# Norsk Hydro ASA European Natural Gas Awakens

Symbol	NHY	Ebitda Next Twelve Months ending 6/30/06 (US\$mm)	6,310
Rating	Buy	North American Natural Gas/Ebitda (%)	0
Price (\$/sh)	82.34	Natural Gas and Oil Production/Ebitda (%)	69
Pricing Date	6/3/05	Adjusted Reserves/Production NTM	8.2
Shares (mm)	251	EV/Ebitda	3.9
Market Capitalization (\$mm)	20,700	PV/Ebitda	5.0
Debt (\$mm)	4,200	Undeveloped Reserves (%)	30
Enterprise Value (EV) (\$mm)	24,900	Natural Gas and Oil Ebitda (\$/boe)	20.90
Present Value (PV) (\$mm)	31,800	Present Value Proven Reserves(\$/boe)	10.90
Net Present Value (\$/share)	110	Present Value Proven Reserves(\$/mcfe)	1.80
Debt/Present Value	0.13	Earnings Next Twelve Months (US\$/sh)	9.77
McDep Ratio - EV/PV	0.78	Price/Earnings Next Twelve Months	8
Dividend Yield (%/year)	3.8	Indicated Annual Dividend (US\$/sh)	3.10
Note: Estimated cash flow an	d earnings tied to o	ne-year futures prices for oil	

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. We raise our net present value to \$110 a share from \$101. Most of the increase is in the value of long-life natural gas that now accounts for 25% of estimated value of the stock. Oil production, 38% of value, continues in a long-term bull market. Aluminum, most of the remaining 36% of value, lost some short-term momentum as the spot price has been below the 200 day average for the past month. The Norwegian currency remains stable in the face of a recent decline in the euro and recovery for the dollar. In addition to fundamental strength, the attractions of the stock include a 3.8% dividend yield, ongoing stock repurchase and 34% appreciation potential to net present value.

#### Raise Net Present Value to \$110 a Share

After our upward revision, present value still looks low relative to next twelve months cash flow (see table <u>Functional Cash Flow and Present Value</u>). Cash flow multiple for the company is below our current correlation with adjusted reserve life index for thirty producers. Natural Gas is below the correlation multiple by 0.1. Oil is below by 0.3. Cash flow multiple for Aluminum and other operations is less than the downstream average by 0.4.

	NTM Ebitda <u>(US\$mm)</u>	Adjusted <u>R/P</u>	PV/ <u>Ebitda</u>	Present Value <u>(US\$mm)</u>	
Natural Gas	960	15.8	8.3	8,000	25%
Oil	3,370	5.3	3.6	12,200	38%
Aluminum	1,980	-	5.9	11,600	36%
	6,310	8.2	5.0	31,800	100%
Debt (US\$mm)					4,200
Net Present Value (US\$mm)					27,600
Shares (mm)					251
Net Present Value (US\$/sh)					110

#### Norsk Hydro Functional Cash Flow and Present Value

### Natural Gas Rises in Europe

The futures price for natural gas delivered in the first quarter of 2006 in the UK has risen from about 37 pence per therm (\$6.70 a million btu) a year ago to 70 pence per therm (\$12.70 a mmbtu) today. At the same time the futures price for natural gas delivered in February 2006 in the U.S. has risen from about \$6.30 a mmbtu to about \$8.30. In other words European futures are now at a premium to U.S. natural gas futures.

Apparently Norsk Hydro sells most of its natural gas on long-term contracts at a price indexed to oil and other indicators. The company's gas price in the first quarter of 2005 was NOK42 a mmbtu, or about \$6.60 a mmbtu. Not knowing how fast the contract price will respond, we hold it flat in our projections (see table <u>Next Twelve Months Operating and Financial Results</u>).

Natural gas will play a larger role in the future beyond growth from existing reserves. Norsk Hydro plans an aluminum extraction plant in Qatar using fuel from the world's largest natural gas field. The company hopes to participate in the export of liquefied natural gas from Russia.

#### Buy Oil and Gas Producers at Mid Decade

Multi-fold gain potential for oil and gas price over the years ahead justifies investment in recommended oil and gas producers, in our opinion. A McDep Ratio of 1.0 implies that a stock would be priced at present value assuming a constant real oil price of US\$40 (see table <u>Rank by McDep Ratio</u>).

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	Next Twelve Months Operating and Financial Estimates								N	
	Q4	Year	Ql	Q2E	Q3E	Q4E	Year	QIE	Q2E	Next Twelve Months
	12/31/04	2004	3/31/05	6/30/05	9/30/05	12/31/05	2005E	3/31/06	6/30/06	6/30/06
Volume						1055		4.0.00		
Natural Gas (mmcfd)	1,056	928	1,068	882	738	1,056	935	1,068	882	935
Oil (mbd)	415	417	406	406	380	422	403	422	422	411
Total gas & oil (mbd)	591	572	584	553	503	598	559	600	569	567
Price										
Natural gas (NOK/mcf)	34	31	42	42	42	42	42	42	42	42
Natural gas (NOK/Sm3)	1.20	0.88	1.47	1.47	1.47	1.47	1.18	1.47	1.47	1.18
Oil										
WTI Cushing US\$/bbl)	48.31	41.44	49.65	51.91	54.31	55.45	52.83	55.51	55.10	55.09
Kroner/\$	6.32	6.74	6.29	6.46	6.46	6.46	6.42	6.46	6.46	6.46
WTI Cushing (NOK/bbl)	305	279	312	335	351	358	339	359	356	356
NHY (NOK/bbl)	264	251	292	313	328	335	317	335	332	333
Total gas & oil (NOK/bbl)	246	233	279	296	309	310	298	310	311	310
Aluminum (US\$/tonne)	1,889	1,751	1,793							
Revenue (NOKmm)										
Natural Gas	3,303	10,524	4,003	3,379	2,827	4,046	14,255	4,003	3,379	14,255
Oil	10,072	38,291	10,659	11,699	11,457	12,990	46,805	12,720	12,908	50,075
Other	28,977	117,134	31,493	26,493	26,493	26,493	110,973	26,493	21,493	100,973
Total	39,049	155,425	42,152	41,572	40,778	43,529	168,030	43,216	37,780	165,303
Expense										
Production	7,395	26,815	8,657	8,780	8,549	9,372	35,357	9,286	9,165	36,371
Other	23,809	102,890	26,773	23,293	23,293	23,293	96,653	23,293	18,293	88,173
Total	31,203	129,705	35,430	32,073	31,842	32,665	132,010	32,579	27,458	124,544
Ebitda (NOKmm)										
Exploration and Production	5,980	22,001	6,005	6,299	5,736	7,664	25,703	7,437	7,122	27,959
Other	5,169	14,243	4,720	3,200	3,200	3,200	14,320	3,200	3,200	12,800
Total Ebitda	11,148	36,244	10,725	9,499	8,936	10,864	40,023	10,637	10,322	40,759
Exploration	518	1,264	308	308	308	308	1,232	308	308	1,232
Deprec., Deplet., & Amort.	6,417	17,238	3,547	3,547	3,547	3,547	14,188	3,547	3,547	14,188
Ebit	4,213	17,742	6,870	5,644	5,081	7,009	24,603	6,782	6,467	25,339
Interest	230	1,413	245	245	245	245	980	245	245	980
Foreign Exchange	(1,606)	(1,350)	951							
Ebt	5,589	17,679	5,674	5,399	4,836	6,764	22,672	6,537	6,222	24,359
Income Tax	1,956	6,188	1,986	1,890	1,693	2,367	7,935	2,288	2,178	8,526
Net Income (NOKmm)										
Exploration and Production	8,621	30,408	9,842							
Other Operations	(2,387)	1,139	1,912							
Non operating deductions	(2,601)	(20,055)	(8,066)							
Total	3,633	11,492	3,688	3,509	3,143	4,396	14,737	4,249	4,044	15,833
Shares (millions)	252	254	251	251	251	251	251	251	251	251
Per share (NOK)	14.40	45.20	14.70	13.99	12.53	17.52	58.74	16.94	16.12	63.11
Ebitda Margin (E&P)	45%	45%	41%	42%	40%	45%	42%	44%	44%	43%
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
ומג וגמוט	55%	33%	55%	55%	33%	55%	33%	55%	33%	33%

Norsk Hydro Next Twelve Months Operating and Financial Estimates

		Rating	Price (\$/sh) 3-Jun 2005	Shares (mm)	Market Cap (\$mm)	Net Present Value (\$/sh)	Debt/ Present Value	McDep Ratio		
Producer/Refiners - Large Cap and Mid Cap										
Kinder Morgan, Inc.	KMI	S2	78.76	125	9,850	20.00	0.74	1.77		
Marathon Oil Corporation	MRO	В	49.99	349	17,430	42.00	0.30	1.13		
Imperial Oil Limited (30%)	IMO	В	72.15	105	7,560	64.00	0.10	1.11		
Petro-Canada	PCZ	В	57.53	263	15,150	70.00	0.19	0.86		
ConocoPhillips	COP	В	55.01	1,420	78,100	70.00	0.21	0.83		
Norsk Hydro ASA	NHY	В	82.34	251	20,660	110.00	0.13	0.78		
Suncor Energy	SU	В	40.20	461	18,540	54.00	0.10	0.77		
PetroChina Company Ltd (10%)	PTR	В	64.73	176	11,380	94.00	0.05	0.70		
Lukoil Oil Company	LUKOY	В	35.25	834	29,000	52.00	0.03	0.69		
Total or Mediar	1				208,000		0.13	0.83		

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

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