Rating: Buy S&P 500: 1272

# Norsk Hydro Natural Gas Price Advance

Symbol	NHY	Ebitda Next Twelve Months ending 12/31/06 (US\$mm)	7,900
Rating	Buy	North American Natural Gas/Ebitda (%)	0
Price (\$/sh)	111.05	Natural Gas and Oil Production/Ebitda (%)	66
Pricing Date	2/14/06	Adjusted Reserves/Production NTM	7.8
Shares (mm)	251	EV/Ebitda	4.3
Market Capitalization (\$mm)	27,800	PV/Ebitda	4.9
Debt (\$mm)	5,900	Undeveloped Reserves (%)	29
Enterprise Value (EV) (\$mm)	33,700	Natural Gas and Oil Ebitda (\$/boe)	23.30
Present Value (PV) (\$mm)	38,500	Present Value Proven Reserves(\$/boe)	12.30
Net Present Value (\$/share)	130	Present Value Proven Reserves(\$/mcfe)	2.00
Debt/Present Value	0.15	Earnings Next Twelve Months (US\$/sh)	9.18
McDep Ratio - EV/PV	0.88	Price/Earnings Next Twelve Months	12
Dividend Yield (%/year)	2.9	Indicated Annual Dividend (US\$/sh)	3.23

Note: Estimated cash flow and earnings tied to one-year futures prices for oil.

Reported results may vary widely from estimates. Estimated present value per share revised only infrequently.

The Norwegian government owns 44% of the shares in Norsk Hydro.

### **Summary and Recommendation**

Buy-recommended **Norsk Hydro (NHY)** received a natural gas price of NOK1.85 a cubic meter in the fourth quarter last year, up from 1.36 in the third quarter. The Norwegian kroner price for the European supplier translates to almost \$8 a mmbtu, still less than \$8.50 for six-year futures in the U.S. and \$13 for the natural gas equivalent of six-year oil futures. NHY stock offers 17% appreciation potential to estimated net present value of \$130 a share. Short adjusted reserve life of 5.2 years for oil combines with long-life index of 14 years for natural gas to yield an average life index of 7.8 years. The overall short life is matched by unlevered cash flow multiple, EV/Ebitda, of 4.3 years that is lowest of peers. Present value of 30% for natural gas and 36% for oil leaves 34% for the remainder, mostly aluminum. Cash flow at high aluminum price appeared strong for the quarter just reported while income was nil after discretionary writeoffs and hedging loss.

Kurt H. Wulff, CFA

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

			Price		Net			
			(\$/sh)		Market	Present	Debt/	
	Symbol/		14 <b>-</b> Feb	Shares	Cap	Value	Present	McDep
	R	Rating	2006	(mm)	(\$mm)	(\$/sh)	Value	Ratio
Producer/Refiners - Large Cap and	d Mid Cap	)						
Kinder Morgan, Inc.	KMI	S2	90.30	139	12,590	33.00	0.74	1.45
Imperial Oil Limited (30%)	IMO	В	96.89	101	9,770	90.00	0.09	1.07
Petro-Canada	PCZ	В	45.31	523	23,700	42.00	0.19	1.06
Suncor Energy	SU	В	71.24	461	32,850	75.00	0.10	0.95
Marathon Oil Corporation	MRO	В	66.16	368	24,340	75.00	0.25	0.91
Norsk Hydro ASA	NHY	В	111.05	251	27,820	130.00	0.15	0.88
PetroChina Company Ltd (10%)	PTR	В	96.96	176	17,050	120.00	0.01	0.81
Lukoil Oil Company	LUKOY	В	77.10	830	64,000	100.00	0.01	0.77
Gazprom (50%)	<b>OGZPF</b>	В	84.30	1,133	95,500	140.00	0.02	0.61
Total or Median	ı				308,000		0.10	0.91

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

			Price	Adjstd	D			Divd or
			(\$/sh)	Resrvs/	PV/	EV/		Distrib
	Symbol/		14 <b>-</b> Feb	Prod	Ebitda	Ebitda	P/E	NTM
	Ra	ting	2006	NTM	NTM	NTM	NTM	(%)
Producer/Refiners - Large Cap and M	id Cap							
Kinder Morgan, Inc.	KMI	S2	90.30		8.2	11.9	18	3.9
Suncor Energy	SU	В	71.24	17.7	8.1	7.7	15	0.3
Imperial Oil Limited (30%)	IMO	В	96.89	10.7	6.9	7.4	12	0.9
Gazprom (50%)	<b>OGZPF</b>	В	84.30	20.0	10.2	6.2	10	0.5
Petro-Canada	PCZ	В	45.31	6.0	5.6	5.9	11	0.8
Lukoil Oil Company	LUKOY	В	77.10	19.7	6.0	4.7	7	1.3
Marathon Oil Corporation	MRO	В	66.16	6.5	4.8	4.4	7	2.0
PetroChina Company Ltd (10%)	PTR	В	96.96	11.6	5.3	4.3	8	3.9
Norsk Hydro ASA	NHY	В	111.05	7.8	4.9	4.3	12	2.9
Median				11.1	6.0	5.9	11	1.3

## Norsk Hydro Functional Cash Flow and Present Value

	) / File 1		D17/	Present				
	NTM Ebitda	Adjusted	PV/	Value				
	<u>(US\$mm)</u>	<u>R/P</u>	<u>Ebitda</u>	<u>(US\$mm)</u>				
Net rel Con	1 170	140	0.0	11.500	200/			
Natural Gas	1,160	14.0	9.9	11,500	30%			
Oil	4,060	5.2	3.4	14,000	36%			
Aluminum	2,680	_	4.9	13,000	34%			
	7,900	7.8	4.9	38,500	100%			
Debt (US\$mm)					5,900			
Net Present Value (US\$mm)								
Shares (mm)								
Net Present Value (US\$/sh)								
Over (-)/ Under (+) Correlation (US\$/sh)								

Norsk Hydro Next Twelve Months Operating and Financial Estimates

									Next
	Q4 12/31/04	Q3 9/30/05	Q4 12/31/05	<i>Year</i> 2005	Q1E 3/31/06	Q2E 6/30/06	Q3E 9/30/06	Q4E 12/31/06	Twelve Months 12/31/06
Volume									
Natural Gas (mmcfd)	1,056	852	1,104	987	1,196	1,035	954	1,236	1,105
Oil (mbd)	415	399	405	399	431	431	431	431	431
Total gas & oil (mbd)	591	541	589	563	630	603	590	637	615
Price									
Natural gas (NOK/mcf)	34	39	52	43	45	45	45	45	45
Natural gas (NOK/Sm3) Oil	1.20	1.36	1.85	1.22	1.60	1.60	1.60	1.60	1.28
WTI Cushing US\$/bbl)	48.31	62.52	60.02	56.31	63.02	63.13	64.83	65.68	64.17
Kroner/\$	6.32	6.47	6.63	6.45	6.81	6.81	6.81	6.81	6.81
WTI Cushing (NOK/bbl)	305	405	398	363	429	430	441	447	437
NHY (NOK/bbl)	264	391	369	343	398	398	409	414	405
Total gas & oil (NOK/bb	246	349	352	318	358	362	372	368	365
Aluminum (US\$/tonne)	1,889	1,838	2,078						
Revenue (NOKmm)									
Natural Gas	3,303	3,020	5,323	15,500	4,880	4,315	3,979	5,156	18,330
Oil	10,072	14,338	13,741	49,998	15,423	15,794	16,218	16,433	63,868
Other	28,977	30,274	31,577	124,203	31,577	31,577	31,577	31,577	126,306
Total	39,049	44,612	45,318	174,201	51,879	51,686	51,774	53,165	208,504
Expense									
Production	7,395	10,581	10,474	38,562	11,465	11,310	11,381	12,494	46,649
Other	23,809	26,724	26,094	105,950	27,013	27,013	27,013	27,013	108,053
Total	31,203	37,305	36,568	144,512	38,478	38,323	38,394	39,507	154,702
Ebitda (NOKmm)									
Exploration and Production	5,980	6,777	8,590	26,936	8,838	8,799	8,817	9,095	35,549
Other	5,169	3,550	5,483	18,253	4,563	4,563	4,563	4,563	18,253
Total Ebitda	11,148	10,327	14,073	45,189	13,401	13,362	13,380	13,658	53,802
Exploration	518	199	1,092	1,839	1,092	1,092	1,092	1,092	4,368
Deprec., Deplet., & Amort.	6,417	3,570	5,487	16,119	6,187	6,187	6,187	6,187	24,748
Ebit	4,213	6,558	7,494	27,231	6,122	6,083	6,101	6,379	24,686
Interest	230	104	303	878	150	150	150	150	600
Foreign Exchange	(1,606)	46	601	2,159					
Ebt	5,589	6,408	6,590	24,194	5,972	5,933	5,951	6,229	24,086
Income Tax	1,956	2,243	2,307	8,468	2,090	2,077	2,083	2,180	8,430
Net Income (NOKmm)									
Exploration and Production	8,621	12,625	11,537	43,451					
Other Operations	(2,387)	348	(1,086)	2,982					
Non operating deductions	(2,601)	(8,808)	(6,167)	(30,707)					
Total	3,633	4,165	4,284	15,726	3,882	3,857	3,868	4,049	15,656
Shares (millions)	252	251	251	251	251	251	251	251	251
Per share (NOK)	14.40	16.60	17.10	62.70	15.50	15.40	15.44	16.16	62.50
Ebitda Margin (E&P)	45%	39%	45%	41%	44%	44%	44%	42%	43%
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%

#### **Home Country and Business Segments**

				North	Rest			
				Amer.	of World			Total
			Non-	Natural	Natural	Oil	Down-	Present
	Symbol/		U.S.	Gas	Gas	Prod'n	stream	Value
	Rai	ting	Domicile	(%)	(%)	(%)	(%)	(US\$mm)
Producer/Refiners - Large Cap								
Gazprom	OGZPF	В	Russia		100			325,000
PetroChina Company Ltd.	PTR	В	China	-	9	71	20	213,000
Lukoil Oil Company	LUKOY	В	Russia	-	-	75	25	83,600
Norsk Hydro ASA	NHY	В	Norway	-	30	36	34	38,500
Suncor Energy	SU	В	Canada	4	-	89	7	38,200
Marathon Oil Corporation	MRO	В		13	7	40	41	36,600
Imperial Oil Limited	IMO	В	Canada	12	-	64	24	33,300
Petro-Canada	PCZ	В	Canada	23	4	53	20	27,100
Median				4	5	64	24	795,000

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