



# Independent Stock Idea

October 28, 2010

rating: buy  
s&p 500: 1182

## PetroChina (PTR)

### Raise NPV to \$170 from \$150 on Natural Gas and Downstream

<i>Symbol</i>	PTR	<i>Ebitda Next Twelve Months ending 12/31/11 (US\$mm)</i>	52,000
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	122.83	<i>Natural Gas and Oil Production/Ebitda (%)</i>	77
<i>Pricing Date</i>	10/27/10	<i>Adjusted Reserves/Production NTM</i>	13.6
<i>Shares (mm)</i>	1830	<i>EV/Ebitda</i>	5.2
<i>Market Capitalization (US\$mm)</i>	225,000	<i>PV/Ebitda</i>	6.9
<i>Debt (US\$mm)</i>	46,000	<i>Undeveloped Reserves (%)</i>	40
<i>Enterprise Value (EV) (US\$mm)</i>	271,000	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	31.01
<i>Present Value (PV) (US\$mm)</i>	357,000	<i>Present Value Proven Reserves(US\$/boe)</i>	12.58
<i>Net Present Value (US\$/share)</i>	170	<i>Present Value Proven Reserves(US\$/mcf)</i>	2.10
<i>Debt/Present Value</i>	0.13	<i>Earnings Next Twelve Months (US\$/sh)</i>	12.19
<i>McDep Ratio - EV/PV</i>	0.76	<i>Price/Earnings Next Twelve Months</i>	10
<i>Dividend Yield (%/year)</i>	3.5	<i>Indicated Annual Dividend (US\$/sh)</i>	4.35
Note: Estimated cash flow and earnings tied to one-year futures prices for oil.			
Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.			
The Peoples Republic of China holds 86% of the outstanding shares.			
Estimated present value presumes a long-term price for oil of US\$75 a barrel.			
For historical analysis of PTR since 2001 see <a href="http://www.mcdep.com/3ptr.htm">www.mcdep.com/3ptr.htm</a>			

### Summary and Recommendation

Buy-recommended **PetroChina (PTR)** offers unlevered appreciation potential of 32% to a McDep Ratio of 1.0 where stock price would equal Net Present Value (NPV) of \$170 a share. On the strength of rising natural gas price and refined product margin, NPV is up from \$150. Third quarter results released on October 27 verify a long-awaited upward adjustment of government-controlled natural gas price along with better profit margin on price-controlled refined products (see table [Quarterly Operating and Financial Estimates](#)). Third quarter earnings of 34,700 million renminbi (RMB) prompt us to raise our estimate of cash flow for the next twelve months (see table [Half-Yearly Financial Results](#)). Because the company reports earnings by segment only on a half-yearly basis we surmise that the added strength comes from other (downstream) businesses that include refining/marketing, petrochemicals and natural gas transmission/distribution. Higher cash flow boosts the value of natural gas and downstream to 15% and 22% of NPV (see table [Functional Cash Flow and Present Value](#)). PetroChina is demonstrating solid growth in investment value as the most important oil and gas company in the country whose rapid growth has made it the world's largest energy consumer. Scoring a total return of 28% a year for the past nine years, the stock can continue to be rewarding, we believe.

Kurt H. Wulff, CFA



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PetroChina Company Limited									
Quarterly Operating and Financial Estimates									
									Twelve
	Q3	Q2	Q3	Q4E	Year	Q1E	Q2E	Q3E	Months E
	9/30/09	6/30/10	9/30/09	12/31/10	2010E	3/31/11	6/30/11	9/30/11	12/31/11
<b>Volume</b>									
Natural gas (bcf)	504	540	535	646	2,330	671	594	588	2,563
Natural Gas (mmcf)	5,478	5,935	5,810	7,018	6,384	7,454	6,529	6,391	7,023
Days	92	91	92	92	365	90	91	92	365
Oil (mmb)	214	215	215	215	854	210	212	215	852
Oil (mbd)	2,326	2,362	2,334	2,334	2,341	2,334	2,334	2,334	2,334
Total gas & oil (mmb)	298	305	304	322	1,243	322	311	313	1,279
Total gas & oil (mbd))	3,239	3,351	3,302	3,503	3,405	3,576	3,422	3,399	3,504
<b>Price</b>									
Natural gas (\$/mcf)									
Henry Hub (\$/mmbtu)	3.39	4.09	4.38	3.62	4.35	3.96	3.95	4.11	4.12
Company	3.39	3.73	4.27	4.27	3.89	4.27	4.27	4.27	4.27
Oil (\$/bbl)									
WTI Cushing	68.22	77.85	76.08	83.12	78.93	85.14	86.32	87.19	86.63
Company	61.92	74.74	70.49	77.02	73.08	78.89	79.98	80.79	80.28
Total gas & oil (\$/bbl)	50.20	59.28	57.34	59.86	57.53	60.39	62.70	63.51	62.03
NY Harbor 3-2-1 (\$/bbl)	9.45	12.13	8.31	7.69	8.82	7.53	10.16	9.72	8.65
<b>Revenue (\$mm)</b>									
Natural Gas	1,710	2,015	2,284	2,760	9,060	2,867	2,539	2,513	10,955
Oil	13,251	16,061	15,135	16,535	62,440	16,569	16,985	17,345	68,379
Total	14,961	18,076	17,419	19,295	71,500	19,436	19,524	19,858	79,334
RMB/\$US	6.83	6.82	6.77	6.69	6.77	6.69	6.69	6.69	6.69
Total Upstream (RMB)	102,197	123,278	117,929	128,997	484,281	129,940	130,527	132,760	530,391
Other (Downstream)	165,545	242,724	245,373	202,069					
Total Revenue	267,742	366,002	363,302	331,066					
<b>Expense</b>									
194,560 285,923 288,399 242,506									
<b>Ebitda (RMB)</b>									
Exploration and Production									
Other									
Total	73,182	80,079	74,903	88,560					
Exploration	5,161	8,555	2,960	12,849					
Deprec., Deplet., & Amort.	24,774	28,406	26,788	29,064					
Other non cash	71	(485)	391	(391)					
<b>Ebit</b>									
Interest	43,176	43,603	44,764	47,038					
<b>Ebt</b>									
Income Tax	1,046	1,157	1,370	1,855					
<b>Net Income (RMB)</b>									
Exploration and Production	42,130	42,446	43,394	45,183					
Other	11,283	9,058	8,694	11,679					
Unallocated									
Total	30,847	33,388	34,700	33,504					
<b>Shares (millions)</b>									
Earnings per share (RMB)	1,830	1,830	1,830	1,830					
Ebitda Margin (E&P)	17	18	19	18					
Tax Rate	27%	21%	20%	26%					



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PetroChina Company Limited									
Half-Yearly Financial Results									
	<i>H1</i>	<i>H2</i>	<i>Year</i>	<i>H1</i>	<i>H2E</i>	<i>Year</i>	<i>H1E</i>	<i>H2E</i>	<i>Twelve</i>
	<i>6/30/09</i>	<i>12/31/09</i>	<i>2009</i>	<i>6/30/10</i>	<i>12/31/10</i>	<i>2010E</i>	<i>6/30/11</i>	<i>12/31/11</i>	<i>Months E</i>
									<i>12/31/11</i>
NY Harbor 3-2-1 (\$/bbl)	9.33	7.34	<b>8.34</b>	9.64	8.00	<b>8.82</b>	8.85	8.46	<b>8.65</b>
<b>Revenue (RMB)</b>									
Upstream (from quarterly table)	144,760	217,742	<b>362,503</b>	237,355	246,926	<b>484,281</b>	260,467	269,924	<b>530,391</b>
Downstream Value Added	270,517	386,256	<b>656,772</b>	447,442	447,442	<b>894,885</b>	447,442	447,442	<b>894,885</b>
Total	415,277	603,998	<b>1,019,275</b>	684,797	694,368	<b>1,379,165</b>	707,909	717,366	<b>1,425,275</b>
<b>Expense</b>	298,044	468,349	<b>766,393</b>	526,521	530,905	<b>1,057,426</b>	537,676	542,404	<b>1,080,080</b>
<b>Ebitda (RMB)</b>									
Exploration and Production	69,304	110,615	<b>179,920</b>	114,746	123,463	<b>238,209</b>	130,233	134,962	<b>265,195</b>
Other	47,929	25,034	<b>72,962</b>	43,530	40,000	<b>83,530</b>	40,000	40,000	<b>80,000</b>
Total	117,233	135,649	<b>252,882</b>	158,276	163,463	<b>321,739</b>	170,233	174,962	<b>345,195</b>
Exploration	11,107	8,291	<b>19,398</b>	15,809	15,809	<b>31,618</b>	15,809	15,809	<b>31,618</b>
Deprec., Deplet., & Amort.	42,859	49,400	<b>92,259</b>	55,852	55,852	<b>111,704</b>	55,852	55,852	<b>111,704</b>
Other non cash									
<b>Ebit</b>	63,267	77,958	<b>141,225</b>	86,615	91,802	<b>178,417</b>	98,572	103,301	<b>201,873</b>
Interest	2,047	3,225	<b>5,272</b>	2,525	3,225	<b>5,750</b>	2,525	3,225	<b>5,750</b>
<b>Ebt</b>	61,220	74,733	<b>135,953</b>	84,090	88,577	<b>172,667</b>	96,047	100,076	<b>196,123</b>
Income Tax	11,810	21,663	<b>33,473</b>	18,210	20,373	<b>38,583</b>	24,012	23,017	<b>47,029</b>
<b>Net Income (RMB)</b>									
Exploration and Production	37,640	67,379	<b>105,019</b>	73,372					
Other	34,352	4,073	<b>38,425</b>	24,204					
Unallocated	(22,582)	(18,382)	<b>(40,964)</b>	(31,696)					
Total	49,410	53,070	<b>102,480</b>	65,880	68,204	<b>134,084</b>	72,036	77,058	<b>149,094</b>
<b>Shares (millions)</b>	1,830	1,830	<b>1,830</b>	1,830	1,830	<b>1,830</b>	1,830	1,830	<b>1,830</b>
Earnings per share (RMB)	27	29	<b>56</b>	36	37	<b>73</b>	39	42	<b>81</b>
Ebitda Margin (E&P)	48%	51%	<b>50%</b>	48%	50%	<b>49%</b>	50%	50%	<b>50%</b>
Tax Rate	19%	29%	<b>25%</b>	22%	23%	<b>22%</b>	25%	23%	<b>24%</b>

PetroChina					
Functional Cash Flow and Present Value					
	<i>NTM Ebitda</i>	<i>Adjusted</i>	<i>PV/</i>	<i>Present</i>	
	<i>(US\$mm)</i>	<i>R/P</i>	<i>Ebitda</i>	<i>Value</i>	
				<i>(US\$mm)</i>	
Natural Gas	5,500	18.4	10.0	55,000	15%
Oil	34,100	11.2	6.5	222,000	62%
Downstream	12,000		6.7	80,000	22%
	51,600	13.6	6.9	357,000	100%
Debt (US\$mm)					46,000
Net Present Value (US\$mm)					311,000
Shares (mm)					1,830
Net Present Value - Standard Estimate (US\$/sh)					170
NPV Approximation by Cash Flow Multiple Depending on Reserve Life (US\$/sh)					186



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