**E&P** update

rating on Reliance Industries (RIL).

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# Merrill Lynch

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### Valuation upside from higher gas price & reserve accretion

Further upside to E&P valuation and FY09 earnings possible

There could be further upside to our valuation of US\$12.9bn for RIL's E&P assets

and its FY09E earnings forecast. Factors that may boost valuation are valuation

of oil discoveries being higher than accounted by us, higher gas price realization

other blocks. Higher gas price realization itself could add US\$1.8-2.3bn to our

E&P valuation. Factors that could drive up FY09E earnings are higher gas

of US\$4-4.5/mmbtu for D6 gas production, further accretion of reserves in D6 and

production from D6 than assumed by us and oil production commencing in FY09E as indicated by Niko Resources (RIL's partner in D6 block). We retain our Buy

Niko has in a recent press release indicated that oil has been struck in the MA-2 well after the MA-1 oil discovery made in D6 in June 2006. Oil production from the MA field may begin in 2Q 2008. Our current valuation of oil discoveries is modest at US\$774m. Niko has also indicated that reserve estimates of the independent expert made in June 2006 do not include results of three discoveries (MA-1, MA-2 and P-1A). Upside is also possible from oil and gas discoveries made in two other KG basin blocks in the last 12 months. Higher gas price realization than the US\$3/mmbtu assumed by us for D6 gas could also boost valuation.

#### FY09E earnings upside from higher gas price and output

Niko has indicated that gas production from the D6 block may start in mid-2008, as against in December 2008 as assumed by us. Gas output at 30mmscmd for 225 days in FY09E could boost RIL's earnings by Rs14bn (13%). Higher gas price of US\$4-4.5/mmbtu could boost FY09E earnings by another Rs15-20bn (14-19%).

#### Estimates (Mar)

(Rs)	2005A	2006A	2007E	2008E	2009E
Net Income (Adjusted - mn)	75,717	90,693	107,978	99,223	106,054
EPS	54.35	65.10	77.51	71.22	76.12
EPS Change (YoY)	47.0%	19.8%	19.1%	-8.1%	6.9%
Dividend / Share	7.50	10.00	10.00	10.00	10.00
Free Cash Flow / Share	70.47	34.18	67.03	32.59	52.29
GDR EPS (US\$)	2.49	2.92	3.50	3.22	3.44
GDR Dividend / Share (US\$)	0.344	0.449	0.452	0.452	0.452

#### Valuation (Mar)

	2005A	2006A	2007E	2008E	2009E
P/E	23.58x	19.69x	16.54x	18.00x	16.84x
Dividend Yield	0.585%	0.780%	0.780%	0.780%	0.780%
EV / EBITDA*	16.11x	14.30x	11.68x	12.68x	11.46x
Free Cash Flow Yield*	5.50%	2.67%	5.23%	2.54%	4.08%

<sup>\*</sup> For full definitions of iOmethod SM measures, see page 7

#### Stock Data

Price (Common / GDR)	Rs1,282 / US\$57.50
Price Objective	Rs1,320 / US\$58.41
Date Established	2-Nov-2006 / 2-Nov-2006
Investment Opinion	C-1-7 / C-1-7
Volatility Risk	HIGH / HIGH
52-Week Range	Rs664.72-Rs1,350
Market Value (mn)	US\$40,342
Shares Outstanding (mn)	1,393.2 / 696.6
Average Daily Volume	926,435
ML Symbol / Exchange	XRELF / BSE
ML Symbol / Exchange	RLNIY / LIN
Bloomberg / Reuters	RIL IN / RELI.BO
ROE (2007E)	20.1%
Net Dbt to Eqty (Mar-2006A)	31.5%
Est. 5-Yr EPS / DPS Growth	0.2% / 0.1%
Free Float	52.1%



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# *iQprofile*<sup>™</sup> Reliance Industries Ltd.

Key Income Statement Data (Mar)	2005A	2006A	2007E	2008E	2009E
(Rs Millions)					
Sales	652,413	803,727	1,029,988	932,982	876,511
Gross Profit	121,884	137,255	168,112	154,871	171,301
Sell General & Admin Expense	NA	NA	NA	NA	NA
Operating Profit	84,649	103,245	129,686	114,905	126,126
Net Interest & Other Income	6,038	3,795	(371)	1,145	529
Associates	NA	NA	NA	NA	NA
Pretax Income	90,687	107,041	129,315	116,051	126,655
Tax (expense) / Benefit	(14,970)	(16,347)	(21,337)	(16,827)	(18,765)
Net Income (Adjusted)	75,717	90,693	107,978	99,223	106,054
Average Fully Diluted Shares Outstanding	1,393	1,393	1,393	1,393	1,393
Key Cash Flow Statement Data					
Net Income (Reported)	75,717	90,693	107,978	99,223	106,054
Depreciation & Amortization	37,235	34,009	38,426	39,965	45,175
Change in Working Capital	NA	NA	NA	NA	NA
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	22,432	22,407	39,406	4,223	(1,297)
Cash Flow from Operations	135,384	147,109	185,810	143,411	149,933
Capital Expenditure	(37,209)	(99,487)	(92,421)	(98,013)	(77,079)
(Acquisition) / Disposal of Investments	(30,801)	129,436	(40,501)	(20,047)	67,497
Other Cash Inflow / (Outflow)	NA	NA	NA	NA	NA
Cash Flow from Investing	(68,009)	29,950	(132,921)	(118,060)	(9,582)
Shares Issue / (Repurchase)	(3,603)	1	(1)	(1)	7
Cost of Dividends Paid	(8,289)	(11,914)	(13,935)	(13,932)	(13,104)
Cash Flow from Financing	(16,067)	(193,394)	(38,936)	(47,933)	(51,462)
Free Cash Flow	98,175	47,623	93,389	45,398	72,853
Net Debt	146,436	157,106	118,154	126,780	92,839
Change in Net Debt	(55,446)	28,053	(38,952)	(11,418)	(165,888)
Key Balance Sheet Data					
Property, Plant & Equipment	350,823	626,745	665,267	707,842	724,273
Other Non-Current Assets	165,193	18,373	58,874	98,965	31,468
Trade Receivables	39,278	41,636	53,357	48,332	47,563
Cash & Equivalents	41,410	61,550	52,502	11,877	9,452
Other Current Assets	209,161	182,650	201,012	185,597	171,653
Total Assets	805,865	930,955	1,031,012	1,052,613	984,409
Long-Term Debt	153,439	165,158	140,158	106,158	29,158
Other Non-Current Liabilities	42,668	49,708	59,407	66,950	75,441
Short-Term Debt	34,407	53,499	30,499	32,499	73,134
Other Current Liabilities	171,315	164,545	224,329	200,567	175,890
Total Liabilities	401,829	432,909	454,392	406,174	353,622
Total Equity	404,031	498,040	576,612	646,429	722,258
Total Equity & Liabilities	805,861	930,949	1,031,004	1,052,603	1,075,881
<i>iQmethod</i> <sup>™</sup> - Bus Performance*					
Return On Capital Employed	12.1%	13.1%	14.1%	12.3%	13.5%
Return On Equity	20.2%	20.1%	20.1%	16.2%	15.5%
Operating Margin	13.0%	12.8%	12.6%	12.3%	14.4%
EBITDA Margin	18.7%	17.1%	16.3%	16.6%	19.5%
<i>iQmethod</i> <sup>sm</sup> - Quality of Earnings*			2.2.0	2.2.0	270
Cash Realization Ratio	1.8x	1.6x	1.7x	1.4x	1.4x
Asset Replacement Ratio	1.8x 1.0x	1.6x 2.9x	1.7x 2.4x	2.5x	1.4x 1.7x
Tax Rate (Reported)	16.5%	15.3%	16.5%	14.5%	14.8%
Net Debt-to-Equity Ratio	36.2%	31.5%	20.5%	19.6%	12.9%
Interest Cover	5.8x	11.8x	13.4x	19.0% 12.8x	12.7x
	J.UA	11.01	13.71	12.01	12.//
Key Metrics					

<sup>\*</sup> For full definitions of *iQmethod* <sup>SM</sup> measures, see page 7.

#### **Company Description**

India's largest petchem and second largest refining company, Reliance, owns a 660bpd refinery with plans to upgrade to 1mn bpd by 2009. It also has a 900ktpa cracker, 1mtpa polyester, 1.9mtpa polymer and over 3mtpa of fibre intermediate capacities. Refining contributes 55% to revenues with petchem contributing 43%. The company has discovered gas with initial inplace reserves of 14tcf on the East Coast.

#### Stock Data

Shares / GDR	2.00
Price to Book Value	3.1x



# Update on D6 oil discovery

#### Press release by partner Niko Resources sheds more light

A press release by Reliance industries' (RIL) partner Niko Resources (Niko) in the D6 deepwater block gives more details of oil discoveries made in the D6 block in June 2006. Niko holds 10% interest while RIL holds the balance 90% interest in the D6 block located in the Krishna-Godavari (KG) basin. RIL had in its 2Q FY07 results presentation dated October 19, 2006 indicated that a commerciality proposal for the MA-1 oil discovery in the D6 block would be shortly submitted. RIL had also indicated that the company may be in a position to give more details regarding the oil discoveries in 90-120 days (i.e. January-February 2007).

#### Initial oil production from MA fields likely to be targeted in 2Q 2008

A press release by Niko dated December 15 gives the following additional data and update on the oil discoveries in the D6 block:

- Application has been made for the commerciality of the MA field and approval is expected to be granted in the near future
- The full field development plan will be submitted after the approval of the commerciality
- The MA oil development is to be fast-tracked, with initial production targeted in the 2Q 2008
- Another well, MA-2, has encountered the thickest hydrocarbon column discovered to date in the D6 block. The hydrocarbon column consisted of both oil and gas/condensate. MA-2 is located about 2km from the MA-1 well where oil was discovered in June 2006
- The oil discovery in MA-2 is of light oil (42-43 API)

#### Disappointing results from drilling of MB-1 well

Niko had in July 2006 indicated that MB-1 well would be drilled about 11km east of the MA-1 oil and gas discovery. This was part of the continued evaluation of the Cretaceous prospectivity of the D6 block following the MA-1 discovery. The MB-1 well was to test a shallower separate structure with similar targets and geological settings as in the MA-1 well. Niko has in a press release dated November 14, 2006 indicated that MB-1 well drilled has turned out to be a dry well. The well has therefore been abandoned.

#### MB-1 well disappointment has no bearing on MA-1 reserve prospects

The press release also emphasizes that MB-1 was a separate structure from the MA-1 discovery and its drilling results do not have any bearing on the reserves of MA-1. The November 2006 press release also mentioned that drilling of MA-2 well would continue to further evaluate the multiple Cretaceous prospects with oil potential. The positive result from the MA-2 well, which is located within the MA-1 prospect, appears to have affirmed that the MB-1 disappointment has no implications for the reserves of the MA field.

#### Update on development of gas discoveries in D6

Niko, in its December 2006 press release, also gives the following data regarding the development of Dhirubhai 1 and 3 gas fields in the D6 block:

- Gas production from D6 is scheduled to start in mid-2008. Even other sources like the regulator (DGH) have indicted production would start in mid-2008. However, RIL has been consistently mentioning that gas production from D6 would start in 2H FY09 (September 2008-March 2009).
- The approved field development plan provides flexibility in the critical portions of the facilities to handle production at a rate of 120mmscmd (4.2bcfd) in future as and when additional reserves are added. Note that the development plan approved recently by DGH envisages a gas production rate of 80mmscmd (2.8bcfd).

#### Update on D6 exploration

The entire D6 block has been covered by 3D seismic by mid-2006. It appears that 20 wells have been drilled to date in the D6 block, with MB-1 being the 20<sup>th</sup> well and MA-2 the 19<sup>th</sup>. Further drilling to evaluate prospects of gas and possibly oil in deeper water identified by the 3D seismic will commence after the drilling of the Cretaceous wells (MB-1 and MA-2).

#### Further accretion of reserves likely in the D6 block

As per the estimates of the independent expert Gaffney Cline and Associates released by Niko in June 2006, in the D6 block:

- Original gas in place stood at 35.4tcf (in-place reserves of 27.2tcf and high case resources of 8.2tcf)
- Recoverable 3P gas reserves stood at 21tcf
- Recoverable 2P gas reserves stood at 11.3tcf

#### Experts' estimate does not include results of three discoveries

There appears to be further upside to the independent expert's estimate of original in-place gas, 3P reserves and 2P reserves in the D6 block as given above. This is because these estimates do not include the results of the following three discoveries:

- P-1A gas discovery. This discovery was significant as it discovered gas in the Miocene section. This further opens up the exploration potential of deeper water areas of D6, where more wells will be drilled in 2007.
- MA-1 oil and gas discovery
- MA-2 oil and gas discovery

# Implications for valuation and earnings

Valuation upside from oil discoveries and further reserve accretion Our valuation of RIL's E&P business stands at Rs477/share (US\$12.9bn). There could be further upside to this E&P valuation due to the following potential upsides:

- Valuation of the oil discoveries in the D6 block being higher than our current valuation of Rs29/share (US\$774m)
- Further accretion of gas reserves in the D6 block due to discoveries in P-1A, MA-1 and MA-2. The independent experts' 2P reserve (11.3tcf) and best case resource (3.1tcf) estimates, which we have valued, do not include results of these discoveries

- Further accretion of reserves due to oil discoveries made in the KG-OSN-2001/2 (also called KG-III-6) block in December 2005 and gas discovery made in the KG-OSN-2001/1 block in September 2006
- Higher gas price realization for gas produced from the D6 block than assumed by us. We are assuming gas price realization of just US\$3/mmbtu (US\$18/boe) for D6 gas, while actual realization could be US\$4-4.5/mmbtu (US\$24-27/boe) or higher.

Table 1: Valuation of RIL's E&P assets

	mmboe	USD/boe	Risk	USDm	Rs/share
D6 2P reserves	1,833	3.2		5,815	215
PMT proven reserves	141	7.4		1,045	39
Proven oil reserves outside India	9	3.8		35	1
	1,983	3.5		6,895	255
NEC-25 2P	447	3.2	90%	1,280	47
CBM	594	3.0	90%	1,630	60
2P reserves	3,024	3.2		9,804	363
D6 resources best case	502	2.0	90%	903	33
Oil discoveries	450	8.6	20%	774	29
Resources	952	1.8		1,677	62
Total reserves & resources	3,976	2.9		11,481	425
Exploration upside				1,396	52
Total E&P valuation				12,878	477
Shares out (excluding treasury shares)					1220
Source: DIL Nike Desources and DSD Marrill Lynch					

Source: RIL, Niko Resources and DSP Merrill Lynch

Upside to valuation possible despite exploration upside already taken

Note that a part of these potential upsides is captured in the exploration upside of 12% (US\$1.4bn) in our valuation (see Table 1). However, there is clearly potential for these upsides being far higher than the exploration upside accounted by us. This is apparent from the following examples of upside to valuation:

- D6 valuation would be higher by US\$1.8bn (Rs66/share) if price realization of gas production from D6 is US\$4/mmbtu instead of US\$3/mmbtu
- D6 valuation would be higher by US\$2.3bn (Rs86/share) if price realization of gas production from D6 is US\$4.5/mmbtu instead of US\$3/mmbtu

#### Upside to earnings possible from early and high gas production

Upside to RIL's FY09E earnings is possible if RIL does actually start gas production in mid-2008 (i.e. 1H FY09E) at a production rate higher than 20mmscmd. If gas price realization is higher there would be further upside to earnings. Thus, we estimate the following upside to FY09E earnings is possible

- RIL's FY09E earnings would be higher than our current estimate by US\$328m (Rs14.2bn) if gas production is at 30mmscmd for 225 days in FY09E. Our FY09E earnings forecast assumes gas production at 20mmscmd for 110 days (December 2008 to March 2009). On this basis we expect net profit from D6 at US\$133m (Rs5.8bn).
- RIL's FY09E earnings would be higher by another US\$344-457m (Rs14.9-19.8bn) if gas price realization is US\$4.0-4.5/mmbtu as against US\$3/mmbtu assumed by us.

If oil production from D6 starts in FY09 that would also further boost earnings.



# Price Objective Basis & Risk

RIL's price objective on a sum of parts basis works out to Rs1,320/share. The value of the core refining and petrochemical business has been calculated on DCF. Value of its investment in Reliance Petroleum is calculated on DCF value of RPL and applying it to RIL's holding in RPL. Its oil and gas reserves and resources are also valued on a DCF basis. RIL's investment in IPCL is valued at current market price.

Significant weakening in refining and petrochemical margins even below our expectation is a risk to our price objective. Such a decline in margins is more likely to be triggered by negative surprises on demand rather than supply. As discussed our refining margin forecasts assume almost all possible refinery projects coming up. Large disappointments on the E&P front could be another risk to our price objective. We have valued even resources and exploration upside.

## **Analyst Certification**

I, Vidyadhar Ginde, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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#### iQmethod<sup>™</sup> Measures Definitions

Business Performance Numerator Denominator

Return On Capital Employed NOPAT = (EBIT + Interest Income) \* (1 - Tax Rate) + Goodwill Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization Amortization Shareholder

Return On Equity Net Income Shareholders' Equity
Operating Margin Operating Profit Sales

Earnings Growth Expected 5-Year CAGR From Latest Actual N/A
Free Cash Flow Cash Flow From Operations – Total Capex N/A

**Quality of Earnings** 

 Cash Realization Ratio
 Cash Flow From Operations
 Net Income

 Asset Replacement Ratio
 Capex
 Depreciation

 Tax Rate
 Tax Charge
 Pre-Tax Income

 Net Debt-To-Equity Ratio
 Net Debt = Total Debt, Less Cash & Equivalents
 Total Equity

 Interest Cover
 EBIT
 Interest Expense

Valuation Toolkit

Price / Earnings RatioCurrent Share PriceDiluted Earnings Per Share (Basis As Specified)Price / Book ValueCurrent Share PriceShareholders' Equity / Current Basic Shares

Dividend Yield Annualised Declared Cash Dividend Current Share Price

Free Cash Flow Yield Cash Flow From Operations – Total Capex Market Cap. = Current Share Price \* Current Basic Shares

Enterprise Value / Sales EV = Current Share Price \* Current Shares + Minority Equity + Net Debt + Sales

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

iQmethod swis the set of Merrill Lynch standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

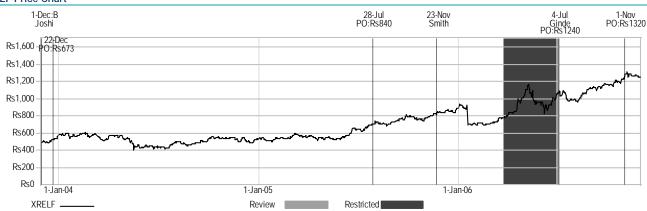
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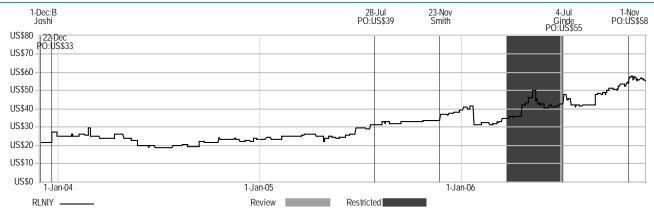
#### **XRELF Price Chart**



B: Buy, N: Neutral, S: Sell, PO: Price objective, NA: No longer valid The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security

is under review with the opinion withdrawn. Chart current as of November 30, 2006 or such later date as indicated.

#### **RLNIY Price Chart**



B: Buy, N: Neutral, S: Sell, PO: Price objective, NA: No longer valid

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security is under review with the opinion withdrawn. Chart current as of November 30, 2006 or such later date as indicated.

#### Investment Rating Distribution: Chemicals Group (as of 01 Jan 2007)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent			
Buy	29	43.28%	Buy	5	17.24%			
Neutral	30	44.78%	Neutral	8	26.67%			
Sell	8	11.94%	Sell	3	37.50%			
Investment Rating Distribution: Global Group (as of 01 Jan 2007)								
Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent			
Buy	1310	42.89%	Buy	401	30.61%			
Neutral	1508	49.38%	Neutral	443	29.38%			
Sell	236	7.73%	Sell	52	22.03%			

<sup>\*</sup> Companies in respect of which MLPF&S or an affiliate has received compensation for investment banking services within the past 12 months.

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