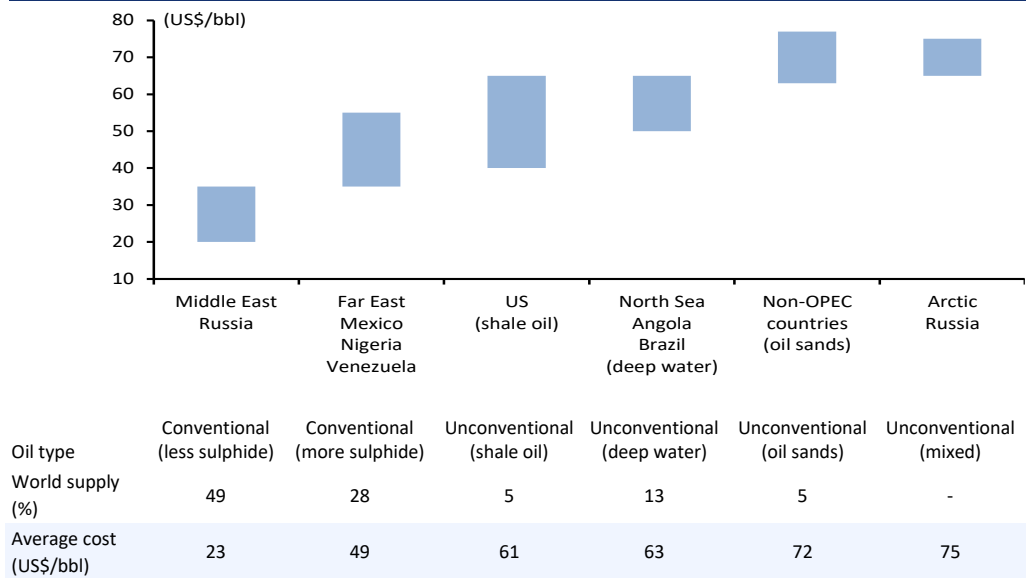
**Sustainable global Capex recovery**

Global oil companies' Capex entered an upcycle following the strong oil price recovery experienced since 2016. Barclays' global E&P spending survey index climbed 7% YoY in 2017, increasing for the first time since the 2014 oil price collapse, while Barclays forecasts global Capex to grow 8% YoY in 2018F.

We believe the current Capex recovery cycle is different from the previous one. Thanks to technological advances, the global breakeven price for crude oil production has fallen. We estimate the global marginal cost of production to determine the price at which most oil companies would break even when producing an extra barrel of crude oil through Capex increase in the current oil upward cycle. We exclude the Middle East and Russia from our calculation as their Capex decisions are largely independent of oil price changes due to very low production costs (US\$20-30/bbl). As such, we calculate a global supply-weighted average marginal cost of production of US\$56/bbl, which is low than US\$70/bbl of previous cycle.

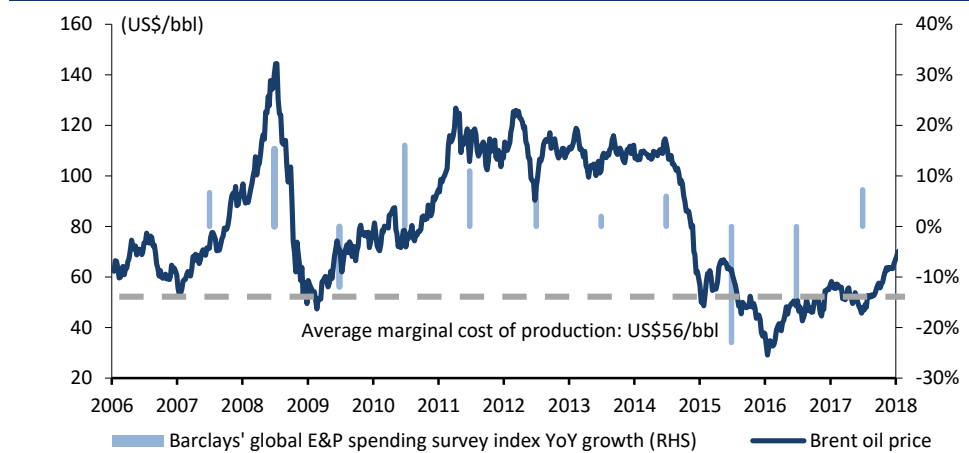
We note global Capex picked up in 2017, after two consecutive years of contraction, as Brent oil price exceeded the US\$56/bbl threshold. Given the long-term market view of US\$65/bbl, as reported by Reuters, we believe the Capex recovery will be sustainable. Under sustainable capex recovery, we highlight improving order flow and operational performance for upstream oil and gas services businesses such as SPT Energy.

**Fig 18: Crude oil production cost range by geographical area in 2016**



Source: EOG resources, PIRA, SWS Research

**Fig 19: Brent oil price and global Capex growth**



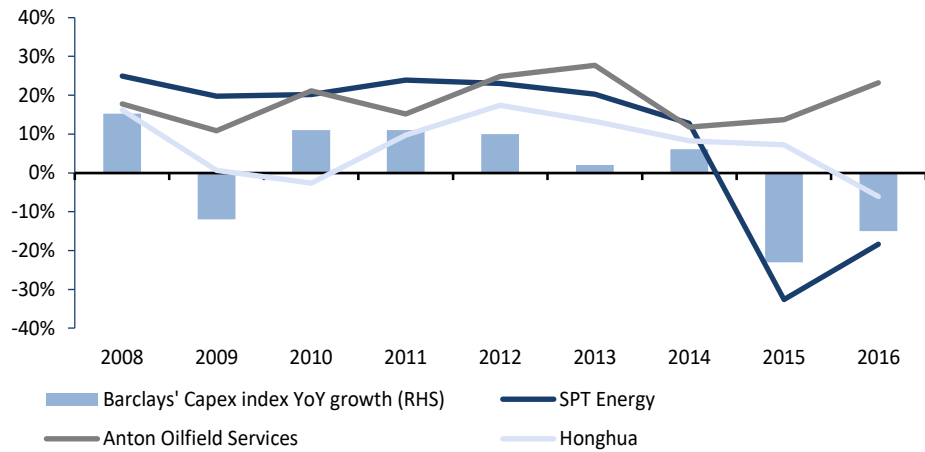
Source: Wind, Barclays, SWS Research

**Sensitive to market recovery**

Historically, Capex recovery leads to improving fundamentals, particularly profitability, for upstream oil & gas services companies. We note SPT's and Anton Oilfield Services Group's (3337:HK – BUY) Ebitda margin swiftly picked up as Capex recovered in 2010-14, supported by high oil prices. By contrast, oil & gas equipment manufacturer Honghua Group's (196:HK – Outperform) profitability only picked up in 2011. As one of the first destinations for upstream Capex during an upcycle tends to be oilfield services, and investment in new equipment typically occurs after idle capacity is fully utilised, services providers generally show a more rapid response to oil price recovery and Capex growth than equipment providers.

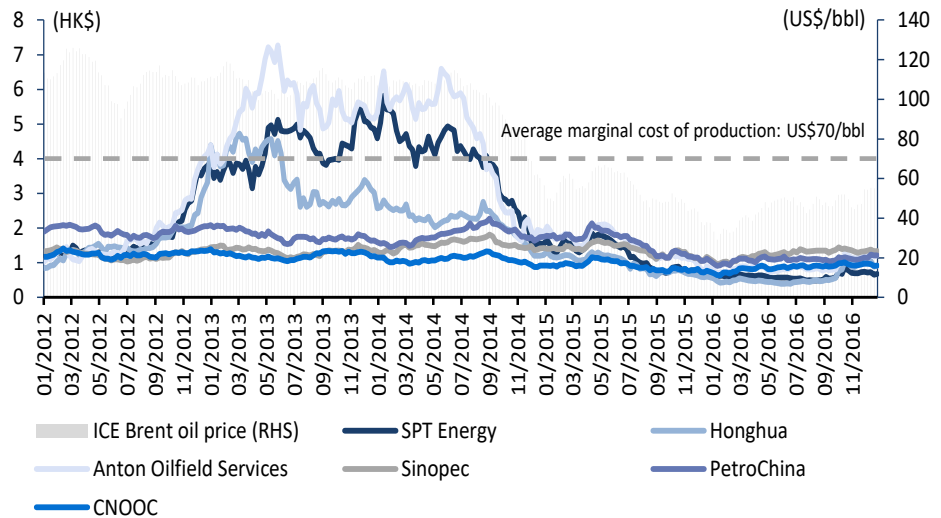
In terms of share price performance, we note upstream oil & gas services providers are more sensitive to oil price changes than upstream equipment manufacturers, like Honghua, and E&P companies, such as PetroChina (857:HK – N-R), China Petroleum & Chemical Corporation (Sinopec; 386:HK – N-R) and CNOOC (883:HK – N-R). Hence, during the 2011-14 oil price boom, oil & gas services firms such as SPT and Anton experienced stronger share price performance.

**Fig 20: Ebitda margin of China's upstream oil & gas services companies**



Source: Wind, SWS Research

**Fig 21: Share price performance of upstream oil & gas companies, 2012-16**



Source: Bloomberg, SWS Research

**Scenario analysis**

Top line drilling service and completion service revenue come from oil companies' Capex, which is liable to significant impact by oil price changes. The correlation between drilling service revenue and Brent oil price during 2011-2017 reached 0.55 (R<sup>2</sup>=0.3), while the correlation between drilling service revenue and Brent oil price during 2011-2017 reached 0.62 (R<sup>2</sup>=0.4). We ran several scenarios to explore the effect of oil price changes on SPT, from top to bottom line.

**Bull case:** As OPEC members adhere to a tight supply schedule, further propped by increasing concerns about geopolitical risks in Middle East, Brent oil prices average US\$65-plus/bbl in 18E. Assuming soaring oil prices, we expect global Capex to increase at the same average growth rate as when oil prices exceeded US\$70/bbl during the previous upcycle (c.+15% YoY), triggering an upward Capex investment upcycle for upstream services firms.

**Base case:** Crude oil supply and demand maintain the price of oil between the Capex recovery threshold of US\$56/bbl and Reuters' survey forecast of US\$65/bbl. Under this scenario, we expect shale oil supply not to rise substantially given production bottlenecks and cost concerns (shale average cost of production: US\$61/bbl), thus supporting long-term stability of oil prices. Global Capex would increase steadily, at a rate of 8-10% YoY, in line with the market forecast given by Barclays.

**Bear case:** If OPEC decides to cancel the production cut pact or the global economy suffers from unexpected large shocks, the growing supply or weakened demand could drive oil prices below the Capex recovery threshold of US\$56/bbl. As a result, global Capex would contract, catching upstream services companies off guard, and thus likely driving down SPT's profitability.

Based on results of a regression run on SPT's Ebitda margin and global Capex growth, we note that under our bull scenario, SPT's profitability would significantly improve, reaching record-high levels, while under our base case scenario, SPT's profitability would recover to its average of 20.0% during the previous upcycle in 2011-14.

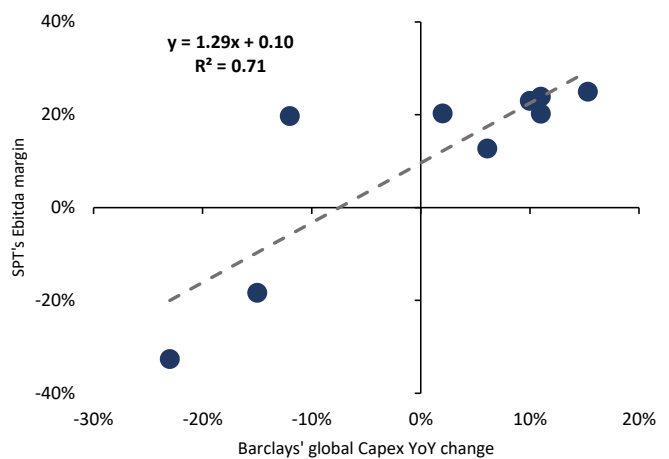
To date, we have not seen any signs of large economic slowdown or sudden increase in supply. Therefore, we believe the base case and bull case scenarios are more likely than the bear case scenario. We expect global Capex to grow moderately in 2018-19E, with a positive impact on SPT's fundamentals, improving SPT's drilling and completion service order inflow.

Fig 22: Sensitivity analysis

2018E	Brent oil price (US\$/bbl)	Global Capex growth (YoY)	Ebitda margin
Bull case	> 65	> 15%	> 29.4%
Base case	56-65	8-11%	20.3-24.2%
Bear case	< 56	< 0%	< 10%

Source: SWS Research

Fig 23: Regression between SPT's Ebitda margin and global Capex growth

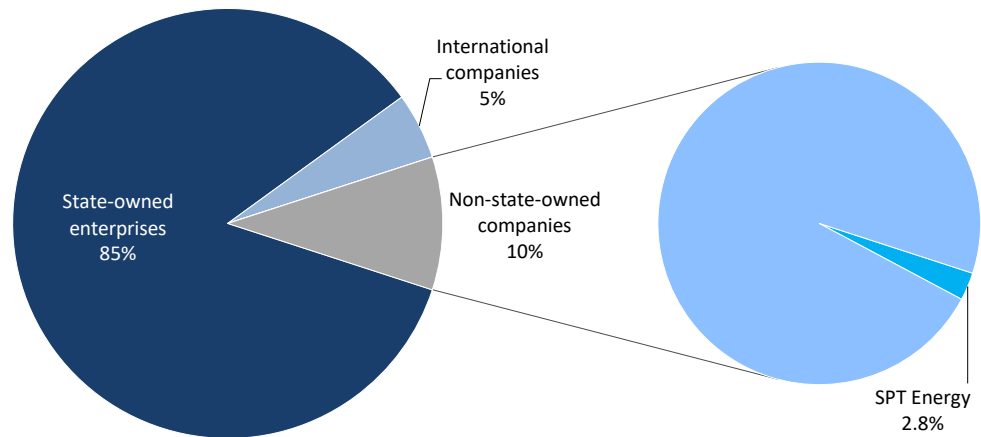


Source: Barclays, SWS Research

## China natural gas opportunities

In contrast to global markets, China’s upstream oil and gas market is dominated by state-owned enterprises (SOEs), while the government significantly influences national oil companies’ strategies. PetroChina (857:HK – N-R), China Petroleum & Chemical Corporation (Sinopec; 386:HK – N-R) and CNOOC (883:HK – N-R) are China’s three largest NOCs. According to a study from Peking University, the three SOEs account for 85% of China’s upstream oil & gas services market, with private companies occupying a 10% market share and international players representing the remaining 5%. We estimate SPT’s market share within the non-state-owned segment at 2.8%, and therefore estimate its share in the overall China market at 0.28%.

Fig 24: China’s upstream oil & gas services market breakdown



Source: Peking University Research Center, SWS Research

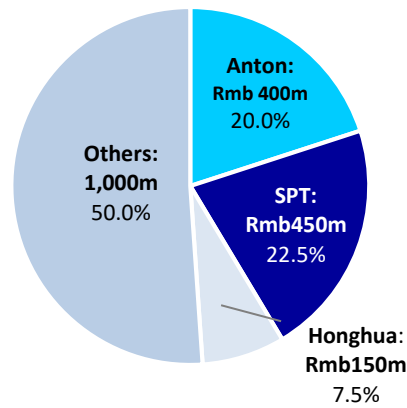
China market generated over half of SPT’s revenue in 2017. We highlight the rapid growth of the natural gas market in China, with strong support from the government and sharp growth in downstream demand. Nearly 100% of SPT Energy’s domestic revenue comes from gas-related businesses, compared to 80% for Anton, which makes SPT the key beneficiary of the current rapid natural gas development.

### Shale gas opportunities

Policymakers target total natural gas consumption of 360bn cubic metres by 2020, a 14.9% Cagr from 2017 levels, which is mainly supported by the ambitious Five-Year Energy Plan, targeting production of 30bcm of shale gas by 2020, a 44.2% Cagr from 2017 levels. Sinopec’s Fuling Shale Gas Region is assigned a 15bnm<sup>3</sup> production target. PetroChina’s Changning-Weiyuan Shale Gas Region is assigned a 10bnm<sup>3</sup> production target, while its 2017 production level was 2.5bnm<sup>3</sup> representing a 59% Cagr in the next three years. PetroChina plans to drill 300 new shale gas wells in 2018, representing a 196% YoY growth. The size of one well-construction contract on average amounts to Rmb50m. Therefore, the potential market size for upstream oilfield businesses in Changning-Weiyuan Shale Gas Region may reach Rmb15bn in 2018, representing more than 100% YoY growth.

As it is difficult for PetroChina to achieve such an ambitious goal on his own, PetroChina opened the turnkey project market in Changning-Weiyuan Shale Gas Region to non-SOEs such as SPT. Currently non-SOEs have secured contracts on 40 wells, equivalent to Rmb2bn in orders in-hand. Backed by its technical reputation and long-term relationship with PetroChina, SPT has taken a leading position in the non-SOE shale gas market. We expect it to book at least Rmb300m in 18E revenue. Assuming the ambitious 2020 target is met, we expect the overall non-SOE market could expand further in 19E and 20E, facilitating increasing order inflow for SPT.

Fig 25: Non-SOEs' Shale Gas In-hand Orders as of 2018.4



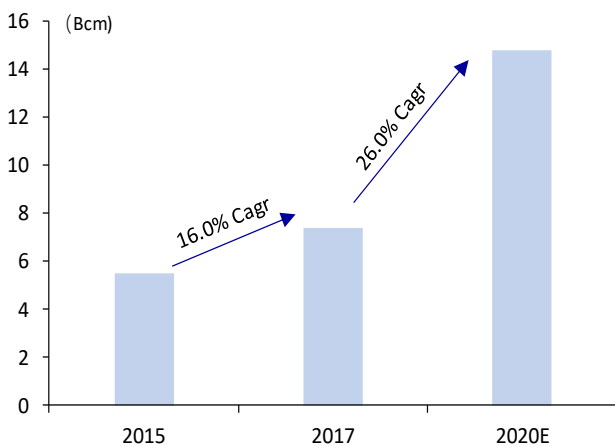
Source: Company data, SWS Research

### Underground storage tank opportunities

The national five-year plan for the energy industry calls for underground gas storage tanks' working gas volume to increase from 5.5bnm<sup>3</sup> in 2015 to 14.8bnm<sup>3</sup> in 2020, representing a 21.9% Cagr, which is the only binding target within the plan. Currently China has a total of 25 underground gas storage facilities with working gas volume of 7.4bnm<sup>3</sup> in 2017. Increasing the number of gas storage facilities is one way to substantially boost working gas volume. The underground gas storage tanks can be converted from either depleted oil-gas reservoirs or salt caverns. According to PetroChina's research, assuming no capacity constraints, the required investment for generating 1m<sup>3</sup> of working gas in oil-gas reservoir converted tanks is Rmb3.5-4, which will be even higher for salt cavern converted tanks due to geological complexities. To meet the binding target of 14.8bnm<sup>3</sup> by 2020, at least Rmb25.9bn of investment is needed for underground tank constructions in the coming three years, benefiting O&G service companies as drilling and well completion they provide is an important part of constructions.

To meet the binding target, the working gas volume of underground gas storage tanks will need to expand at a minimum Cagr of 26.0%, 10pts up from the first half of the 13th Five-Year Plan when non-SOEs' involvement in the construction of underground gas storage tanks was limited. Backed by government support as reiterated in the latest policy release, we expect non-SOEs to play a bigger role in future construction to sustain higher growth, benefiting market-leading non-SOE gas well service provider SPT.

Fig 26: working gas volume of underground gas storage tanks



Source: NDRC, SWS Research

Fig 27: Domestic underground gas storage tanks by 2017

Operator	Gas storage	Type	Amount
CNPC	Dagang	Oil-gas reservoir	6
	Jing58	Oil-gas reservoir	3
	Bannan	Oil-gas reservoir	2
	Suqiao	Oil-gas reservoir	5
	Jintan	Salt cavern	1
	Liuzhuang	Oil-gas reservoir	1
	Lamadian	Oil-gas reservoir	1
	Shuang6	Oil-gas reservoir	1
	Xiangguosi	Oil-gas reservoir	1
	Hutubi	Oil-gas reservoir	1
	Shan224	Oil-gas reservoir	1
SINOPEC	Jintan	Salt cavern	1
	Zhongyuanwen96	Oil-gas reservoir	1

Source: CNPC Website, SWS Research

SPT is expert in China gas well service, with nearly 100% of its domestic revenue coming from gas-related business, compared to 80% for Anton. Its technical strength lies in well-completion services. According to Spears & Associate, SPT Energy accounts for 75% of high-end well completion market share in Tarim Oilfield where geological challenges are immense with the depth of wells generally exceeding 5,000m, leading to average gross margin of 40% (the company average: 30%). Its major competitors are international O&G service conglomerates with strong technical backgrounds, such as Schlumberger (SLB:US – N-R) and Baker Hughes (BHGE:US – N-R).

SPT's strength matches the technical requirements for underground gas storage tank construction. The buried depth of China oil-gas reservoir and salt caverns reaches 4,500m and 2,000m respectively, higher than 95% of the world reservoirs, which posts large challenges of well-completion for potential bidders. With ample experience in the Tarim Oilfield and government support for non-SOEs, we expect future order inflow from underground gas storage tanks for SPT. In its recent reverse roadshow, company management guided revenue of Rmb200m-300m from underground gas storage tanks in 19E. Under a conservative assumption of Rmb200m with a 40% gross margin, our 19E revenue forecast is boosted by 10.2% and net profit by 24.2%.

### Market leading position in Tarim Oilfield

Operated by PetroChina, Tarim is China's third largest onshore oil and gas Oilfield. Its natural gas reserves account for 22 percent of China's total. In 2017, the Tarim Oilfield reported a natural gas output of 25.3b cm, representing 20.9% of the total domestic supply. Although large output suggests large Capex investment benefiting oilfield service providers, the technical challenges for oil production are immense, establishing high entry barrier for potential bidders. According to People's Daily, more than 80% of China super-deep wells are in Tarim, in which high temperature and pressure complicate the drilling and completion process.

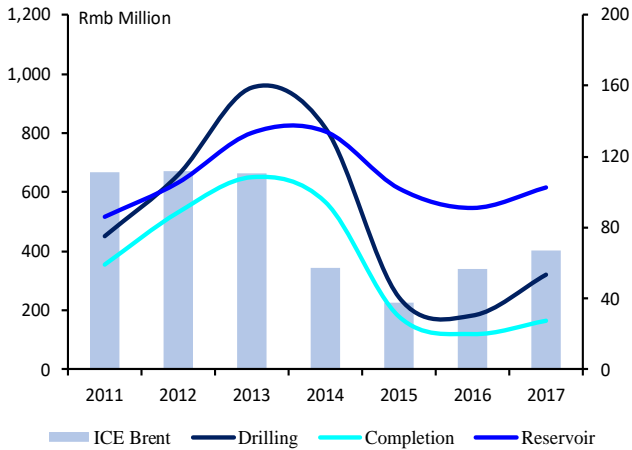
SPT Energy is among the first non-SOEs to operate in Tarim Oilfield. It holds several records in Tarim including the record for providing oil-based drilling fluids service in the deepest well in Asia, which shows its technical strength. PetroChina plans to increase Capex to raise Tarim's annual output to 30 million tons of oil equivalent in 2020. We view SPT energy as the key beneficiary based on its technical strength and dominant position (75%) in Tarim completion service market. According to the management, SPT Energy won US\$30m (Rmb195m) well-completion tenders from Tarim Oilfield in April 2018, two times the in-hand well-completion orders on hand as of March 2018.

## Business strength

SPT is one of the few non-SOEs that covers the whole process of oilfield development. Compared to drilling and completion services revenue that come from oil companies' capital expenditures, revenue from reservoir services generated from oil companies' routine operating expenditure has less volatility and is less correlated with changes in oil prices than drilling and completion services, as shown in figures 28 and 29, diversifying overall oil price risk. Meanwhile, SPT maintains sufficient exposure to oil price recovery through drilling and completion services, enhancing its business strengths in the market.

Fig 28: working gas volume of underground gas storage tanks

Fig 29: Domestic underground gas storage tanks by 2017



	Revenue volatility	Correlation with oil price
Drilling	53.1%	0.55
Completion	54.8%	0.62
Reservoir	16.3%	0.04

Source: Annual report, SWS Research

Source: Annual report, SWS Research

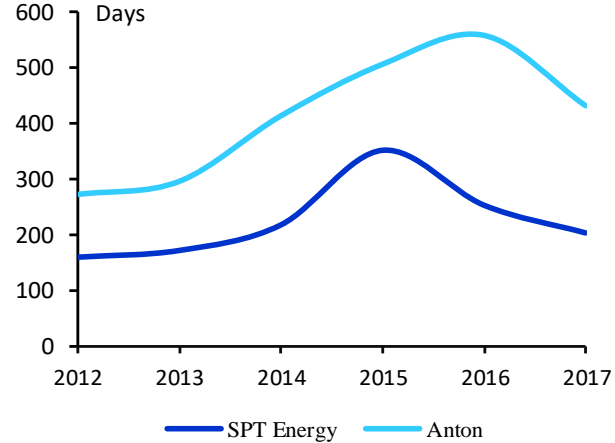
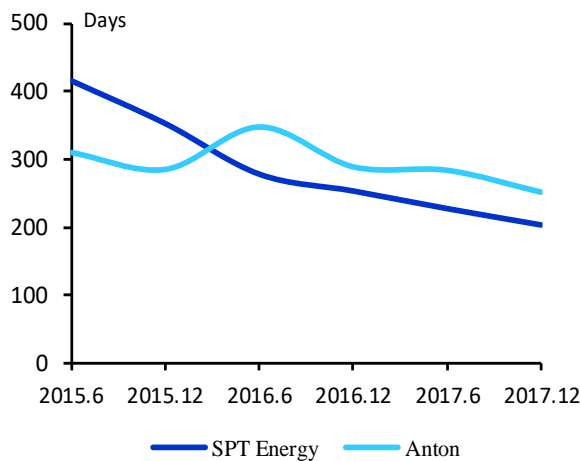
**Strategic shifts**

SPT increased its Capex from Rmb89m in 2011 to Rmb211.9m in 2014, representing a 33.5% Cagr, amid high oil prices. However, the 2014 oil price collapse took a heavy toll on SPT, as the company subsequently recorded large depreciations on idle equipment, thus impacting its financials. Depreciation accounted for 14% of the firm’s total revenue in 2016 (vs only 4% in 2014). In addition, impairment losses represented 5-10% of total revenue in 2016-17, weighing on the company’s overall profitability. As a result, Ebitda margin slumped from 12.7% in 2014 to -18.8% in 2016.

In response to the 2014 oil price decline and its consequences on the company’s financials, SPT management has been committed to streamlining operations to improve internal efficiencies, implementing a large-scale pay cut. The average salary was reduced from Rmb150,000 in 2013 to Rmb110,000 in 2017, slashing overall salary expenses by 32.6% during the same period. Accounts receivable days were reduced by 51% from its peak to 204 days, while operating cycle days decreased from a peak of 353 days to 204 days in 2017, superior to SPT’s main competitor Anton. Under management’s continuing efforts to improve operational efficiencies, we expect costs will remain subdued in the upcycle.

Fig 30: Account receivable days

Fig 31: Operating cycle days



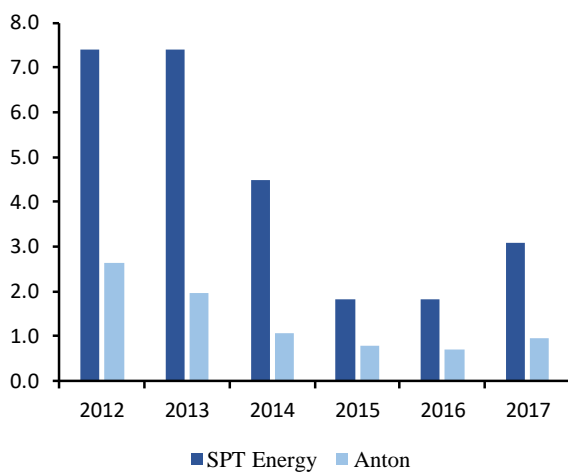
Source: Annual report, SWS Research

Source: Annual report, SWS Research

In terms of business strategy, Anton shifted towards a technology-oriented and asset-light business model that provides the company with increasing operating and financial flexibility, as well as high value-added. Guided by the strategic shift, SPT developed Submersible Direct-driven Screw Pump for oil production services, which saves half of the power consumption of a common screw pump, while offering twice the system efficiency of a common screw pump. The firm also recorded a first as a private player developing a high-end eco-friendly water-based drilling fluid system in-house, which shortens the drilling cycle by 30% while meeting increasingly stringent environmental requirements.

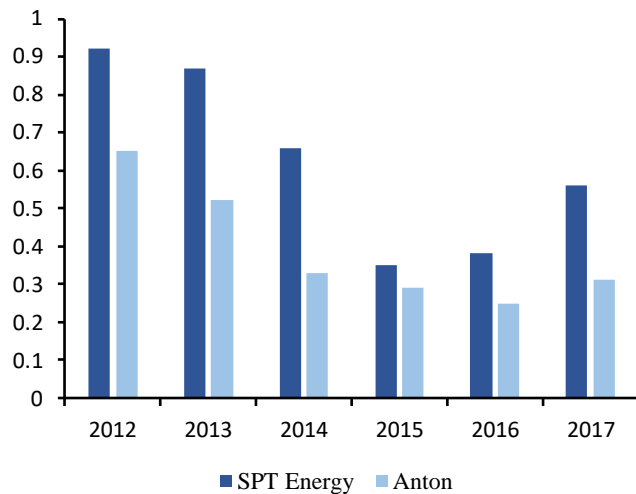
The high-value-added equipment and services were developed under just Rmb64.5m in total Capex in 2016-17, representing just 38% of the average Capex during 2011-15. These high-value-added and asset-light services facilitate order inflow with less Capex demand, improving asset efficiency. As a result, total asset turnover increased from 0.35 in December 2015 to 0.56 in December 2017, while fixed-asset turnover rose from 1.82 to 3.07 over the same period, superior to its main competitor Anton. Assuming the same profit margin and financial leverage as during the previous oil price uptrend, an improvement in asset turnover will push up the firm's profitability. As such, we expect SPT's share price to gain momentum as the company continues to roll out its asset-light strategy.

Fig 32: Fix asset turnover



Source: Annual report, SWS Research

Fig 33: Asset turnover



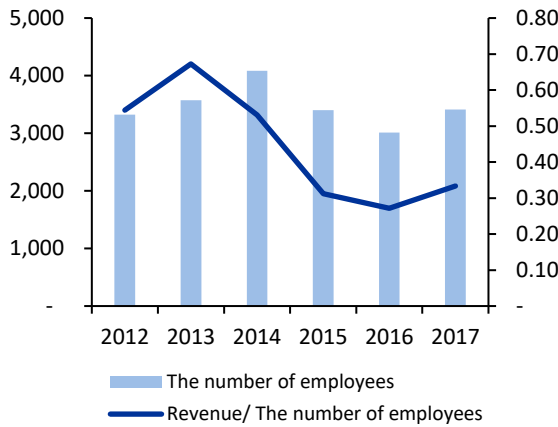
Source: Annual report, SWS Research

### Operating capacity

Guided by SPT Energy's asset-light strategy, nearly half of its equipment is rented. To avoid potential capacity bottleneck against the backdrop of increasing order inflow, SPT Energy developed several policies. First, the term of lease is set in line with the term of service contracts to avoid mismatch maturity. Second, priority provisions are included in the tenancy agreement, prioritizing SPT Energy over others in renting the equipment from lessor in certain regions. The equipment lessors include Lanzhou Lanshi Group, Jereh Group and PetroChina. According to our market investigation, there is no acute shortage of common oilfield equipment in the rental market.

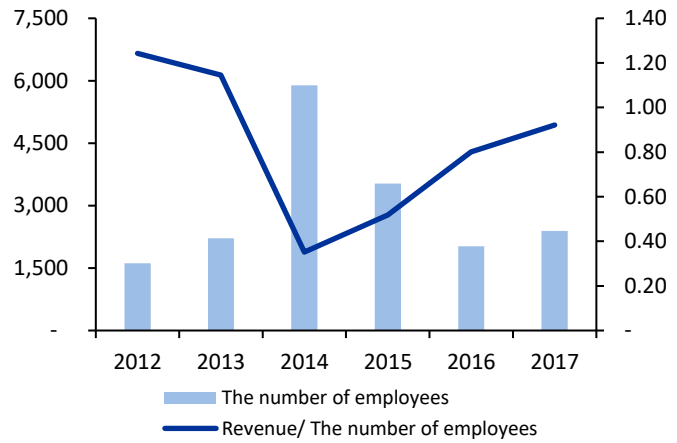
In terms of the employee capacity, compared to its main competitor Anton, SPT Energy's revenue per employee generates is still at low level, suggesting sufficient employee capacity under the current order inflow. Compared to Anton's 59% layoffs from peak level, SPT energy only slashed 16% of the total employees from peak level, suggesting larger operational flexibility at current cycle.

Fig 34: SPT Energy employee capacity



Source: Annual report, SWS Research

Fig 35: Anton employee capacity



Source: Annual report, SWS Research

## Financial analysis

Given the sustainable oil price recovery and China natural gas opportunities, we anticipate positive and sustainable revenue growth in 2018-20E. As current drilling orders in-hand amount to Rmb685.8m, and as we assume 80% of the orders to be recognised as revenue in 18E, we forecast SPT’s drilling services revenue to reach Rmb544.8m in 18E (+70% YoY). Backed by increasing shale gas order inflow amid rising oil prices, we expect drilling revenue to reach Rmb871.7m in 19E (+60% YoY), and Rmb1131.3m in 20E (+30% YoY). Meanwhile, as current well completion orders in-hand amount to Rmb287.9m and assuming 100% of the orders will be booked as revenue in 18E, we forecast well completion revenue of Rmb281.3m in 18E (+70% YoY). Assuming an additional Rmb200m in completion orders from underground storage tanks in 19E, we expect completion revenue to reach Rmb478.2m in 19E (+70% YoY), and Rmb621.6m in 20E (+30% YoY). As revenue from reservoir services is less volatile, we expect reservoir services revenue to increase at its historical average YoY growth rate, reaching Rmb737.6m in 18E (+20% YoY), Rmb885.2m in 19E (+20% YoY), and Rmb973.7m in 20E (+20% YoY). As such, we expect total revenue to grow 41.0% YoY to Rmb1.6bn in 18E, 41.9% YoY to Rmb2.3bn in 19E, and 21.7% YoY to Rmb2.8bn in 20E.

Fig 36: In-hand orders

(RMB Million)	In-hand Order as of 2018.4	The Exp. percentage booked in 2018E Revenue
Drilling	685.8	80%
Completion	287.9	100%
Reservoir	560.9	-

Source: Company data, SWS Research

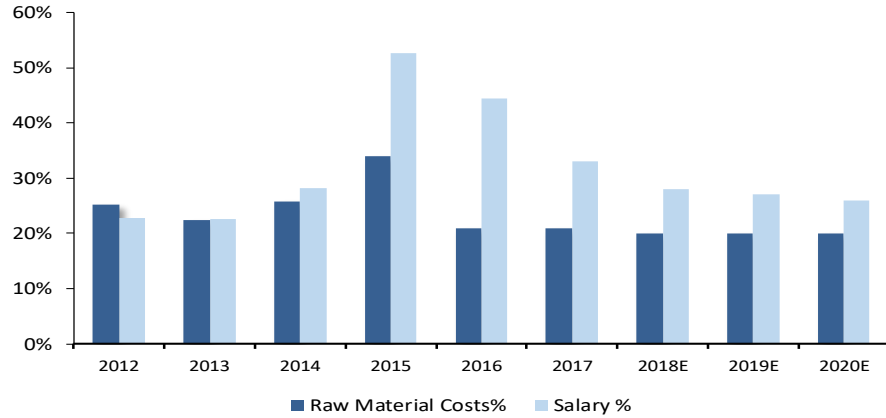
Fig 37: Revenue breakdown



Source: Company data, SWS Research

Raw materials costs and salaries currently account for 60% of SPT’s operating costs. In line with its strategic shift, the company has stepped up its cost control efforts, resulting in improved inventory and personnel management. We forecast the number of employees to be 3,600 in 18E, 4,000 in 19E and 4,200 in 20E, while average salary will increase to Rmb0.12m in 2018E, Rmb0.15m in 19E and Rmb0.17 in 20E. We thus expect total salary expenditure will account for 28% of revenue in 18E, 27% in 19E, and 26% in 20E, following the firm’s cost-control plan. Meanwhile, we expect raw materials costs to stabilise at 20% of total revenue in 2018-20E.

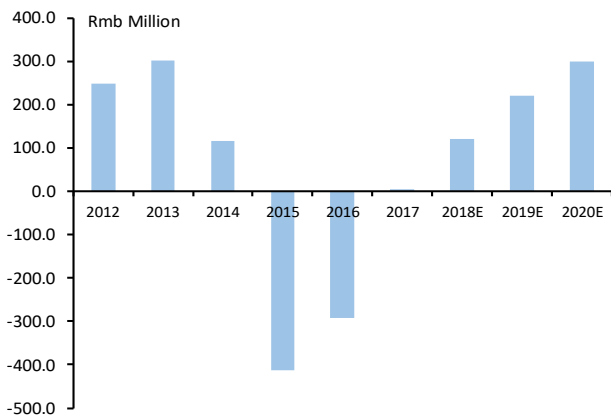
**Fig 38: Raw material costs and salary expenses as a percentage of revenue**



Source: Company data, SWS Research

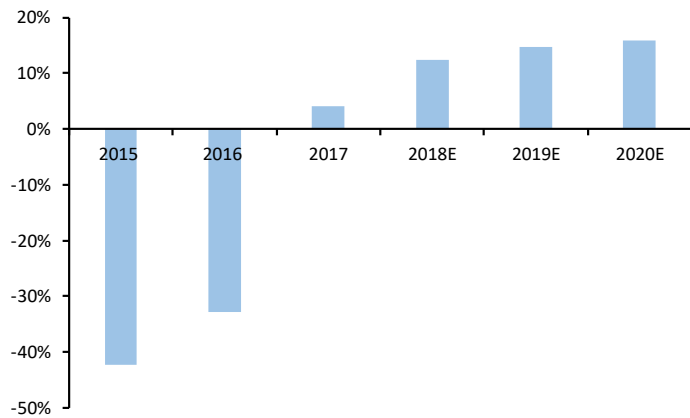
Given increasing revenue, on the back of recovering oil prices, and improved control of personnel expenses and raw materials costs, we forecast net profit of Rmb119.6m in 18E (+2,058.9.0% YoY), Rmb220.3m in 19E (+84.2% YoY), and Rmb299.2m in 20E (+35.8% YoY). As such, we expect the company’s Ebit margin to reach 12% in 18E, 15% in 19E, and 16% in 20E.

**Fig 39: Net profit**



Source: Company data, SWS Research

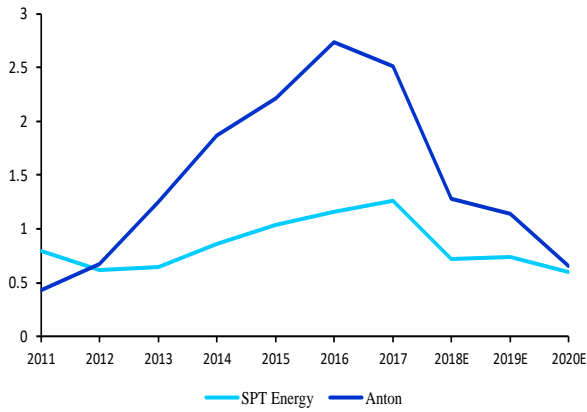
**Fig 40: Ebit margin**



Source: Company data, SWS Research

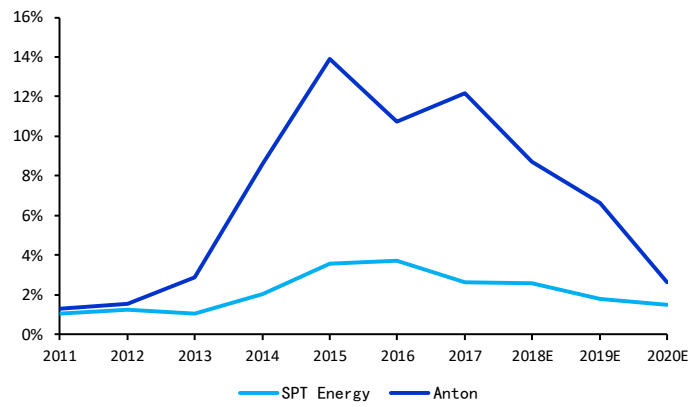
Compared to its main competitor, Anton, SPT Energy has lower leverage. With the equity placement, the firm’s leverage may decrease further. We forecast a debt-to-equity ratio of 0.7 in 18E, 0.7 in 19E and 0.6 in 20E. Thanks to its low leverage and smaller scale of debt financing, financing costs for SPT average 6%, which is significantly lower than Anton (10%). As Anton’s US\$300m high-yield debt matures in 2020, at which point we expect it to again raise debt, we expect SPT to maintain its financing cost advantage until 2020E.

Fig 41: Debt-to-asset ratio



Source: Company data, SWS Research

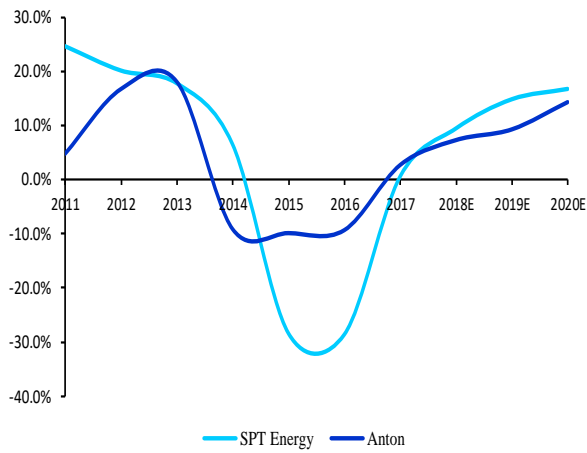
Fig 42: Financial expense/revenue



Source: Company data, SWS Research

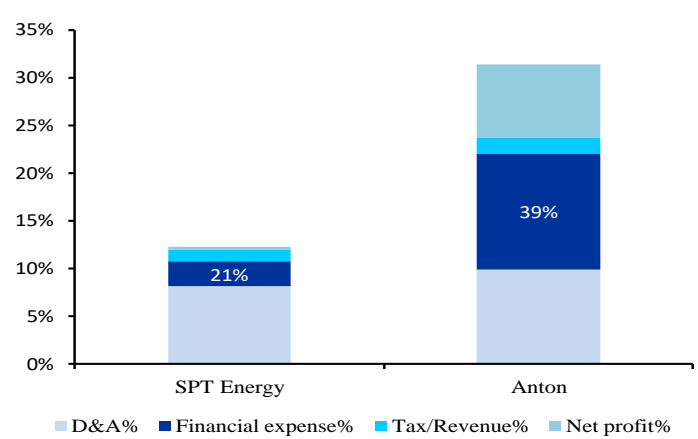
Thanks to SPT's low financing cost, interest expense eroded only 21% of Ebitda in 2017 (Anton: 39%). SPT's financing cost advantages, further expanded by SPT's high operating efficiencies, give the company larger performance flexibility. We forecast SPT's ROE to recover more swiftly than Anton, reaching 9.5% in 18E, 14.9% in 19E and 16.9% in 20E.

Fig 43: ROE



Source: Company data, SWS Research

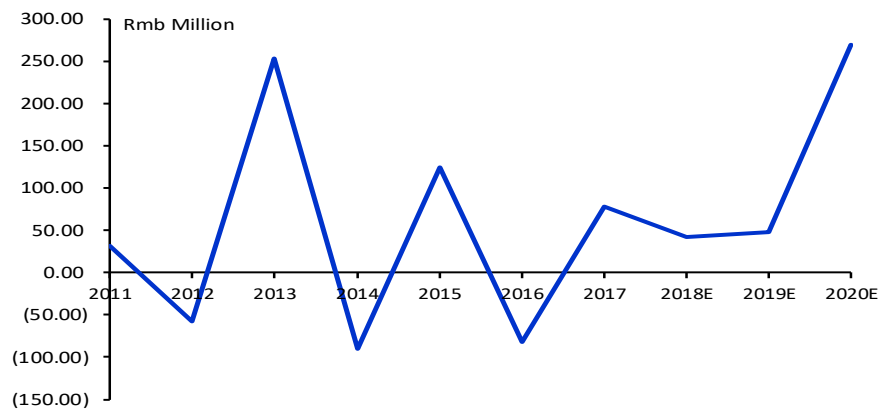
Fig 44: 2017 Ebitda breakdown



Source: Company data, SWS Research

Backed by the oil price recovery and China rapid natural gas development, we expect operating cash flow will remain positive in 2018-20E.

Fig 45: Operating cash flow

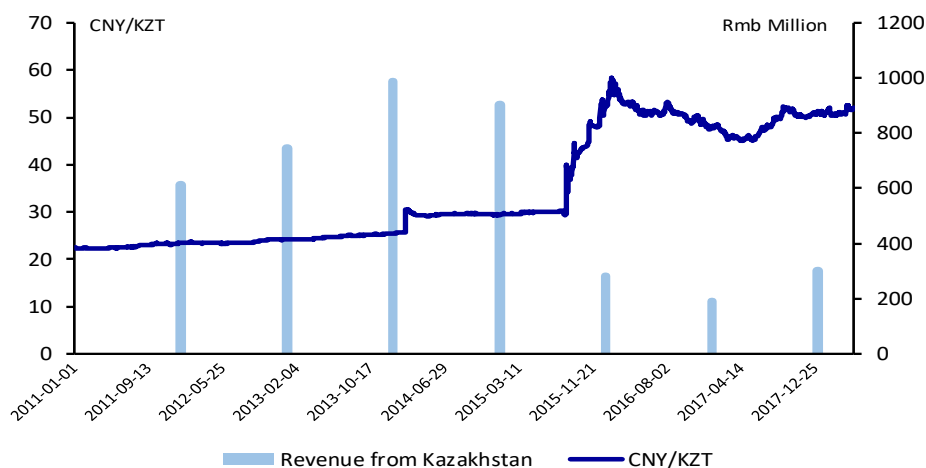


Source: Company data, SWS Research

## Forex risks

Kazakhstan is SPT's largest overseas market, where NOCs require that service contracts should be denominated in its local currency, the tenge. After the Kazakh central bank devalued the tenge by 65% against the US dollar in 2015 after the oil price collapse, SPT's revenue from Kazakhstan was significantly affected by forex and slumped 68.5% YoY in 2015. As such, we view the firm's exposure to the tenge as a source of potential risk.

Fig 46: Kazakhstan Revenue and forex changes



Source: Company data, SWS Research

We ran a sensitivity analysis to examine the potential impact of the tenge on our 18E revenue and net profit forecasts. Assuming a sub-10% annual depreciation in the tenge, our revenue forecast will be reduced by less than 3%, while our net profit forecast will decrease less than 10%. We expect the tenge will remain stable in 18E as oil prices continue to climb, facilitating exports for oil-dependent Kazakhstan. It is unlikely that large depreciation will take place.

Fig 47: Sensitivity analysis of Tenge forex change on 2018E revenue

Forex Change	Kazakhstan Revenue growth%				
	5%	10%	20%	30%	40%
5%	-0.9%	-1.0%	-1.1%	-1.2%	-1.2%
10%	-1.8%	-1.9%	-2.0%	-2.2%	-2.4%
20%	-3.3%	-3.4%	-3.7%	-4.0%	-4.3%
30%	-4.5%	-4.7%	-5.2%	-5.6%	-6.0%
50%	-6.5%	-6.8%	-7.5%	-8.1%	-8.7%

Source: Company data, SWS Research

Fig 48: Sensitivity analysis of Tenge forex change on 2018E net profit

Forex Change	Kazakhstan Revenue growth%				
	5%	10%	20%	30%	40%
5%	-4.1%	-4.3%	-4.7%	-5.0%	-5.4%
10%	-7.8%	-8.2%	-8.9%	-9.6%	-10.4%
20%	-14.3%	-14.9%	-16.3%	-17.7%	-19.0%
30%	-19.8%	-20.7%	-22.6%	-24.5%	-26.3%
50%	-28.5%	-29.9%	-32.6%	-35.3%	-38.1%

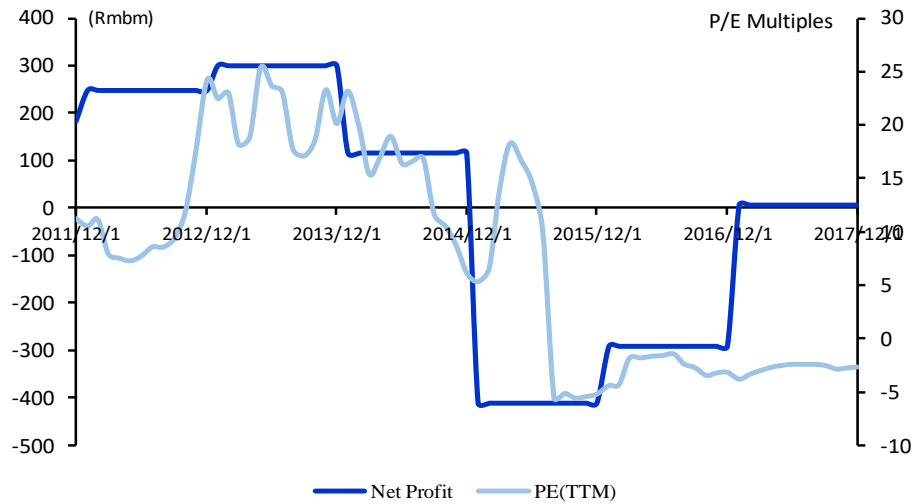
Source: Company data, SWS Research

## Valuation

We adopt a relative valuation approach for SPT Energy to estimate its target price, using the PE multiple, as the firm's profit is highly cyclical. In the previous 2011-14 cycle, SPT PE reached 25.3x as net profit touched a record high of Rmb300m. The PE multiple at which the firm's valuation stabilised in the previous cycle was 10x. We maintain our diluted EPS forecasts at Rmb0.06 in 18E, Rmb0.12 in 19E (+100% YoY), and Rmb0.16 in 20E (+6.7% YoY). We assign a 10.0x multiple to our

diluted EPS forecast of Rmb0.12 in 19E, and derive a target price of HK1.49, representing 20.0x 18E PE, which is lower than the record high seen in the previous cycle.

**Fig 49: Historical PE and net profit**



Source: Wind, SWS Research

As of 4 May 2018, SPT's valuation is attractive compared with peers, as it has lower PE and PB multiples than its main competitor Anton.

**Fig 49: Historical PE and net profit**

Code	Name	Market Cap(HK\$)	P/E		P/B		EV/EBITDA	
			18E	19E	18E	19E	18E	19E
1251HK	Spt Energy	12.1	10.7	5.8	1.0	0.9	7.2	4.8
<b>Peers</b>								
3337HK	Anton	31.1	10.9	7.9	1	0.9	9.8	7.5
196HK	Honghua	42.9	11.2	5.6	0.6	0.7	13.1	9.4
2178HK	Petroking	8.1	-	-	-	-	-	-
2883HK	Cosl	583	26.1	16.5	0.9	0.9	7.3	6.5
1623HK	Hilong	19.5	10.3	7.1	0.4	0.4	2.2	2

Note: Forward valuations for companies not under SWS coverage (Petroking, Cosl and Hilong) are based on consensus forecasts

Source: Wind, SWS Research

We expect oil price recovery is more sustainable than consensus and highlight China natural gas opportunities, leading to faster-than-expected revenue growth and incremental order inflow from current underground storage tank construction. Moreover, we are positive on SPT's strategic shift, leading to increased operational and financing flexibility and thus improved profitability.

We see lower-than-expected oil prices and forex risk as the main downside risk for SPT, while considering OPEC's production cut decisions and China natural gas rapid development as two important catalysts for the stock.

## Appendix

**Fig 50: Management team**

Name	Position	Summary
Wang Guoqiang	CEO and chairman of the board	Wang Guoqiang has served as chief executive officer for about five years, and has been a director of the company since June 2008. Wang is also chairman of the board and nomination committee, and a member of the remuneration committee. He has worked in the oil & gas industry for more than 32 years, and is currently in charge of the overall operation and management of the group.
Wu Dongfang Ethan	Executive director	Wu Dongfang has worked in the oil & gas industry for more than 25 years, and has been a director of the company since June 2008. Wu is in charge of business development for the group.
Liu Ruoyan	Executive director and executive president	Liu Ruoyan has worked in the oil & gas industry for more than 43 years, and has been an executive director of since December 2011. Liu is in charge of marketing for the well drilling and workover business, and management of production and operation for the group.
Jin Shumao	Vice president	Jin Shumao resigned as an executive director on 21 March 2017. Jin has worked in the oil & gas industry for more than 44 years in China and abroad. Jin is responsible for the operation, integration, and development of all product and service lines worldwide.
Li Qiang	Executive director, vice president, and CFO	Li Qiang has been involved in corporate management for more than 19 years, and has been an executive director since March 2017. Li is primarily responsible for internal control, including planning and operations, capital operation, and information disclosure.
Lin Yang	Non-executive director	Lin Yang currently serves as an executive director at Forebright Capital Management Limited. He was appointed by China Outfitters Holdings Limited as a non-executive director.
Chen Chunhua	Independent non-executive director	Chen Chunhua has worked for South China University of Technology since July 1986, and now serves as a professor and tutor for doctoral students in the Business Administration School, with more than 30 years of experience in academic education and practice in corporate operations and business management. She is also a member of the audit committee of the group.
Zhang Yujuan	Independent non-executive director	Zhang Yujuan is the chairman of the remuneration committee and a member of the nomination committee. She successively served as general manager of Nanjing Pincheng Four Seasons Cultural and Creative Company, general manager of Chengdu Tianxinyang Gold Industry, and director of Hong Kong Tianxinyang.
Wu Kwok Keung Andrew	Independent non-executive director	Wu Kwok Keung is the chairman of the audit committee and a member of the remuneration committee and nomination committee. He worked for Ernst & Young for over 32 years before retiring.
Wan Kah Ming	Independent non-executive director	Wan Kah Ming has been involved in legal practice for more than 22 years, focusing on China inbound and outbound investment, finance, mergers and acquisitions, and restructuring. Wan is also a member of the audit committee.
Jiang Qingsong	CEO, vice president, and general manager of the Russian division	Jiang Qingsong has worked in the oil & gas industry for more than 20 years, and joined the group in March 2003. Jiang is primarily responsible for the business development and management of the overseas market (except North America).
Zhao Feng	Vice president and general manager of the North American division	Zhao Feng has worked in the oil & gas industry for about 30 years, and joined the group in January 1999. Zhao is primarily responsible for business development and management of the North American and Singaporean markets.
Li Zhiguo	COO and manager of the project expansion department	Li Zhiguo has worked in the oil & gas industry for more than 22 years, and joined the group in March 1996. Li is primarily responsible for market development in China.
Wan Wenjiang	Vice president and head of the engineering technology centre	Wan Wenjiang has worked in the oil & gas industry for more than 36 years, and joined the group in April 2004. Wan is mainly responsible for technology development and management.
Ma Hongguo	Vice president and general manager of eastern China	Ma Hongguo has worked in the oil & gas industry for more than 20 years, and joined the group in 2003. Ma is primarily in charge of operations and management for eastern China.

Source: SWS Research

**Table 1: Consolidated Income Statement**

(Rmbm)	2016	2017	2018E	2019E	2020E
Revenues	818	1,137	1,604	2,275	2,770
Material Costs	(178)	(235)	(313)	(447)	(546)
Salary Exp	(376)	(367)	(438)	(603)	(720)
Rental Costs	(53)	(69)	(109)	(156)	(191)
Transportation Costs	(23)	(19)	(48)	(68)	(83)
Service Costs	(107)	(188)	(208)	(296)	(360)
Impairments	(83)	23	(20)	(20)	(19)
Others Operating Costs	(149)	(143)	(192)	(273)	(332)
EBITDA	(150)	139	275	411	518
EBIT	(268)	47	200	335	441
Finance Costs	(35)	(30)	(39)	(39)	(39)
<b>Profit Before Tax</b>	<b>(303)</b>	<b>17</b>	<b>161</b>	<b>296</b>	<b>402</b>
Income Tax Expense	(11)	(14)	(32)	(59)	(80)
Minority interests	22	2	(9)	(17)	(23)
<b>Profit for the year</b>	<b>(292)</b>	<b>6</b>	<b>120</b>	<b>220</b>	<b>299</b>

Source: SWS Research

**Table 2: Consolidated Balance Sheet**

(Rmbm)	2016	2017	2018E	2019E	2020E
Current Assets	1,447	1,431	1,746	2,175	2,476
Cash and cash equivalents	246	147	495	519	732
Trade & notes receivables	564	683	729	1,034	1,204
Other receivables	249	262	190	228	154
Inventories	372	337	313	373	364
Other current assets	18	3	20	22	22
PP&E	393	349	349	349	349
Intangible assets	36	23	29	33	37
Other non-current assets	184	186	201	200	201
<b>Total Assets</b>	<b>2,060</b>	<b>1,990</b>	<b>2,326</b>	<b>2,759</b>	<b>3,065</b>
Current Liabilities	923	972	840	996	979
Borrowings	279	263	300	300	300
Trade and other payables	493	517	351	485	466
Other current liabilities	151	192	189	211	213
Long-term liabilities	125	39	132	172	172
<b>Total Liabilities</b>	<b>1,048</b>	<b>1,012</b>	<b>972</b>	<b>1,168</b>	<b>1,151</b>
Minority Interests	97	98	107	124	146
Shareholder Equity	915	880	1,247	1,467	1,768
Share Capital	1	1	1	1	2
Reserves	1,318	1,336	1,646	1,866	2,165
Forex Difference	(403)	(457)	(400)	(400)	(399)
<b>Total Liabilities and equity</b>	<b>2,060</b>	<b>1,990</b>	<b>2,326</b>	<b>2,759</b>	<b>3,065</b>

Source: SWS Research

**Fig 43: Consolidated Cash Flow Statement**

(Rmbm)	2016	2017	2018E	2019E	2020E
Profit before taxation	(303)	17	161	296	402
Plus:Depr. and amortisation	118	92	75	76	77
Finance cost	30	30	39	39	(39)
Losses from investments	(5)	0	0	0	0
Change in working capital	(5)	(17)	(137)	(248)	(105)
Others	83	(45)	(95)	(115)	(82)
CF from operating activities	(82)	78	42	48	269
CAPEX	(29)	(35)	(80)	(80)	(80)
Other CF from investing activities	1	1	(1)	0	4
CF from investing activities	(28)	(34)	(81)	(80)	(76)
Equity financing	0	0	190	0	0
Net change in liabilities	8	(101)	128	40	0
Other CF from financing activities	0	12	9	13	13
CF from financing activities	8	(89)	327	53	13
Forex Difference	3	(54)	57	0	1
Net cash flow	(99)	(99)	346	21	207
FCFF	(196)	73	25	23	165
FCFE	(157)	(3)	178	95	196

Source: SWS Research

**Fig 44: Key Financial Ratios**

	2015	2016	2017E	2018E	2019E
Ratios per share (Rmb)					
Earnings per share	(0.19)	0.00	0.06	0.12	0.16
Diluted EPS	(0.19)	0.00	0.06	0.12	0.16
Operating CF per share	(0.05)	0.05	0.02	0.03	0.15
Dividend per share	0.00	0.00	0.00	0.00	0.00
Net assets per share	0.60	0.57	0.68	0.80	0.96
Key Operating Ratios(%)					
ROIC	-30.38	-2.06	6.66	11.82	14.07
ROE	-31.08	0.33	9.50	14.89	16.81
EBITDA Margin	-18.36	12.22	17.12	18.07	18.70
EBIT Margin	-32.77	4.12	12.46	14.73	15.93
Growth rate of Revenue(YoY)	-22.84	39.01	41.02	41.86	21.74
Growth rate of Profit(YoY)	-28.90	-	3,845.64	84.18	35.80
Debt-to-asset ratio	50.86	50.84	41.79	42.34	37.54
Turnover rate of net assets	0.81	1.16	1.18	1.43	1.45
Turnover rate of total assets	0.40	0.57	0.69	0.82	0.90
Effective tax rate (%)	-3.71	80.97	20.00	20.00	20.00
Dividend yield (%)	-	-	-	-	-

Source: SWS Research

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