# Encana Corporation Natural Gas with Oil Sands

Symbol	ECA	Ebitda Next Twelve Months ending 12/31/06 (US\$mm)	9,500
Rating	Buy	North American Natural Gas/Ebitda (%)	78
Price (US\$/sh)	47.61	Natural Gas and Oil Production/Ebitda (%)	100
Pricing Date	1/18/06	Adjusted Reserves/Production NTM	7.1
Shares (mm)	876	EV/Ebitda	5.5
Market Capitalization (US\$mm)	41,700	PV/Ebitda	5.8
Debt (US\$mm)	10,900	Undeveloped Reserves (%)	34
Enterprise Value (EV) (US\$mm)	52,600	Natural Gas and Oil Ebitda (US\$/mcfe)	6.00
Present Value (PV) (US\$mm)	55,600	Present Value Proven Reserves(US\$/boe)	24.49
Net Present Value (US\$/share)	51	Present Value Proven Reserves(US\$/mcfe)	4.08
Debt/Present Value	0.20	Earnings Next Twelve Months (US\$/sh)	4.24
McDep Ratio - EV/PV	0.95	Price/Earnings Next Twelve Months	11
Dividend Yield (%/year)	0.6	Indicated Annual Dividend (US\$/sh)	0.30
Note: Estimated cash flow and a	arnings tied to or	ne-year futures prices for oil and natural gas	

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.

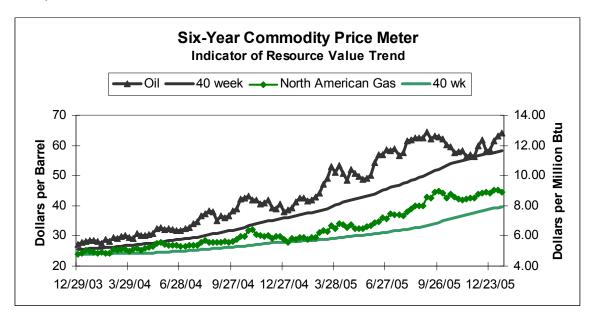
#### **Summary and Recommendation**

Buy-recommended **Encana Corporation (ECA)** offers the largest stock market concentration on North American natural gas. Size makes it a lower risk investment for individual investors, an easily tradable investment for institutional investors and a worthwhile target for acquisition by a mega cap energy company. Apparently major oil companies have also expressed interest in the company's resource position in oil sands, among the largest in Canada. Meanwhile the stock has not yet recovered from the market decline last fall combined with the early retirement of the chief executive officer, Gwyn Morgan. While Encana shares are priced near estimated net present value of \$51, the estimate is tied to a long-term oil price of \$50 a barrel. In contrast, oil for steady delivery over the next six years is quoted at \$65 a barrel in the futures market.

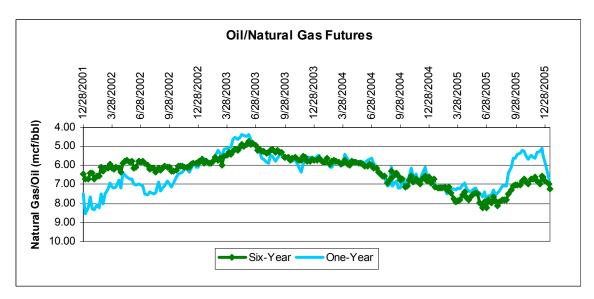
## McDep Ratio Relates Oil Price to Opportunity

A McDep Ratio below 1.0 tells us that Encana's market cap and debt, or enterprise value, is less than the estimated present value of its energy resources assuming a long-term real price of \$50 a barrel for Light, Sweet Crude Oil. More importantly for Encana our estimate of present value presumes an equivalent price of \$10 a million btu for natural gas.

Meanwhile six-year oil futures are about \$65 a barrel. Momentum has been positive for more than three years as the current quote stays above the 40-week average (see chart <u>Six-Year</u> <u>Commodity Price Meter</u>). Six-year oil has tripled in the four years we have been calculating it on a weekly basis. We do not need further gains in oil price to make money in buy recommendations. Yet our vision of \$150 oil in 2010 implies additional scope to exceed common expectations.



We display oil price and natural gas price on the same scale as though natural gas price would be oil price divided by 5. On that basis six-year natural gas should be near \$13 a million btu, not \$9 where it is now. The ratio of oil price to natural gas price did reach 5 in the spring of 2003 (see chart (<u>Oil/Natural Gas Futures</u>). For the past few months one-year futures reached the 5 to 1 equivalent. Recently one-year futures have rejoined six-year futures at 7 to 1.



Encana's McDep Ratio ranks near the median among peer companies (see table <u>Rank by McDep</u> <u>Ratio</u>). Aside from the fundamental appreciation potential we outlined above, a McDep Ratio of 1.0 is an indication of takeover value. The McDep Ratio of buy-recommended **Burlington Resources (BR)**, increased to 1.0 immediately after buy-recommended **ConocoPhillips (COP)** announced its takeover offer. Encana probably expects more than a 1.0 McDep Ratio on our current estimates especially considering that the stock almost touched \$60 on October 3, 2005.

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			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol	/	18-Jan	Shares	Cap	Value	Present	McDep
		Rating	2006	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Independent Natural Gas and Oil	- Large C	Cap and N	/lid Cap					
XTO Energy Inc.	XTO	В	46.58	370	17,230	48.00	0.20	0.98
Encana Corporation	ECA	В	47.61	876	41,700	51.00	0.20	0.95
CNOOC Limited (29%)	CEO	В	79.25	119	9,450	84.00	0.00	0.94
Devon Energy Corporation	DVN	В	66.96	454	30,400	86.00	0.15	0.81
Occidental Petroleum Corp.	OXY	В	91.11	432	39,400	120.00	0.12	0.79
Burlington Resources	BR	В	90.57	381	34,500	115.00	-	0.79
Anadarko Petroleum Corp.	APC	В	104.46	238	24,900	140.00	0.12	0.78
Total or Media	1				198,000		0.12	0.81

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

#### Low Cash Flow Multiple

Unlevered cash flow multiples in single digits attest to low valuation (see table <u>Rank by</u> <u>EV/Ebitda</u>). Multiples may be low because investors may be uncertain how long cash flow will last at current levels. That depends on commodity price and reserve life. Cash flow estimated for the next twelve months, Ebitda NTM, reflects latest futures prices. Reserve life is measured as adjusted reserves divided by next twelve months production.

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

			Price (\$/sh)	Adjstd Resrvs/	PV/	EV/		Divd or Distrib
	~ 1	. ,	( )				D (D	
	Symbol	/	18 <b>-</b> Jan	Prod	Ebitda	Ebitda	P/E	NTM
	Rating		2006	NTM	NTM	NTM	NTM	(%)
Independent Natural Gas and Oil - La	rge Cap	and Mi	d Cap					
XTO Energy Inc.	XTO	В	46.58	10.8	6.5	6.4	11	0.4
Encana Corporation	ECA	В	47.61	7.1	5.8	5.5	11	0.6
Anadarko Petroleum Corp.	APC	В	104.46	12.5	6.4	5.0	10	0.7
CNOOC Limited (29%)	CEO	В	79.25	9.2	5.2	4.9	9	2.9
Occidental Petroleum Corp.	OXY	В	91.11	11.3	6.0	4.7	8	1.6
Devon Energy Corporation	DVN	В	66.96	7.8	5.0	4.0	7	0.4
Burlington Resources	BR	В	90.57	-	-	-	-	-
Mediar	1			9.2	5.8	4.9	9	0.6

#### **Concentration on Natural Gas**

Each oil and gas stock has its own unique mix of energy resources (see table <u>Business Segments</u>). Encana's concentration on natural gas matches the highest for peers. While we hold our present value estimates steady for months, prices of peer stocks may react in the short-term depending on relative changes in expectations for natural gas and oil. We recommend that investors have both natural gas and oil representation.

## **Home Country and Business Segments**

	Symbo	Rating	Non- U.S. Domicile	North Amer. Natural Gas (%)	Rest of World Natural Gas (%)	Oil Prod'n (%)	Down- stream (%)	Total Present Value (US\$mm)
Independent Natural Gas and	l Oil - L	arge Caj	p and Mid (	Cap				
Occidental Petroleum Corp.	OXY	В		14	1	75	11	59,000
Encana Corporation	ECA	В	Canada	83	-	17	-	55,600
Devon Energy Corporation	DVN	В		64	-	36	-	46,000
Anadarko Petroleum Corp.	APC	В		60	-	40	-	37,700
CNOOC Limited	CEO	В	China	-	12	88	-	34,600
XTO Energy Inc.	XTO	В		83	-	17	-	22,100
Burlington Resources	BR	В						
Media	n			62	-	38	-	255,000

#### Static Present Value Justified by Dynamic Cash Flow

Present value analysis presumes that fundamental value is measured by the projection of cash flows years into the future and bringing them to the present applying a real discount rate, currently 7% a year. We generally hold present value estimates static until there is justification to make new commodity price assumptions.

Next Twelve Months (NTM) cash flow represents the volumes and costs that form the base for future projections. Reserve life index tells how long cash flow will last. NTM cash flow and reserve life are the two main variables in our correlation by function for about 30 companies. Net present value indicated by the current combined correlation is about \$8 a share lower than our ongoing standard estimate for the company (see table <u>Functional Cash Flow and Present Value</u>).

## Encana Corporation Functional Cash Flow and Present Value

	NTM <u>Ebitda</u>	Adjusted <u>R/P</u>	PV/ <u>Ebitda</u>	Present <u>Value</u>	
North American Natural Gas	7,420	7.0	6.2	46,000	83%
Oil	2,090	7.6	4.6	9,600	17%
	9,510	7.1	5.8	55,600	100%
Debt					10,900
Net Present Value (\$mm)					44,700
Shares					876
Net Present Value (\$/sh)					51
Over (-)/ Under (+) Correlation (US	S\$/sh)				(8)

#### **Oil Sands Position Strategically Valuable**

Heretofore our interest in Encana seemed justified almost entirely on the company's natural gas prospects. Our ears perked up last fall when management disclosed that its oil sands leases were

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capable of supporting 500,000 barrels daily of oil production. That is as much as pioneers Syncrude and Suncor each expect to produce eventually. Our present value of just under \$10 billion for Encana's oil production includes mostly liquids associated with natural gas production and current oil sands production of about 40,000 barrels daily. Considering that buyrecommended **Total (TOT)** recently paid more than a billion dollars for a company that had about a third the potential, Encana oil sands leases may be worth several billion dollars in their undeveloped state. The company would likely be interested in a deal with a partner who supplies most of the capital for part of the ownership.

Oil sands deposits are too deep to be mined on Encana's leases and are produced instead with steam injection typically. The main challenge is upgrading the heavy raw material to the level of conventional crude oil. A partner could bring refining capability to the venture.

#### **Futures Prices Propel Estimated Cash Flow by Quarter**

Cash flow for the next year is projected from a base through the latest reported quarter (see table <u>Next Twelve Months Operating and Financial Estimates</u>). Company disclosures provide the clues for future volumes and costs as well as geographic and quality differences in price.

#### Kurt H. Wulff, CFA

Volume	Q4 12/31/04	Q3 9/30/05	Q4E 12/31/05	Year 2005E	Q1E 3/31/06	Q2E 6/30/06	Q3E 9/30/06	Q4E 12/31/06	Next Twelve Months 12/31/06
Natural Gas (mmcfd)	3,087	3,222	3,400	3,246	3,400	3,400	3,400	3,400	3,400
Oil (mbd)	159	150	3,400 157	3,240 155	3,400 157	157	3,400 157	3,400 157	3,400 157
Total (bcf)	372	130 379	399	1,525	391	395	399	399	1,585
Total (mmcfed)	4,041	4,122	4,342	4,177	4,342	4,342	4,342	4,342	4,342
Price	4,041	4,122	4,342	4,177	4,342	4,342	4,342	4,342	4,342
Henry Hub (US\$/mmbtu)	7.10	8.56	13.00	8.65	9.69	8.96	9.16	9.89	9.43
Differential	1.02	1.27	3.04	1.26	1.52	1.41	1.44	1.55	1.48
Encana (\$/mcf)	6.08	7.29	9.96	7.39	8.17	7.55	7.72	8.33	7.94
WTI Cushing (US\$/bbl)	48.31	62.52	59.99	56.30	62.94	65.51	66.29	66.70	65.36
Differential	17.57	16.36	15.70	18.33	16.47	17.14	17.35	17.45	17.09
Encana (\$/bbl)	30.74	46.16	44.29	37.98	46.47	48.37	48.94	49.25	48.27
Total (\$/bbl)	35.12	44.27	56.42	42.90	48.45	45.98	46.88	49.84	47.79
Revenue (\$mm)									
Natural Gas	1,727	2,161	3,116	8,749	2,499	2,337	2,414	2,607	9,857
Oil	450	637	640	2,152	657	691	707	711	2,766
Total	2,176	2,798	3,756	10,901	3,156	3,028	3,121	3,318	12,623
Expense	317	690	929	2,471	779	747	771	820	3,117
Ebitda (\$mm)	1,860	2,108	2,827	8,430	2,377	2,281	2,350	2,498	9,506
Deprec., Deplet., & Amort.	641	677	677	2,715	677	677	677	677	2,708
Hedging	226	135	57	326	38	56	57	57	208
Interest	113	218	218	637	218	218	218	218	872
Ebt	880	1,078	1,875	4,752	1,444	1,329	1,398	1,546	5,718
Income tax	308	377	656	1,663	505	465	489	541	2,001
Net Income (\$mm)	572	701	1,219	3,089	939	864	909	1,005	3,717
Per share (\$)	0.62	0.80	1.39	3.49	1.07	0.99	1.04	1.15	4.24
Shares (millions)	930	876	876	885	876	876	876	876	876
Ebitda margin	85%	75%	75%	77%	75%	75%	75%	75%	75%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%

#### Encana Corporation Next Twelve Months Operating and Financial Estimates

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