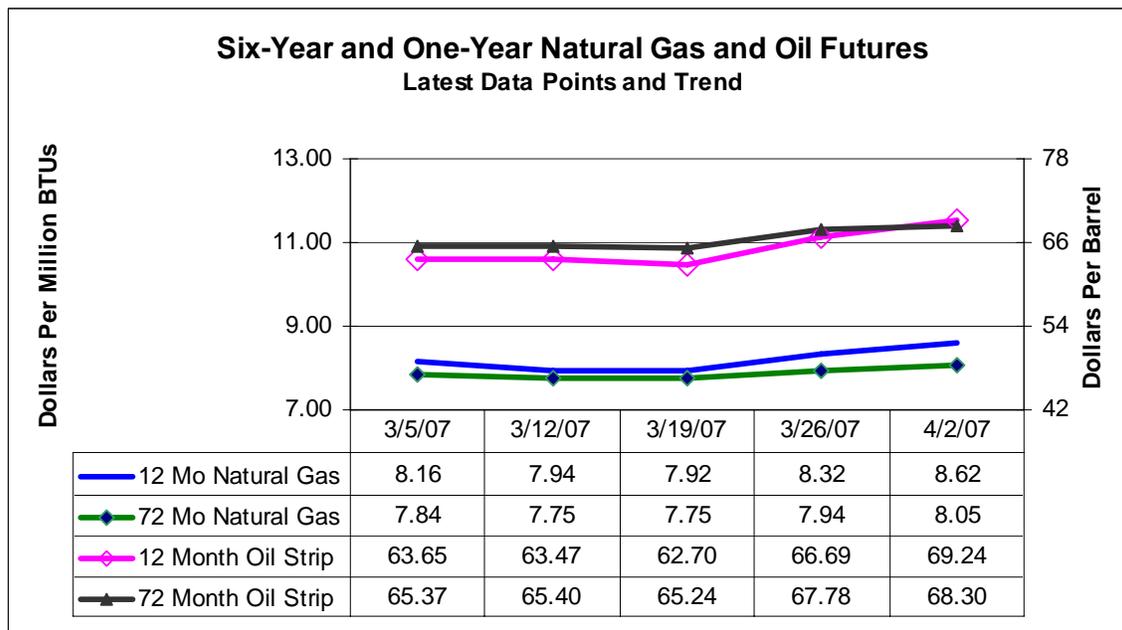


Ultimate Carbon Economics

Summary and Recommendation

Global warming could be worth a 25-70% boost in natural gas price and enhance the investment appeal of independent producers **Devon Energy (DVN)**, **EOG Resources (EOG)**, **Encana (ECA)** and **XTO Energy (XTO)** among other buy recommendations. At the lower end of the range we assume it would cost a coal-based power plant about \$4 a million btu to eliminate carbon dioxide emissions by adding about 50% to capital and operating costs. Since it would cost a natural gas-based power plant only about half as much, the value and therefore price of natural gas could be \$2 a million btu, or 25% higher than today's quote for natural gas to be delivered over the next six years (see chart below). At the same time, the worst emitting coal plants could be curtailed and more gas could be burned in the natural gas-based power plants we already have, but are using only on the hottest or coldest days. Moreover, new natural gas-based power plants can be built relatively quickly while it would take decades to make all the changes for coal-based power. Meanwhile, natural gas is being produced near capacity currently. Even a modest program to reduce carbon dioxide emissions would contribute favorably to drive natural gas price toward the refined oil equivalent at crude oil price divided by 5, or up 70% from today's level of crude oil price divided by 8.5.

Kurt H. Wulff, CFA



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Oil and Gas Producers - Rank by McDep Ratio

	Symbol/ Rating		Price (US\$/sh) 2-Apr 2007	Shares (mm)	Market Cap (US\$m)	Net Present Value (US\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
Exxon Mobil Corporation	XOM	B	76.16	5,816	443,000	82.40	0.04	0.93
Total S.A.	TOT	B	70.28	2,288	161,000	80.00	0.14	0.90
BP plc	BP	B	65.04	3,268	213,000	80.00	0.17	0.84
Chevron Corporation	CVX	B	74.83	2,206	165,000	92.00	0.09	0.83
Royal Dutch Shell plc	RDS-A	B	66.84	3,171	212,000	84.00	0.14	0.82
Gazprom (50%)	OGZPY	B	41.47	2,849	118,200	56.00	0.07	0.76
ConocoPhillips	COP	B	68.19	1,672	114,000	100.00	0.20	0.74
<i>Total or Median</i>					<i>1,426,000</i>		<i>0.14</i>	<i>0.83</i>
Producer/Refiners - Large Cap								
Kinder Morgan, Inc.	KMI	S	106.61	133	14,210	33.00	0.76	1.53
Imperial Oil Limited (30%)	IMO	B	37.92	289	10,960	37.00	0.07	1.02
Marathon Oil Corporation	MRO	B	100.46	352	35,360	110.00	0.12	0.92
Norsk Hydro (pro forma)	NHY	B	33.09	1,229	40,670	38.00	0.20	0.90
PetroChina Company Ltd (10%)	PTR	B	118.38	181	21,430	140.00	0.06	0.86
Petro-Canada	PCZ	B	39.32	498	19,580	49.00	0.19	0.84
Suncor Energy	SU	B	77.05	461	35,530	95.00	0.07	0.82
Lukoil Oil Company	LUKOY	B	85.60	835	71,000	110.00	0.02	0.78
<i>Total or Median</i>					<i>249,000</i>		<i>0.10</i>	<i>0.88</i>
Independent Natural Gas and Oil - Large Cap								
XTO Energy Inc.	XTO	B	55.37	371	20,540	60.00	0.14	0.93
CNOOC Limited (34%)	CEO	B	88.72	140	12,400	98.00	-	0.90
Encana Corporation	ECA	B	51.40	806	41,400	65.00	0.13	0.82
EOG Resources	EOG	B	72.60	247	17,900	92.00	0.05	0.80
Anadarko Petroleum Corp.	APC	B	43.70	464	20,300	75.00	0.44	0.77
Occidental Petroleum Corp.	OXY	B	49.58	853	42,300	69.00	0.09	0.74
Devon Energy Corporation	DVN	B	70.11	448	31,400	115.00	0.14	0.66
<i>Total or Median</i>					<i>186,000</i>		<i>0.13</i>	<i>0.80</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	30.70	45	1,370	44.00	0.22	0.77
Energy Partners Ltd.	EPL	B	17.99	40	720	31.00	0.26	0.69
Encore Acquisition Company	EAC	B	24.71	54	1,330	48.00	0.23	0.63
Cimarex Energy Company	XEC	B	37.45	84	3,150	68.00	0.09	0.59
<i>Total or Median</i>					<i>6,600</i>		<i>0.23</i>	<i>0.66</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	52.79	171	9,000	15.00	0.54	2.17
Kinder Morgan Management, LLC	KMR	S	51.20	62	3,160	15.00	0.54	2.12
Pengrowth Energy Trust	PGH		16.85	241	4,060	17.00	0.26	0.99
Enerplus Resources Fund	ERF		42.43	123	5,220	47.00	0.11	0.91
Penn West Energy Trust	PWE	B	29.75	240	7,130	36.00	0.15	0.85
San Juan Basin Royalty Trust	SJT	B	31.43	47	1,460	40.00	-	0.78
Hugoton Royalty Trust	HGT	B	25.11	40	1,000	34.00	-	0.74
Canadian Oil Sands Trust	COSWF	B	24.53	479	11,750	35.00	0.08	0.72
<i>Total or Median</i>					<i>42,800</i>		<i>0.13</i>	<i>0.88</i>

B = Buy, S = Sell, H = Hold

Present Value = Shares times Net Present Value divided by (1-Debt/Present Value).

Debt = Present Value times Debt/Present Value

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

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Oil and Gas Producers - Rank by EV/Ebitda

	Symbol/ Rating		Price (US\$/sh) 2-Apr 2007	Adjustd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)	
Mega Cap									
Gazprom (50%)	OGZPY	B	41.47	24.0	8.6	6.5	10	0.2	
Exxon Mobil Corporation	XOM	B	76.16	11.5	6.3	5.9	10	1.7	
BP plc	BP	B	65.04	9.8	6.8	5.7	10	3.6	
Total S.A.	TOT	B	70.28	9.6	6.2	5.5	10	3.6	
Chevron Corporation	CVX	B	74.83	10.0	6.0	5.0	9	2.8	
Royal Dutch Shell plc	RDS-A	B	66.84	7.4	5.4	4.4	8	4.3	
ConocoPhillips	COP	B	68.19	10.8	5.7	4.2	7	2.4	
	<i>Median</i>				10.0	6.2	5.5	10	2.8
Producer/Refiners - Large Cap									
Kinder Morgan, Inc.	KMI	S	106.61		8.9	13.7	21	3.3	
Suncor Energy	SU	B	77.05	18.3	11.3	9.3	17	0.4	
Imperial Oil Limited (30%)	IMO	B	37.92	13.2	8.1	8.3	14	0.7	
PetroChina Company Ltd (10%)	PTR	B	118.38	15.2	7.5	6.4	13	3.9	
Marathon Oil Corporation	MRO	B	100.46	8.3	5.9	5.4	10	1.3	
Lukoil Oil Company	LUKOY	B	85.60	18.1	6.5	5.0	8	1.5	
Norsk Hydro (pro forma)	NHY	B	33.09	8.6	5.4	4.9	9	2.5	
Petro-Canada	PCZ	B	39.32	6.5	5.2	4.4	8	1.1	
	<i>Median</i>				13.2	7.0	5.9	12	1.4
Independent Natural Gas and Oil - Large Cap									
XTO Energy Inc.	XTO	B	55.37	12.3	7.7	7.2	13	0.9	
Anadarko Petroleum Corp.	APC	B	43.70	10.3	7.6	5.8	8	1.6	
EOG Resources	EOG	B	72.60	9.7	7.2	5.7	14	0.5	
Encana Corporation	ECA	B	51.40	9.2	6.8	5.6	11	1.6	
CNOOC Limited (34%)	CEO	B	88.72	11.1	5.9	5.4	10	3.8	
Occidental Petroleum Corp.	OXY	B	49.58	11.9	7.0	5.2	10	1.8	
Devon Energy Corporation	DVN	B	70.11	9.1	6.8	4.5	8	0.8	
	<i>Median</i>				10.3	7.0	5.6	10	1.6
Independent Natural Gas and Oil - Small Cap									
Berry Petroleum Company	BRY	B	30.70	10.3	9.4	7.2	13	1.0	
Encore Acquisition Company	EAC	B	24.71	15.0	8.4	5.3	22	-	
Cimarex Energy Company	XEC	B	37.45	8.1	6.1	3.6	8	0.4	
Energy Partners Ltd.	EPL	B	17.99	5.2	4.3	3.0	-	-	
	<i>Median</i>				9.2	7.3	4.4	13	0.2
Income									
Kinder Morgan Energy Partners, L.P.	KMP	S	52.79		7.7	16.7	39	6.3	
Kinder Morgan Management, LLC	KMR	S	51.20		7.7	16.3	37	6.5	
San Juan Basin Royalty Trust	SJT	B	31.43	10.6	10.7	8.4	10	9.9	
Canadian Oil Sands Trust	COSWF	B	24.53	22.0	11.1	8.1	11	7.4	
Pengrowth Energy Trust	PGH		16.85	7.4	7.3	7.3	23	15.4	
Hugoton Royalty Trust	HGT	B	25.11	13.1	9.5	7.0	10	10.4	
Enerplus Resources Fund	ERF		42.43	9.0	6.8	6.3	11	10.3	
Penn West Energy Trust	PWE	B	29.75	7.5	7.1	6.1	11	11.9	
	<i>Median</i>				9.8	7.7	7.7	11	10.1

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2008; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

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McDep Energy Portfolio
Composite of Buy Recommendations

Symbol	Price (US\$/sh)	Portfolio Weight		Non- U.S. HQ	North Amer. Natural Gas (%)	Rest of World Natural Gas (%)	Oil Prod'n (%)	Down- stream (%)	McDep Ratio	
		2-Apr 2007	Equity (%)							EV (%)
Mega Cap										
Exxon Mobil Corporation	XOM	76.16	3.1	2.8		0.2	0.5	1.3	0.8	0.93
Total S.A.	TOT	70.28	2.8	2.8	2.8		0.8	1.2	0.8	0.90
BP plc	BP	65.04	1.3	1.4	1.4	0.1	0.2	0.7	0.4	0.84
Chevron Corporation	CVX	74.83	5.9	5.6		0.4	0.4	3.3	1.5	0.83
Royal Dutch Shell plc	RDS-A	66.84	2.7	2.8	2.8	0.1	0.5	1.1	1.1	0.82
Gazprom	OGZPY	41.47	9.0	8.5	8.5		6.7	1.8		0.76
ConocoPhillips	COP	68.19	4.8	5.6		1.0	0.4	3.0	1.2	0.74
Producer/Refiners - Large Cap										
Imperial Oil Limited	IMO	37.92	1.5	1.4	1.4	0.1		1.0	0.3	1.02
Marathon Oil Corporation	MRO	100.46	1.4	1.4		0.1	0.1	0.5	0.6	0.92
Norsk Hydro (pro forma)	NHY	33.09	2.6	2.8	2.8		0.7	1.0	1.1	0.90
PetroChina Company Ltd.	PTR	118.38	3.0	2.8	2.8		0.2	2.4	0.2	0.86
Petro-Canada	PCZ	39.32	1.3	1.4	1.4	0.2	0.0	0.9	0.2	0.84
Suncor Energy	SU	77.05	1.5	1.4	1.4	0.1		1.3	0.1	0.82
Lukoil Oil Company	LUKOY	85.60	6.4	5.6	5.6			4.2	1.4	0.78
Independent Natural Gas and Oil - Large Cap										
XTO Energy Inc.	XTO	55.37	2.8	2.8		2.0		0.8		0.93
CNOOC Limited	CEO	88.72	3.3	2.8	2.8		0.3	2.5		0.90
Encana Corporation	ECA	51.40	5.5	5.6	5.6	4.1		1.1	0.4	0.82
EOG Resources	EOG	72.60	6.2	5.6		4.2	0.4	1.0		0.80
Anadarko Petroleum Corp.	APC	43.70	1.4	2.8		1.5		1.2	0.1	0.77
Occidental Petroleum Corp	OXY	49.58	2.9	2.8		0.4	0.0	2.1	0.3	0.74
Devon Energy Corporation	DVN	70.11	5.2	5.6		3.1		2.5		0.66
Independent Natural Gas and Oil - Small Cap										
Berry Petroleum Company	BRY	30.70	1.2	1.4		0.3		1.1		0.77
Energy Partners Ltd.	EPL	17.99	1.0	1.4		0.8		0.7		0.69
Encore Acquisition Compæ	EAC	24.71	2.1	2.8		0.8		2.1		0.63
Cimarex Energy Company	XEC	37.45	2.8	2.8		1.9		0.9		0.59
Income										
Penn West Energy Trust	PWE	29.75	4.1	4.2	4.2	1.4		2.8		0.85
San Juan Basin Royalty Tr	SJT	31.43	6.6	5.6		5.6				0.78
Hugoton Royalty Trust	HGT	25.11	1.6	1.4		1.4				0.74
Canadian Oil Sands Trust	COSWF	24.53	5.9	5.6	5.6			5.6		0.72
Portfolio Composite										
			100	100	49	30	11	48	11	0.78
	Canada				20					
	Russia				14					
	Europe				10					
	China				6					

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Index of Recent Research**Stock Ideas**

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
30-Mar	CEO	CNOOC Ltd	New Oil Price and Stock Price Momentum
29-Mar	COP	ConocoPhillips	Largest North American Natural Gas Producer
29-Mar	IMO	Imperial Oil Limited	Upgrade to Buy on Oil Price Momentum
23-Mar	SJT	San Juan Basin Royalty Trust	Planetary Emergency
23-Mar	HGT	Hugoton Royalty Trust	Planetary Emergency
20-Mar	PTR	PetroChina Company Limited	Government Takes Gains
2-Mar	* COSWF	Canadian Oil Sands Trust	New Twelve Month Volume High
2-Mar	* EPL	Energy Partners, Ltd.	Another Tough Year in 2006
1-Mar	* BRY	Berry Petroleum	Light Oil Irony
28-Feb	* PWE	Penn West Energy Trust	Lower Net Present Value to \$36 a Unit
20-Feb	* NHY	Norsk Hydro ASA	Raise NPV to \$36 a Share
16-Feb	* XEC	Cimarex Energy Company	Dry Spell
16-Feb	* ECA	EnCana Corporation	Home-Grown, Clean Energy in the Stock Market
15-Feb	* EAC	Encore Acquisition	Reduce NPV to \$48 a Share
15-Feb	* TOT	Total S.A.	Thank You, Thierry Desmarest
14-Feb	* XTO	XTO Energy Inc.	The Trend Goes On
13-Feb	* OGZPY	Gazprom	Enlightened Self Interest
7-Feb	* DVN	Devon Energy Corporation	Current Favorite Large Cap Independent
7-Feb	* APC	Anadarko Petroleum Corporation	Avarice in Algiers
6-Feb	* BP	BP p.l.c.	Difficult Execution
5-Feb	* CVX	Chevron Corporation	Momentum despite Chavez
2-Feb	* MRO	Marathon Oil Corporation	Emphasis on Refining
1-Feb	* EOG	EOG Resources Inc.	Reserves Up Ten Percent in 2006
1-Feb	* XOM	Exxon Mobil Corporation	Raise Present Value to a Half Trillion Dollars
1-Feb	* RDSA	Royal Dutch Shell plc	Reserves and Earnings Ahead
26-Jan	* SU	Suncor Energy Inc.	Committed to 500,000 Barrels Daily
26-Jan	* OXY	Occidental Petroleum Corporation	Largest Oil Independent
26-Jan	* PCZ	Petro-Canada	Volume Corner Turned
18-Jan	* KMX	Kinder Morgan	Good Bye KMI
12-Jan	* LUKOY	Lukoil Oil Company	Downside Oil Price Protection

Meter Reader - A Weekly Analysis

3-Apr		Carbon Cents
27-Mar		Hu Jintao Visits Vladimir Putin
20-Mar	*	Refined Oil Products Price Points Up
13-Mar	*	ExxonMobil: Impressive Volume, Impressive Return

Natural Gas and Oil Royalty Trusts - A Weekly Analysis

30-Mar		Funny Thing about Price Momentum
23-Mar		Planetary Emergency
16-Mar	*	Sincere Flattery
9-Mar	*	Bull Market in Long-term Natural Gas

* Archived on www.mcdep.com

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