A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

Energy Stock Selection

Summary and Recommendation

Buy-recommended stocks share low McDep Ratios, mostly low or reasonable debt and honest management (as best we know). Sell-recommended stocks share high valuation, high debt, excessive compensation, tricky accounting and questionable practices.

Crude oil and products – ChevronTexaco (CVX), ConocoPhillips (COC/P), Marathon Oil (MRO)

Natural gas – Burlington Resources (BR), EnCana (ECA) Natural gas royalty trust – San Juan Basin Royalty Trust (SJT) Small cap natural gas – XTO Energy (XTO), Forest Oil (FST), Purcell Energy (PEL.TO), Energy Partners (EPL)

Overseas – PetroChina (PTR), CNOOC Limited (CEO)

Energy infrastructure – **Exelon (EXC)** (debt is a bit high)

Sell – Kinder Morgan (KMI, KMP, KMR), El Paso Energy Partners (EPN)

Of course there are other energy stocks that may be attractive buy candidates and vulnerable sell candidates. Our valuation ranking of 74 stocks is intended to help investors make money and avoid losses in a diversified energy portfolio (see Tables L-1, L-2, M-1, M-2, S-1 and S-2).

Kurt H. Wulff, CFA



A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

Table L-1
Mega Cap and Large Cap Energy Companies
Rank by McDep Ratio: Market Cap and Debt to Present Value

			Price			Net		
			(\$/sh)		Market	Present	Debt/	
	Symbol/		16-May	Shares	Cap	Value	Present	McDep
	Ra	iting	2002	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Mega Cap								
Exxon Mobil Corporation	XOM		40.27	6,858	276,000	36.00	0.09	1.11
BP plc	BP		51.90	3,734	194,000	50.00	0.15	1.03
Royal Dutch/Shell	RD	3	56.05	3,502	196,000	60.00	0.12	0.94
TotalFinaElf S.A.	TOT		77.58	1,352	104,900	90.00	0.14	0.88
ChevronTexaco Corporation	CVX	2	89.00	1,062	94,500	110.00	0.16	0.84
Total or Median					865,000		0.14	0.94
Energy Infrastructure								
Duke Energy Corporation	DUK		34.70	792	27,500	30.40	0.48	1.07
Southern Company	SO		27.02	701	18,900	23.90	0.47	1.07
American Electric Power Co. Inc.	AEP	3	43.80	322	14,100	42.20	0.63	1.01
Dominion Resources	D		61.64	269	16,600	76.20	0.45	0.90
Exelon Corporation	EXC	2	53.04	323	17,100	69.30	0.46	0.87
El Paso Corporation	EP		34.51	546	18,800	47.10	0.48	0.86
Williams Companies	WMB		15.71	521	8,200	24.80	0.59	0.85
Total or Median					94,000		0.47	0.88
Natural Gas and Oil								
OAO Lukoil	LUKOY		71.50	299	21,400	70.00	0.08	1.02
ENI S.p.A.	E		76.50	789	60,300	75.00	0.19	1.02
Occidental Petroleum Corp.	OXY		30.00	372	11,200	30.00	0.48	1.00
Anadarko Petroleum Corp.	APC		53.16	266	14,100	56.00	0.26	0.96
Devon Energy	DVN		49.91	165	8,200	55.00	0.48	0.95
Encana Corporation	ECA	2	30.48	484	14,800	35.00	0.25	0.91
Unocal Corporation	UCL		38.22	245	9,400	45.00	0.33	0.90
Burlington Resources	BR	1	43.56	202	8,800	57.00	0.32	0.84
ConocoPhillips	P	2	60.94	680	41,400	80.00	0.32	0.84
Marathon Oil Corporation	MRO	1	28.58	310	8,900	42.00	0.35	0.79
Total or Median					177,000		0.32	0.91
Service								
Baker Hughes Inc.	BHI		36.86	338	12,500	24.50	0.13	1.44
Schlumberger Ltd.	SLB		55.55	581	32,300	44.00	0.12	1.23
Halliburton Company	HAL		16.76	430	7,200	25.00	0.14	0.72

Buy/Sell rating after symbol: 1-Strong Buy, 2-Buy, 3-Neutral, 4-Sell, 5-Strong Sell McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

Table L-2
Mega Cap and Large Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

			Price (\$/sh)	EV/	EV/		vidend or stribution	PV/
	Symbol/		16-May	Sales	Ebitda	P/E	NTM	Ebitda
		ating	2002	NTM	NTM	NTM	(%)	NTM
Mega Cap		_						
Exxon Mobil Corporation	XOM		40.27	1.7	11.2	24	2.3	10.1
BP plc	BP		51.90	1.5	9.5	20	2.7	9.2
TotalFinaElf S.A.	TOT		77.58	1.3	8.3	17	2.7	9.4
ChevronTexaco Corporation	CVX	2	89.00	1.3	7.7	15	3.1	9.1
Royal Dutch/Shell	RD	3	56.05	1.4	7.6	15	2.5	8.1
Media	ın			1.4	8.3	17	2.7	9.2
Energy Infrastructure								
Duke Energy Corporation	DUK		34.70	0.9	9.7	14	3.2	9.0
Southern Company	SO		27.02	3.3	9.6	16	5.0	9.0
American Electric Power Co. Inc.	AEP	3	43.80	0.6	9.1	13	5.5	9.0
Dominion Resources	D		61.64	3.4	8.1	13	4.2	9.0
Exelon Corporation	EXC	2	53.04	2.4	7.8	12	3.3	9.0
El Paso Corporation	EP		34.51	0.8	7.7	11	2.6	9.0
Williams Companies	WMB		15.71	2.5	7.7	7	5.1	9.0
Media	ın			2.4	8.1	13	4.2	9.0
Natural Gas and Oil								
Occidental Petroleum Corp.	OXY		30.00	1.6	8.1	14	3.3	8.1
ConocoPhillips	P	2	60.94	0.9	8.0	19	2.4	9.5
Anadarko Petroleum Corp.	APC		53.16	3.1	7.8	17	0.6	8.1
Devon Energy	DVN		49.91	3.1	7.0	50	0.4	7.4
ENI S.p.A.	E		76.50	1.8	7.0	14	2.4	6.9
Marathon Oil Corporation	MRO	1	28.58	0.5	6.0	12	3.2	7.6
Encana Corporation	ECA	2	30.48	3.8	5.9	12	0.8	6.5
Burlington Resources	BR	1	43.56	4.3	5.9	13	1.3	7.0
Unocal Corporation	UCL		38.22	2.5	5.6	14	2.1	6.2
OAO Lukoil	LUKOY		71.50	1.8	5.0	10	1.5	4.9
Media	ın			2.2	6.5	14	1.8	7.2
Service								
Baker Hughes Inc.	BHI		36.86	2.3	11.5	26	1.2	9.0
Schlumberger Ltd.	SLB		55.55	2.8	9.9	28	1.4	9.0
Halliburton Company	HAL		16.76	0.7	5.8	13	3.0	8.2

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

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

	Symbol	/ Rating	Price (\$/sh) 16-May 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastructure								
Kinder Morgan Energy Partners, L.P.	KMP	5	35.74	136	4,900	12.40	0.48	1.99
Kinder Morgan Management, LLC	KMR	5	35.80	30	1,100	12.40	0.48	1.98
Kinder Morgan, Inc.	KMI	5	44.73	125	5,600	16.00	0.78	1.40
Enterprise Products Part.	EPD		22.90	174	4,000	15.80	0.23	1.34
Calpine Corporation	CPN	3	8.70	375	3,300	5.00	0.87	1.09
AES Corporation	AES		6.55	543	3,600	8.80	0.83	0.96
Consol Energy Inc.	CNX		23.53	79	1,900	35.90	0.51	0.83
Valero Energy Corporation	VLO		40.99	104	4,300	60.00	0.46	0.83
Mirant Corporation	MIR		8.15	353	2,900	18.60	0.65	0.80
Sempra Energy	SRE		24.38	203	5,000	41.70	0.50	0.79
CMS Energy Corporation	CMS		15.25	128	2,000	43.80	0.62	0.75
Constellation Energy Group	CEG		28.98	152	4,400	56.50	0.35	0.68
Dynegy Inc.	DYN		7.65	419	3,200	28.50	0.36	0.53
Total or Mediar	ı				43,000		0.51	0.89
Natural Gas and Oil								
Murphy Oil Corporation	MUR		93.36	46	4,300	82.00	0.18	1.11
Ocean Energy, Inc.	OEI		22.09	178	3,900	20.00	0.30	1.07
Imperial Oil Limited (30%)	IMO		31.69	119	3,800	30.00	0.11	1.05
Norsk Hydro ASA (49%)	NHY		52.02	126	6,600	54.00	0.18	0.97
Petro-Canada	PCZ		28.58	262	7,500	31.00	0.11	0.93
XTO Energy Inc.	XTO	2	20.90	124	2,600	26.00	0.21	0.85
PetroChina Company Ltd (10%)	PTR	2	20.31	176	3,600	30.00	0.17	0.73
Total or Mediar	ı				28,700		0.18	1.01

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral, 5 - Strong Sell McDep Ratio = \mathbf{M} arket \mathbf{c} ap and \mathbf{D} ebt to \mathbf{p} resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

Table M-2
Mid Cap Energy Companies
Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

	Symbol	/ Rating	Price (\$/sh) 16-May 2002	EV/ Sales NTM	EV/ Ebitda NTM		Dividend or Distribution NTM (%)	PV/ Ebitda NTM
Energy Infrastructure								
Kinder Morgan Energy Partners, L.P.	KMP	5	35.74	4.6	17.8	25	6.6	9.0
Kinder Morgan Management, LLC	KMR	5	35.80	4.6	17.8	25	6.6	9.0
Calpine Corporation	CPN	3	8.70	2.1	12.5	8	-	11.4
Enterprise Products Part.	EPD	3	22.90	1.6	12.1	13	5.5	9.0
Kinder Morgan, Inc.	KMI	5	44.73	3.9	11.8	16	0.4	8.4
AES Corporation	AES		6.55	3.0	8.6	5	_	9.0
Consol Energy Inc.	CNX		23.53	2.0	7.5	8	4.8	9.0
Mirant Corporation	MIR		8.15	0.4	7.2	4	-	9.0
Sempra Energy	SRE		24.38	1.1	7.1	9	4.1	9.0
CMS Energy Corporation	CMS		15.25	0.7	6.8	8	9.6	9.0
Constellation Energy Group	CEG		28.98	1.8	6.2	9	1.7	9.0
Valero Energy Corporation	VLO		40.99	0.3	5.6	8	1.0	6.8
Dynegy Inc.	DYN		7.65	0.3	4.8	4	3.9	9.0
Median	!			1.8	7.5	8	3.9	9.0
Natural Gas and Oil								
Imperial Oil Limited (30%)	IMO		31.69	1.2	11.6	30	1.7	11.1
Murphy Oil Corporation	MUR		93.36	1.0	8.9	44	1.6	8.0
Ocean Energy, Inc.	OEI		22.09	5.0	8.4	38	0.7	7.8
Petro-Canada	PCZ		28.58	1.7	6.9	18	0.9	7.4
XTO Energy Inc.	XTO	2	20.90	3.5	6.6	13	0.2	7.8
Norsk Hydro ASA (49%)	NHY		52.02	0.9	4.6	14	2.0	4.8
PetroChina Company Ltd (10%)	PTR	2	20.31	1.6	3.7	7	6.3	5.1
Median				1.5	7.6	24	1.2	7.8

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

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

	Symbol/ Rai	ting	Price (\$/sh) 16-May 2002	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio
Energy Infrastucture								
El Paso Energy Partners	EPN	5	36.62	39.9	1,460	11.10	0.59	1.94
Enbridge Energy Partners,	EEP	5	45.13	31.0	1,400	16.60	0.58	1.72
TEPPCO Partners, L.P.	TPP		31.82	46.5	1,480	12.90	0.61	1.58
Plains All Amer. Pipeline	PAA		25.90	41.6	1,080	14.90	0.39	1.46
Northern Border Partners	NBP		39.30	42.0	1,650	20.10	0.57	1.41
Penn Virginia Res. Part, L.P.(48%)			22.00	7.7	170	17.90	0.12	1.20
Penn Virginia Corporation	PVA		37.26	9.0	340	35.00	0.10	1.06
AmeriGas Partners, L.P.	APU		22.98	49.0	1,130	23.50	0.47	0.99
Total or Median				.,.,	8,700		0.52	1.43
Natural Gas and Oil					-,,			
Dorchester Hugoton, Ltd.	DHULZ		14.05	10.7	151	11.60	(0.17)	1.25
Provident Energy Trust (US\$)	PVX		6.89	36.0	250	5.00	0.46	1.21
Quicksilver Resources Inc.	KWK		25.52	19.4	500	20.00	0.43	1.16
Spinnaker Exploration Company	SKE		40.24	28.5	1,150	35.00	0.03	1.15
Newfield Exploration Company	NFX		38.16	48.6	1,860	33.00	0.25	1.12
Stone Energy Company	SGY		42.64	26.4	1,130	42.00	0.29	1.01
Forest Oil Corporation	FST	2	32.01	46.8	1,500	35.00	0.30	0.94
Unit Corporation	UNT		19.55	36.2	710	21.00	0.03	0.93
Southwestern Energy Company	SWN		14.44	25.6	370	17.00	0.44	0.92
CNOOC Limited (19%)	CEO	2	26.41	78.0	2,060	30.00	-	0.88
Pogo Producing Company	PPP		25.76	60.5	1,560	32.00	0.27	0.86
Encore Acquisition Corp. (25%)	EAC		16.06	7.5	121	20.00	0.18	0.84
Magnum Hunter Resources, Inc.	MHR		7.50	71.5	540	11.00	0.46	0.83
Swift Energy Company	SFY		15.39	24.8	380	22.00	0.32	0.80
Total or Median					12,300		0.28	0.94
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.14	6.0	103	20.50	-	0.84
San Juan Basin Royalty Trust	SJT	2	11.80	46.6	550	16.50	-	0.72
Hugoton RoyaltyTrust (46%)	HGT		11.37	18.4	210	16.40	-	0.69
Micro Cap								
Torch Energy Royalty Trust	TRU		5.77	8.6	50	5.50	-	1.06
Energy Partners Ltd.(30%)	EPL	2	8.67	8.2	71	10.00	0.38	0.92
Abraxas Petroleum Corporation	ABP		0.91	27.0	25	2.00	0.84	0.91
Purcell Energy, Ltd. (US\$)	PEL.TO	2	1.81	29.0	53	3.00	0.14	0.66

Buy/Sell rating after symbol: 1 - Strong Buy, 2 - Buy, 3 - Neutral, 4 - Sell, 5 - Strong Sell McDep Ratio = **M**arket **c**ap and **De**bt to **p**resent value of oil and gas and other businesses

A Weekly Analysis of Energy Stocks Using the McDep Ratio May 20, 2002

Table S-2 Small Cap Energy Companies Rank by EV/Ebitda: Enterprise Value to Earnings Before Interest, Tax, Deprec.

			Price (\$/sh)	EV/	EV/		vidend or stribution	PV/
	Symbol/		16-May	Sales	Ebitda NTM	P/E	NTM	Ebitda NTM
	Ka	ting	2002	NTM	I V I IVI	NTM	(%)	IN 1 IVI
Energy Infrastucture								
El Paso Energy Partners	EPN	5	36.62	12.4	17.4	31	7.1	9.0
Enbridge Energy Partners,	EEP		45.13	6.9	15.5	87	7.8	9.0
TEPPCO Partners, L.P.	TPP		31.82	1.1	14.2	20	7.2	9.0
Plains All Amer. Pipeline	PAA		25.90	0.2	13.1	19	7.9	9.0
Northern Border Partners	NBP		39.30	8.0	12.7	17	8.1	9.0
Penn Virginia Res. Part, L.P.(48%)	PVR		22.00	8.1	10.8	12	9.1	9.0
AmeriGas Partners, L.P.	APU		22.98	1.5	8.9	13	9.6	9.0
Penn Virginia Corporation	PVA		37.26	3.3	5.1	13	2.4	4.8
Median				5.1	12.9	18	7.8	9.0
Natural Gas and Oil								
Dorchester Hugoton, Ltd.	DHULZ		14.05	6.8	10.2	14	8.5	8.2
Quicksilver Resources Inc.	KWK		25.52	5.1	9.2	23	-	8.0
Forest Oil Corporation	FST	2	32.01	4.3	7.3	26	-	7.8
Provident Energy Trust (US\$)	PVX		6.89	3.6	7.3	90	16.1	6.1
Magnum Hunter Resources, Inc.	MHR		7.50	3.3	6.8	21	-	8.3
Swift Energy Company	SFY		15.39	4.4	6.5	32	-	8.1
Pogo Producing Company	PPP		25.76	3.7	6.2	36	0.5	7.3
Encore Acquisition Corp. (25%)	EAC		16.06	4.1	6.2	14	-	7.4
Unit Corporation	UNT		19.55	3.3	6.2	14	-	6.6
Southwestern Energy Company	SWN		14.44	2.4	5.8	14	-	6.3
CNOOC Limited (19%)	CEO	2	26.41	4.4	5.8	11	0.9	6.5
Spinnaker Exploration Company	SKE		40.24	4.8	5.6	17	-	4.8
Newfield Exploration Company	NFX		38.16	3.7	5.2	21	-	4.7
Stone Energy Company	SGY		42.64	3.9	5.1	13	-	5.0
Median				4.0	6.2	19	-	7.0
Natural Gas Royalty Trusts								
Cross Timbers Royalty Trust	CRT		17.14	6.2	8.9	10	10.5	10.6
San Juan Basin Royalty Trust	SJT	2	11.80	5.6	7.2	10	10.0	10.1
Hugoton RoyaltyTrust (46%)	HGT		11.37	4.5	6.5	9	11.2	9.4
Micro Cap								
Abraxas Petroleum Corporation	ABP		0.91	4.4	6.3		-	6.9
Energy Partners Ltd.(30%)	EPL	2	8.67	2.7	5.2		-	5.7
Torch Energy Royalty Trust	TRU		5.77	4.1	4.9	6	18.0	4.6
Purcell Energy, Ltd. (US\$)	PEL.TO	2	1.81	3.1	4.3	12	-	6.4

EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2003; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses