

PetroChina Company Limited
Raise Net Present Value to \$50 a Share

Symbol	Price	Floating Shares (mm)	Market Cap (\$mm)	Net		McDep Ratio	EV/	EV/	P/E NTM	Div'd	PV/
	(\$/sh) 8-Sep 2003			Present Value (\$/sh)	Debt/ Present Value		Sales NTM	Ebitda NTM		NTM (%)	Ebitda NTM
PTR	35.20	176	6,190	50.00	0.11	0.74	2.3	4.1	8.4	5.8	5.5

McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses

EV = Enterprise Value = Market Cap and Debt: \$mm 7,300

Ebitda = Earnings before interest, tax, depreciation and amortization: \$mm 1,790

NTM = Next Twelve Months Ended June 30, 2003; P/E = Stock Price to Earnings

PV = Present Value of energy businesses: \$mm 9,900

Shares, Market Cap, EV, Ebitda and PV for 10% of company publicly traded. 90% government owned.

Summary and Recommendation

After sharp recent appreciation, the stock of buy-recommended PetroChina has scope for further gains to perhaps \$50 a share in today's commodity market terms, in our opinion. That price would value the company's cash flow at the same low multiple of 5.5 times that we assess as the median for present value of a dozen large producer/refiners that include U.S. and non-U.S. entities. The new assessment removes much of the discount for political risk that investors no longer seem to require. An investment in the stock is (1) a participation in the modernization and conversion of the Chinese Economy to natural gas, (2) the potential to raise profits to normal levels in rapidly growing operations in refining/marketing and chemicals and (3) high cash flow from stable oil production. Each of those areas carries risk as to the whether the company actually earns the return needed to justify reinvestment of cash flow. Finally further stock price gains may not be immediate as one might expect some normal consolidation of the price trend and/or perhaps the sale of another *tranche* of government owned shares.

High Cash Flow from Stable Oil Production

In late August PetroChina reported strong gains in cash flow in the first half of 2003 that stemmed primarily from participation in higher world crude oil price. Though we had anticipated gains in our projections, it is gratifying that the company actually delivered the increases. The expectation that China's crude oil should get a world price adjusted for transportation and quality appears to be borne out.

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Oil production appears steady at near 2.1 million barrels daily. Among companies in our coverage only **ExxonMobil (XOM)** and **Royal/Dutch Shell (RD)** produce more oil currently. Much of the production, including that from the giant Daqing field, is mature and perhaps sensitive to price. Yet, PetroChina's adjusted oil reserve life index at 12.9 years implies longer life than that of XOM or RD or most other producers in our coverage.

Downstream Turns Profitable

Refining/Marketing and Chemicals achieved operating income of almost a tenth of that from production. That is progress from a loss or break-even position previously. Because downstream cash flow appears to be about a fifth of that from production, profits could improve further. Meanwhile the rapid growth potential of the Chinese economy implies similar prospects for oil products and chemicals.

Historic Natural Gas Opportunity

Like the conversion of the U.S. economy to natural gas after World War II and the conversion of Europe to natural gas after the North Sea discoveries China is converting to natural gas ([Stock Idea: PetroChina – Ground Floor Opportunity in Natural Gas, June 11, 2001](#)). PetroChina is leading the way with a long pipeline from its vast reserves in the West to markets in the East. There is understandable concern whether such a large investment is justified and will be profitable. There is no question in our mind that the project is strategically and environmentally justified. Natural gas production and transportation is the growth story for PetroChina on top of stable oil production and profitable oil downstream businesses.

Dividend Tracks Earnings

Management delivered on another promise to declare higher dividends when earnings increased. On that basis at one point earlier this year we projected a double-digit next twelve months dividend yield (see *Meter Reader*, March 13, 2003). That seemed aggressive and we backed off from it. Yet, the latest declaration for half-year dividend is more than double that of a year earlier, justifying expectations that seemed too aggressive. Not changing our more cautious technique, we estimate a dividend for the next twelve months equal to that paid or declared for the past twelve months, \$2.04 per share. There is no withholding tax and the dividend appears to qualify for the new, low 15% rate of taxation for U.S. holders.

Quarterly Production and Half-Year Financial Reporting

Since PetroChina does not report quarterly earnings, we make our next twelve months projections through the second half of 2004 instead of nine months that we do for other companies. We precede our production and financial tables with a calculation of adjusted reserve life (see reserves table). Then, we have a separate model for production that the company does report quarterly, including price in U.S. dollars (see quarterly table). Our financial model matches the Half-Year format (see semi-annual table).

Buy Half Position in McDep Energy Portfolio

Our remaining mechanism for controlling the risk of an investment in PetroChina is to limit a new purchase to half a normal portfolio position weighted on an unlevered basis. Investors who now have a larger position as a result of appreciation might limit their holding to a full normal position. Since PetroChina has a low ratio of debt to present value, it can represent a larger equity market value in a portfolio and still imply less financial risk than that of a comparable stock with higher debt.

Kurt H. Wulff, CFA

PetroChina Company Limited
Natural Gas and Oil Reserves

	<i>Natural Gas</i> <i>(bcf)</i>	<i>Oil</i> <i>(mmb)</i>	<i>Total</i>	
			<i>(bcf)</i>	<i>(mmb)</i>
<i>Reserves (bcf or mmb)</i>				
Proven (P)	38,817	10,937	104,439	17,407
Proven Developed (PD)	11,921	9,198	67,109	11,185
Proven Undeveloped (PUD)	26,896	1,739	37,330	6,222
<i>Production, Next Twelve Months</i>	648	783	5,348	891
<i>Reserve Life Index (years)</i>				
R/P P	59.9	14.0	19.5	19.5
R/P PD	18.4	11.7	12.5	12.5
R/P PUD	41.5	2.2	7.0	7.0
R/P PD+.5PUD	39.2	12.9	16.0	16.0

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McDep Associates
Independent Stock Idea
September 9, 2003

PetroChina Company Limited
Next Twelve Months Production

	<i>Q4</i>	<i>Year</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Next</i>
	<i>12/31/02</i>	<i>2002</i>	<i>3/31/03</i>	<i>6/30/03</i>	<i>9/30/03</i>	<i>12/31/03</i>	<i>2003E</i>	<i>Twelve</i>
								<i>Months</i>
								<i>12/31/04</i>
Volume								
Natural gas (bcf)	158	606	185	165	141	158	648	648
Natural Gas (mmcf)	1,713	1,660	2,050	1,814	1,528	1,713	1,775	1,775
Days	92	365	90	91	92	92	365	365
Oil (mmb)	195	771	191	195	197	197	781	783
Oil (mbd)	2,115	2,113	2,123	2,146	2,146	2,146	2,141	2,146
Total gas & oil (mmb)	221	872	222	223	221	224	889	891
Total gas & oil (mbd)	2,400	2,390	2,465	2,449	2,401	2,432	2,436	2,442
Price								
Natural gas (\$/mcf)								
Henry Hub (\$/mmbtu)	4.30	3.36	6.38	5.63	4.87	4.96	5.46	4.95
Company	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Oil (\$/bbl)								
WTI Cushing	28.18	26.10	34.03	29.07	30.59	29.36	30.76	27.89
Company	26.01	22.48	29.26	26.96	28.37	27.23	27.95	25.86
Total gas & oil (\$/bbl)	24.31	21.23	26.83	25.08	26.61	25.41	25.98	24.15
Revenue (\$mm)								
Natural Gas	307	1,182	360	322	274	307	1,263	1,263
Oil	5,060	17,340	5,592	5,266	5,602	5,377	21,837	20,261
Total	5,367	18,522	5,951	5,588	5,877	5,684	23,100	21,524
Total(RMB)	44,357	153,071	49,185	46,183	48,567	46,977	190,913	177,884

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PetroChina Company Limited
Next Twelve Months Operating and Financial Results

	<i>H1</i>	<i>H2</i>	<i>Year</i>	<i>H1</i>	<i>H2E</i>	<i>Year</i>	<i>Next Twelve Months</i>
	<i>6/30/02</i>	<i>12/31/02</i>	<i>2002</i>	<i>6/30/03</i>	<i>12/31/03</i>	<i>2003E</i>	<i>12/31/04</i>
NY Harbor 3-2-1 (\$/bbl)	4.17	4.84	4.50	6.40	6.35	6.37	5.53
Revenue (RMB)							
Upstream (from Q table)	69,036	84,035	153,071	95,368	95,544	190,913	172,436
Downstream Value Added	38,892	52,461	91,353	52,592	52,175	104,767	90,882
Total	107,928	136,496	244,424	147,960	147,720	295,680	263,317
Expense	53,233	60,279	113,512	66,011	65,891	131,901	115,720
Ebitda (RMB)							
Production			102,206			127,866	115,233
Other			28,706			35,913	32,364
Total	54,695	76,217	130,912	81,949	81,829	163,778	147,597
Exploration	3,744	4,351	8,095	4,811	4,811	9,622	9,622
Deprec., Deplet., & Amort.	18,877	17,905	36,782	20,909	20,909	41,818	41,818
Other non cash							
Ebit	32,074	43,612	75,685	56,229	56,109	112,338	96,157
Interest	1,952	1,564	3,516	1,187	1,187	2,374	2,374
Ebt	30,122	42,048	72,169	55,042	54,922	109,964	93,783
Income Tax	10,543	14,717	25,259	19,265	19,223	38,488	32,824
Net Income (RMB)							
Exploration and Production	29,625	42,514	72,139	50,270			
Other	1,754	(1,552)	202	4,725			
Unallocated	(11,800)	(13,631)	(25,431)	(16,376)			
Total	19,579	27,331	46,910	38,619	35,699	74,318	60,959
Shares (millions)	1,758	1,758	1,758	1,758	1,758	1,758	1,758
Earnings per share (RMB)	11.14	15.55	26.68	21.97	20.31	42.27	34.68
Ebitda Margin	51%	56%	54%	55%	55%	55%	56%
Tax Rate	35%	35%	35%	35%	35%	35%	35%

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