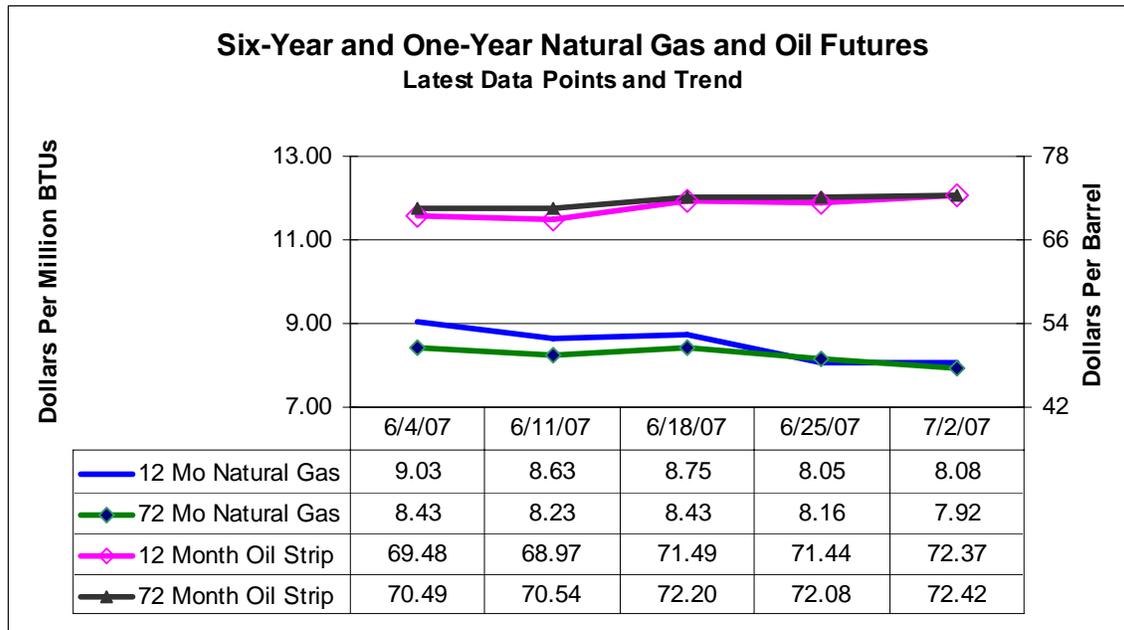


New Oil Sands Breakeven - \$50 a Barrel

Summary and Recommendation

The irony of construction cost rising to justify commodity price to justify equity investment is demonstrated in buy-recommended **Petro-Canada (PCZ)**'s announcement of a price tag of US\$18 billion on its Fort Hills oil sands project. For satisfactory profit, it now takes an oil price above US\$50 a barrel, up from perhaps \$25 a barrel five years ago, judging from a presentation on June 28 by Chief Executive Ron Brenneman and his Petro-Canada colleagues. Specifically, Fort Hills apparently would earn an 8.2% annual return on owner's investment at a light, sweet crude oil price of US\$53 a barrel, after we adjust to take account of today's value of the Canadian dollar. In contrast, the current quote of US\$72 a barrel for the next six years implies either a higher return on investment or a higher present value of a third more than full capital cost of C\$134,000 a daily barrel. Taking account of the risk in achieving construction success, we suggest a half weighting in PCZ stock in the illustrative McDep Energy Portfolio. Noting that the stock market prices a fully completed plant, Syncrude, at a low C\$122,000 a daily barrel, we suggest a double weighting in the stock of buy-recommended **Canadian Oil Sands Trust (COSWF)**, a pure play on Syncrude.

Kurt H. Wulff, CFA



Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Analyses are prepared from sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Mr. Wulff is not paid by covered companies. Neither he nor his spouse trade a subject stock within a week before or after a change in rating.

Oil and Gas Producers - Rank by McDep Ratio

	Symbol/ Rating		Price (US\$/sh) 2-Jul 2007	Shares (mm)	Market Cap (US\$m)	Net Present Value (US\$/sh)	Debt/ Present Value	McDep Ratio
Mega Cap								
Total S.A.	TOT	B	82.39	2,281	188,000	89.00	0.13	0.94
Exxon Mobil Corporation	XOM	B	84.82	5,714	485,000	92.00	0.05	0.93
Royal Dutch Shell plc	RDS-A	B	83.39	3,153	263,000	94.00	0.13	0.90
BP plc	BP	B	73.30	3,231	237,000	87.00	0.16	0.87
Chevron Corporation	CVX	B	85.15	2,206	188,000	105.00	0.09	0.83
ConocoPhillips	COP	B	80.01	1,669	134,000	112.00	0.18	0.76
Gazprom (50%)	OGZPY	B	42.69	2,855	121,900	62.00	0.07	0.71
<i>Total or Median</i>					<i>1,617,000</i>		<i>0.13</i>	<i>0.87</i>
Producer/Refiners - Large Cap								
Imperial Oil Limited (30%)	IMO	B	47.12	287	13,540	42.00	0.07	1.11
Norsk Hydro ASA (post Oct 1)	NHY	H	12.35	1,241	15,330	11.00	0.13	1.11
Petro-Canada	PCZ	B	54.62	502	27,420	55.00	0.18	0.99
Marathon Oil Corporation	MRO	H	61.20	694	42,470	62.00	0.13	0.99
PetroChina Company Ltd (10%)	PTR	B	150.90	181	27,310	166.00	0.05	0.91
Statoil ASA (29%)	STO	B	31.49	928	29,220	35.00	0.11	0.91
Suncor Energy	SU	B	91.20	461	42,050	105.00	0.07	0.88
Lukoil Oil Company	LUKOY	B	76.80	831	64,000	121.00	0.02	0.64
<i>Total or Median</i>					<i>261,000</i>		<i>0.09</i>	<i>0.95</i>
Independent Natural Gas and Oil - Large Cap								
CNOOC Limited (34%)	CEO	B	115.84	140	16,200	108.00	-	1.07
Encana Corporation	ECA	B	62.91	780	49,100	72.00	0.14	0.89
XTO Energy Inc.	XTO	B	61.01	372	22,700	70.00	0.13	0.89
Anadarko Petroleum Corp.	APC	B	51.89	465	24,100	74.00	0.38	0.82
Occidental Petroleum Corp.	OXY	B	58.72	847	49,700	77.00	0.07	0.78
EOG Resources	EOG	B	74.13	247	18,300	102.00	0.05	0.74
Devon Energy Corporation	DVN	B	79.63	450	35,800	129.00	0.15	0.67
<i>Total or Median</i>					<i>216,000</i>		<i>0.13</i>	<i>0.82</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	37.68	45	1,680	44.00	0.24	0.89
Encore Acquisition Company	EAC	B	27.92	53	1,480	54.00	0.34	0.68
Energy Partners Ltd.	EPL	B	16.70	31	520	38.00	0.35	0.64
Cimarex Energy Company	XEC	B	39.85	84	3,360	76.00	0.09	0.57
<i>Total or Median</i>					<i>7,000</i>		<i>0.29</i>	<i>0.66</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	55.64	172	9,550	15.00	0.54	2.24
Kinder Morgan Management, LLC	KMR	S	52.63	62	3,250	15.00	0.54	2.15
Pengrowth Energy Trust	PGH		19.25	244	4,700	17.00	0.29	1.09
Penn West Energy Trust	PWE	B	34.03	240	8,160	36.00	0.17	0.95
Enerplus Resources Fund	ERF		47.66	123	5,880	52.00	0.13	0.93
Canadian Oil Sands Trust	COSWF	B	31.20	479	14,940	39.00	0.08	0.82
San Juan Basin Royalty Trust	SJT	B	31.88	47	1,490	40.00	-	0.80
Hugoton Royalty Trust	HGT	B	25.07	40	1,000	34.00	-	0.74
<i>Total or Median</i>					<i>49,000</i>		<i>0.15</i>	<i>0.94</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

Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Analyses are prepared from sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Mr. Wulff is not paid by covered companies. Neither he nor his spouse trade a subject stock within a week before or after a change in rating.

Oil and Gas Producers - Rank by EV/Ebitda

	Symbol/ Rating		Price (US\$/sh) 2-Jul 2007	Adjustd Resrvs/ Prod NTM	PV/ Ebitda NTM	EV/ Ebitda NTM	P/E NTM	Divd or Distrib NTM (%)
Mega Cap								
Gazprom (50%)	OGZPY	B	42.69	24.6	9.4	6.7	10	0.9
Exxon Mobil Corporation	XOM	B	84.82	11.5	7.0	6.5	11	1.7
Total S.A.	TOT	B	82.39	9.4	6.6	6.1	11	1.4
BP plc	BP	B	73.30	9.6	6.9	6.0	10	3.4
Royal Dutch Shell plc	RDS-A	B	83.39	7.9	6.1	5.5	10	3.5
Chevron Corporation	CVX	B	85.15	10.0	6.5	5.3	9	2.7
ConocoPhillips	COP	B	80.01	11.2	6.6	5.1	9	2.0
		<i>Median</i>		<i>10.0</i>	<i>6.6</i>	<i>6.0</i>	<i>10</i>	<i>2.0</i>
Producer/Refiners - Large Cap								
Imperial Oil Limited (30%)	IMO	B	47.12	13.3	8.4	9.3	16	0.6
Suncor Energy	SU	B	91.20	23.6	9.7	8.5	15	0.3
PetroChina Company Ltd (10%)	PTR	B	150.90	15.1	8.0	7.3	15	3.1
Norsk Hydro ASA (post Oct 1)	NHY	H	12.35	-	6.5	7.2	12	1.4
Marathon Oil Corporation	MRO	H	61.20	7.8	6.0	5.9	10	1.6
Statoil ASA (29%)	STO	B	31.49	7.7	6.1	5.5	13	5.0
Petro-Canada	PCZ	B	54.62	6.9	5.5	5.5	11	0.9
Lukoil Oil Company	LUKOY	B	76.80	17.8	7.6	4.9	8	1.9
		<i>Median</i>		<i>10.6</i>	<i>7.1</i>	<i>6.6</i>	<i>12</i>	<i>1.5</i>
Independent Natural Gas and Oil - Large Cap								
XTO Energy Inc.	XTO	B	61.01	12.2	9.0	8.0	14	0.8
Anadarko Petroleum Corp.	APC	B	51.89	11.2	8.6	7.0	13	1.4
Encana Corporation	ECA	B	62.91	9.5	7.8	7.0	14	1.3
CNOOC Limited (34%)	CEO	B	115.84	10.6	6.1	6.6	12	2.9
EOG Resources	EOG	B	74.13	9.6	8.0	5.9	14	0.5
Devon Energy Corporation	DVN	B	79.63	9.4	8.3	5.6	11	0.7
Occidental Petroleum Corp.	OXY	B	58.72	11.9	7.2	5.6	11	1.5
		<i>Median</i>		<i>10.6</i>	<i>8.0</i>	<i>6.6</i>	<i>13</i>	<i>1.3</i>
Independent Natural Gas and Oil - Small Cap								
Berry Petroleum Company	BRY	B	37.68	10.3	8.8	7.8	14	0.8
Encore Acquisition Company	EAC	B	27.92	14.8	8.9	6.1	14	-
Cimarex Energy Company	XEC	B	39.85	8.1	7.1	4.0	9	0.4
Energy Partners Ltd.	EPL	B	16.70	5.4	5.5	3.5	-	-
		<i>Median</i>		<i>9.2</i>	<i>8.0</i>	<i>5.1</i>	<i>14</i>	<i>0.2</i>
Income								
Kinder Morgan Energy Partners, L.P.	KMP	S	55.64		7.9	17.7	54	6.0
Kinder Morgan Management, LLC	KMR	S	52.63		7.9	17.0	51	6.3
San Juan Basin Royalty Trust	SJT	B	31.88	10.2	12.3	9.8	12	8.3
Canadian Oil Sands Trust	COSWF	B	31.20	21.1	10.9	8.9	12	6.4
Pengrowth Energy Trust	PGH		19.25	7.5	7.6	8.4	32	14.8
Hugoton Royalty Trust	HGT	B	25.07	14.0	11.0	8.1	12	8.7
Enerplus Resources Fund	ERF		47.66	9.0	7.9	7.4	14	10.0
Penn West Energy Trust	PWE	B	34.03	7.6	7.5	7.2	16	11.4
		<i>Median</i>		<i>9.6</i>	<i>7.9</i>	<i>8.6</i>	<i>15</i>	<i>8.5</i>

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended June 30, 2008; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Analyses are prepared from sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Mr. Wulff is not paid by covered companies. Neither he nor his spouse trade a subject stock within a week before or after a change in rating.

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-Jul 2007	Equity (%)							EV (%)
Mega Cap										
Total S.A.	TOT	82.39	2.9	2.9	2.9		0.7	1.5	0.6	0.94
Exxon Mobil Corporation	XOM	84.82	1.6	1.4		0.1	0.2	0.8	0.4	0.93
Royal Dutch Shell plc	RDS-A	83.39	2.8	2.9	2.9	0.1	0.4	1.4	1.0	0.90
BP plc	BP	73.30	2.7	2.9	2.9	0.2	0.3	1.7	0.7	0.87
Chevron Corporation	CVX	85.15	6.0	5.7		0.3	0.4	3.6	1.5	0.83
ConocoPhillips	COP	80.01	5.1	5.7		0.9	0.4	3.0	1.4	0.76
Gazprom	OGZPY	42.69	9.1	8.6	8.6		6.6	2.0		0.71
Producer/Refiners - Large Cap										
Imperial Oil Limited	IMO	47.12	1.6	1.4	1.4	0.1		1.1	0.2	1.11
Petro-Canada	PCZ	54.62	1.4	1.4	1.4	0.2	0.0	1.0	0.2	0.99
PetroChina Company Ltd.	PTR	150.90	3.1	2.9	2.9		0.2	2.5	0.2	0.91
Statoil ASA	STO	31.49	1.5	1.4	1.4		0.5	0.9	-	0.91
Suncor Energy	SU	91.20	1.5	1.4	1.4	0.1		1.3	0.1	0.88
Lukoil Oil Company	LUKOY	76.80	6.5	5.7	5.7			4.1	1.6	0.64
Independent Natural Gas and Oil - Large Cap										
CNOOC Limited	CEO	115.84	3.3	2.9	2.9		0.3	2.6		1.07
Encana Corporation	ECA	62.91	4.2	4.3	4.3	3.2		0.9	0.1	0.89
XTO Energy Inc.	XTO	61.01	4.3	4.3		3.3		1.0		0.89
Anadarko Petroleum Corp.	APC	51.89	1.8	2.9		1.5		1.3	0.1	0.82
Occidental Petroleum Corp	OXY	58.72	3.0	2.9		0.4	0.0	2.2	0.3	0.78
EOG Resources	EOG	74.13	6.3	5.7		4.3	0.4	1.0		0.74
Devon Energy Corporation	DVN	79.63	5.2	5.7		3.2		2.5		0.67
Independent Natural Gas and Oil - Small Cap										
Berry Petroleum Company	BRY	37.68	1.2	1.4		0.4		1.0		0.89
Encore Acquisition Comp	EAC	27.92	1.7	2.9		0.5		2.4		0.68
Energy Partners Ltd.	EPL	16.70	1.5	2.9		1.4		1.5		0.64
Cimarex Energy Company	XEC	39.85	2.8	2.9		2.0		0.9		0.57
Income										
Penn West Energy Trust	PWE	34.03	2.8	2.9	2.9	0.9		1.9		0.95
Canadian Oil Sands Trust	COSWF	31.20	6.1	5.7	5.7	(0.6)		6.3		0.82
San Juan Basin Royalty Tr	SJT	31.88	6.7	5.7		5.7				0.80
Hugoton Royalty Trust	HGT	25.07	3.3	2.9		2.9				0.74
Portfolio Composite			100	100	47	31	10	50	8	0.78
Canada					17					
Russia					14					
Europe					10					
China					6					

Note: Percentages in the Portfolio Weight - EV column correspond to unlevered positions ranging from triple at 8.6% to half at 1.4%.

Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Analyses are prepared from sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Mr. Wulff is not paid by covered companies. Neither he nor his spouse trade a subject stock within a week before or after a change in rating.

Index of Recent Research**Stock Ideas**

<u>Date</u>	<u>Symbol</u>	<u>Stock</u>	<u>Theme</u>
29-Jun	OGZPY	Gazprom	Raise NPV to \$62 a Share
29-Jun	LUKOY	Lukoil Oil Company	Raise NPV to \$121 a Share
1-Jun	* SJT	San Juan Basin Royalty Trust	Stable Present Value (RT Weekly)
1-Jun	* HGT	Hugoton Royalty Trust	Stable Present Value (RT Weekly)
31-May	* NHY	Norsk Hydro ASA	Hold New NHY, Buy Statoil
18-May	* MRO	Marathon Oil Corporation	Downgrade to Hold from Buy on Price
9-May	* XEC	Cimarex Energy Company	Lowest McDep Ratio
8-May	* PWE	Penn West Energy Trust	Committed to Income Distributions
7-May	* EAC	Encore Acquisition	Encore for Bell Creek
7-May	* PTR	PetroChina Company Limited	Raise NPV on Discovery
4-May	* TOT	Total S.A.	Integrated Model
4-May	* EPL	Energy Partners, Ltd.	Strategic Alternatives Disappointment
3-May	* RDSA	Royal Dutch Shell plc	Record Results
2-May	* BRY	Berry Petroleum	Piceance and Diatomite
2-May	* DVN	Devon Energy Corporation	Low McDep Ratio Natural Gas
2-May	* IMO	Imperial Oil Limited	Oil Sands Deal Unmasks Value
1-May	* EOG	EOG Resources Inc.	Productive Drilling Boosts Cash Flow
1-May	* MRO	Marathon Oil Corporation	Stock Split Declared
1-May	* APC	Anadarko Petroleum Corporation	Adjust NPV to \$70 a Share on Lower Debt
27-Apr	* CVX	Chevron Corporation	Solid Results
26-Apr	* CEO	CNOOC Ltd	Volume up 5%
26-Apr	* XOM	Exxon Mobil Corporation	Another Record Quarter
26-Apr	* COSWF	Canadian Oil Sands Trust	Distribution Raised 33%
25-Apr	* XTO	XTO Energy Inc.	Buy for Natural Gas
25-Apr	* ECA	EnCana Corporation	Buy for Natural Gas
25-Apr	* COP	ConocoPhillips	Strong Demand, Constrained Supply
25-Apr	* BP	BP p.l.c.	CEO Cycle
24-Apr	* OXY	Occidental Petroleum Corporation	Well-Positioned in Oil
24-Apr	* PCZ	Petro-Canada	Volume Up 15%
18-Apr	* KMX	Kinder Morgan	Deal Delayed

Meter Reader - A Weekly Analysis

3-Jul		New Oil Sands Breakeven - \$50 a Barrel
26-Jun		Our Friend, the Trend
19-Jun	*	Oil Rich Country
12-Jun	*	Kovykta Kontroversy

Natural Gas and Oil Royalty Trusts - A Weekly Analysis

29-Jun		Honest Ed Stemplach
22-Jun		CAPPitalizing Canadian Oil Sands Trust
15-Jun	*	Dorchester Minerals Defies Decline
8-Jun	*	Real Value for Patient Investors

* Archived on www.mcdep.com

Historical independent energy investment analysis by Kurt Wulff doing business as McDep Associates is posted at www.mcdep.com. Analyses are prepared from sources and data believed to be reliable, but no representation is made as to their accuracy or completeness. Mr. Wulff is not paid by covered companies. Neither he nor his spouse trade a subject stock within a week before or after a change in rating.