

Rating: Buy  
S&P 500: 1220

## **PetroChina Company Ltd.** **Understated Natural Gas Resources**

<i>Symbol</i>	PTR	<i>Ebitda Next Twelve Months ending 6/30/06 (US\$mm)</i>	37,000
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	81.80	<i>Natural Gas and Oil Production/Ebitda (%)</i>	87
<i>Pricing Date</i>	8/19/05	<i>Adjusted Reserves/Production NTM</i>	13.9
<i>Shares (mm)</i>	1758	<i>EV/Ebitda</i>	4.2
<i>Market Capitalization (US\$mm)</i>	144,000	<i>PV/Ebitda</i>	6.0
<i>Debt (US\$mm)</i>	9,000	<i>Undeveloped Reserves (%)</i>	27
<i>Enterprise Value (EV) (US\$mm)</i>	153,000	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	32.51
<i>Present Value (PV) (US\$mm)</i>	220,000	<i>Present Value Proven Reserves(US\$/boe)</i>	12.15
<i>Net Present Value (US\$/share)</i>	120	<i>Present Value Proven Reserves(US\$/mcf)</i>	2.03
<i>Debt/Present Value</i>	0.04	<i>Earnings Next Twelve Months (US\$/sh)</i>	10.87
<i>McDep Ratio - EV/PV</i>	0.69	<i>Price/Earnings Next Twelve Months</i>	8
<i>Dividend Yield (%/year)</i>	4.0	<i>Indicated Annual Dividend (US\$/sh)</i>	3.24

Note: Estimated cash flow and earnings tied to one-year futures prices for oil and natural gas.

Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.

The Peoples Republic of China holds 90% of the outstanding shares.

### **Summary and Recommendation**

Down 14% from an intraday high of \$95.65 on August 2, the stock of buy-recommended **PetroChina Company Ltd. (PTR)** ranks among the most undervalued of leading global oil producers. Some 98% of the assets of the company are in its fast-growing home country despite a recently completed deal to acquire reserves outside China for \$2.5 billion. The company receives world prices for crude oil. Apparently it receives somewhat less than world prices for refined products. Currently reported natural gas price is only about a fifth the long-term oil equivalent as the Chinese government wants to encourage substitution for highly polluting coal. Financial results for the first half of 2005 are likely to be reported this week. The stock has 47% appreciation potential to net present value. Financial risk appears low though there is obvious political risk.

### **A Small Step to Expand Internationally**

Politically, the fear of China gaining any significant control of international oil and gas resources and using it to deprive other countries seems unfounded. To acquire or develop international capacity would take a great deal of capital that China shows little sign of being willing to spend. PetroChina's international deal is small. Fellow Chinese producer, buy-recommended **CNOOC Ltd. (CEO)** bid late and low for buy-recommended Unocal ultimately acquired by buy-recommended **Chevron (CVX)** at an advantageous price.

Similarly, investor fears that PetroChina would be driven to waste capital as an instrument of government policy also appear exaggerated. When a deal was finally announced on June 10, 2005 and approved by in a special meeting of shareholders on August 16, 2005 it involved a modest investment to purchase oil reserves primarily in Kazakhstan. Additional interests give the company exposure to activity in Africa and South America.

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**Hidden Value in Natural Gas**

Profits from crude oil production have been the primary driver of the company's success as a publicly held stock. Natural gas seems likely to gain in importance as it becomes more widely used and appreciated for its cleanliness and convenience. Our arbitrarily limited adjusted reserve life of 20 years suggests unrecognized potential. Current cash flow generation of an estimated \$1.4 billion for the next twelve months is held back by a low price of less than \$2 a million btu. The current quote for natural gas delivered over the next six years in the U.S. is about four times that at \$8. We think that quote is moving to \$12 if oil stays at \$60 a barrel.

**PetroChina**  
**Functional Cash Flow and Present Value**

	<i>NTM Ebitda</i> <i>(US\$mm)</i>	<i>Adjusted</i> <i>R/P</i>	<i>PV/</i> <i>Ebitda</i>	<i>Present</i> <i>Value</i> <i>(US\$mm)</i>	
Natural Gas	1,400	20.0	14.3	20,000	9%
Oil	27,100	12.5	5.8	158,000	72%
Downstream	8,100		5.2	42,000	19%
	36,600	13.9	6.0	220,000	100%
Debt (US\$mm)					9,000
Net Present Value (US\$mm)					211,000
Shares (mm)					1,758
Net Present Value (US\$/sh)					120

**PetroChina Company Limited**  
**Next Twelve Months Operations**

	<i>Q4</i> <i>12/31/04</i>	<i>Year</i> <i>2004</i>	<i>Q1</i> <i>3/31/05</i>	<i>Q2</i> <i>6/30/05</i>	<i>Q3E</i> <i>9/30/05</i>	<i>Q4E</i> <i>12/31/05</i>	<i>Year</i> <i>2005E</i>	<i>Q1E</i> <i>3/31/06</i>	<i>Q2E</i> <i>6/30/06</i>	<i>Next</i> <i>Twelve</i> <i>Months</i> <i>6/30/06</i>
<b>Volume</b>										
Natural gas (bcf)	234	<b>839</b>	261	245	267	285	<b>1,058</b>	288	300	<b>1,140</b>
Natural Gas (mmcf)	2,545	<b>2,293</b>	2,899	2,697	2,900	3,100	<b>2,899</b>	3,200	3,300	<b>3,124</b>
Days	92	<b>366</b>	90	91	92	92	<b>365</b>	90	91	<b>365</b>
Oil (mmb)	193	<b>778</b>	200	197	199	199	<b>794</b>	195	197	<b>789</b>
Oil (mbd)	2,093	<b>2,126</b>	2,221	2,162	2,162	2,162	<b>2,176</b>	2,162	2,162	<b>2,162</b>
Total gas & oil (mmb)	232	<b>918</b>	243	238	243	246	<b>971</b>	243	247	<b>979</b>
Total gas & oil (mbd)	2,518	<b>2,508</b>	2,704	2,611	2,645	2,678	<b>2,659</b>	2,695	2,712	<b>2,682</b>
<b>Price</b>										
Natural gas (\$/mcf)										
Henry Hub (\$/mmbtu)	7.10	<b>6.15</b>	6.27	6.76	7.85	9.77	<b>7.66</b>	10.30	8.51	<b>9.11</b>
Company	1.96	<b>2.00</b>	1.98	1.92	1.92	1.92	<b>1.93</b>	1.92	1.92	<b>1.92</b>
Oil (\$/bbl)										
WTI Cushing	48.31	<b>41.44</b>	49.65	53.05	61.76	64.40	<b>57.22</b>	65.29	65.08	<b>64.13</b>
Company	40.97	<b>33.88</b>	37.63	49.30	57.39	59.85	<b>51.03</b>	60.68	60.48	<b>59.59</b>
Total gas & oil (\$/bbl)	36.05	<b>30.54</b>	33.03	42.80	49.01	50.53	<b>43.87</b>	50.95	50.55	<b>50.26</b>
<b>Revenue (\$mm)</b>										
Natural Gas	459	<b>1,675</b>	517	471	512	547	<b>2,046</b>	552	576	<b>2,187</b>
Oil	7,891	<b>26,362</b>	7,522	9,698	11,413	11,902	<b>40,536</b>	11,804	11,897	<b>47,016</b>
Total	8,350	<b>28,037</b>	8,039	10,169	11,925	12,449	<b>42,582</b>	12,356	12,473	<b>49,204</b>
Total(RMB)	69,011	<b>231,710</b>	66,437	84,040	98,553	102,887	<b>351,916</b>	102,118	103,084	<b>406,642</b>

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**PetroChina Company Limited**  
**Next Twelve Months Financial Results**

	<i>H1</i>	<i>H2</i>	<i>Year</i>	<i>H1E</i>	<i>H2E</i>	<i>Year</i>	<i>H1E</i>	<i>Next</i>
	<i>6/30/04</i>	<i>12/31/04</i>	<i>2004</i>	<i>6/30/05</i>	<i>12/31/05</i>	<i>2005E</i>	<i>6/30/06</i>	<i>Twelve</i>
								<i>Months</i>
								<i>6/30/06</i>
NY Harbor 3-2-1 (\$/bbl)	8.74	6.75	7.74	8.38	11.84	10.11	11.03	11.43
<b>Revenue (RMB)</b>								
Natural Gas								
Oil								
Upstream (from quarterly table)	102,266	129,444	<b>231,710</b>	150,477	201,440	<b>351,916</b>	205,202	<b>406,642</b>
Downstream Value Added	77,286	79,637	<b>156,923</b>	79,637	79,637	<b>159,274</b>	79,637	<b>159,274</b>
Total	179,552	209,081	<b>388,633</b>	230,113	281,077	<b>511,190</b>	284,839	<b>565,916</b>
<b>Expense</b>								
Production								
Other								
Total	85,013	97,693	<b>182,706</b>	108,209	133,691	<b>241,900</b>	135,572	<b>269,263</b>
<b>Ebitda (RMB)</b>								
Exploration and Production	73,124	92,060	<b>165,183</b>	102,576	128,057	<b>230,633</b>	129,939	<b>257,996</b>
Other	21,415	19,328	<b>40,744</b>	24,007	33,898	<b>57,904</b>	31,592	<b>65,490</b>
Total	94,539	111,388	<b>205,927</b>	121,904	147,386	<b>269,290</b>	149,267	<b>296,653</b>
Exploration	5,630	6,093	<b>11,723</b>	6,093	6,093	<b>12,186</b>	6,093	<b>12,186</b>
Deprec., Deplet., & Amort.	24,673	21,738	<b>46,411</b>	21,738	21,738	<b>43,476</b>	21,738	<b>43,476</b>
Other non cash								
<b>Ebit</b>	64,236	83,557	<b>147,793</b>	94,073	119,555	<b>213,628</b>	121,436	<b>240,991</b>
Interest	925	1,378	<b>2,303</b>	1,378	1,378	<b>2,756</b>	1,378	<b>2,756</b>
<b>Ebt</b>	63,311	82,179	<b>145,490</b>	92,695	118,177	<b>210,872</b>	120,058	<b>238,235</b>
Income Tax	18,019	24,544	<b>42,563</b>	32,443	41,362	<b>73,805</b>	42,020	<b>83,382</b>
<b>Net Income (RMB)</b>								
Exploration and Production	52,701	72,870	<b>125,571</b>					
Other	11,549	10,622	<b>22,171</b>					
Unallocated	(18,958)	(25,857)	<b>(44,815)</b>					
Total	45,292	57,635	<b>102,927</b>	60,252	76,815	<b>137,067</b>	78,038	<b>154,853</b>
<b>Shares (millions)</b>	1,758	1,758	<b>1,758</b>	1,758	1,758	<b>1,758</b>	1,758	<b>1,758</b>
Earnings per share (RMB)	25.76	32.78	<b>58.55</b>	34.27	43.69	<b>77.97</b>	44.39	<b>88.08</b>
Ebitda Margin (E&P)	72%	71%	<b>71%</b>	68%	64%	<b>66%</b>	63%	<b>63%</b>
Tax Rate	28%	30%	<b>29%</b>	35%	35%	<b>35%</b>	35%	<b>35%</b>

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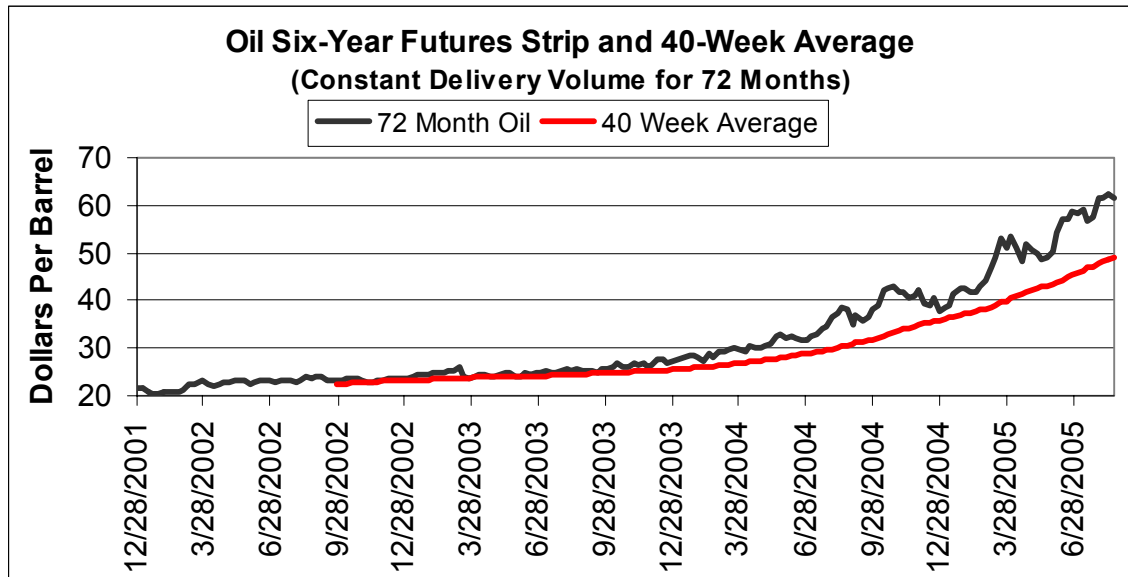
**Oil and Gas Producers**  
**Rank by McDep Ratio: Market Cap and Debt to Present Value**

	<i>Symbol/</i>	<i>Rating</i>	<i>Price</i> <i>(\$/sh)</i>	<i>Shares</i>	<i>Market</i>	<i>Net</i>	<i>Debt/</i>	<i>McDep</i>
			<i>19-Aug</i>	<i>(mm)</i>	<i>Cap</i>	<i>Present</i>	<i>Present</i>	<i>Ratio</i>
			<i>2005</i>		<i>(\$mm)</i>	<i>Value</i>	<i>Value</i>	
<b>Mega Cap</b>								
BP plc	BP	B	68.06	3,545	241,000	82.00	0.10	0.85
Total S.A.	TOT	B	128.10	1,182	151,000	160.00	0.12	0.83
Exxon Mobil Corporation	XOM	B	58.82	6,370	375,000	74.00	0.04	0.80
Royal Dutch Shell plc	RDS-A	B	64.47	3,372	217,000	84.00	0.11	0.79
Chevron Corporation	CVX	B	59.92	2,256	135,000	90.00	0.12	0.71
			<i>Total or Median</i>		<i>1,119,000</i>		<i>0.11</i>	<i>0.80</i>
<b>Producer/Refiners - Large Cap and Mid Cap</b>								
Kinder Morgan, Inc.	KMI	S2	92.34	123	11,370	20.00	0.76	1.88
Imperial Oil Limited (30%)	IMO	B	90.82	104	9,410	84.00	0.09	1.07
Marathon Oil Corporation	MRO	B	60.20	367	22,090	65.00	0.27	0.95
Petro-Canada	PCZ	B	76.39	263	20,090	84.00	0.18	0.93
Suncor Energy	SU	B	55.50	461	25,590	68.00	0.10	0.83
Norsk Hydro ASA	NHY	B	101.70	251	25,530	130.00	0.13	0.81
Lukoil Oil Company	LUKOY	B	45.70	830	38,000	65.00	0.02	0.71
PetroChina Company Ltd (10%)	PTR	B	81.80	176	14,380	120.00	0.04	0.69
ConocoPhillips	COP	B	63.07	1,419	89,500	100.00	0.15	0.69
			<i>Total or Median</i>		<i>256,000</i>		<i>0.13</i>	<i>0.83</i>

**Oil Price Continues in Long-Term Uptrend**

How high can it go? The historical parallel with the late 1970s suggests oil price could be higher. The trend seems well-defined and there is no obvious limit. The summer peak consumption period may be well along, but the northern hemisphere winter peak is not far away.

In any event there is a cushion in our analysis. The futures market is above \$60. Our present value calculations use \$50. PetroChina's McDep Ratio of 0.69 implies that PTR stock may be priced for just \$34 a barrel.



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