

Rating: Buy
S&P 500: 1231

Norsk Hydro ASA Norsk Natural Gas

<i>Symbol</i>	NHY	<i>Ebitda Next Twelve Months ending 6/30/06 (US\$m)</i>	7,100
<i>Rating</i>	Buy	<i>North American Natural Gas/Ebitda (%)</i>	0
<i>Price (\$/sh)</i>	94.15	<i>Natural Gas and Oil Production/Ebitda (%)</i>	66
<i>Pricing Date</i>	7/26/05	<i>Adjusted Reserves/Production NTM</i>	8.2
<i>Shares (mm)</i>	251	<i>EV/Ebitda</i>	4.0
<i>Market Capitalization (\$mm)</i>	23,600	<i>PV/Ebitda</i>	4.5
<i>Debt (\$mm)</i>	4,600	<i>Undeveloped Reserves (%)</i>	30
<i>Enterprise Value (EV) (\$mm)</i>	28,200	<i>Natural Gas and Oil Ebitda (\$/boe)</i>	22.40
<i>Present Value (PV) (\$mm)</i>	32,200	<i>Present Value Proven Reserves(\$/boe)</i>	10.50
<i>Net Present Value (\$/share)</i>	110	<i>Present Value Proven Reserves(\$/mcf)</i>	1.80
<i>Debt/Present Value</i>	0.14	<i>Earnings Next Twelve Months (US\$/sh)</i>	11.27
<i>McDep Ratio - EV/PV</i>	0.88	<i>Price/Earnings Next Twelve Months</i>	8
<i>Dividend Yield (%/year)</i>	3.2	<i>Indicated Annual Dividend (US\$/sh)</i>	3.05

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

Among natural gas and oil buy recommendations, **Norsk Hydro ASA (NHY)** is most concentrated on European natural gas where prices now lead those of North America. Oil production may account for more value in Norsk Hydro today, but natural gas has more upside that is beginning to become more apparent. UK natural gas price reached almost a hundred pence per therm (\$18 a million Btu, \$90 a barrel equivalent) on July 12 and has since fallen back to around 70. NHY reports natural gas reserves amounting to 19 times next twelve months production compared to 6 times for oil. The stock appears to have 17% appreciation potential to present value assuming a long-term oil price of \$40 a barrel. The current quote for oil delivered over the next six years is about \$58 a barrel.

Clean Energy

Europe likes clean. Allowances for emitting carbon dioxide in Europe trade for ten times the price in the U.S. A temporary high in the price for emission permits occurred at about the same time as near 100 pence per therm natural gas.

Recall that Europe has signed the Kyoto treaty for reducing carbon dioxide in the atmosphere while the U.S. has not. Europe also generates a lot of power from coal and nuclear. Coal plants obviously are not clean. Apparently, France's nuclear power plants have to be curtailed during warm days for fear of "boiling the Seine" with the excess heat from nuclear power. Coal plants emit twice or more carbon dioxide than natural gas and nuclear plants generate twice or more waste heat than natural gas.

Ultimately a sophisticated economy pays for clean. \$18 a million Btu may be too high to be sustained for now, but \$12 is not. That is the heating equivalent of distillate oil refined from \$60

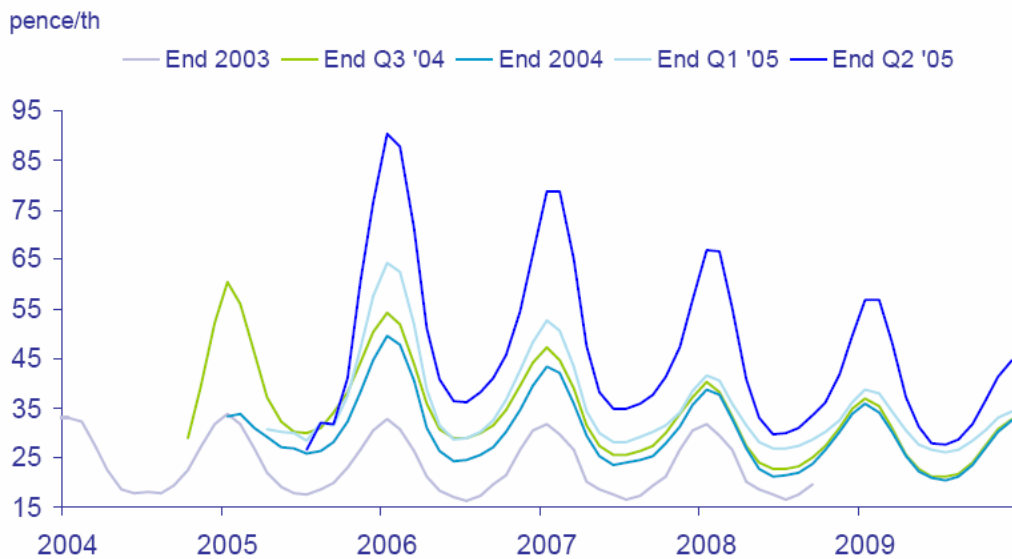
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a barrel crude oil. Distillate oil can be substituted for natural gas in power generation if more emissions are allowed temporarily.

NHY sold its natural gas for about 37 kroner an mcf, or about \$5.50 a million Btu in the quarter just ended. Management is aware of the emerging value of its clean product as it displays a chart on UK natural gas price in its quarterly presentation (see chart [UK gas prices](#)). NBP is the National Balancing Point, the pricing location for natural gas transactions. A therm is a hundred thousand British Thermal Units. Multiply pence per therm by the exchange rate around \$1.74 per pound and divide by ten to get dollars a million Btu.

Norsk Hydro ASA – Second quarter 2005

UK gas prices – NBP forward curves



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The chart nicely displays the awakening of European natural gas. The Norwegians have a lot of it. Ultimately Russia has the most natural gas.

Quarterly Results on Track

Projections are little changed after taking account of latest disclosures (see table [Next Twelve Months Operating and Financial Estimates](#)). Present Value remains diversified at 39% concentrated on oil, 36% downstream, mostly aluminum and 25% natural gas (see table [Functional Cash Flow and Present Value](#)).

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Norsk Hydro
Next Twelve Months Operating and Financial Estimates

	<i>Q4</i>	<i>Year</i>	<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>12/31/04</i>	<i>2004</i>	<i>3/31/05</i>	<i>6/30/05</i>	<i>9/30/05</i>	<i>12/31/05</i>	<i>2005E</i>	<i>3/31/06</i>	<i>6/30/06</i>	<i>6/30/06</i>
Volume										
Natural Gas (mmcf)	1,056	928	1,068	924	738	1,056	946	1,068	924	946
Oil (mbd)	415	417	406	385	380	422	398	422	422	411
Total gas & oil (mbd)	591	572	584	539	503	598	556	600	576	569
Price										
Natural gas (NOK/mcf)	34	31	42	37	37	42	40	42	42	41
Natural gas (NOK/Sm3)	1.20	0.88	1.47	1.31	1.31	1.47	1.12	1.47	1.47	1.15
Oil										
WTI Cushing US\$/bbl)	48.31	41.44	49.65	53.05	57.86	60.30	55.22	60.75	60.52	59.86
Kroner/\$	6.32	6.74	6.29	6.39	6.55	6.55	6.45	6.55	6.55	6.55
WTI Cushing (NOK/bbl)	305	279	312	339	379	395	356	398	396	392
NHY (NOK/bbl)	264	251	292	318	355	370	334	373	372	368
Total gas & oil (NOK/bbl)	246	233	279	291	323	335	307	337	339	334
Aluminum (US\$/tonne)	1,889	1,751	1,793	1,796						
Revenue (NOKmm)										
Natural Gas	3,303	10,524	4,003	3,155	2,520	4,046	13,723	4,003	3,540	14,108
Oil	10,072	38,291	10,659	11,260	12,424	14,379	48,722	14,172	14,431	55,406
Other	28,977	117,134	31,493	30,859	30,859	30,859	124,070	30,859	25,859	118,436
Total	39,049	155,425	42,152	42,119	45,803	49,284	179,358	49,033	43,830	187,950
Expense										
Production	7,395	26,815	8,657	8,850	9,013	10,062	36,582	9,994	9,938	39,007
Other	23,809	102,890	26,773	26,359	26,859	26,859	106,850	26,859	21,859	102,436
Total	31,203	129,705	35,430	35,209	35,872	36,921	143,432	36,853	31,797	141,443
Ebitda (NOKmm)										
Exploration and Production	5,980	22,001	6,005	5,565	5,931	8,363	25,863	8,180	8,033	30,507
Other	5,169	14,243	4,720	4,500	4,000	4,000	17,220	4,000	4,000	16,000
Total Ebitda	11,148	36,244	10,725	10,065	9,931	12,363	43,083	12,180	12,033	46,507
Exploration	518	1,264	308	240	400	400	1,348	400	400	1,600
Deprec., Deplet., & Amort.	6,417	17,238	3,547	3,515	3,800	3,800	14,662	3,800	3,800	15,200
Ebit										
Interest	230	1,413	245	226	300	300	1,071	300	300	1,200
Foreign Exchange	(1,606)	(1,350)	951	561						
Ebt	5,589	17,679	5,674	5,523	5,431	7,863	24,490	7,680	7,533	28,507
Income Tax	1,956	6,188	1,986	1,933	1,901	2,752	8,572	2,688	2,637	9,977
Net Income (NOKmm)										
Exploration and Production	8,621	30,408	9,842	9,447						
Other Operations	(2,387)	1,139	1,912	1,808						
Non operating deductions	(2,601)	(20,055)	(8,066)	(7,665)						
Total	3,633	11,492	3,688	3,590	3,530	5,111	15,919	4,992	4,896	18,530
Shares (millions)										
Per share (NOK)	14.40	45.20	14.70	14.30	14.06	20.36	63.42	19.89	19.51	73.82
Ebitda Margin (E&P)	45%	45%	41%	39%	40%	45%	41%	45%	45%	44%
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%

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Norsk Hydro
Functional Cash Flow and Present Value

	<i>NTM Ebitda</i> <i>(US\$m)</i>	<i>Adjusted</i> <i>R/P</i>	<i>PV/</i> <i>Ebitda</i>	<i>Present</i> <i>Value</i> <i>(US\$m)</i>	
Natural Gas	950	15.6	8.4	8,000	25%
Oil	3,710	5.3	3.4	12,600	39%
Aluminum	2,440	-	4.8	11,600	36%
	7,100	8.2	4.5	32,200	100%
Debt (US\$m)					4,600
Net Present Value (US\$m)					27,600
Shares (mm)					251
Net Present Value (US\$/sh)					110

Buy Natural Gas and Oil Producers

Peer stocks appear priced at a median McDep Ratio of 0.91 (see table [Rank by McDep Ratio](#)). Since a McDep Ratio of 1.00 represents present value assuming a long-term oil price of \$40 a barrel, the group appears to be valued at \$36 a barrel or less. The long-term commodity price in the futures market is currently about \$58 a barrel.

More undervalued stocks have lower McDep Ratios. The rank with lowest on the bottom suggests buy low and sell high.

Oil and Gas Producers
Rank by McDep Ratio: Market Cap and Debt to Present Value

	<i>Symbol/</i> <i>Rating</i>	<i>Price</i> <i>(\$/sh)</i> <i>26-Jul</i> <i>2005</i>	<i>Shares</i> <i>(mm)</i>	<i>Market</i> <i>Cap</i> <i>(\$mm)</i>	<i>Net</i> <i>Present</i> <i>Value</i> <i>(\$/sh)</i>	<i>Debt/</i> <i>Present</i> <i>Value</i>	<i>McDep</i> <i>Ratio</i>
Producer/Refiners - Large Cap and Mid Cap							
Kinder Morgan, Inc.	KMI S2	88.91	123	10,940	20.00	0.76	1.84
Imperial Oil Limited (30%)	IMO B	83.55	104	8,650	64.00	0.11	1.27
Marathon Oil Corporation	MRO B	57.68	367	21,170	45.00	0.33	1.19
Petro-Canada	PCZ B	69.46	263	18,300	70.00	0.20	0.99
Suncor Energy	SU B	48.84	461	22,520	54.00	0.11	0.91
ConocoPhillips	COP B	61.73	1,420	87,700	70.00	0.21	0.91
Norsk Hydro ASA	NHY B	94.15	251	23,630	110.00	0.14	0.88
PetroChina Company Ltd (10%)	PTR B	85.50	176	15,030	94.00	0.05	0.91
Lukoil Oil Company	LUKOY B	39.90	830	33,000	52.00	0.02	0.77
	<i>Total or Median</i>			<i>241,000</i>		<i>0.14</i>	<i>0.91</i>

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