

Analysis of Oil & Gas Stocks September 17, 2010

## **Natural Gas Opportunity for the Tens Decade**

### **Summary and Recommendation**

Out of favor with investors as a result of today's low price, natural gas offers the best energy investment opportunity of the decade on the basis of accelerating demand, environmental advantages and a supply breakthrough that radically changes the outlook for cleaner energy, we believe. While the potential reward is several fold gain, the main risk is timing, in our opinion. The immediate outlook depends on economic activity, political action, and weather, all of which no one can predict with much certainty. Because the current near-month futures price of about \$4 a million btu is down some 75% from the high of the past five years of about \$15, we think the downside risk is low. Strong upside, no cost to wait and minimal downside looks like a money-making combination for patient investors. Five of six buy recommendations are concentrated from 59% to 100% on the growth fuel (see <u>Tables 1-4</u> on pages 6-9). We like oil, too, as we see the current near-month price of about \$74 a barrel exceeding the \$145 high from the past five years in the next decade.

### **Opportunistic Price Outlook**

The U.S. Energy Information Administration probably spends more money than any other group to forecast energy price. Yet the product of their effort falls within a wide band of uncertainty. Forecasting a price of \$5.24 for December 2011, the actual price might be as high as \$10.04 or as low as \$2.79 and still be within the confidence interval (see chart Henry Hub Natural Gas Price on page 2). The oil price forecast for December 2011 is \$84 a barrel within a confidence interval of \$41 to \$164 (see chart West Texas Intermediate (WTI) Crude Oil Price on page 3). Natural gas price is at a low extreme at a third the energy equivalent of oil (see chart Oil/Natural Gas Futures Ratio on page 4).

### **Accelerating Demand**

At \$4 a million btu, natural gas is also cheaper than coal taking account of today's permissive environmental standards for coal burning. EIA expects U.S. natural gas consumption to be up 4% in 2010 over 2009. Helped by a hot summer requiring additional power generation for air-conditioning, the growth in natural gas for electric power may be 8 percent in the second half of 2010 compared to the same period in 2009.

Though the pace may subside depending on weather and other factors, the ultimate global demand for natural gas to replace coal in power generation is almost unlimited. Coal for



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power is about a third of global energy supply while all uses of natural gas account for another third. Environmentally it could be desirable to replace all coal burning implying a doubling of natural gas demand. At the same time electric power generation is usually the fastest growing source of energy demand. China, the world's largest energy economy and growing fast, gets 80% of its energy from coal.

### **Fuel of Choice for Power Generation**

New coal plant construction in developed countries is virtually grinding to a halt. Though the U.S. has not passed restrictions on carbon dioxide emissions, it hasn't passed subsidies for "clean coal" either. A costly carbon dioxide control program is probably not justifiable anyway, but increasing restrictions on obvious pollutants like sulfur, mercury, toxic metals and the like are common sense, we think. A prudent utility executive has to consider that restrictions on coal-fired generation will get progressively tighter one way or another. Not knowing for sure that such regulations could render a new coal plant uneconomic, the reasonable course of action is not to take a chance on the long lead time, high capital cost investment. James Rogers, the chief executive of Duke Energy, a major coal and nuclear utility, declared to an audience in Tianjin, China on September 13, "Gas-fired power plants will be built in lieu of coal plants because of uncertainty in the regulation of coal, on sulfur oxides and nitrogen oxides as well as carbon." according to Bloomberg.

#### Clean Fuel Technological Breakthrough

It is an article of faith among optimistic Americans that technology will provide magical solutions to our problems. On that basis, political leaders and alternate energy promoters champion costly subsidies for uneconomic and impractical projects. To replace gasoline with ethanol, we would practically cover the whole country with corn fields! At least that might look better than wind towers. Would covering the whole country with solar panels be more appealing? In other words, those alternatives don't have scale and costs are prohibitive especially when government debt is exploding. Those who want more government in our economy might applaud the control that government retains with the ability to turn subsidies on or off at will.

The problem with natural gas, to be facetious, is that oil companies produce it. Environmental lobbyists, it seems, see the whole purpose of alternative energy to get rid of evil oil companies. Now in the irony of ironies, the energy cost breakthrough sought in nuclear, solar and wind has arrived in natural gas and has been developed primarily by oil and oil service companies!



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Horizontal multistage fracturing didn't arrive over night, but it has changed the supply equation in a major way since the financial panic of 2008. To the surprise of energy analysts, natural gas production did not decline much when rigs drilling for natural gas were cut by two-thirds in reaction to the financial disruption. The remaining one third were drilling highly productive horizontal wells with an increasing number of fracturing stages with better and better optimization. The technique has opened up hydrocarbonrich shale formations that were always known, but couldn't be produced economically.

The advantages of natural gas for power generation have become increasingly obvious the past two decades with the combined cycle power plant that combines a jet engine with a conventional boiler to increase conversion efficiency. Since a jet engine can't use coal, the solid fuel became disadvantaged on efficiency in addition to cleanliness. The problem utility executives had with natural gas had been the fear that as soon as they committed to the better fuel its price would go up. That essentially happened to the natural gas merchant power generation pioneers in the past decade. Now with the supply breakthrough, the natural gas producing industry has the capacity to develop much more fuel at an economic price.

#### **Income and Growth Stocks**

While the price of gas will likely not rise to make power generation uneconomic, it still has attractive potential to increase. Bloomberg reports that Mr. Rogers, the Duke chief and large future natural gas customer, conditions his conclusion on a price range of \$4 to \$7. Since we are at the bottom of that range now, the trend from here may be up. Next twelve months futures prices are about \$4.50, roughly where they have been for the past year. Futures for the next six years may have stopped declining at \$5.50. Our long-term price expectation is \$8 though we make year-ahead projections at the futures price, currently \$4.50.

Our long-term prospect anticipates that conditions will improve with moderate economic growth. Expectations now are generally low as they usually are after a steep economic downturn. Natural gas price confidence is also at a seasonal low point after peak summer demand and before peak winter demand. Stock market confidence is low before November mid-term elections. Seasonal tax selling may be in swing.

Despite all the economic and political gloom, most income and small cap oil and gas stocks are in an uptrend with current price above the 200-day average. Income stocks look good because distributions have continued to be attractive and our projected yields have remained strong using a \$4.50 one year price for gas. Nor is there much



## Income and Small Cap Weekly

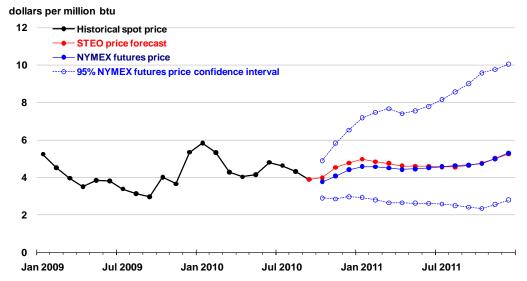
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competition from traditional savings and money market interest. Existing volumes from long-life producers is nearly always the most economic source of energy.

Our growth stock buys look good helped by strong current cash flow from oil. More important, natural gas drilling using latest technology has unlocked large new potential. Yet, because new production declines rapidly, new investment is in continuing demand to grow or maintain supply.

Kurt H. Wulff, CFA

## **Henry Hub Natural Gas Price**



Note: Confidence interval derived from options market information for the 5 trading days ending September 2, 2010 Intervals not calculated for months with sparse trading in "near-the-money" options contracts



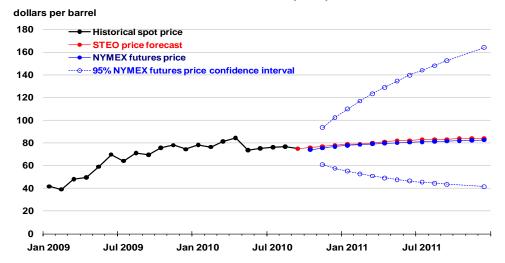
Source: Short-Term Energy Outlook, September 2010; Reuters News Service; and CME Group



## Income and Small Cap Weekly

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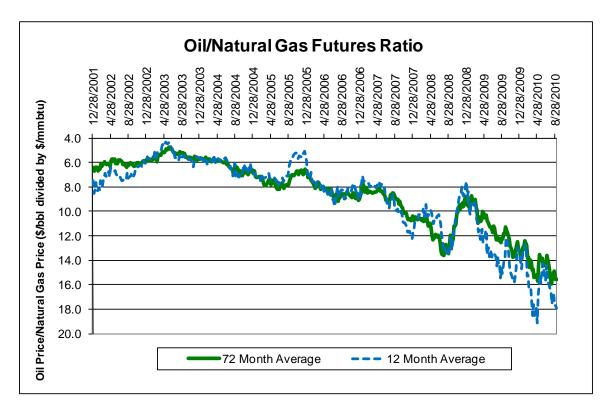
### West Texas Intermediate (WTI) Crude Oil Price



Note: Confidence interval derived from options market information for the 5 trading days ending September 2, 2010 Intervals not calculated for months with sparse trading in "near-the-money" options contracts



Source: Short-Term Energy Outlook, September 2010; Reuters News Service; and CME Group





	_			Table 1						
	-				Cap Ene	<b>-</b>				
De	ebt, Bu	sin	ess Seg	ments	and Inc	ome Yi	eld			
						Present	Value			
			Price			by Segm				
S	ymbol/Rai	ting		EV/	Enterprise	NAmer.	( / 0 /	Dist.	Dist.	
		Buy	16-Sep	Market	Value	Natural	Oil	NTM	Yield	McDep
(	CB (see be		2010	Сар	(\$mm)		Prod'n	(\$/un)	(%)	Ratio
Canadian Income Trusts (US\$)										
	PGH		10.72	1.41	4.400	26	61	0.01	76	0.00
Pengrowth Energy Trust	PWE		10.72 18.74	1.41	4,400 11,500	36 22	64 78	0.81	7.6 5.6	0.98
Penn West Energy Trust Enerplus Resources Fund	ERF		23.79		5,200		59	2.09	8.8	
Peyto Energy Trust	PEYUF		14.00	1.24	2,070	41 78	22	1.39	9.9	0.83
Canadian Oil Sands Trust	COSWF	CD			13,700	76	100			
	COSWF	CB	25.52	1.11			100	1.95	7.6	0.69
Total or Median					36,900					0.83
Small Cap Independent Producers										
Denbury Resources Inc.	DNR		15.71	1.54	9,710	16	84	-	-	1.03
Petrohawk Energy Corporation	HK		15.90	1.64	8,060	96	4	-	-	1.01
Whiting Petroleum Corporation	WLL		90.60	1.19	6,440	14	86	-	-	0.97
Range Resources	RRC		35.21	1.34	7,840	82	18	0.04	0.1	0.94
Berry Petroleum Company	BRY		29.82	1.63	2,640	31	69	0.30	1.0	0.90
Cimarex Energy Company	XEC	В	69.09	1.10	6,510	59	41	0.32	0.5	0.87
Ultra Petroleum	UPL		39.28	1.22	7,460	94	6	-	-	0.83
Birchcliff Energy Ltd. (US\$)	BIREF	CB	8.66	1.24	1,360	68	32	-	-	0.67
Total or Median					50,000					0.92
Top Line Cash Payers										
Sabine Royalty Trust	SBR		51.41	1.00	750	50	50	3.39	6.6	1.14
Cross Timbers Royalty Trust	CRT		36.49	1.00	220	75	25	2.24	6.2	1.07
Permian Basin RT	PBT		19.01	1.00	890	38	62	1.42	7.5	1.06
Freehold Royalty Trust (US\$)	FRHLF		15.91	1.09	1,010	25	75	1.62	10.2	0.94
Dorchester Minerals, L.P.	DMLP	В	24.66	1.02	770	66	34	1.72	7.0	0.91
Total or Median					3,600					1.06
10.00 07 1120.00					2,000					1100
Bottom Line Cash Payers										
Linn Energy, LLC	LINE		30.39	1.45	6,460	47	53	2.52	8.3	1.27
Legacy Reserves L.P.	LGCY		23.80	1.37	1,310	17	83	2.08	8.7	1.13
Encore Energy Partners, L.P. (52%)	ENP		18.42	1.29	560	25	75	2.00	10.9	1.06
Mesa RoyaltyTrust	MTR		45.99	1.00	86	75	25	3.60	7.8	0.96
Hugoton RoyaltyTrust	HGT	В	19.19	1.00	770	90	10	1.38	7.2	0.91
San Juan Basin Royalty Trust	SJT	В	22.61	1.00	1,050	100	-	1.23	5.4	0.90
Total or Median					10,200					1.01
Composite (excl COSWF)										
Enterprise Value Weighting					87,100	50	50			0.94
Equal Weighting					,	54	46			0.96
Equal Weighted Buys						67	33			0.86
CD C D C . LD .	.1 .	1		1	200.1					
CB=Contrarian Buy, Stock Price ap										
McDep Ratio = Market cap and Def	ot to <b>p</b> rese		alue of oil a barrel for o							



Table 2											
McDep Income and Small Cap Energy Portfolio											
Net Present Value and McDep Ratio											
			Price			Net					
			(\$/sh)		Market	Present	Debt/				
	Symbol/		16-Sep	Shares	Cap	Value	Present	McDe			
	Ra	ting	2010	(mm)	(\$mm)	(\$/un)	Value	Ratio			
Canadian Income Trusts (US\$)											
Pengrowth Energy Trust	PGH		10.72	290.0	3,110	11.00	0.29	0.98			
Penn West Energy Trust	PWE		18.74	439.6	8,240	23.00	0.24	0.86			
Enerplus Resources Fund	ERF		23.79	177.5	4,220	30.00	0.16	0.83			
Peyto Energy Trust	PEYUF		14.00	119.4	1,670	18.00	0.16	0.81			
Canadian Oil Sands Trust	COSWF	СВ	25.52	484.0	12,350	38.00	0.07	0.69			
Total or Median	002111	CD	20102	10 110	29,600	20.00	0.16	0.83			
					·						
Small Cap Independent Producers											
Denbury Resources Inc.	DNR		15.71	401.0	6,300	15.00	0.36	1.03			
Petrohawk Energy Corporation	HK		15.90	303.0	4,910	16.00	0.39	1.01			
Whiting Petroleum Corporation	WLL		90.60	59.2	5,400	95.00	0.16	0.97			
Range Resources	RRC		35.21	158.5	5,870	40.00	0.24	0.94			
Berry Petroleum Company	BRY		29.82	54.3	1,620	35.00	0.35	0.90			
Cimarex Energy Company	XEC	В	69.09	85.6	5,910	80.00	0.08	0.87			
Ultra Petroleum	UPL		39.28	154.0	6,120	50.00	0.15	0.83			
Birchcliff Energy Ltd. (US\$)	BIREF	CB	8.66	127.0	1,100	14.00	0.13	0.67			
Total or Median					37,230		0.20	0.92			
Top Line Cash Payers											
Sabine Royalty Trust	SBR		51.41	14.6	750	45.00	_	1.14			
Cross Timbers Royalty Trust	CRT		36.49	6.0	220	34.00	-	1.07			
Permian Basin RT	PBT		19.01	46.6	890	18.00	_	1.06			
Freehold Royalty Trust (US\$)	FRHLF		15.91	58.3	930	17.00	0.08	0.94			
Dorchester Minerals, L.P.	DMLP	В	24.66	30.7	760	27.00	0.02	0.91			
Total or Median					3,550			1.06			
Bottom Line Cash Payers											
Linn Energy, LLC	LINE		30.39	146.5	4,450	21.00	0.39	1.27			
Legacy Reserves L.P.	LGCY		23.80	40.1	950	20.00	0.31	1.13			
Encore Energy Partners, L.P. (52%)	ENP		18.42	23.4	430	17.00	0.24	1.06			
Mesa RoyaltyTrust	MTR		45.99	1.9	86	48.00	-	0.96			
Hugoton RoyaltyTrust	HGT	В	19.19	40.0	770	21.00	-	0.91			
San Juan Basin Royalty Trust	SJT	В	22.61	46.6	1,050	25.00	-	0.90			
Total or Median					7,740			1.01			
B=Buy; CB=Contrarian Buy, Stock Price	apparently	y in d	owntrend	compared	to 200-day	average.					
McDep Ratio = $\mathbf{M}$ arket $\mathbf{c}$ ap and $\mathbf{D}\mathbf{e}$ bt to				-							
Present Value presumes long-term prices											



Table 3										
McDep Inco	me and	d Sı	nall C	ap Ene	rgy Po	rtfolio				
Value Multiples - Rank by EV/Ebitda										
	_									
			Price			A diat d				
				Revenue	Dist/	Adjstd Resrvs/	PV/	EV		
	Symbol/		16-Sep	Royalty		Prod	Ebitda	Ebitde		
	-	ting	2010	(%)	Equity Ebitda	NTM	NTM	NTM		
Canadian Income Trusts (US\$)	DEX# IE		14.00		1.02	21.5	10.0	10.0		
Peyto Energy Trust	PEYUF		14.00		1.03	21.5	13.3	10.8		
Penn West Energy Trust	PWE	GD.	18.74		0.45	9.9	9.9	8.5		
Canadian Oil Sands Trust	COSWF	CB	25.52		0.60	26.7	11.7	8.1		
Enerplus Resources Fund	ERF		23.79		0.60	9.7	8.6	7.1		
Pengrowth Energy Trust  Median	PGH		10.72		0.52	9.3 9.9	7.1 9.9	7.0 8.1		
						7.7	7.7	0.1		
Small Cap Independent Producers										
Range Resources	RRC		35.21		-	12.1	13.6	12.8		
Ultra Petroleum	UPL		39.28		-	13.2	12.9	10.6		
Birchcliff Energy Ltd. (US\$)	BIREF	CB	8.66		-	21.4	14.2	9.5		
Petrohawk Energy Corporation	HK		15.90		-	7.1	9.4	9.5		
Denbury Resources Inc.	DNR		15.71		-	12.8	8.4	8.6		
Berry Petroleum Company	BRY		29.82		-	11.9	8.4	7.6		
Whiting Petroleum Corporation	WLL		90.60		-	9.6	6.7	6.5		
Cimarex Energy Company	XEC	В	69.09		-	6.3	6.8	6.0		
Median						12.0	8.9	9.1		
Top Line Cash Payers										
Cross Timbers Royalty Trust	CRT		36.49	84	0.96	13.7	14.5	15.6		
Sabine Royalty Trust	SBR		51.41	100	1.00	8.7	13.3	15.2		
Dorchester Minerals, L.P.	DMLP	В	24.66	77	0.89	6.8	13.9	12.7		
Permian Basin RT	PBT		19.01	42	0.95	13.1	12.0	12.7		
Freehold Royalty Trust (US\$)	FRHLF		15.91	71	0.92	8.2	9.6	9.0		
Median						8.7	13.3	12.7		
Bottom Line Cash Payers										
Linn Energy, LLC	LINE		30.39		1.64	18.4	13.6	17.3		
San Juan Basin Royalty Trust	SJT	В	22.61		0.76	14.0	15.4	13.9		
Hugoton RoyaltyTrust	HGT	В	19.19		0.88	12.7	13.5	12.3		
Mesa RoyaltyTrust	MTR		45.99		0.92	9.0	12.3	11.8		
Legacy Reserves L.P.	LGCY		23.80		1.01	12.2	9.7	11.0		
Encore Energy Partners, L.P.	ENP		18.42		1.08	13.2	9.2	9.7		
Median	·-		10.12		1.00	12.9	12.9	12.1		
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B=Buy; CB=Contrarian Buy, Stock Price EV = Enterprise Value = Market Cap and										
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Earnings; PV = Present Value of oil and g Top Line Cash Payers defined as those h					hame for	n mi a la t				

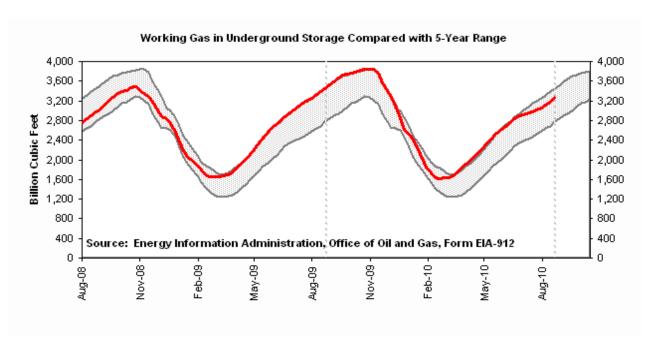


		,	Table 4					
Oil and	d Gas In	com	e and S	mall Ca	p Stocks			
Rank by	Enterpr	ise `	Value to	200 Da	ay Averag	ge		
			Price					
			(\$/sh)		Enterpris	e Value/		
	Symbol/		16-Sep	52Wk	52Wk		200 Day	McDep
		ting	2010	High	Low	Avg.	Avg.	Ratio
Canadian Income Trusts (US\$)								
Pengrowth Energy Trust	PGH		10.72	0.92	1.76	1.07	1.04	0.98
Enerplus Resources Fund	ERF		23.79	0.97	1.52	1.03	1.03	0.83
Peyto Energy Trust	PEYUF		14.00	0.91	1.37	0.98	1.03	0.81
Penn West Energy Trust	PWE		18.74	0.88	1.23	0.98	0.98	0.86
Canadian Oil Sands Trust	COSWF	CB	25.52	0.77	1.09	0.99	0.94	0.69
Median				0.91	1.37	0.99	1.03	0.83
Small Cap Independent Producers								
Whiting Petroleum Corporation	WLL		90.60	0.98	1.55	1.04	1.12	0.97
Cimarex Energy Company	XEC	В	69.09	0.86	1.70	0.98	1.08	0.87
Berry Petroleum Company	BRY		29.82	0.92	1.13	1.02	1.01	0.90
Denbury Resources Inc.	DNR		15.71	0.87	1.15	1.01	1.00	1.03
Birchcliff Energy Ltd. (US\$)	BIREF	CB	8.66	0.85	1.24	0.95	0.98	0.67
Ultra Petroleum	UPL		39.28	0.73	1.06	0.95	0.88	0.83
Petrohawk Energy Corporation	HK		15.90	0.68	1.10	1.00	0.86	1.01
Range Resources	RRC		35.21	0.68	1.11	0.99	0.85	0.94
Median				0.86	1.14	0.99	0.99	0.92
Top Line Cash Payers								
Permian Basin RT	PBT		19.01	0.95	1.62	1.01	1.10	1.06
Sabine Royalty Trust	SBR		51.41	0.94	1.34	0.99	1.08	1.14
Cross Timbers Royalty Trust	CRT		36.49	0.92	1.29	1.04	1.05	1.07
Dorchester Minerals, L.P.	DMLP	В	24.66	0.88	1.23	0.97	1.03	0.91
Freehold Royalty Trust (US\$)	FRHLF		15.91	0.89	1.20	1.00	1.01	0.94
Median				0.92	1.29	1.00	1.05	1.06
Bottom Line Cash Payers								
Linn Energy, LLC	LINE		30.39	0.97	1.68	1.02	1.08	1.27
Mesa RoyaltyTrust	MTR		45.99	0.85	1.56	1.03	1.07	0.96
Legacy Reserves L.P.	LGCY		23.80	0.93	1.36	0.99	1.05	1.13
Hugoton RoyaltyTrust	HGT	В	19.19	0.87	1.28	0.97	1.04	0.91
San Juan Basin Royalty Trust	SJT	В	22.61	0.79	1.37	0.93	1.01	0.90
Encore Energy Partners, L.P. (52%)	ENP		18.42	0.88	1.60	0.98	0.97	1.06
Median				0.87	1.47	0.99	1.05	1.01



## Income and Small Cap Weekly

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**Disclaimer:** This analysis was prepared by Kurt Wulff, Manager of McDep LLC. The firm used sources and data believed to be reliable, but makes no representation as to their accuracy or completeness. This analysis is intended for informational purposes and is not a solicitation to buy or sell a security. Past performance is no guarantee of future results.

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