



Rating: Buy
 S&P 500: 1213

PetroChina Company Limited

West to East Pipeline Flowing

<i>Symbol</i>	PTR	<i>Ebitda Next Twelve Months ending 12/31/05 (US\$mm)</i>	25,500
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (US\$/sh)</i>	53.35	<i>Natural Gas and Oil Production/Ebitda (%)</i>	80
<i>Pricing Date</i>	12/27/04	<i>Adjusted Reserves/Production NTM</i>	13.3
<i>Shares (mm)</i>	1758	<i>EV/Ebitda</i>	4.0
<i>Market Capitalization (US\$mm)</i>	93,800	<i>PV/Ebitda</i>	6.0
<i>Debt (US\$mm)</i>	8,500	<i>Undeveloped Reserves (%)</i>	23
<i>Enterprise Value (EV) (US\$mm)</i>	102,300	<i>Natural Gas and Oil Ebitda (US\$/boe)</i>	21.27
<i>Present Value (PV) (US\$mm)</i>	152,600	<i>Present Value Proven Reserves(US\$/boe)</i>	8.43
<i>Net Present Value (US\$/share)</i>	82	<i>Present Value Proven Reserves(US\$/mcfe)</i>	1.41
<i>Debt/Present Value</i>	0.06	<i>Earnings Next Twelve Months (US\$/sh)</i>	6.64
<i>McDep Ratio - EV/PV</i>	0.67	<i>Price/Earnings Next Twelve Months</i>	8
<i>Dividend Yield (%/year)</i>	4.4	<i>Indicated Annual Dividend (US\$/sh)</i>	2.35

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

Natural gas production growth for buy-recommended **PetroChina (PTR)** appears to be accelerating with the completion of the West to East natural gas pipeline in recent months. Widely considered marginally economic at low historical oil price, the \$8.5 billion project delivers clean fuel profitability today to a market choking on pollution from coal. Stable oil production continues to provide most of current cash flow while refined products and petrochemicals are growing at double digit annual rates. The stock has 54% appreciation potential in the next year or two to reach our estimate of net present value of \$82 a share that is tied to a constant real oil price of \$35 a barrel.

Once-in-a-Lifetime China Natural Gas Opportunity

A 4000 kilometer, 2500 mile, pipeline connecting natural gas fields in the western desert to starved markets in the industrialized east has started to flow in commercial volumes. The original budget was \$5.2 billion for a pipeline with initial capacity of 12 billion cubic meters annually, 1.2 billion cubic feet daily. The design contemplated expansion by an additional 50%. The 2002 budget also allowed an additional \$3.5 billion for producing facilities including development wells. The gas was to be priced at the wellhead at RMB 0.45 a cubic meter, \$1.92 a thousand cubic feet while the pipeline transportation was to be priced at RMB 0.84, \$3.59. The delivered price of \$5.51 would be competitive with heating oil refined from crude oil priced at about \$27 a barrel. While that looked expensive in 2002, it looks cheap today.

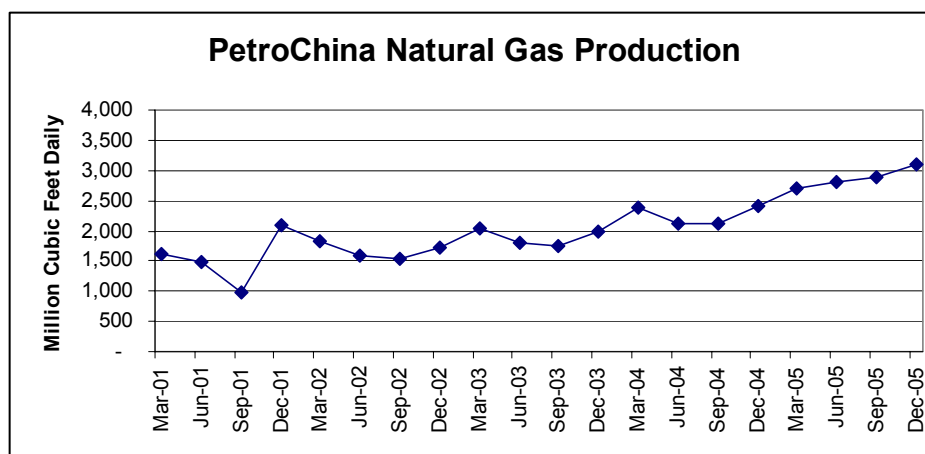
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When we allocate estimated present value by function (see table [Functional Cash Flow and Present Value](#)), the 7% share for natural gas looks low relative to ultimate potential. Undeveloped natural gas reserves of 36% require further investment though the outlays should be profitable beyond what we count now. At the same time PetroChina has been adding new natural gas reserves at a rapid pace while domestic oil reserves may increase less than annual production.

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	1,500	16.4	7.5	11,300	7%
Oil	20,300	12.7	5.9	119,600	78%
Downstream	3,700		5.9	21,800	14%
	25,500	13.3	6.0	152,700	100%
Debt (US\$mm)				8,500	
Net Present Value (US\$mm)				144,200	
Shares (mm)				1,758	
Net Present Value (US\$/sh)				82	

A long reserve life and growing reserves support higher annual production. The completed west-to-east pipeline provides visibility for further near-term increases (see chart [Natural Gas Production](#)).



PetroChina's wellhead price for natural gas is understated by world standards. While the reported price of \$2.07 a thousand cubic feet is close to the price quoted at the time the company was lining up customers for its pipeline, conditions have changed since then. Since much of PetroChina's business is with other state-owned entities (SOE), the government has a lot to say about prices. We expect higher price for natural gas eventually, but we do not count on it and do not project much increase for the next twelve months (see table [Next Twelve Months Operations](#)).

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PetroChina Company Limited
Next Twelve Months Operations

	<i>Q4</i>	<i>Q3</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Next Twelve Months</i>
	<i>12/31/03</i>	<i>9/30/04</i>	<i>12/31/04</i>	<i>2004E</i>	<i>3/31/05</i>	<i>6/30/05</i>	<i>9/30/05</i>	<i>12/31/05</i>	<i>12/31/05</i>
Volume									
Natural gas (bcf)	182	195	221	826	243	255	267	285	1,050
Natural Gas (mmcf)	1,982	2,120	2,400	2,257	2,700	2,800	2,900	3,100	2,876
Days	92	92	92	366	90	91	92	92	365
Oil (mmb)	194	197	197	783	193	195	197	197	782
Oil (mbd)	2,103	2,141	2,141	2,138	2,141	2,141	2,141	2,141	2,141
Total gas & oil (mmb)	224	230	234	920	233	237	241	245	957
Total gas & oil (mbd)	2,434	2,495	2,541	2,514	2,591	2,608	2,625	2,658	2,621
Price									
Natural gas (\$/mcf)									
Henry Hub (\$/mmbtu)	5.08	5.75	7.10	6.15	6.72	6.36	6.43	6.78	6.57
Company	1.95	2.07	2.07	2.03	2.07	2.07	2.07	2.07	2.07
Oil (\$/bbl)									
WTI Cushing	31.19	43.89	48.40	41.47	44.12	43.88	42.78	42.18	43.24
Company	26.68	35.07	38.67	33.34	35.25	35.06	34.18	33.70	34.54
Total gas & oil (\$/bbl)	24.65	31.86	34.54	30.17	31.28	31.01	30.18	29.56	30.50
Revenue (\$mm)									
Natural Gas	355	404	457	1,673	503	527	552	590	2,173
Oil	5,163	6,909	7,619	26,089	6,793	6,832	6,734	6,639	26,998
Total	5,518	7,312	8,076	27,762	7,296	7,359	7,286	7,229	29,171
Total(RMB)	45,603	60,433	66,743	229,442	60,297	60,822	60,217	59,747	241,083

Oil Cash Cow

PetroChina does not need growth to earn a high return from existing oil reserves. Because China, like the U.S., is a net importer of oil, it taxes domestic production at normal business rates rather than the high rates that exporting countries often impose. Of course that is the only sensible approach. Windfall profits taxes and price controls were a bitter experience for the U.S. the last time oil increased rapidly in price. We are gratified to see that PetroChina's reported crude oil price responds to world economic trends.

Price and volume trends are reported quarterly, but financial results are reported only semi-annually. It may be months yet before we learn details of operations for the six months now concluding. Actual cash flows could fall short of our projections, but still be strong (see table Next Twelve Months Financial Results).

Downstream Boom

It has been oft-repeated how China's appetite for growth has contributed to commodity price trends. In the oil sector domestic production growth is limited. As a result strong demand for petroleum is magnified in rapidly increasing imports of crude oil and products. PetroChina refines the oil it produces and imports some in addition. The company reports a 13% increase in crude oil refined in the first nine months of 2004 compared to 2003. We also see occasional references to government control of prices for refined products. Fortunately, the degree of control has not been overly severe as we can see that PetroChina reports growing profits from its downstream business. The current level of profits seems close to international standards. Conceivably, we could justify a higher multiple for above average growth.

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PetroChina Company Limited
Next Twelve Months Financial Results

	<i>Year</i>	<i>H1</i>	<i>H2E</i>	<i>Year</i>	<i>H1E</i>	<i>H2E</i>	<i>Next Twelve Months</i>
	2003	<i>6/30/04</i>	<i>12/31/04</i>	2004E	<i>6/30/05</i>	<i>12/31/05</i>	<i>12/31/05</i>
NY Harbor 3-2-1 (\$/bbl)	6.42	9.88	6.67	8.28	7.40	6.83	7.04
Revenue (RMB)							
Natural Gas							
Oil							
Upstream (from quarterly table)	185,160	102,266	127,176	229,442	121,119	119,964	248,295
Downstream Value Added	118,619	77,286	77,286	154,573	77,286	77,286	154,573
Total	303,779	179,552	204,462	384,014	198,405	197,250	402,868
Expense							
Production							
Other							
Total	135,951	85,013	97,468	182,481	94,440	93,862	191,908
Ebitda (RMB)							
Production	141,004	73,124	85,579	158,703	82,551	81,973	168,130
Other	26,824	21,415	14,472	35,887	16,049	14,806	30,521
Total	167,828	94,539	106,994	201,533	103,966	103,388	210,960
Exploration	10,577	5,630	5,630	11,260	5,630	5,630	11,260
Deprec., Deplet., & Amort.	40,531	24,673	24,673	49,346	24,673	24,673	49,346
Other non cash							
Ebit	116,720	64,236	76,691	140,927	73,663	73,085	150,354
Interest	2,346	925	925	1,850	925	925	1,850
Ebt	114,374	63,311	75,766	139,077	72,738	72,160	148,504
Income Tax	40,031	18,019	26,518	44,537	25,458	25,256	51,976
Net Income (RMB)							
Exploration and Production	92,370	52,701					
Other	7,998	11,549					
Unallocated	(30,754)	(18,958)					
Total	69,614	45,292	49,248	94,540	47,279	46,904	96,527
Shares (millions)	1,758	1,758	1,758	1,758	1,758	1,758	1,758
Earnings per share (RMB)	39.60	25.76	28.01	53.78	26.89	26.68	54.91
Ebitda Margin (E&P)	76%	72%	67%	69%	68%	68%	68%
Tax Rate	35%	28%	35%	32%	35%	35%	35%

Looking Overseas

News reports have PetroChina talking to **Canadian Oil Sands Trust (COSWF)** among others for future oil supplies to fuel the Chinese economy. Interviewed on *Bloomberg*, Marcel Coutu of COS confirms that PTR has obtained test cargos of Syncrude to run through its refineries on a trial basis. Conceivably PTR could participate in a pipeline from the interior to the Canadian coast that would handle eventual imports of Canadian crude oil. Mr. Coutu emphasizes that COS would not sell shares to PTR.

Another story, apparently denied as to specific timing, would have PTR issue new shares in the domestic market to finance oil investment outside China. The intent to issue new shares can be motivation to pay careful attention to the rights of existing shareholders. International investment is one of the strengths of mega cap companies.

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