

Rating: Buy
S&P 500: 1266

PetroChina Company Ltd. **Commodity Price Catch Up Potential**

<i>Symbol</i>	PTR	<i>Ebitda Next Twelve Months ending 12/31/06 (US\$m)</i>	41,000
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	97.10	<i>Natural Gas and Oil Production/Ebitda (%)</i>	93
<i>Pricing Date</i>	2/8/06	<i>Adjusted Reserves/Production NTM</i>	11.6
<i>Shares (mm)</i>	1758	<i>EV/Ebitda</i>	4.2
<i>Market Capitalization (US\$m)</i>	171,000	<i>PV/Ebitda</i>	5.2
<i>Debt (US\$m)</i>	2,000	<i>Undeveloped Reserves (%)</i>	27
<i>Enterprise Value (EV) (US\$m)</i>	173,000	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	32.64
<i>Present Value (PV) (US\$m)</i>	213,000	<i>Present Value Proven Reserves(US\$/boe)</i>	12.62
<i>Net Present Value (US\$/share)</i>	120	<i>Present Value Proven Reserves(US\$/mcf)</i>	2.10
<i>Debt/Present Value</i>	0.01	<i>Earnings Next Twelve Months (US\$/sh)</i>	12.00
<i>McDep Ratio - EV/PV</i>	0.81	<i>Price/Earnings Next Twelve Months</i>	8
<i>Dividend Yield (%/year)</i>	3.9	<i>Indicated Annual Dividend (US\$/sh)</i>	3.79

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.

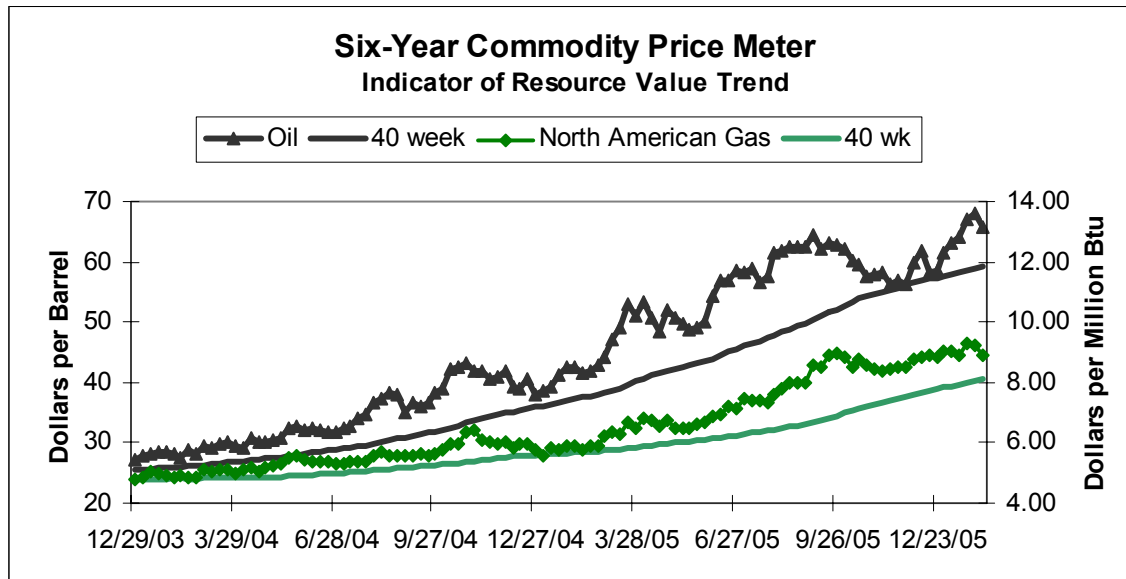
Summary and Recommendation

Buy-recommended **PetroChina Company Ltd. (PTR)** offers prospective 24% appreciation to estimated net present value of \$120 a share. World pricing for natural gas could add \$30 a share to present value while lifting of price controls on refined products might add a further indeterminate amount. On our official estimate, PTR stock has a McDep Ratio at the more undervalued end of the range for producer/refiners. Adjusted reserve life above the median implies unlevered cash flow multiple ought to be above its position as the lowest. The company's non-U.S. domicile can be desirable political diversification for energy investors. Concentration of value on oil production is high at 71% helped by international crude pricing without political interference.

McDep Ratio Relates Oil Price to Opportunity

A McDep Ratio above 1.0 tells us that PTR's market cap and debt, or enterprise value, is somewhat more than the estimated present value of its energy resources assuming a long-term real price of \$50 a barrel for Light, Sweet Crude Oil. Meanwhile six-year oil futures are about \$65 a barrel. Momentum has been positive for more than three years as the current quote stays above the 40-week average (see chart [Six-Year Commodity Price Meter](#)). Six-year oil has tripled in the four years we have been calculating it on a weekly basis. We do not need further gains in oil price to make money in buy recommendations. Yet our vision of \$150 oil in 2010 implies additional scope to exceed common expectations.

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PTR's McDep Ratio ranks below the median of peer companies (see table Rank by McDep Ratio). Aside from fundamental value, a McDep Ratio of 1.0 is an indication of takeover value. The McDep Ratio of buy-recommended **Burlington Resources (BR)**, increased to 1.0 immediately after buy-recommended **ConocoPhillips (COP)** announced its takeover offer.

Rank by McDep Ratio: Market Cap and Debt to Present Value

	Symbol/ Rating	Price (\$/sh) 8-Feb 2006	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap							
BP plc	BP B	67.20	3,465	233,000	77.00	0.15	0.89
Total S.A.	TOT B	129.58	1,176	152,000	160.00	0.12	0.83
Exxon Mobil Corporation	XOM B	60.39	6,211	375,000	74.00	0.04	0.82
Royal Dutch Shell plc	RDS-A B	62.82	3,293	207,000	80.00	0.11	0.81
Chevron Corporation	CVX B	57.89	2,236	129,000	85.00	0.11	0.72
ConocoPhillips	COP B	60.20	1,693	102,000	95.00	0.22	0.71
				<i>Total or Median</i>	<i>1,198,000</i>	<i>0.12</i>	<i>0.82</i>
Producer/Refiners - Large Cap and Mid Cap							
Kinder Morgan, Inc.	KMI S2	91.85	139	12,800	33.00	0.74	1.47
Imperial Oil Limited (30%)	IMO B	103.01	101	10,380	90.00	0.09	1.13
Petro-Canada	PCZ B	47.66	523	24,930	42.00	0.19	1.11
Suncor Energy	SU B	76.71	461	35,370	75.00	0.10	1.02
Marathon Oil Corporation	MRO B	69.35	368	25,510	75.00	0.25	0.94
Norsk Hydro ASA	NHY B	117.42	251	29,460	130.00	0.17	0.92
PetroChina Company Ltd (10%)	PTR B	97.10	176	17,070	120.00	0.01	0.81
Lukoil Oil Company	LUKOY B	77.00	830	64,000	100.00	0.01	0.77
Gazprom (50%)	OGZPF B	85.40	1,133	96,800	140.00	0.02	0.62
				<i>Total or Median</i>	<i>316,000</i>	<i>0.10</i>	<i>0.94</i>

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Low Cash Flow Multiple

PetroChina has an adjusted reserve life index of 11.6 years that is longer than the median of peers (see table [Rank by EV/Ebitda](#)). In contrast, the company's unlevered multiple, EV/Ebitda, is the lowest of peers. Logic tells us production that lasts longer generally should have more present value as a multiple of next twelve months cash flow.

Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Symbol/ Rating	Price (\$/sh) 8-Feb 2006	Adjstd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap							
BP plc	BP B	67.20	9.6	6.4	5.7	9	3.3
Exxon Mobil Corporation	XOM B	60.39	11.2	6.3	5.2	9	2.1
Total S.A.	TOT B	129.58	9.2	6.0	5.0	8	2.8
Royal Dutch Shell plc	RDS-A B	62.82	7.4	5.6	4.5	8	3.5
ConocoPhillips	COP B	60.20	10.9	5.5	4.0	6	2.1
Chevron Corporation	CVX B	57.89	9.7	5.5	3.9	7	3.1
	<i>Median</i>		9.7	5.8	4.7	8	2.9
Producer/Refiners - Large Cap and Mid Cap							
Kinder Morgan, Inc.	KMI S2	91.85		8.2	12.0	18	3.8
Suncor Energy	SU B	76.71	17.7	7.6	7.8	16	0.3
Imperial Oil Limited (30%)	IMO B	103.01	10.7	6.5	7.4	12	0.8
Gazprom (50%)	OGZPF B	85.40	20.0	10.2	6.3	10	0.5
Petro-Canada	PCZ B	47.66	6.0	5.3	5.9	10	0.7
Norsk Hydro ASA	NHY B	117.42	7.9	5.2	4.8	10	2.5
Marathon Oil Corporation	MRO B	69.35	6.5	4.7	4.4	7	1.9
Lukoil Oil Company	LUKOY B	77.00	19.7	5.7	4.4	7	1.3
PetroChina Company Ltd (10%)	PTR B	97.10	11.6	5.2	4.2	8	3.9
	<i>Median</i>		11.1	5.7	5.9	10	1.3

More Concentration on Oil

Each oil and gas stock has its own unique mix of energy resources (see table [Business Segments](#)). PetroChina has high concentration on oil, a source of immediate strength.

Total present value at \$213 billion would classify PetroChina as a Mega Cap Energy Producer. Because the company is 90% government owned, the publicly held capitalization meets our large cap size standards.

Correlation Verifies Present Value in Real Time

Our underlying quantitative method for estimating present value projects cash flows years into the future and brings them to the present by applying a real discount rate, currently 7% a year. Around that traditional discounted cash flow analysis (DCF) we deal with uncertainty on a qualitative basis. "Option value" to us, for example, is "upside potential". After awhile DCF analyses fall into a pattern where differences among companies depend mostly on next twelve months cash flow and reserve life. Meanwhile input information is continually changing as companies make new disclosures, each on a different day or at a different hour and commodity prices fluctuate. We aggregate latest information into a correlation analysis that determines a real-time present value approximation. When that approximation deviates too much from our

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Futures Prices Propel Estimated Cash Flow by Quarter

Cash flow for the next year is projected from a base through the latest reported quarter (see tables Next Twelve Months Operating and Financial Estimates). PTR has reported operating volumes and prices through the fourth quarter of 2005, but financial results for the half year may not be available until next month. Futures prices from the New York Mercantile Exchange determine industry benchmarks for the next year.

Note the low natural gas price of about \$2 a million btu. Contrast that with more than \$8 for the North American benchmark, Henry Hub in Louisiana. If we knew that China would allow world pricing for natural gas soon, we could increase our present value of natural gas about four fold. The increment would be some \$60 billion dollars, or more than \$30 a share. The odds favor that happening on a delayed basis.

Kurt H. Wulff, CFA

PetroChina Company Limited
Next Twelve Months Financial Results

	<i>H2</i>	<i>Year</i>	<i>H1</i>	<i>H2E</i>	<i>Year</i>	<i>H1E</i>	<i>H2E</i>	<i>Next Twelve Months</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>12/31/06</i>	<i>12/31/06</i>
NY Harbor 3-2-1 (\$/bbl)	6.75	7.74	8.38	12.88	10.63	8.68	10.81	9.74
Revenue (RMB)								
Natural Gas								
Oil								
Upstream (from quarterly table)	129,444	231,710	150,477	205,481	355,958	235,774	248,647	484,421
Downstream Value Added	79,637	156,923	102,012	102,012	204,025	102,012	102,012	204,025
Total	209,081	388,633	252,489	307,494	559,983	337,787	350,659	688,446
Expense								
Production								
Other								
Total	97,693	182,706	132,115	159,617	291,732	174,764	181,200	355,964
Ebitda (RMB)								
Exploration and Production	92,060	165,183	109,165	136,668	245,833	151,814	158,250	310,065
Other	19,328	40,744	11,209	18,322	29,531	18,322	22,808	41,130
Total	111,388	205,927	120,374	147,876	268,250	163,023	169,459	332,482
Exploration	6,093	11,723	8,528	8,528	17,056	8,528	8,528	17,056
Deprec., Deplet., & Amort.	21,738	46,411	25,791	25,791	51,582	25,791	25,791	51,582
Other non cash								
Ebit	83,557	147,793	86,055	113,557	199,612	128,704	135,140	263,844
Interest	1,378	2,303	1,185	1,185	2,370	1,185	1,185	2,370
Ebt	82,179	145,490	84,870	112,372	197,242	127,519	133,955	261,474
Income Tax	24,544	42,563	23,246	39,330	62,576	44,632	46,884	91,516
Net Income (RMB)								
Exploration and Production	72,870	125,571	84,693					
Other	10,622	22,171	844					
Unallocated	(25,857)	(44,815)	(23,913)					
Total	57,635	102,927	61,624	73,042	134,666	82,887	87,071	169,958
Shares (millions)	1,758	1,758	1,758	1,758	1,758	1,758	1,758	1,758
Earnings per share (RMB)	32.78	58.55	35.05	41.55	76.60	47.15	49.53	96.68
Ebitda Margin (E&P)	71%	71%	73%	67%	69%	64%	64%	64%
Tax Rate	30%	29%	27%	35%	32%	35%	35%	35%

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PetroChina Company Limited
Next Twelve Months Operations

	<i>Q4</i>	<i>Q3</i>	<i>Q4</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Next Twelve Months</i>
	<i>12/31/04</i>	<i>9/30/05</i>	<i>12/31/05</i>	<i>2005</i>	<i>3/31/06</i>	<i>6/30/06</i>	<i>9/30/06</i>	<i>12/31/06</i>	<i>12/31/06</i>
Volume									
Natural gas (bcf)	234	257	389	1,152	288	300	304	313	1,205
Natural Gas (mmcf)	2,545	2,793	4,225	3,156	3,200	3,300	3,300	3,400	3,301
Days	92	92	92	365	90	91	92	92	365
Oil (mmb)	193	199	247	842	241	244	247	247	978
Oil (mbd)	2,093	2,161	2,680	2,307	2,680	2,680	2,680	2,680	2,680
Total gas & oil (mmb)	232	242	311	1,034	289	294	297	299	1,179
Total gas & oil (mbd)	2,518	2,626	3,385	2,833	3,214	3,230	3,230	3,247	3,231
Price									
Natural gas (\$/mcf)									
Henry Hub (\$/mmbtu)	7.10	8.56	13.00	8.65	9.26	8.31	8.62	9.63	8.96
Company	1.96	2.34	2.08	2.08	2.08	2.08	2.08	2.08	2.08
Oil (\$/bbl)									
WTI Cushing	48.31	62.52	60.02	56.31	65.23	66.74	68.15	68.81	67.23
Company	40.97	55.19	52.57	48.88	57.14	58.46	59.70	60.27	58.90
Total gas & oil (\$/bbl)	36.05	47.89	44.23	42.12	49.73	50.63	51.66	51.93	51.00
Revenue (\$mm)									
Natural Gas	459	600	808	2,396	599	625	631	651	2,506
Oil	7,891	10,972	12,965	41,157	13,785	14,260	14,721	14,864	57,630
Total	8,350	11,572	13,773	43,553	14,384	14,884	15,352	15,514	60,135
Total(RMB)	69,011	94,155	111,327	355,958	115,873	119,901	123,672	124,975	484,421
RMB/SUS	8.26	8.14	8.08	8.17	8.06	8.06	8.06	8.06	8.06

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