

The Case for Energy Investment

Summary and Recommendation

We outline our current presentation that recommends energy stocks for real growth, inflation protection, deflation resistance and tax efficiency. Our commodity price outlook is for real appreciation in light sweet oil and premium recognition for natural gas. Our primary valuation indicator, the McDep Ratio, counters the distortion of debt as it relates financial market prices to energy resource values. Our buy recommendations feature energy producers including **Canadian Oil Sands Trust (COS.u_TO)**, **Anadarko Petroleum (APC)**, **PetroChina (PTR)** and **ChevronTexaco (CVX)**. We recommend selling pipeline partnerships that have high valuation, little inflation protection, limited deflation resistance, and accounting that misrepresents risks.

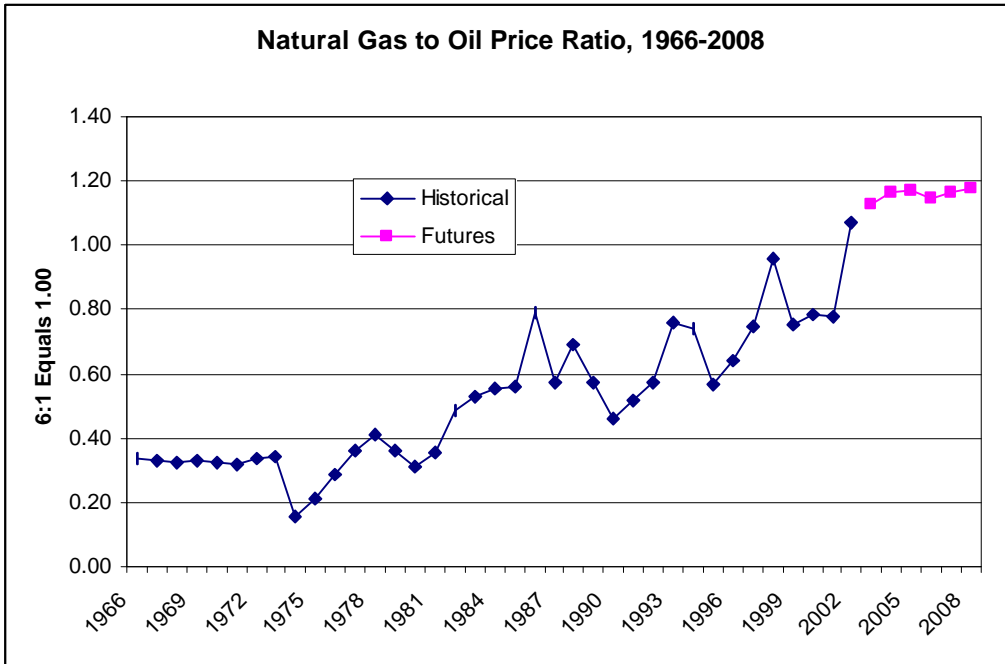
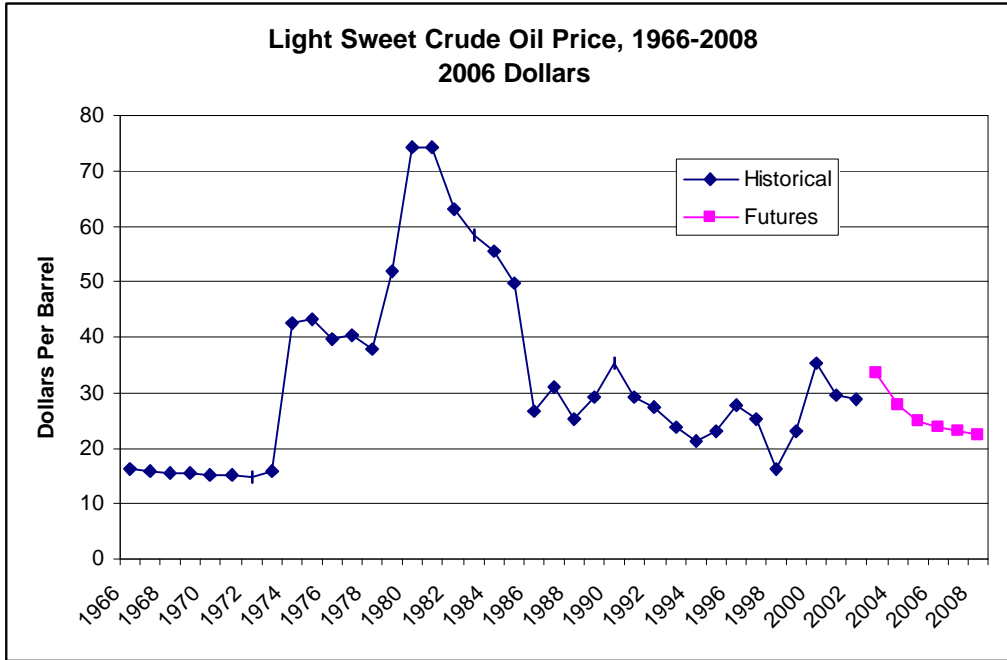
1. Invest in energy for growth, inflation protection, deflation resistance and tax efficiency
 - a. Real growth
 - i. Real return likely to exceed ten-year TIPS
 - ii. Nominal return may match ten-year T-Note and grow
 - b. Inflation protection
 - i. Short-term interest rates below inflation
 - ii. Energy priced globally
 - c. Deflation resistance
 - i. Low debt
 - ii. Essential commodity consumed continuously
 - d. Newly enhanced tax-efficiency
 - i. High capacity to pay dividends that are taxed lightly
 - ii. High capacity for inflation gains that would be taxed lightly
2. Oil is Cheap and Natural Gas is Clean
 - a. Oil underpriced by a third or more
 - i. Spare production capacity minimal
 - ii. Demand linked to economic growth
 - iii. Futures prices low (see Chart)
 - b. Natural gas gains recognition as a premium fuel
 - i. No spare production in North America
 - ii. Premium demand for heating and turbine fuel
 - iii. Futures prices at modest premium to oil (see Chart)
 - c. Refining margin fluctuating around low level
 - d. Power generation margin potential in coal and nuclear

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A Weekly Analysis of Energy Stocks Using the McDep Ratio

July 10, 2003



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3. McDep Ratio measures unlevered value
 - a. Market Cap and Debt to Present Value
 - b. Unlevered – counters the distortion of debt
 - c. Present value depends on interest rates, inflation, commodity prices, reserve life, investment requirements, operating costs
 - i. Weekly calculations for natural gas royalty trusts
 - ii. Periodic reconciliation of cash flow multiple assessments with reserve life

4. Buy energy producers
 - a. Mega Cap – CVX, RD
 - b. Producer/Refiners – COP, MRO, PTR
 - c. North Am Natural Gas – ECA, BR, APC, XTO, SJT
 - d. Oil – CEO, EAC, COS_u.TO

5. Sell pipeline partnerships– EEP, EEQ, EPN, KMI, KMR, KMP
 - a. Real growth valued two to three times buy recommendations
 - b. Most inflation protection usurped by general partner
 - c. Limited deflation resistance because of high leverage
 - d. Accounting misrepresents debt and high compensation to general partner
 - e. Expect more competition for investor attention from better companies paying more dividends because of tax change

Kurt H. Wulff, CFA

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

	<i>Symbol/ Rating</i>		<i>Price (\$/sh) 9-Jul 2003</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
Mega Cap								
Royal Dutch/Shell	RD	B	45.50	3,473	158,000	55.00	0.18	0.86
ChevronTexaco Corporation	CVX	B	72.80	1,064	77,500	95.00	0.20	0.81
Producer/Refiners - Large Cap and Mid Cap								
ConocoPhillips	COP	B	53.19	682	36,300	70.00	0.38	0.85
PetroChina Company Ltd (10%)	PTR	B	29.40	176	5,170	40.00	0.14	0.77
Marathon Oil Corporation	MRO	B	26.70	310	8,280	40.00	0.31	0.77
Independent Natural Gas and Oil - Large Cap and Mid Cap								
Encana Corporation	ECA	B	36.63	470	17,200	40.00	0.21	0.93
Burlington Resources	BR	B	52.00	202	10,500	60.00	0.27	0.90
CNOOC Limited (19%)	CEO	B	31.15	78	2,430	35.00	-	0.89
XTO Energy Inc.	XTO	B	19.61	185	3,630	24.00	0.24	0.86
Anadarko Petroleum Corp.	APC	B	43.47	258	11,200	60.00	0.30	0.81
Independent Natural Gas and Oil - Small Cap Natural Gas and Oil Royalty Trusts								
San Juan Basin Royalty Trust	SJT	B	17.99	47	840	19.20	-	0.94
Energy Partners Ltd.	EPL	B	10.71	37	390	12.00	0.22	0.92
Encore Acquisition Corp. (40%)	EAC	B	18.98	11	210	24.00	0.18	0.83
Canadian Oil Sands Trust (US\$)	COS_u.T	B	25.54	80	2,030	45.00	0.17	0.64
Pipeline and Power								
Kinder Morgan Energy Partners, L.P.	KMP	S	40.15	135	5,440	14.00	0.48	1.98
Kinder Morgan Management, LLC	KMR	S	38.00	46	1,750	14.00	0.48	1.89
Enbridge Energy Partners, L.P.	EEP	S	49.93	35	1,750	14.90	0.64	1.86
Enbridge Energy Management, L.L.C	EEQ	S	48.30	35	1,690	14.90	0.64	1.81
Gulfterra Energy Partners	GTM	S	38.91	55	2,140	15.70	0.56	1.64
Kinder Morgan, Inc.	KMI	S	53.68	123	6,600	14.00	0.80	1.56

Buy/Sell rating after symbol: B - Buy, S - Sell

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

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McDep Energy Portfolio

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

			Price (\$/sh)	EV/ Sales	EV/ Ebitda	P/E	Dividend or Distribution NTM (%)	PV/ Ebitda NTM
	Symbol/ Rating		9-Jul 2003	NTM	NTM	NTM		
Mega Cap								
Royal Dutch/Shell	RD	B	45.50	1.0	6.9	15	4.5	8.0
ChevronTexaco Corporation	CVX	B	72.80	0.9	6.6	13	3.8	8.1
Producer/Refiners - Large Cap and Mid Cap								
ConocoPhillips	COP	B	53.19	0.6	7.1	13	3.0	8.3
Marathon Oil Corporation	MRO	B	26.70	0.4	4.9	11	3.4	6.3
PetroChina Company Ltd (10%)	PTR	B	29.40	1.9	3.3	6	4.9	4.3
Independent Natural Gas and Oil - Large Cap and Mid Cap								
XTO Energy Inc.	XTO	B	19.61	5.1	7.5	15	0.2	8.7
CNOOC Limited (19%)	CEO	B	31.15	3.9	5.9	14	3.4	6.6
Anadarko Petroleum Corp.	APC	B	43.47	3.8	5.3	9	0.9	6.5
Burlington Resources	BR	B	52.00	3.7	5.3	11	1.1	5.8
Encana Corporation	ECA	B	36.63	2.0	4.2	9	0.8	4.5
Independent Natural Gas and Oil - Small Cap								
Natural Gas and Oil Royalty Trusts								
San Juan Basin Royalty Trust	SJT	B	17.99	6.0	7.3	8	12.1	7.8
Canadian Oil Sands Trust (US\$)	COS_u.T	B	25.54	2.9	4.9	5	5.6	7.7
Encore Acquisition Corp. (40%)	EAC	B	18.98	3.2	4.6	9	-	5.6
Energy Partners Ltd.	EPL	B	10.71	2.6	4.1	16	-	4.5
Pipeline and Power								
Kinder Morgan Energy Partners, L.P.	KMP	S	40.15	2.5	17.3	21	6.4	8.8
Enbridge Energy Partners, L.P.	EEP	S	49.93	2.2	16.7	37	7.2	9.0
Kinder Morgan Management, LLC	KMR	S	38.00	2.4	16.6	20	6.7	8.8
Enbridge Energy Management, L.L.C	EEQ	S	48.30	2.1	16.3	36	7.5	9.0
Gulfterra Energy Partners	GTM	S	38.91	5.5	14.8	24	6.9	9.0
Kinder Morgan, Inc.	KMI	S	53.68	2.6	12.3	16	1.1	7.9

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2004; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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Table 1-1
Energy Producers
Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/ Rating</i>	<i>Price (\$/sh) 9-Jul 2003</i>	<i>Shares (mm)</i>	<i>Market Cap (\$mm)</i>	<i>Net Present Value (\$/sh)</i>	<i>Debt/ Present Value</i>	<i>McDep Ratio</i>
Mega Cap							
Exxon Mobil Corporation	XOM	35.86	6,714	241,000	35.00	0.09	1.02
Total S.A.	TOT	74.17	1,292	95,800	85.00	0.17	0.89
Royal Dutch/Shell	RD B	45.50	3,473	158,000	55.00	0.18	0.86
BP plc	BP	40.65	3,721	151,000	50.00	0.15	0.84
ChevronTexaco Corporation	CVX B	72.80	1,064	77,500	95.00	0.20	0.81
	<i>Total or Median</i>			<i>723,000</i>		<i>0.17</i>	<i>0.86</i>
Producer/Refiners - Large Cap and Mid Cap							
Murphy Oil Corporation	MUR	51.00	92	4,710	41.00	0.26	1.18
Imperial Oil Limited (30%)	IMO	33.59	113	3,810	36.00	0.12	0.94
Valero Energy Corporation	VLO	37.70	114	4,300	50.00	0.50	0.88
Petro-Canada	PCZ	38.20	265	10,120	45.00	0.19	0.88
ENI S.p.A.	E	74.82	750	56,100	90.00	0.14	0.85
Norsk Hydro ASA (49%)	NHY	47.78	126	6,040	60.00	0.28	0.85
ConocoPhillips	COP B	53.19	682	36,300	70.00	0.38	0.85
OAo Lukoil	LUKOY	74.00	206	15,000	90.00	0.12	0.84
Petroleo Brasileiro S. A.	PBR N	20.87	1,096	22,900	30.00	0.25	0.77
PetroChina Company Ltd (10%)	PTR B	29.40	176	5,170	40.00	0.14	0.77
Suncor Energy	SU	18.29	476	8,710	25.00	0.14	0.77
Marathon Oil Corporation	MRO B	26.70	310	8,280	40.00	0.31	0.77
	<i>Total or Median</i>			<i>177,000</i>		<i>0.19</i>	<i>0.85</i>
Independent Natural Gas and Oil							
Pogo Producing Company	PPP	41.72	65	2,690	38.00	0.22	1.08
Occidental Petroleum Corp.	OXY	33.55	383	12,900	35.00	0.38	0.97
Apache Corporation	APA	65.03	159	10,300	70.00	0.20	0.94
Encana Corporation	ECA B	36.63	470	17,200	40.00	0.21	0.93
Burlington Resources	BR B	52.00	202	10,500	60.00	0.27	0.90
CNOOC Limited (19%)	CEO B	31.15	78	2,430	35.00	-	0.89
Devon Energy	DVN	51.35	163	8,400	65.00	0.42	0.88
XTO Energy Inc.	XTO B	19.61	185	3,630	24.00	0.24	0.86
Pioneer Natural Resources Company	PXD	25.84	119	3,080	35.00	0.33	0.82
Unocal Corporation	UCL	28.87	255	7,400	40.00	0.35	0.82
Anadarko Petroleum Corp.	APC B	43.47	258	11,200	60.00	0.30	0.81
Canadian Natural Resources Limited	CNQ	38.79	139	5,390	55.00	0.29	0.79
	<i>Total or Median</i>			<i>95,000</i>		<i>0.28</i>	<i>0.89</i>
Service							
Baker Hughes Inc.	BHI	33.45	339	11,300	25.00	0.09	1.30
Schlumberger Ltd.	SLB	48.06	581	27,900	44.00	0.22	1.07
Halliburton Company	HAL	23.45	434	10,200	22.00	0.25	1.05

Buy/Sell rating after symbol: B - Buy, N - Neutral, S - Sell

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