

Rating: Buy
S&P 500: 1105

Energy Partners, Ltd.

Volume Acceleration

<i>Symbol</i>	EPL	<i>Ebitda Next Twelve Months ending 6/30/05 (\$mm)</i>	233
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	61
<i>Price (US\$/sh)</i>	14.80	<i>Natural Gas and Oil Production/Ebitda (%)</i>	100
<i>Pricing Date</i>	8/26/04	<i>Adjusted Reserves/Production NTM</i>	5.0
<i>Shares (mm)</i>	38	<i>EV/Ebitda</i>	3.0
<i>Market Capitalization (US\$mm)</i>	570	<i>PV/Ebitda</i>	4.2
<i>Debt (US\$mm)</i>	140	<i>Undeveloped Reserves (%)</i>	31
<i>Enterprise Value (EV) (US\$mm)</i>	710	<i>Natural Gas and Oil Ebitda (US\$/mcfe)</i>	4.60
<i>Present Value (PV) (US\$mm)</i>	990	<i>Present Value Proven Reserves(US\$/boe)</i>	20.10
<i>Net Present Value (US\$/share)</i>	22	<i>Present Value Proven Reserves(US\$/mcfe)</i>	3.35
<i>Debt/Present Value</i>	0.14	<i>Earnings Next Twelve Months (US\$/sh)</i>	1.49
<i>McDep Ratio - EV/PV</i>	0.72	<i>Price/Earnings Next Twelve Months</i>	10
<i>Dividend Yield (%/year)</i>	0.0	<i>Indicated Annual Dividend (US\$/sh)</i>	0.00

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

We continue a Buy rating on the common shares of **Energy Partners (EPL)** as a small cap participation in an improved industry outlook for finding and developing oil and gas on the Gulf of Mexico Continental Shelf. The exploration effort headed by Bruce Sidner, who joined EPL with the acquisition of Hall-Houston in 2002, appears to be showing promising results. As a result, Chairman Rick Bachmann expects an expanded drilling program this year to produce 10%-20% production growth next year. Our estimate of present value of \$22 a share assumes a 7% real return on a constant real oil price of \$35 a barrel and average reinvestment success.

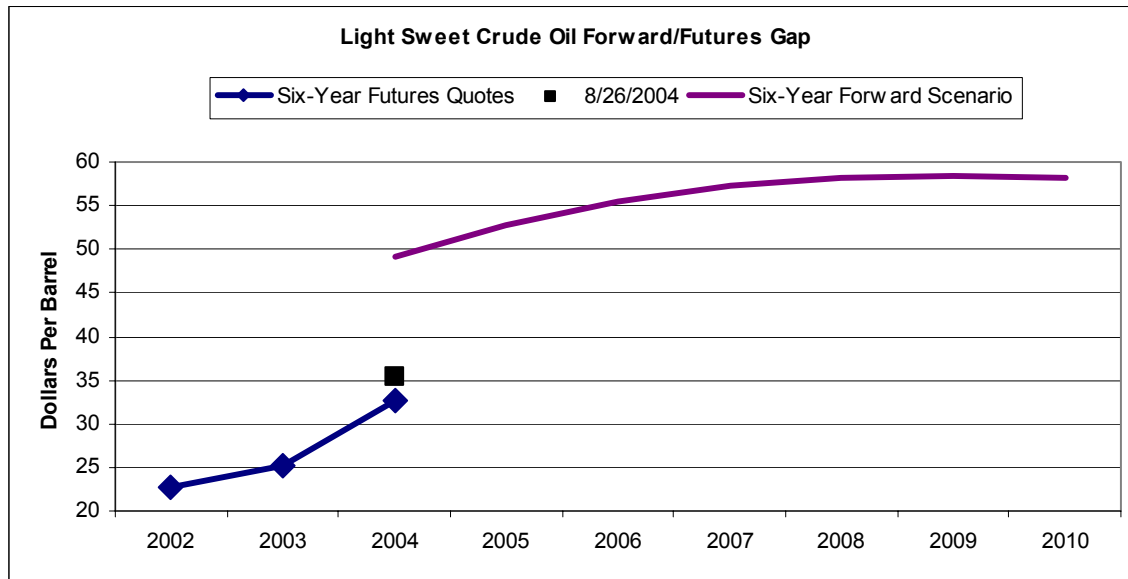
Moderate Oil Price Scenario

The value of the company depends in large part on the future price of crude oil. Publicly traded in the commodity markets, futures contracts for delivery over the next six years continue in a steep uptrend. Whether the trend will slow for awhile we cannot know. Our scenario is that a move that began in the low \$20 and is now in the mid \$30 could reach \$50 (see chart Light Sweet Crude Oil Forward/Futures Gap).

To construct the scenario we assumed oil would peak in 2010 at \$50 in constant dollars. That is more moderate than the peak in early 1981 at more than \$80 in constant dollars. Then we applied 3% per year inflation and calculated six-year averages to build a forward curve.

Economics support the price trends. Oil demand is strong with world economic growth paced by developing countries, especially China. Supply growth is limited as spare capacity has virtually disappeared. The largest producing fields in the Middle East are now mature. It will take time, large amounts of capital and a secure political climate to boost producing rates.

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Monetary factors favor oil investment as interest rates below inflation drive investors to real assets for protection against the dollar losing value. If similar past periods are any guide, the authorities may not raise interest rates above inflation for the rest of the decade.

Environmental factors favor higher oil and gas price. Coal is still a quarter of world primary energy supply. Cleaner oil and gas are undervalued as long as we tolerate environmentally disadvantageous coal.

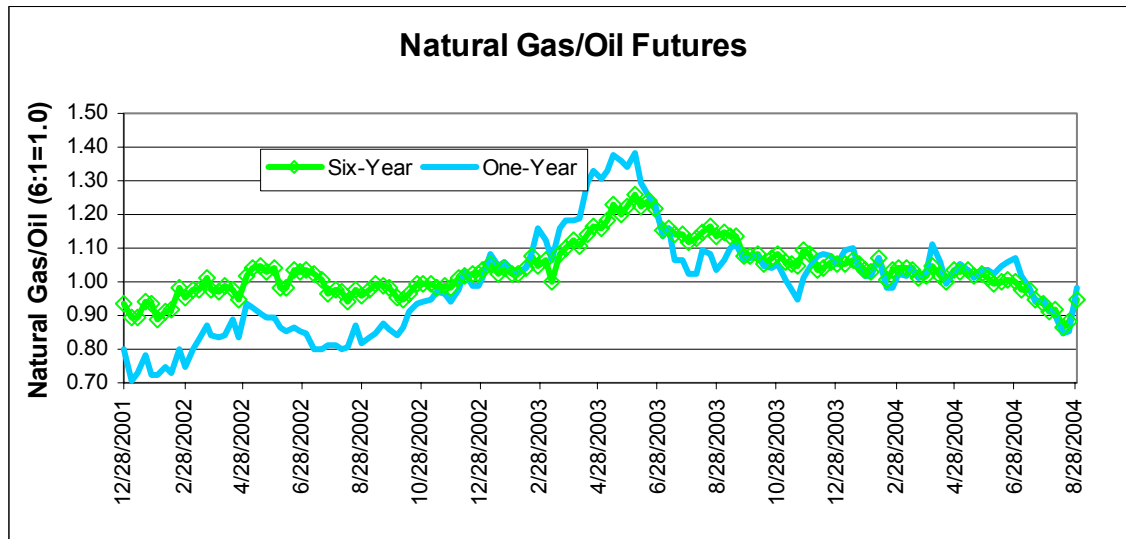
Political factors favor higher oil price in consuming countries and producing countries. Consuming governments often resort to artificial forces to hold down oil price that can appear to work temporarily.

In producing countries we have seen time and again that oil production goes down when international oil companies are not welcome. After Iran, Iraq and Venezuela, now Saudi Arabia appears vulnerable to political change that may bring about production decline.

Too much of a gain in oil price might cause problems of economic adjustment though we think much of the concern expressed is exaggerated. Nonetheless we have a threshold of 60% gain in monthly price compared to a year earlier when we start to become concerned about weak demand for oil. October futures currently near \$43 a barrel would have to remain above \$52 for the 60% threshold to be breached.

Natural Gas Price Lagging Oil

EPL's reserves are about 55% oil, but natural gas is expected to provide 61% of cash flow for the next twelve months. Recent relative underperformance of natural gas price appears to have reversed partially as oil price has dropped back from a peak. That shows in a plot of natural gas price compared to oil price (see chart [Natural Gas/Oil Futures](#)). The long term trend is for natural gas price to gain relative to oil because it is a cleaner fuel among other factors.



One-Year Futures Point to Higher Cash Flow and Profits

As our next twelve months (NTM) cash flow model moves ahead to the period ending June 30, 2005 expectations also advance mainly because of advancing one-year futures. We relate natural gas and oil price to the quotes for commodities traded on the New York Mercantile Exchange (see table [Next Twelve Months Operating and Financial Estimates](#)).

Investors who want calendar year estimates can find 2004 in the table. For 2005 we suggest using the next twelve months as a rough estimate. Estimates can change frequently along with oil markets.

Present Value at Real Price and Real Return

NTM estimates determine to a large extent the first year of projected cash flow that we discount to present value (see table [Present Value of Oil and Gas Reserves](#)). The calculation is set up on the basis of a barrel of proven reserves, 0.69 developed and 0.31 undeveloped.

While there are many assumptions that could be discussed, discount rate and oil price are especially important. Price escalation and discount rate interact. In this case we make the simplification of dealing in constant dollars. That assumes price escalation, cost escalation and discount rate are all net of inflation.

For discount rate we use a 7% real return per year on an unlevered basis. That means a buyer who pays present value would earn 7% per year above inflation if all the projections were to materialize as stated.

First year oil price is from the futures market. We hold it constant at an arbitrary level thereafter. The assumed price listed in the upper right hand corner is the commonly quoted benchmark Light, Sweet Crude. The price still escalates as we assume that natural gas gains relative to oil. A price of \$35 a barrel leads to present value of future cash flow from a barrel of reserves equal to \$16.50 (see box in right hand column).

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Energy Partners, Ltd.
Next Twelve Months Operating and Financial Estimates

	<i>Q1</i>	<i>Q2</i>	<i>Q3E</i>	<i>Q4E</i>	<i>Year</i>	<i>Q1E</i>	<i>Q2E</i>	<i>Next Twelve Months</i>
	<i>3/31/04</i>	<i>6/30/04</i>	<i>9/30/04</i>	<i>12/31/04</i>	<i>2004E</i>	<i>3/31/05</i>	<i>6/30/05</i>	<i>6/30/05</i>
Volume								
Natural Gas (mmcf)	77	87	87	87	85	87	87	87
Oil (mbd)	8.0	8.4	8.4	8.4	8.3	8.4	8.4	8.4
Total (mb)	1,876	2,086	2,109	2,109	8,179	2,063	2,086	8,366
Total (mbd)	20.8	22.9	22.9	22.9	22.4	22.9	22.9	22.9
Price								
Natural Gas								
Henry Hub (\$/mmbtu)	5.64	6.10	5.57	5.95	5.82	6.78	6.00	6.08
Differential (\$/mmbtu)	(0.17)	(0.17)	-	-	(0.09)	-	-	0.00
EPL (\$/mcf)	5.81	6.27	5.57	5.95	5.90	6.78	6.00	6.07
Oil (\$/bbl)								
WTI Cushing	35.23	38.34	44.45	42.74	40.19	41.50	40.25	42.24
Differential	1.73	(1.01)	1.50	1.44	0.81	1.40	1.36	1.42
EPL	33.50	39.35	42.95	41.30	39.38	40.10	38.89	40.82
Total (\$/bbl)	33.79	36.01	36.92	37.76	36.19	40.47	37.08	38.04
Revenue (\$mm)								
Natural Gas	40	50	45	48	182	53	48	193
Oil	24	30	33	32	119	30	30	125
Other	(1)	(5)			(6)			-
Total	63	75	78	80	296	83	77	318
Expense (\$mm)								
Lease operating	10	10	11	11	41	10	10	42
Production taxes	2	2	3	3	11	3	3	13
General and administrative	8	7	7	7	30	8	8	31
Total	20	19	21	21	81	22	22	85
Ebitda (\$mm)	43	56	57	59	215	62	55	233
Exploration	10	8	8	8	33	8	8	32
Deprec., Deplet. & Amort.	19	22	23	23	87	23	23	92
Other non cash	(0)	0	2	2	4	-	-	5
Ebit (\$mm)	15	26	23	25	91	31	25	104
Interest	4	3	3	3	14	3	3	14
Ebt (\$mm)	12	23	20	22	77	27	21	91
Income tax	4	8	7	8	28	10	8	34
Net income (\$mm)	8	15	13	14	49	17	13	57
Per share	0.20	0.38	0.33	0.36	1.27	0.45	0.35	1.49
Shares (millions)	37.7	38.4	38.4	38.4	38.3	38.4	38.4	38.4
Lease operating (\$/bbl)	5.22	4.70	5.00	5.00	4.97	5.00	5.00	5.00
Production taxes (%)	3.4	2.6	4.0	4.0	3.5	4.0	4.0	4.0
G & A (\$/bbl)	4.37	3.40	3.37	3.37	3.61	4.00	4.00	3.68
D., D. & A (\$/bbl)	9.97	10.64	11.00	11.00	10.67	11.00	11.00	11.00
Tax rate	36%	37%	37%	37%	37%	37%	37%	37%

Present Value per Barrel Leads to Present Value per Share

We illustrate the calculation of Net Present Value (NPV) in a sensitivity table where each column is headed by a different oil price (see table Net Present Value Calculation). Oil price corresponds to present value per barrel which then leads step by step to the final result. The price of \$35 a barrel corresponds to our standardized present value of \$22 a share.

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Present value per barrel multiplied by barrels of proven reserves tends to understate value more for companies with a shorter reserve life. We see that in a strong correlation of enterprise value with NTM cash flow and adjusted reserve life. We highlight the amount of the understatement as short life uplift that amounts to almost a fifth of present value in the standard case.

Energy Partners, Ltd.
Present Value of Oil and Gas Reserves

Volume Decline (%/yr):	24	Nymex Oil Price Post 2005 (\$/bbl)	35
Volume Enhancement (%/yr):	7	Real Discount Rate (%/yr):	7.0
Capex/Cash Flow (%):	11	Variable Cost (%):	20

Year	Basic (bbl)	Volume Enhanced (bbl)	Total (bbl)	Price (\$/bbl)	Revenue (\$)	Fixed Cost (\$)	Var. Cost (\$)	Cash Flow (\$)	Cap Ex (\$)	Free CF (\$)	Disc Factor	Present Value (\$)
Total 2005 through 2024; years ending on 6/30												
	0.691	0.310	1.001	36.78	36.80	6.41	7.43	22.96	2.18	20.78	0.79	16.50
2005	0.170	0.000	0.170	38.04	6.46	0.43	1.30	4.73	0.52	4.21	0.97	4.07
2006	0.129	0.017	0.146	35.00	5.10	0.43	1.03	3.64	0.40	3.24	0.90	2.93
2007	0.098	0.027	0.125	35.42	4.43	0.43	0.89	3.11	0.34	2.76	0.84	2.33
2008	0.074	0.033	0.107	35.84	3.84	0.43	0.78	2.64	0.29	2.35	0.79	1.85
2009	0.056	0.036	0.092	36.26	3.34	0.43	0.67	2.24	0.25	1.99	0.74	1.47
2010	0.043	0.036	0.079	36.68	2.90	0.43	0.59	1.88	0.21	1.68	0.69	1.16
2011	0.032	0.036	0.068	37.10	2.51	0.43	0.51	1.58	0.17	1.40	0.64	0.90
2012	0.024	0.034	0.058	37.52	2.18	0.43	0.44	1.31	0.00	1.31	0.60	0.79
2013	0.019	0.026	0.044	37.94	1.67	0.43	0.34	0.91	0.00	0.91	0.56	0.51
2014	0.014	0.019	0.033	38.36	1.28	0.43	0.26	0.60	0.00	0.60	0.53	0.31
2015	0.011	0.015	0.025	38.78	0.98	0.43	0.20	0.36	0.00	0.36	0.49	0.18
2016	0.008	0.011	0.019	39.20	0.75	0.43	0.15	0.17	0.00	0.17	0.46	0.08
2017	0.006	0.008	0.015	39.62	0.58	0.43	0.12	0.03	0.00	0.03	0.43	0.01
2018	0.005	0.006	0.011	40.04	0.44	0.43	0.09	-0.07	0.00	-0.07	0.40	-0.03
2019	0.004	0.005	0.008	40.46	0.34	0.43	0.07	-0.16	0.00	-0.16	0.37	-0.06

Energy Partners, Ltd.
Net Present Value Calculation

Constant Oil Price (\$/bbl):	30	35	40	50
Present Value per Barrel (\$):	14.20	16.50	18.80	23.30
Oil and Gas reserves (million barrels equivalent):	49	49	49	49
Present Value of Oil and Gas Reserves (\$mm):	700	810	900	1,100
Short Life Uplift (\$mm)	180	180	180	180
Total	880	990	1,080	1,280
Debt (\$mm):	140	140	140	140
Present Value of Equity (\$mm):	740	850	940	1,140
Shares (mm):	38	38	38	38
Net Present Value (\$/sh):	19	22	24	30

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Growth Expected to Accelerate

Short-life companies generate current cash flow at a higher rate relative to resource value. With more cash to reinvest, the short life company becomes more sensitive to return on that reinvestment.

EPL follows the philosophy that cash flow is for drilling while debt is for acquisitions. Accordingly the boost in Ebitda to more than \$200 million estimated for 2004 has been accompanied by a boost in capital spending to \$175 million. With that much spending there should be some volume growth. As a result management now guides analysts and investors to expect volume in 2005 to be 10% to 20% higher than in 2004.

At the same time results have to be sufficiently encouraging to justify a high level of spending and increased volume expectation. Indeed, volume gains are already picking up with a 10% gain from the first quarter to the second quarter of 2004.

Two important areas of activity that attract our attention are extensions of EPL's traditional areas of Bay Marchand and East Bay both near the mouth of the Mississippi River. At South Timbalier 41, EPL is drilling development wells where a recent discovery is producing and plans an exploratory well nearby. Management eyes installing "sizeable" infrastructure. The deep wells reach from 16,000 to 17,000 feet.

The company is currently seeking partners for a 20,000 feet exploration prospect in the East Bay area. The size of structure the exploration scientists and engineers think they have identified is larger than anything the company has drilled previously. After risk sharing the company's likely 25% share of a successful natural gas discovery might equal all of its current total reserves. While one has to be skeptical of success on such a large prospect, modestly named Denali after the highest mountain in North America, the pursuit of it will be interesting.

Kurt H. Wulff, CFA

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