GLOBAL OIL AND GAS MARKET

Over the last decade, global energy consumption has increased significantly. According to the BP Review of World Energy 2010, global energy demand grew from 186 million barrels of oil equivalent per day in 2000 to 224 million barrels of oil equivalent per day in 2009.

The primary driver of the increase in global energy consumption has been growth in a number of large emerging economies, with China being the main contributor. According to International Energy Outlook 2010 released by the EIA, China's energy consumption is expected to grow from 38.5 million barrels of oil equivalent per day in 2007 to 59.9 million barrels of oil equivalent per day in 2020, representing a CAGR of 3.5%. In contrast, the energy consumption in the U.S. and OECD Europe is expected to grow at CAGRs of 0.2% and 0.1%, respectively, over the same period.

Following several years of robust oil demand growth, the global economic recession that began in 2008 and continued into 2009 had a profound impact on world oil demand. Global oil consumption decreased in 2009 for the first time since 1982. However, global oil demand growth is expected to recover as global economy resumes its growth. According to the International Energy Outlook 2010 released by the EIA, global oil consumption is projected to grow by 7% from 2007 to 2020.

The most rapid growth in oil consumption is expected to occur in nations outside the OECD, where strong long-term GDP growth are expected to drive oil demand to increase by 1.6% CAGR from 2007 to 2020. As a result, by 2020 non-OECD oil demand is expected to account for 50% of global oil demand, up from 43% in 2007. In particular, China, as one of the fastest growing economies in the world, is expected to have the highest oil consumption growth, at a 3.3% CAGR from 2007 to 2020.

The following table sets forth the historical and projected world oil consumption volume by region from 2007 to 2020:

	2007 (million	2015E barrels	2020E per day)	2007 as % of total	2020E as % of total	2007-2020E CAGR
OECD						
OECD North America	25.1	24.6	25.0	29.2%	27.1%	0.0%
- United States	20.6	20.2	20.6	23.9%	22.4%	0.0%
- Canada	2.3	2.2	2.2	2.7%	2.4%	(0.5)%
- Mexico	2.1	2.2	2.3	2.4%	2.5%	0.8%
OECD Europe	15.3	14.0	13.4	17.8%	14.5%	(1.0)%
OECD Asia	8.4	7.7	8.0	9.8%	8.7%	(0.4)%
- Japan	5.0	4.2	4.3	5.8%	4.7%	(1.1)%
- South Korea	2.2	2.4	2.5	2.6%	2.7%	1.1%
- Australia/New Zealand	1.1	1.1	1.1	1.3%	1.2%	0.3%
Total OECD	48.8	46.3	46.4	56.7%	50.4%	(0.4)%
Non-OECD						
Non-OECD Europe and Eurasia	5.1	4.9	4.9	5.9%	5.3%	(0.3)%
Russia	2.9	2.8	2.7	3.4%	2.9%	(0.5)%
Other	2.2	2.1	2.2	2.6%	2.4%	0.1%
Non-OECD Asia	16.8	20.1	22.7	19.5%	24.6%	2.4%
China	7.6	10.0	11.6	8.8%	12.6%	3.3%
India	2.8	3.2	3.6	3.3%	3.9%	1.9%
Other Non-OECD Asia	6.3	6.9	7.6	7.3%	8.3%	1.5%
Middle East	6.4	7.2	7.8	7.4%	8.5%	1.5%
Africa	3.1	3.5	3.6	3.6%	3.9%	1.2%
Central and South America	6.0	6.6	6.7	7.0%	7.3%	0.9%
Brazil	2.4	2.8	3.0	2.8%	3.3%	1.8%
Other Central and South America	3.6	3.7	3.7	4.2%	4.0%	0.3%
Total Non-OECD	<u>37.3</u>	42.4	45.7	43.3%	49.6%	1.6%
Total World	86.1	88.7	92.1	<u>100</u> %	<u>100.0</u> %	<u>0.5</u> %

Source: EIA, International Energy Outlook 2010—Reference Case

Oil demand has driven and will continue to drive increasing investment across the global petroleum industry, both upstream, which includes exploration and production of hydrocarbons, and midstream/downstream, which includes the transportation, processing and marketing of hydrocarbons.

To meet increasing energy demand, global oil production is expected to increase by a total of 7.3 million barrels of oil equivalent per day from 2007 to 2020, equivalent to a CAGR of 0.6%, according to the International Energy Outlook 2010 released by the EIA. Oil production growth among OPEC countries is expected to be higher at a 0.9% CAGR, compared with the non-OPEC market at a 0.4% CAGR from 2007 to 2020.

The following table sets forth the historical and projected world oil production volume by region from 2007 to 2020:

Region	2007	2008	2015E	2020E	2007 as % of Total	2020E as % of Total	2007-2020E CAGR
Region			rrels per		or rotar	01 10141	CHOK
OPEC	34.4	35.6	37.4	38.8	40.6%	42.1%	0.9%
Middle East	23.1	24.2	25.2	26.4	27.2%	28.7%	1.0%
North Africa	4.0	4.1	4.4	4.1	4.7%	4.5%	0.3%
West Africa	4.1	4.2	5.1	5.4	4.8%	5.9%	2.1%
South America	3.2	3.1	2.7	2.8	3.8%	3.0%	(1.0)%
Non-OPEC	50.4	49.9	51.3	53.3	59.4%	57.9%	0.4%
OECD	21.6	20.9	20.5	20.6	25.5%	22.4%	(0.4)%
OECD North America	15.4	15.0	16.2	16.9	18.2%	18.3%	0.7%
OECD Europe	5.4	5.2	3.5	3.1	6.4%	3.4%	(4.2)%
OECD Asia	0.8	0.8	0.7	0.7	0.9%	0.8%	(0.5)%
Non-OECD	28.8	29.0	30.8	32.7	34.0%	35.5%	1.0%
Non-OECD Europe and Eurasia	12.8	12.7	13.1	13.8	15.1%	15.0%	0.6%
Non-OECD Asia	7.8	7.8	7.4	7.4	9.2%	8.0%	(0.4)%
China	4.1	4.0	3.8	4.0	4.8%	4.3%	(0.1)%
Middle East (Non-OPEC)	1.5	1.5	1.6	1.5	1.8%	1.6%	(0.2)%
Africa	2.6	2.6	2.9	3.2	3.1%	3.5%	1.5%
Central and South America	4.1	4.3	5.9	7.0	4.8%	7.6%	4.2%
Total World	84.8	<u>85.5</u>	88.7	92.1	<u>100.0</u> %	<u>100.0</u> %	<u>0.6</u> %

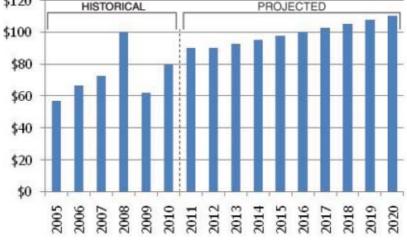
Source: EIA, International Energy Outlook 2010—Reference Case

Following several years of robust growth in oil prices, the global economic crisis in late 2008 resulted in a steep fall in oil prices, with West Texas Intermediate ("WTI") spot prices falling from a high of over \$145 per barrel in July 2008 to a five-year low of \$31 per barrel in December 2008. In 2009, oil prices began at below \$40 per barrel, but increased slowly throughout the year as investors became increasingly optimistic that the global economy would recover faster than expected.

According to Spears and Associates, or spears, given the aggressive field development plans in Canada (oil sands), Brazil and Kazakhstan, combined with sluggish oil demand growth in industrialised countries, it seems likely that excess OPEC capacity will remain around 5 million barrels per day, leaving the oil market well supplied over the short-to-mid term in the absence of unexpected supply interruptions.

The following table sets forth the historical and projected oil prices from 2005 to 2020. The oil price projection is based on the assumptions that (i) the OPEC spare oil production capacity will increase from 3.4 million barrels per day in 2011 to 3.6 million barrels per day in 2020, representing a CAGR of 0.6% and (ii) an inflation rate of 3% per year in the same period. As at 30 November 2011, the WTI spot price was \$100 per barrel.





Source: Spears and Associates

Typically, the difference between WTI and Brent spot prices is less than \$1-\$2 per barrel, but for most of 2011, Brent prices have been \$20-\$30 per barrel higher than WTI due to the supply/demand imbalances in the US market affecting the price of WTI. As a result, Brent has become a more relevant price for the purpose of tracking/estimating drilling activity outside the US. We expect that spot Brent prices will trade in the \$100-\$110 per barrel range over the 2011 to 2015 timeframe.

Over time the price of WTI is expected to return to parity with Brent as the oil supply/demand imbalance that has emerged in the US market this year is slowly resolved via the construction of new pipelines.

Global natural gas consumption is expected to grow by 26% from 2007 to 2020, according to the International Energy Outlook 2010 released by the EIA. In the same period, China, driven by its strong economic growth, is expected to have the second highest gas consumption growth, at a 7.4% CAGR. Consistent with the outlook for oil demand growth, gas consumption growth from 2007 through 2020 is expected to be higher in the non-OECD market, at a 2.9% CAGR compared with the OECD market at a 0.5% CAGR.

The following table sets forth the historical and projected world gas consumption by region from 2007 to 2020:

Region	2005	2006	2007	2015E	2020E	2007 as % of Total	2020E as % of Total	2007-2020E CAGR
		(trillio	ns of cubi	ic feet)				
OECD								
OECD North America	27.3	27.2	28.3	27.4	29.2	26.1%	21.4%	0.2%
- United States	22.0	21.7	23.0	21.7	22.6	21.2%	16.6%	(0.2)%
- Canada	3.4	3.3	2.9	3.2	3.4	2.7%	2.5%	1.3%
- Mexico	1.9	2.2	2.4	2.5	3.1	2.2%	2.3%	2.0%
OECD Europe	19.2	19.1	19.2	20.2	21.0	17.7%	15.4%	0.7%
OECD Asia	5.3	5.8	6.3	6.9	7.3	5.8%	5.4%	1.1%
- Japan	3.1	3.4	3.7	3.8	3.9	3.4%	2.9%	0.4%
- South Korea	1.1	1.1	1.2	1.5	1.6	1.1%	1.2%	2.0%
- Australia/New Zealand	1.1	1.2	1.3	1.7	1.8	1.2%	1.3%	2.4%
Total OECD	51.8	52.1	53.7	54.5	57.4	49.5%	42.1%	0.5%
Non-OECD								
Non-OECD Europe and Eurasia	25.3	25.3	25.9	26.8	27.5	23.9%	20.2%	0.5%
- Russia	16.2	16.6	16.7	16.7	16.9	15.4%	12.4%	0.1%
- Other	9.1	8.7	9.1	10.1	10.6	8.4%	7.8%	1.2%
Non-OECD Asia	8.5	9.6	10.5	16.7	20.4	9.7%	15.0%	5.3%
- China	1.7	2.0	2.5	4.9	6.3	2.3%	4.6%	7.4%
- India	1.3	1.4	1.5	3.1	3.9	1.4%	2.9%	7.6%
- Other Non-OECD Asia	5.6	6.2	6.6	8.7	10.2	6.1%	7.5%	3.4%
Middle East	9.8	10.3	10.7	16.2	18.4	9.9%	13.5%	4.2%
Africa	3.0	2.9	3.1	4.8	5.7	2.9%	4.2%	4.8%
Central and South America	4.4	4.5	4.6	5.6	7.0	4.2%	5.1%	3.4%
Brazil	0.7	0.7	0.7	1.1	1.5	0.6%	1.1%	6.0%
Other Central and South								
America	3.7	3.8	3.9	4.6	5.5	3.6%	4.0%	2.7%
Total Non-OECD	50.9	52.6	54.7	70.1	78.9	50.4%	57.9%	2.9%
Total World	<u>102.7</u>	<u>104.6</u>	108.5	<u>124.7</u>	<u>136.3</u>	<u>100.0</u> %	<u>100.0</u> %	<u>1.8</u> %

Source: EIA, International Energy Outlook 2010—Reference Case

Global gas production is expected to grow by a 2.0% CAGR from 2007 to 2020, according to the International Energy Outlook 2010 released by the EIA. Gas production growth from 2007 through 2020 is expected to be higher among non-OECD countries at a 2.9% CAGR, compared with OECD countries market at a 0.2% CAGR.

The following table sets forth the historical and projected world gas production volume by region from 2007 to 2020:

Region	2007	2008	2015E	<u>2020E</u>	2007 as % of Total	2020E as % of Total	2007-2020E CAGR
	(t	rillions of	cubic fee	t)			
OECD							
United States	19.2	20.3	19.4	20.1	18.0%	14.6%	0.4%
Canada	6.3	6.0	5.6	5.5	5.9%	4.0%	(1.0)%
Mexico	10.2	10.7	9.6	9.0	9.6%	6.5%	(1.0)%
Europe	1.7	1.7	3.5	3.7	1.6%	2.7%	6.2%
Australia / New Zealand	1.7	1.7	2.4	2.5	1.6%	1.8%	3.0%
Other OECD	2.0	2.0	2.1	2.3	1.9%	1.7%	1.0%
Total OECD	39.5	40.8	40.2	40.5	37.1%	29.5%	0.2%
Non-OECD							
Russia	23.1	23.4	23.0	24.3	21.7%	17.7%	0.4%
Europe and Central Asia	7.3	7.8	9.2	9.5	6.8%	6.9%	2.1%
Iran	4.0	4.1	6.4	8.0	3.8%	5.8%	5.5%
Qatar	2.2	2.7	6.4	7.4	2.1%	5.4%	9.8%
Other Middle East	6.4	6.7	8.1	9.2	6.0%	6.7%	2.8%
North Africa	5.3	5.4	8.2	9.0	5.0%	6.5%	4.2%
Other Africa	1.6	1.7	3.1	3.7	1.5%	2.7%	6.6%
China	2.4	2.7	2.9	3.0	2.3%	2.2%	1.8%
Other Asia	9.6	9.9	12.9	14.2	9.0%	10.3%	3.1%
Central and South America	5.2	5.3	6.6	8.7	4.9%	6.3%	4.0%
Total Non-OECD	67.0	69.7	86.8	97.0	62.9%	70.5%	2.9%
Total World	106.6	110.5	126.9	137.5	<u>100.0</u> %	100.0 %	2.0%

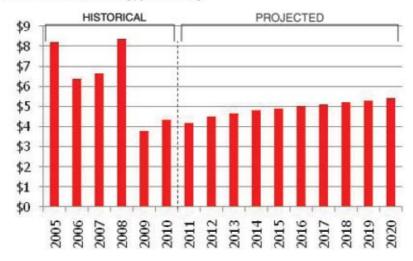
Source: EIA, International Energy Outlook 2010—Reference Case

Although the extent of the world's tight gas, shale gas and coalbed methane resource base has not yet been assessed fully, industry analysts expect to see a substantial increase in the supply of gas from these unconventional sources in the future, especially from the United States, Canada and China. According to the EIA, shale gas is projected to account for 34% of U.S. natural gas production by 2035. Tight gas, shale gas and coalbed methane resources are expected to play an even greater role for the future of domestic natural gas supplies in Canada and China, accounting for 63% and 55% of total domestic production by 2035.

According to Spears and Associates, U.S. spot gas prices are projected to average US\$4.16/mmbtu in 2011 and remain sluggish over the foreseeable future, due to rapid production increases from shale gas resources and continuing gas supply surplus.

The following table sets forth the historical and projected U.S. gas prices from 2005 to 2020. The gas price projection is based on the assumptions that (i) the spare gas production capacity in the U.S. will increase from 0.8 trillion cubic feet in 2011 to 1.0 trillion cubic feet in 2020, representing a CAGR of 2.3%; and (ii) an inflation rate of 3% per year for the same period. As at 30 November 2011, the U.S. gas price was \$3.55/mmbtu.

Gas Price Outlook (\$/mmbtu)



Source: Spears and Associates

OILFIELD SERVICES SECTOR OVERVIEW

The oilfield services industry provides services and equipment to oil and gas companies involved in the exploration and production of oil and gas. A wide spectrum of oilfield services and equipment are required for the exploration, development and production of an oil or gas field, such as geophysical prospecting, well drilling, cementing, well completion, production stimulation, well intervention, production surveillance and maintenance services.

The oilfield services industry can be broadly divided into three market segments, based on regional upstream activities and the type and stage of oilfield services required:

- Mature markets: mainly in North America and Europe where advanced oilfield services are
 widely used. Main oilfield services providers in this market segment are large and established
 international providers, who are well funded and possess advanced technology, equipment and
 experienced technical teams.
- Development markets: mainly in China and Central Asia. These markets were previously dominated by
 the oilfield services subsidiaries of the state-owned oil and gas companies until the emergence of small
 private oilfield services providers, who fill the technological and supply gap.
- Frontier markets: mainly in Latin America, Africa and the Middle East. These markets have abundant hydrocarbon resources, and are therefore poised for a significant level of future exploration and production activities. Oil and gas companies operating in these regions are mostly dependent on the oilfield services and equipment provided by foreign oilfield services providers.

Demand for oilfield services and equipment is driven by the level of upstream exploration and development expenditure set by oil and gas companies, which is closely correlated to oil and gas prices and the global macroeconomic environment. The global economic crisis which started in 2008 and the general negative sentiment regarding the economy resulted in a steep fall in the oil price. The dated Brent spot price fell from a high of over US\$145 per barrel in July 2008 to a five-year low of US\$31 per barrel by December 2008. In 2009, Brent prices began below US\$40 per barrel, but increased steadily throughout the year. By the end of 2010, Brent had reached US\$93 per barrel. In 2010, the Brent oil price increased from US\$77 per barrel at the beginning of

January to US\$93 per barrel by the last trading day of 2010. In the first quarter of 2011, regional instability in North Africa and the Middle-East was perceived as the main cause of the increase in the Brent oil price to above US\$115 per barrel. Brent oil price has since stabilised but remained above US\$100 per barrel for the second half of the year to date.

Global exploration and production (E&P) expenditure increased by 33% from 2007 to 2010 despite the impact of the financial crisis. In 2009, the global economic recession caused a decline in North American E&P expenditure of more than 30%, and this has yet to recover to 2008 levels. Expenditure outside of North America was only down 4.2%, and exceeded 2008 levels in 2010. Over the course of 2010, as confidence in the global economic outlook was gradually restored, and as the oil price steadily improved, global upstream spending increased to US\$442 billion. According to Barclays, in 2011, global E&P expenditure is projected to reach US\$490 billion, surpassing the record US\$454 billion seen in 2008.

The following table sets forth historical and projected global exploration and production expenditure from 2007 to 2011:

Region	2007	2008	2009	2010	2011E
		(bil	lions of U	SD)	
U.S	78.5	106.3	71.2	86.6	93.6
Canada	23.2	28.7	18.5	31.1	32.6
International	230.2	318.6	305.1	324.1	363.3
Total	331.9	453.6	394.8	441.8	489.5
Growth percentage (%)					
U.S	12.6	35.4	(33.0)	21.6	8.1
Canada	(4.1)	23.7	(35.5)	68.1	4.8
International	32.5	38.4	(4.2)	6.2	12.1
Total	24.0	<u>36.7</u>	<u>(13.0)</u>	<u>11.9</u>	10.8

Source: Barclays, "The Original E&P Spending Survey", as of December of each year

During the global financial crisis, many capital projects in the world were delayed, put on hold or abandoned, and annual spending dropped by almost US\$60 billion in 2009. Since 2010, many plans have been restored, in the expectation that demand and commodity prices will remain sufficiently robust over the longer term. Investment plans have recovered in the U.S., as the boom in unconventional plays continues. Capital intense projects in other major producing regions, such as Angola and Australia, are also progressing.

According to Spears and Associates, upstream spending by the Chinese National Oil Companies ("NOCs"), including PetroChina, Sinopec and CNOOC (collectively "Chinese NOCs"), increased at a CAGR of 14.8% from 2007 to 2010, compared to other NOCs' increase at a 8.5% CAGR, and over a threefold increase compared to international oil companies, including BP, Chevron, ConocoPhillips, ENI, ExxonMobil, OMV, Repsol-YPF, Royal Dutch Shell, Statoil and Total (collectively "IOCs"). Total upstream spending by Chinese NOCs is projected to exceed US\$42 billion in 2011, compared to US\$26 billion in 2007.

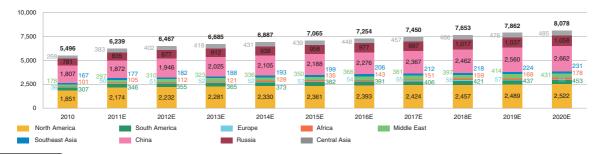
The table below sets forth the planned and projected upstream expenditures of selected companies from 2007 to 2011:

Company	2007	2008	2009	2010	2011E			
		(millions of USD)						
Chinese NOCs								
PetroChina	15,137	19,000	14,000	24,728	26,117			
Sinopec	7,000	8,600	6,800	8,175	9,260			
CNOOC	3,904	5,191	6,600	6,540	7,050			
Subtotal	26,041	32,791	27,400	39,443	42,427			
Other NOCs	99,881	133,309	124,889	127,642	145,724			
IOCs	111,100	121,632	123,460	123,197	141,589			

Source: Barclays, "The Original E&P Spending Survey", as of December of each year

Global upstream activity is expected to grow steadily with the expected strength in oil prices. According to Spears and Associates, global onshore rig activity is projected to grow at a 3.9% CAGR over the 2010—2020 timeframe, with the Middle East (with a projected increase of 9.2%), Central Asia (with a projected increase of 6.1%) and China (with a projected increase of 4.0%) being some of the most active regions.

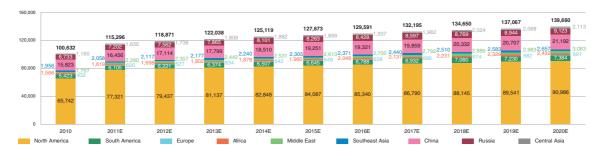
The following chart illustrates the historical and projected land rig activity by region from 2010 to 2020:



Source: Spears and Associates

The number of new onshore wells drilled is expected to grow at a 3.3% CAGR from 2010 to 2020, exceeding 139,660 new wells drilled in 2020. Onshore new well construction expenditures are expected to rise in tandem, growing at a 7.1% CAGR from 2010 to 2020 to reach US\$408 billion in 2020.

The following chart illustrates the historical and projected new onshore wells drilled from 2010 to 2020:



Source: Spears and Associates

The following table sets forth the historical and projected new onshore well construction expenditures from 2010 to 2020:

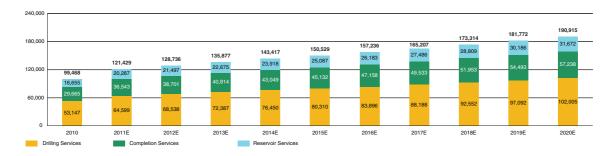
Region	2010	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
					(bil	lions of U	(S\$)				
Onshore											
North America	126.7	157.1	164.7	171.9	179.4	185.7	192.3	199.6	206.8	214.3	222.2
South America	18.6	23.6	25.3	27.3	29.3	31.4	33.8	36.3	38.9	41.8	44.9
Europe	1.1	1.7	1.8	1.9	2.1	2.2	2.3	2.5	2.6	2.8	3.0
Africa	7.0	7.9	8.7	9.6	10.5	11.4	12.5	13.6	14.8	16.2	17.6
Middle East	8.2	10.5	11.4	12.4	13.4	14.5	15.7	17.0	18.4	19.9	21.5
Southeast Asia	9.2	10.7	11.8	12.7	13.8	14.9	16.1	17.4	18.8	20.4	22.1
China	24.7	27.0	29.5	32.2	35.2	38.4	40.5	43.7	46.9	50.2	53.9
Russia	8.4	9.8	10.9	11.8	12.8	13.7	14.7	15.8	16.9	18.2	19.5
Central Asia	1.1	1.8	1.9	2.1	2.3	2.5	2.6	2.8	3.0	3.3	3.5
Average	<u>205.0</u>	<u>250.1</u>	<u>266.1</u>	<u>282.1</u>	<u>298.7</u>	<u>314.8</u>	330.4	<u>348.6</u>	<u>367.3</u>	<u>387.0</u>	<u>408.2</u>

Source: Spears and Associates

According to Spears and Associates, spending for the type of drilling services, completion services, and reservoir services provided by SPT Energy Group Inc. in the markets currently served by SPT Energy Group Inc. (China, Central Asia, Southeast Asia, the Middle East and North America) is estimated to have totalled US\$99.5 billion in 2010. Furthermore, spending on onshore drilling services, completion services, and reservoir services in the markets in which SPT Energy Group Inc. currently participates are expected to grow at a 6.7% CAGR from 2010 to 2020 to reach US\$191 billion in 2020.

The following chart illustrates the historical and projected onshore drilling and completion expenditure in selected regions (China, Central Asia, Southeast Asia, the Middle East and North America) from 2010 to 2020:

(US\$ millions)



Source: Spears and Associates

On a global basis, the market segments of drilling services, completion services and reservoir services account for approximately 65% of total expenditures to drill and complete wells. In 2010, these three services segments accounted for a total expenditures of US\$178 billion on a global basis.

The following table sets forth the historical and projected global drilling services, completion services, and reservoir services market outlook from 2010 to 2020:

Type	2	2010	2	011E	20	012E	2	013E	20	014E	20	015E	2016E	2017 E	2018E	2019E	2020 E
										(billio	ns o	f US\$)					
Drilling Services	\$	110	\$	133	\$	142	\$	151	\$	162	\$	172	\$182	\$194	\$206	\$219	\$234
Completion																	
Services	\$	41	\$	49	\$	52	\$	56	\$	59	\$	62	\$ 65	\$ 69	\$ 73	\$ 77	\$ 81
Reservoir Services	\$	27	\$	32	\$	34	\$	37	\$	39	\$	42	\$ 44	\$ 47	\$ 50	\$ 53	\$ 57
Other	\$	94	\$	113	\$	122	\$	130	\$	139	\$	149	\$158	\$169	\$180	\$192	\$206
Total	\$	272	\$	327	\$	351	\$	374	\$	399	\$	424	\$449	\$478	\$509	\$542	\$577
Drilling Services		41%		41%		41%		41%		41%		41%	41%	41%	41%	41%	41%
Completion																	
Services		15%		15%		15%		15%		15%		15%	15%	14%	14%	14%	14%
Reservoir Services		10%		10%		10%		10%		10%		10%	10%	10%	10%	10%	10%
Other	_	35%		35%	_	35%		35%	_	35%	_	35%	35%	35%	35%	36%	36%
	1	00%]	100%	1	00%	1	100%	1	00%	1	00%	100%	100%	100%	100%	100%

Source: Spears and Associates

China Oilfield Services Outlook

The demand for oilfield services in China is expected to increase significantly to meet increasing domestic energy demand.

Upstream spending in China is expected to grow at a 8.9% CAGR from 2010 to 2020 and reach US\$71.3 billion. Chinese NOCs account for over 90% of the upstream activity in China. CNPC alone accounts for 60%-70% of the Chinese market.

The following chart illustrates the historical and projected upstream activities in China from 2010 to 2020:

Category	2010	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Oil Production (MMbpd)	4.2	4.2	4.2	4.1	4.1	3.8	3.8	3.9	3.9	3.9	4.0
Gas Production (TCF)	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0
Average Active Rigs	1,830	1,903	1,978	2,057	2,138	2,222	2,311	2,403	2,499	2,598	2,702
Onshore	1,807	1,872	1,946	2,025	2,105	2,188	2,276	2,367	2,462	2,560	2,662
Offshore	24	31	32	32	33	34	34	36	37	38	40
Spending on New Well											
Construction (US\$ Bn)	\$ 30.4	\$ 34.9	\$ 38.1	\$ 41.6	\$ 45.4	\$ 49.6	\$ 52.7	\$ 57.0	\$ 61.5	\$ 66.1	\$ 71.3
Onshore	\$ 24.7	\$ 27.0	\$ 29.5	\$ 32.2	\$ 35.2	\$ 38.4	\$ 40.5	\$ 43.7	\$ 46.9	\$ 50.2	\$ 53.9
Offshore	\$ 5.7	\$ 7.9	\$ 8.6	\$ 9.4	\$ 10.3	\$ 11.2	\$ 12.2	\$ 13.4	\$ 14.6	\$ 15.9	\$ 17.4

Source: EIA, Baker Hughes, Spears and Associates

Total spending on onshore drilling services, completion services and reservoir services is projected to grow at a 9.1% CAGR to reach US\$32.3 billion in 2020 from US\$13.6 billion in 2010. Completion services spending is projected to be the fastest growing segment out of the three, increasing at a 12.6% CAGR to reach US\$8.1 billion in 2020 from US\$2.5 billion in 2010, while onshore drilling services and reservoir services are projected to grow at a 8.1% CAGR to reach US\$18.9 billion and US\$5.3 billion, respectively, by 2020.

The following table sets forth the historical and projected onshore drilling, completion, and reservoir services spending in China from 2010 to 2020:

Type	2010	2011E	2012E	2013E	2014E	2015E	2016E	2017 E	2018E	2019E	2020E
					(mi	llions of U	JS\$)				
Drilling Services	8,655	9,451	10,320	11,270	12,307	13,439	14,162	15,285	16,431	17,571	18,881
Completion Services	2,473	2,835	3,244	3,703	4,219	4,800	5,260	5,896	6,573	7,279	8,092
Reservoir Services	2,423	2,646	2,890	3,156	3,446	3,763	3,965	4,280	4,601	4,920	5,287
Total	13,551	14,933	16,454	<u>18,129</u>	<u>19,972</u>	22,002	23,388	<u>25,460</u>	<u>27,605</u>	<u>29,770</u>	<u>32,260</u>

Source: Spears and Associates

According to Spears and Associates, on a revenue basis, the subsidiaries of China's three major state-owned oil companies currently capture approximately 85% of the market in China in the market segments that SPT Energy Group Inc. serves, i.e., onshore drilling services, completion services and reservoir services. Foreign oil service companies such as Schlumberger and Halliburton are estimated to combine to capture approximately 5% of these market segments in China. Spears and Associates further estimates that domestic private companies such as SPT Energy Group Inc, Anton Oilfield Services, Xinjiang Zhudong Petroleum Technology and over 1,200 other domestic private companies combine to capture the remaining approximately 10% of these market segments. Spears and Associates' estimates of revenue by company in 2010 in these market segments in China is as follows:

Company	(billions of RMB)
Affiliates of Chinese NOCs	78.40
Schlumberger	2.00
Halliburton	1.70
Baker Hughes	0.90
SPT Energy Group Inc.	0.44
Anton Oilfield Services	0.40
Xinjiang Zhudong Petroleum Technology	0.36
Others (including around 1,200 companies)	8.00
Total	92.20

The RMB92.2 billion market for these market segments in China corresponds to Spears and Associates' estimate of \$13.6 billion⁽¹⁾ spent in this sector in 2010.

Spears and Associates estimated that SPT Energy Group Inc. captured approximately 5% of the RMB9.2 billion market estimated to have been held by PRC non-state owned companies for these market segments in China in terms of revenue for the year ended 31 December 2010.

For the most part, affiliated companies of state-owned oil companies do not serve the market in China for high-end or critical services wells—wells that are deep, high pressure and/or high temperature—due to their lack of advanced technology. In China, these high-end or critical services wells are primarily served by foreign oilfield services companies or domestic private oilfield services companies such as SPT Energy Group Inc. According to Spears and Associates, we have completed the largest number of high-end or critical services wells in the Tarim Oilfield each year during the Track Record Period and held an approximately 75% market share of the high-end or critical services well completion market in the Tarim Oilfield in 2010.

⁽¹⁾ RMB converted to US\$ at RMB1.00 = US\$0.1475, the average exchange rate from 1 January 2010 to 31 December 2010, based on FactSet.

Growth from Unconventional Gas Resources in China

Shale gas, coalbed methane and tight gas have the potential of becoming major energy sources for domestic consumption in China because of their possible abundance and low emissions. One of the key factors to increase natural gas production from shale rock has been advances in horizontal drilling and hydraulic fracturing technologies, which have brought costs down and made project economics more robust. As such, it is expected that oil and gas companies will increasingly allocate upstream expenditure towards developing such resources.

Shale Gas

According to the EIA, China holds the largest shale gas resources in the world with around 1,275 tcf of technically recoverable resources, most of which are estimated to be in the Sichuan and Tarim basins.

As China currently has no shale gas production and shale gas exploration drilling is just being initiated, public information on shale formations in China is quite limited and reservoir quality remains uncertain. However, China has identified shale gas as one of the country's top targets for technological breakthroughs in the 2011-2015 Five-Year Plan period. According to Spears and Associates, the Ministry of Land and Resources projects that shale gas could supply one-tenth of China's total gas output by 2020, and is targeting 50-80 shale gas prospects and 20-30 exploration and development blocks by 2020, along with building 15-30 billion cubic metres of shale gas production capacity by 2020.

It has been reported that BP p.l.c. has joined Sinopec in exploring shale gas in Guizhou and Jiangsu Provinces. Starting in 2011, Shell has reported that it plans to spend US\$1 billion per year on average over the next five years on shale gas projects in Sichuan Province with CNPC, if its exploration program proves to be successful. In March 2011 CNPC completed its first horizontal shale gas well in the Weiyuan block of Sichuan Province.

Coalbed Methane

In the 12th Five-Year Plan period China hopes to increase its coalbed methane production to 20-24 billion cubic metres (about 2.2 bcfd) by 2015, up from 8.8 billion cubic metres in 2010. According to Spears and Associates, CNPC and China United Coalbed Methane Corporation each expects to produce about 400 mmcfd by 2015, while coal mining companies will produce about 200 mmcfd from their coalbed methane wells in 2015.

So far, CNPC and BP p.l.c. have agreed to form a partnership to develop a large coalbed methane deposit in the Shaerhu block of the Tuha basin in Xinjiang Autonomous Region. In March 2011 Shell signed a framework agreement with the government of the Xinjiang Autonomous Region to jointly explore and develop coalbed methane. In early 2011, CNPC reported that it had discovered 115.2 billion cubic metres of proven coalbed methane reserves in the Fanzhuang and Zhengzhuang blocks in the Qinshui basin in northern Shanxi Province.

Tight Gas

According to Spears and Associates, CNPC and Total plan to drill about 15 wells in the Sulige South gas field in China's Ordos basin in 2011, and the development plan calls for about a total of 2,000 wells to be drilled. First production could begin in 2012 or 2013, and peak production is estimated at 480 mmcfd in 2016.

In 2010 Shell and CNPC entered a 30-year agreement to evaluate tight gas reserves in the Jinqiu block in Sichuan. Expectations are that the block would likely produce 2-3 billion cubic metres of gas a year.

GLOBAL EXPANSION PLANS OF CHINESE NOCS

Over the past decade, Chinese NOCs have actively sought to acquire interests in exploration and production projects overseas. From 2008 to 2010, Chinese NOCs invested over US\$40 billion in acquisitions of oil and gas assets.

CNPC held hydrocarbon assets in 30 countries as of the end of 2010. According to Spears and Associates, PetroChina is expected to spend at least US\$60 billion in the next decade on overseas takeovers after paying more than US\$6.2 billion in the past year for upstream and downstream assets in Australia, Canada, Singapore and Central Asia.

It was reported that CNPC plans to triple its overseas oil and gas production by 2020. It plans to produce 400 million metric tons of oil and gas per year by 2020 and looks to increase its overseas oil and gas production by at least 130 million tons to 200 million tons per year by 2020.

Sinopec has also stepped up its international acquisition efforts, particularly in the upstream sector. In 2009, Sinopec International Exploration and Production Corporation ("SIPC"), a wholly owned subsidiary of Sinopec, acquired Calgary-based Addax Petroleum, one of the largest independent producers in West Africa and the Middle East for US\$7.5 billion. In 2010, SIPC acquired a 9.03% interest in Syncrude from ConocoPhillips for US\$4.65 billion, a 40% interest in Repsol's Brazilian upstream portfolio for US\$7.1 billion, Occidental Petroleum's Argentina assets for US\$2.45 billion, and selected upstream assets in Chevron's Indonesia assets.

CNOOC, while primarily operating in the offshore oil sector in China, has increasingly moved into foreign operations. In March 2010, CNOOC acquired a 50% interest in Bridas Corporation for US\$3.1 billion. In October 2010, it agreed to partner with Chesapeake Energy ("Chesapeake") to jointly develop the Eagle Ford gas shale deposits in South Texas, at a cost of US\$1.08 billion. In January 2011, CNOOC agreed to buy a one-third interest in Chesapeake's oil and gas leases in the Denver-Julesburg and Powder River Basins for US\$570 million, and committed an additional US\$697 million to cover two-thirds of Chesapeake's drilling and completion expenses through 2014. In March 2011, CNOOC and Total each acquired a one-third interest in the Ugandan operations of UK-based oil explorer Tullow Oil.

Central Asia Oilfield Services Outlook

Upstream spending in Central Asia is expected to grow at a 10.4% CAGR from 2010 to 2020 to reach US\$5.4 billion per year.

The following table sets forth the historical and projected upstream activities in Central Asia from 2010 to 2020:

Category	2010	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Oil Production											
(MMbpd)	3.0	3.1	3.1	3.2	3.3	3.4	3.5	3.5	3.6	3.7	3.8
Gas Production (TCF)	6.8	7.2	7.6	8.1	8.5	8.9	9.0	9.1	9.1	9.2	9.3
Average Active Rigs	305	421	442	459	473	483	492	502	512	522	533
Onshore	268	383	402	418	431	439	448	457	466	476	485
Offshore	37	38	40	41	42	43	44	45	46	47	48
Spending on New Well											
Construction											
(US\$ billion)	\$ 2.0	\$ 2.7	\$ 3.0	\$ 3.3	\$ 3.6	\$ 3.8	\$4.1	\$4.4	\$4.7	\$5.1	\$5.4
Onshore	\$ 1.1	\$ 1.8	\$ 1.9	\$ 2.1	\$ 2.3	\$ 2.5	\$2.6	\$2.8	\$3.0	\$3.3	\$3.5
Offshore	\$ 0.9	\$ 1.0	\$ 1.1	\$ 1.2	\$ 1.3	\$ 1.4	\$1.5	\$1.6	\$1.7	\$1.8	\$1.9

Source: EIA, Baker Hughes, Spears and Associates

Total spending on onshore drilling services, completion services and reservoir services in Central Asia is projected to grow at a 12.0% CAGR to reach US\$1.9 billion in 2020 from US\$0.6 billion in 2010. Onshore drilling services, currently the largest market segment out of the three, is projected to increase at 12.0% CAGR to reach US\$1.2 billion in 2020 from US\$0.4 billion in 2010.

The following table sets forth the historical and projected onshore drilling, completion and reservoir services spending in Central Asia from 2010 to 2020:

Type	2010	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
	(US\$ millions)										
Drilling Services	394	618	682	745	805	862	924	992	1,064	1,141	1,225
Completion Services	113	177	195	213	230	246	264	284	304	326	350
Reservoir Services	110	173	191	208	_225	241	259	278	298	320	343
Total	61 7	968	1,068	1,166	<u>1,261</u>	1,350	1,446	1,554	1,666	1,787	<u>1,917</u>

Source: Spears and Associates

Competitive Strength Assessment

SPT Energy Group Inc. is positioned in the market as a large, non-state-owned oilfield services firm with extensive industry experience, a diversified range of products and services, and a growing presence both within China and abroad. It operates in the Tarim Oilfield, Sichuan Oilfield, Changqing Oilfield and other main oilfields in China, and also has operations in Southeast Asia (Indonesia, Singapore), Central Asia (Kazakhstan, Turkmenistan), the Middle East (Dubai), and North America (Canada).

Spears estimated that SPT Energy Group Inc. captured approximately 5% of the 9.2 billion RMB market estimated to have been held by domestic non-state-owned companies for onshore drilling services, completion services, and reservoir services in China in terms of revenue for the year ended 31 December 2010. According to Spears and Associates, in the high end or critical services well completion market in the Tarim Oilfield, SPT Energy Group Inc. completed the largest numbers of wells each year during the Track Record Period. Spears further estimated that SPT Energy Group Inc. held the largest market share in 2010 of about 75% of the well completion market in the Tarim Oilfield, completing about 160 wells out of around 210 high end or critical services wells.

Within China, SPT Energy Group Inc. primarily competes with local domestic companies—either subsidiaries or affiliates of the major state-owned Chinese oil and gas companies or non-state-owned oilfield services providers such as Anton Oilfield services and Xinjiang Zhudong Petroleum Technology.

According to Spears and Associates, the subsidiaries or affiliates of the major state-owned Chinese oil and gas companies typically provide "commodity" applications on conventional wells. These companies typically have a standard range of products or services and with rich experience for certain area. On the other hand, non-state-owned domestic companies such as SPT Energy Group Inc. and Anton Oilfield services typically seek to differentiate themselves by competing with major international oilfield services companies in terms of performance, reliability, range of services, and technical support, but typically offer their services at a lower cost compared to their international competitors.

SPT Energy Group Inc.'s superior research and development capability, integrated line of products and services, and size generally provide it with a competitive advantage compared to local domestic competitors, particularly with regard to high end or critical service well applications, i.e., applications that are applied to deep, high temperature, and high pressure wells.

Outside of China, SPT Energy Group Inc. competes with local oilfield services providers, as well as major international oilfield services companies such as Schlumberger, Halliburton, Baker Hughes and Weatherford.

International oilfield services companies typically seek to provide premium technologies for use in critical service applications. They tend to provide a wide range of products and services and have extensive experience in terms of both downhole applications and geographic coverage. In addition, they typically support extensive research and development programs and offer significant technical support to their clients. These companies compete primarily on the basis of performance, reliability, range of services and technical support.

SPT Energy Group Inc.'s competitive pricing ability, high-quality services and local experience generally provides it with a competitive advantage compared to major international oilfield services companies.

Opportunities and Challenges for the Oilfield Services Sector

Opportunities as well as challenges exist for oilfield services providers, including local content requirements, global outsourcing trends and increasing focus on oilfield services companies' ability to provide integrated and tailored solutions.

Local Content—Local content is sometimes required in developing countries by the local government to regulate foreign direct investment. This is a requirement that goods and services sold in a country contain a minimum level of domestic value-added content, for example in Kazakhstan a certain percentage of employees hired must be Kazakhstan nationals.

Outsourcing—The global trend to outsource engineering and project management by oil and gas companies has continued. It is expected that reduced customer competency will drive the need for full service suppliers throughout the oilfield equipment and services sector.

Greater Complexity Expands Role of Service Firms—The increased complexity in oil and gas development processes, coupled with the ongoing outsourcing by operators, has expanded the role of oilfield services firms in the field development process. There will be increasing focus on the ability of oilfield service companies to provide integrated and tailored solutions for the industry.

ABOUT THIS SECTION

General

This "Industry Overview" section contains information extracted from a commissioned report prepared by Spears and Associates for the purposes of this prospectus. We paid Spears and Associates a fee of USD35,000. Other key sources used to prepare this section include the BP Statistical Review of World Energy, Barclays Capital E&P Spending Survey and EIA. Due to the difficulty of collecting reliable industry information in Kazakhstan, Spears and Associates was unable to present information regarding the oilfield services industry in Kazakhstan, which is a relatively immature market, and the disclosure regarding the oilfield services industry in Kazakhstan is therefore limited in this prospectus.

About Spears and Associates

Spears and Associates has provided market research-based consulting services to the worldwide petroleum industry since 1965, specialising in equipment and services used in exploration, drilling & completion, production, transportation and refining. Current and former clients include petroleum equipment manufacturers, oilfield services firms, oil and gas producers, financial institutions, trade associations, and the U.S. government. Within this market, Spears and Associates provides a wide scope of research and consulting services grouped in the following areas:

- Marketing/Sales—evaluation of market size and growth, market share, customer satisfaction, technology trends, selection criteria, purchasing process, and benchmarking
- Business Development—strategic analysis for mergers and acquisitions, partnering, new technology development and introduction, and competitive analysis
- Finance/Planning—outlook for industry activity and price sensitivity analysis
- Corporate—strategic review, due diligence, and litigation support

In addition to its market research and consulting assignments, Spears and Associates produces three publications covering the upstream petroleum industry: the Drilling and Production Outlook (DPO); the Oilfield Market Report (OMR); and Pipe Logix.

The DPO has tracked and forecast worldwide drilling and production activity since 1981. It is a quarterly report that follows upstream activity—active rigs, wells and footage drilled, and spending to drill and complete wells—in over 50 countries. The DPO is used by over 100 oilfield equipment manufacturers and services firms and financial institutions to monitor worldwide oilfield activity, making it the most widely followed upstream activity forecast in the petroleum industry.

The OMR is an annual report that tracks worldwide upstream spending by producers for over 30 distinct product and service segments. In each segment, the OMR identifies annual turnover for each of the leading vendors. In all, about 250 oilfield equipment and service firms are included in the report. In addition, the OMR identifies recent consolidations and technology trends in each segment. The OMR is used by financial institutions and oilfield equipment and services firms to identify market growth and relative performance.

Pipe Logix is a suite of reports that analyse the Oil County Tubular Goods ("OCTG") market. The flagship publication is the Spot Market Price report, which provides average monthly prices for over 30 categories of pipe. The report covers the most popular sizes of tubing, production casing and surface casing. The Key Market Factors report is a concise presentation of the drivers to the OCTG industry. It is issued monthly and provides a history of OCTG shipments, OCTG imports, active rigs, wells drilled and other critical drivers to OCTG pricing. Every other month the Market Review and Outlook details the drivers, prices, imports/exports and provides commentary and other analysis on the business environment of the OCTG industry.

Research Methodology

Over the course of this research, Spears and Associates interviewed more than 20 people to determine the size of the market, how it is structured, and how it is expected to develop in the future. These interviews were conducted with key industry participants, knowledgeable industry figures such as marketing managers, product managers, and other company executives. Spears and Associates research also relied on its proprietary database of oilfield market segment sales and its internal knowledge of oilfield equipment and service markets developed through working with many of the world's leading oilfield equipment and services companies. The research team also drew on publicly available information on energy markets and measures of industry activity. The focus of Spears and Associates research and interviews was toward the following markets served by SPT Energy Group Inc.: drilling services, completion services and reservoir services.

Other Key Sources

The following sets forth our other key sources used to prepare this "Industry Overview" section.

- BP Statistical Review of World Energy. BP Statistical Review of World Energy is an annual industry report that provides objective quantitative data on world energy markets. The report has been published for over 50 years and is based on statistics taken from the government, primary sources as well as published data. BP plc, one of the world's largest oil and gas companies, issues the report annually. The source data is based on contributions from a number of independent organisations, including OECD, Platts, World Energy Council, EIA and the Oil and Gas Journal.
- Barclays Capital E&P Spending Survey, is a semi-annual product, initiated by Barclays Capital in 1982. The survey attempts to include each meaningful spender on exploration and production throughout the world. It is the largest, most comprehensive survey of its kind, and encompasses integrated oil companies, independents, and national oil companies worldwide.
- EIA. The Energy Information Administration, or EIA, is an independent statistical agency within the United States Department of Energy.