



## INDIA

HDIL IN Outperform  
Price 27 May 10 Rs229.00

<b>12-month target</b>	Rs	<b>325.00</b>
<b>Upside/Downside</b>	%	<b>41.9</b>
<b>Valuation</b>	Rs	<b>294.48</b>
- DCF (WACC 14.7%)		
<b>GICS sector</b>		<b>Real Estate</b>
<b>Market cap</b>	Rsm	<b>82,165</b>
<b>30-day avg turnover</b>	US\$m	<b>8.1</b>
<b>Market cap</b>	US\$m	<b>1,596</b>
<b>Number shares on issue</b>	m	<b>358.8</b>

### Investment fundamentals

Year end 31 Mar		2010A	2011E	2012E	2013E
Total revenue	m	14,960	19,291	36,852	49,535
EBITDA	m	11,241	15,093	29,989	40,423
EBITDA growth	%	-14.6	34.3	98.7	34.8
Recurring profit	m	6,338	10,622	25,705	35,716
Adjusted profit	m	5,197	8,498	20,564	28,574
EPS adj	Rs	15.03	24.57	59.46	82.62
EPS adj growth	%	-45.1	63.5	142.0	38.9
PER adj	x	15.2	9.3	3.9	2.8
Total DPS	Rs	0.00	0.00	0.00	0.00
ROA	%	10.4	11.8	20.7	23.2
ROE	%	8.9	11.1	22.6	24.7
EV/EBITDA	x	9.7	7.3	3.7	2.7
Net debt/equity	%	42.0	41.0	-12.4	-15.9
P/BV	x	1.1	1.0	0.8	0.6

### HDIL IN rel BSE Sensex performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, May 2010  
(all figures in INR unless noted)

Jal Irani  
91 22 6653 3040  
Kumar Saurabh  
91 22 6653 3046

Jal.Irani@macquarie.com  
Kumar.Saurabh@macquarie.com

28 May 2010

# HDIL

## Successful projects launches continue

### Event

- HDIL reported net sales of Rs4,340m, up 6.2% QoQ. PAT increased by 9.3% QoQ and was around 7% above our estimates. Growth is primarily driven by pick-up in Transferable Development Rights (TDR) prices. We reiterate our Outperform rating and revise our target price to Rs325.

### Impact

- Successful project launches continue.** HDIL has successfully launched 4.7m sqf of residential projects since CY09 beginning. The company should recognise around Rs26bn of sales from these projects. As the company follows the project completion method, the major part of revenue from these launches should come in FY12. The company also plans to launch around 4-6m sqf of residential projects in Mumbai suburbs region in FY11.
- TDR sales continue to boost revenue.** Almost 90% of company's 4Q FY10 revenue came in the form of TDR sales. During the quarter, the company sold around 1.5m sqf of TDR at an average rate of ~Rs2500, in line with 3Q FY10 levels but over 150% higher than 4Q FY09 levels.
- Rehabilitation for 1<sup>st</sup> Phase of the Airport project expected to start in three months.** Around 75% of the work is completed for the 1st phase of the Mumbai airport slum rehabilitation project. Rehabilitation process is delayed and is expected to start in next three months. This delay is not going to have any significant impact on our valuations but successful completion of this phase would allow the company to prove its execution capabilities for further phases. This project (all three rehab phases and the consequent reward of TDR and land) contributes ~75% to our core NAV estimate.
- Balance sheet improves mildly.** Net debt/Equity has gone down to 0.45x against 0.49x in 3QFY10. Average cost of debt for the company stands at 12.5%.

### Earnings and target price revision

- As a result of delay in projects we have cut our earnings estimate for FY11E, FY12E and FY13E by 23%, 12% and 1%. We have revised our target price to Rs325 from Rs441. We have excluded parts of Virar project and a few other longer term projects—which are not expected to take off before FY14—in our NAV calculation. If these projects were included in our financial model, they would add another Rs106/share to our NAV.

### Price catalyst

- 12-month price target: Rs325.00 based on a Sum-of-the-Parts methodology.
- Catalyst: Progress on the airport site rehabilitation project, Macro triggers

### Action and recommendation

- Maintain Outperform.** Successful project launches combined with consistent TDR sales and postponement of debt repayments provides steady cash inflow visibility. We maintain our Outperform rating with a sum-of-the-parts based target price of Rs325.

Fig 1 HDIL 4Q FY10 results – sequential growth continues

(Rs mn)	4QFY10	4QFY09	% change YoY	3Q FY10	% change QoQ
Net Sales	4,341	3,579	21.3%	4,089	6.2%
Expenditure	(2,070)	(2,614)	-20.8%	(2,201)	-6.0%
EBITDA	2,271	965	135.3%	1,888	20.3%
Depreciation	(22)	(9)	141.6%	(12)	83.8%
Other Income	304	309	-1.7%	266	14.3%
EBIT	2,554	1,265	101.8%	2,142	19.2%
Interest	(245)	(297)	-17.4%	(190)	28.8%
PBT	2,309	969	138.3%	1,952	18.3%
PBT(excl. exceptional items)	2,309	969	138.3%	1,952	18.3%
Tax	(531)	(350)	51.9%	(324)	63.7%
PAT (recurring)	1,778	619	187.1%	1,628	9.2%
PAT (reported)	1,778	619	187.1%	1,628	9.2%

Source: Company data, Macquarie Research, May 2010

Fig 2 HDIL – sum of parts valuation

NAV calculation			
	Value (Rs m)	Value per share (Rs)	% of Gross NAV
Residential projects	18,362	53	13.6%
Retail projects	3,661	11	2.7%
Commercial projects	112,920	327	83.7%
-of which 'Airport project'	102,174	295	75.7%
<b>Gross NAV</b>	<b>134,943</b>	<b>390</b>	
Less			
- Debt/ (cash)	33,099	96	
<b>Core' net NAV</b>	<b>101,844</b>	<b>294</b>	
Assuming 15% discount to NAV		250	
<b>Longer term projects</b>	<b>Value (Rs m)</b>	<b>Value per share (Rs)</b>	<b>Upside to Net NAV</b>
Projects in Vasai and Virar	20,172	58	15%
Projects in Hyderabad, Pune and Kochi	16,940	49	12%
Total	37,112	107	36%
<b>Net NAV (including option value)</b>	<b>138,956</b>	<b>402</b>	
<b>Target Price (Assuming 15% discount to core NAV and 30% discount to Option Value)</b>		<b>325</b>	

Source: Macquarie Research, May 2010

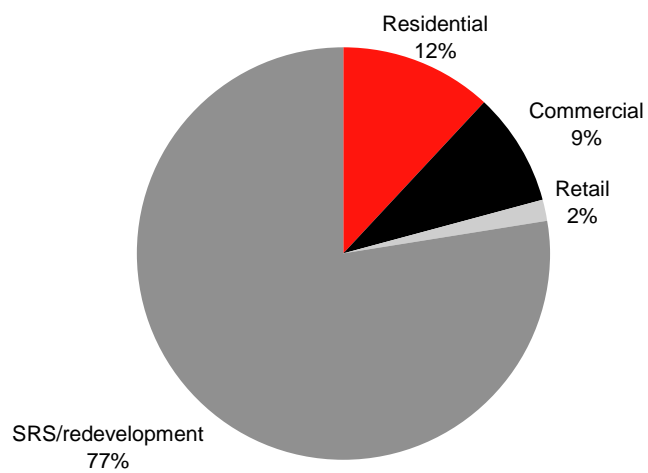
Fig 3 Approximately Rs26bn of sales should be recognised in FY12, FY13

Project	Saleable Area (sqf)	Average Sales Rate (Rs psf)	Expected Sales Realisation (Rs m)	Completion Period	Rehabilitation Area (sqf)
Premiere (Kurla, West)	1,000,000	5,700	5,700	FY12	7,500,000
Galaxy (Kurla, East)	475,000	4,500	2,138	FY12	800,000
Metropolis (Andheri, West)	650,000	9,000	5,850	FY13	-
Majestic (Bhandup)	1,300,000	6,500	8,450	FY13	900,000
Residency Park (Virar)	1,250,000	2,600	3,250	FY12	-
Harmony (Goregaon, West)	65,850	8,451	556	FY12	-
	<b>4,740,850</b>		<b>25,944</b>		<b>9,200,000</b>

Source: Company data, Macquarie Research, May 2010

**Fig 4 HDIL – Ongoing project breakup**

---



Source: Company data, Macquarie Research, May 2010

---

## Housing Development and Infrastructure (HDIL IN, Outperform, Target Price: Rs325.00)

Quarterly Results					Profit & Loss						
	4Q/10A	1Q/11E	2Q/11E	3Q/11E		2010A	2011E	2012E	2013E		
Net Property Income	m	0	0	0	Net Property Income	m	0	0	0		
Development Income	m	5,984	3,665	3,858	4,051	Development Income	m	14,960	19,291	36,852	49,535
Other Revenue	m	0	0	0	0	Other Revenue	m	0	0	0	0
<b>Total Revenue</b>	<b>m</b>	<b>5,984</b>	<b>3,665</b>	<b>3,858</b>	<b>4,051</b>	<b>Total Revenue</b>	<b>m</b>	<b>14,960</b>	<b>19,291</b>	<b>36,852</b>	<b>49,535</b>
Management Fees	m	0	0	0	0	Management Fees	m	0	0	0	0
Other Expenses	m	-1,488	-798	-840	-882	Other Expenses	m	-3,719	-4,198	-6,863	-9,113
<b>EBITDA</b>	<b>m</b>	<b>4,497</b>	<b>2,868</b>	<b>3,019</b>	<b>3,170</b>	<b>EBITDA</b>	<b>m</b>	<b>11,241</b>	<b>15,093</b>	<b>29,989</b>	<b>40,423</b>
Dep & Amortisation	m	28	35	37	39	Dep & Amortisation	m	71	186	579	1,419
<b>EBIT</b>	<b>m</b>	<b>4,468</b>	<b>2,832</b>	<b>2,981</b>	<b>3,130</b>	<b>EBIT</b>	<b>m</b>	<b>11,171</b>	<b>14,907</b>	<b>29,411</b>	<b>39,004</b>
Net Interest Income	m	-2,131	-935	-984	-1,034	Net Interest Income	m	-5,327	-4,922	-4,922	-4,922
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Other Pre-Tax Income	m	197	121	127	134	Other Pre-Tax Income	m	494	637	1,216	1,635
<b>Pre-Tax Profit</b>	<b>m</b>	<b>2,535</b>	<b>2,018</b>	<b>2,124</b>	<b>2,231</b>	<b>Pre-Tax Profit</b>	<b>m</b>	<b>6,338</b>	<b>10,622</b>	<b>25,705</b>	<b>35,716</b>
Tax Expense	m	-456	-404	-425	-446	Tax Expense	m	-1,141	-2,124	-5,141	-7,143
<b>Net Profit</b>	<b>m</b>	<b>2,079</b>	<b>1,614</b>	<b>1,699</b>	<b>1,784</b>	<b>Net Profit</b>	<b>m</b>	<b>5,197</b>	<b>8,497</b>	<b>20,564</b>	<b>28,573</b>
Minority Interests	m	0	0	0	0	Minority Interests	m	1	1	1	1
<b>Reported Earnings</b>	<b>m</b>	<b>2,079</b>	<b>1,615</b>	<b>1,700</b>	<b>1,785</b>	<b>Reported Earnings</b>	<b>m</b>	<b>5,197</b>	<b>8,498</b>	<b>20,564</b>	<b>28,574</b>
<b>Adjusted Earnings</b>	<b>m</b>	<b>2,079</b>	<b>1,615</b>	<b>1,700</b>	<b>1,785</b>	<b>Adjusted Earnings</b>	<b>m</b>	<b>5,197</b>	<b>8,498</b>	<b>20,564</b>	<b>28,574</b>
EPS (rep)		6.01	4.67	4.91	5.16	EPS (rep)		15.03	24.57	59.46	82.62
EPS (adj)		6.01	4.67	4.91	5.16	EPS (adj)		15.03	24.57	59.46	82.62
EPS Growth yoy (adj)	%	-47.4	63.5	63.5	63.5	EPS Growth (adj)	%	-45.1	63.5	142.0	38.9
						PE (rep)	x	15.2	9.3	3.9	2.8
						PE (adj)	x	15.2	9.3	3.9	2.8
EBITDA Margins	%	75.1	78.2	78.2	78.2	Total DPS		0.00	0.00	0.00	0.00
EBIT Margins	%	74.7	77.3	77.3	77.3	Total Div Yield	%	0.0	0.0	0.0	0.0
Earnings Split	%	40.0	19.0	20.0	21.0	Weighted Average Shares	m	346	346	346	346
Revenue Growth	%	-13.4	28.9	28.9	28.9	Period End Shares	m	346	346	346	346
EBIT Growth	%	-14.9	33.4	33.4	33.4						
Profit & Loss Ratios					Cashflow Analysis						
	2010A	2011E	2012E	2013E		2010A	2011E	2012E	2013E		
Revenue Growth	%	-13.4	28.9	91.0	34.4	<b>EBITDA</b>	<b>m</b>	<b>11,241</b>	<b>15,093</b>	<b>29,989</b>	<b>40,423</b>
EBITDA Growth	%	-14.6	34.3	98.7	34.8	Tax Paid	m	-1,141	-2,124	-5,141	-7,143
EBIT Growth	%	-14.9	33.4	97.3	32.6	Chg in Working Capital	m	-16,785	-9,573	31,397	-9,011
EBITDA Margins	%	75.1	78.2	81.4	81.6	Net Interest Paid	m	-5,327	-4,922	-4,922	-4,922
EBIT Margins	%	74.7	77.3	79.8	78.7	Other	m	-63	-119	-288	-400
Net Profit Margins	%	34.7	44.0	55.8	57.7	<b>Operating Cashflow</b>	<b>m</b>	<b>-12,074</b>	<b>-1,645</b>	<b>51,035</b>	<b>18,946</b>
Payout Ratio	%	0.0	0.0	0.0	0.0	Acquisitions	m	0	0	0	0
EV/EBITDA	x	9.7	7.3	3.7	2.7	Capex	m	-955	-1,750	-6,515	-12,528
EV/EBIT	x	9.8	7.4	3.7	2.8	Asset Sales	m	0	0	0	0
						Other	m	494	637	1,216	1,635
<b>Balance Sheet Ratios</b>						<b>Investing Cashflow</b>	<b>m</b>	<b>-461</b>	<b>-1,113</b>	<b>-5,299</b>	<b>-10,894</b>
ROE	%	8.9	11.1	22.6	24.7	Dividend (Ordinary)	m	0	0	0	0
ROA	%	10.4	11.8	20.7	23.2	Equity Raised	m	703	0	0	0
ROIC	%	10.8	11.6	20.7	35.2	Debt Movements	m	-416	0	0	0
Net Debt/Equity	%	42.0	41.0	-12.4	-15.9	Other	m	22,160	-0	0	-0
Interest Cover	x	2.1	3.0	6.0	7.9	<b>Financing Cashflow</b>	<b>m</b>	<b>22,448</b>	<b>-0</b>	<b>0</b>	<b>-0</b>
Price/Book	x	1.1	1.0	0.8	0.6						
Book Value per Share		209.0	233.6	293.0	375.6	<b>Net Chg in Cash/Debt</b>	<b>m</b>	<b>9,913</b>	<b>-2,759</b>	<b>45,736</b>	<b>8,053</b>
						<b>Free Cashflow</b>	<b>m</b>	<b>-13,029</b>	<b>-3,395</b>	<b>44,520</b>	<b>6,418</b>
						<b>Balance Sheet</b>		<b>2010A</b>	<b>2011E</b>	<b>2012E</b>	<b>2013E</b>
						Cash	m	10,668	7,909	53,645	61,698
						Receivables	m	3,689	4,757	9,087	12,214
						Inventories	m	86,073	95,135	60,579	67,857
						Investments	m	2,491	2,491	2,491	2,491
						Fixed Assets	m	0	0	0	0
						Intangibles	m	478	478	478	478
						Other Assets	m	18,801	20,484	26,709	38,219
						<b>Total Assets</b>	<b>m</b>	<b>122,200</b>	<b>131,254</b>	<b>152,990</b>	<b>182,957</b>
						Payables	m	8,689	9,246	10,417	11,810
						Short Term Debt	m	0	0	0	0
						Long Term Debt	m	41,047	41,047	41,047	41,047
						Provisions	m	184	184	184	184
						Other Liabilities	m	0	0	0	0
						<b>Total Liabilities</b>	<b>m</b>	<b>49,920</b>	<b>50,477</b>	<b>51,648</b>	<b>53,042</b>
						Shareholders' Funds	m	72,280	80,777	101,342	129,915
						Minority Interests	m	0	0	0	0
						<b>Total S/H Equity</b>	<b>m</b>	<b>72,280</b>	<b>80,777</b>	<b>101,342</b>	<b>129,915</b>
						<b>Total Liab &amp; S/H Funds</b>	<b>m</b>	<b>122,200</b>	<b>131,254</b>	<b>152,990</b>	<b>182,957</b>

All figures in INR unless noted.

Source: Company data, Macquarie Research, May 2010

## Important disclosures:

Recommendation definitions	Volatility index definition*	Financial definitions
<p><b>Macquarie - Australia/New Zealand</b> Outperform – return &gt;5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return &gt;5% below benchmark return</p> <p><b>Macquarie – Asia/Europe</b> Outperform – expected return &gt;+10% Neutral – expected return from -10% to +10% Underperform – expected return &lt;-10%</p> <p><b>Macquarie First South - South Africa</b> Outperform – expected return &gt;+10% Neutral – expected return from -10% to +10% Underperform – expected return &lt;-10%</p> <p><b>Macquarie - Canada</b> Outperform – return &gt;5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return &gt;5% below benchmark return</p> <p><b>Macquarie - USA</b> Outperform (Buy) – return &gt;5% in excess of Russell 3000 index return Neutral (Hold) – return within 5% of Russell 3000 index return Underperform (Sell)– return &gt;5% below Russell 3000 index return</p> <p><b>Recommendations – 12 months</b></p> <p><b>Note:</b> Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>This is calculated from the volatility of historical price movements.</p> <p><b>Very high–highest risk</b> – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.</p> <p><b>High</b> – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.</p> <p><b>Medium</b> – stock should be expected to move up or down at least 30–40% in a year.</p> <p><b>Low–medium</b> – stock should be expected to move up or down at least 25–30% in a year.</p> <p><b>Low</b> – stock should be expected to move up or down at least 15–25% in a year. * Applicable to Australian/NZ/Canada stocks only</p>	<p>All "Adjusted" data items have had the following adjustments made: Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives &amp; hedging, IFRS impairments &amp; IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends &amp; minority interests</p> <p><b>EPS</b> = adjusted net profit / epowa* <b>ROA</b> = adjusted ebit / average total assets <b>ROA Banks/Insurance</b> = adjusted net profit / average total assets <b>ROE</b> = adjusted net profit / average shareholders funds <b>Gross cashflow</b> = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>

## Recommendation proportions – For quarter ending 31 March 2010

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	50.55%	62.20%	42.25%	42.39%	62.16%	46.74%	(for US coverage by MCUSA, 6.53% of stocks covered are investment banking clients)
Neutral	36.63%	19.02%	47.89%	50.35%	31.89%	34.78%	(for US coverage by MCUSA, 9.62% of stocks covered are investment banking clients)
Underperform	12.82%	18.78%	9.86%	7.27%	5.95%	18.48%	(for US coverage by MCUSA, 0.00% of stocks covered are investment banking clients)

## Company Specific Disclosures:

Important disclosure information regarding the subject companies covered in this report is available at [www.macquarie.com/research/disclosures](http://www.macquarie.com/research/disclosures).

## Analyst Certification:

The views expressed in this research accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analyst principally responsible for the preparation of this research receives compensation based on overall revenues of Macquarie Group Ltd ABN 94 122 169 279 (AFSL No. 318062) (MGL) and its related entities (the Macquarie Group) and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

## General Disclaimers:

Macquarie Securities (Australia) Ltd; Macquarie Capital (Europe) Ltd; Macquarie Capital Markets Canada Ltd; Macquarie Capital Markets North America Ltd; Macquarie Capital (USA) Inc; Macquarie Capital Securities Ltd and its Taiwan branch; Macquarie Capital Securities (Singapore) Pte Ltd; Macquarie Securities (NZ) Ltd; Macquarie First South Securities (Pty) Limited; Macquarie Capital Securities (India) Pvt Ltd; Macquarie Capital Securities (Malaysia) Sdn Bhd; and Macquarie Securities (Thailand) Ltd are not authorized deposit-taking institutions for the purposes of the Banking Act 1959 (Commonwealth of Australia), and their obligations do not represent deposits or other liabilities of Macquarie Bank Limited ABN 46 008 583 542 (MBL) or MGL. MBL does not guarantee or otherwise provide assurance in respect of the obligations of any of the above mentioned entities. MGL provides a guarantee to the Monetary Authority of Singapore in respect of the obligations and liabilities of Macquarie Capital Securities (Singapore) Pte Ltd for up to SGD 35 million. This research has been prepared for the general use of the wholesale clients of the Macquarie Group and must not be copied, either in whole or in part, or distributed to any other person. If you are not the intended recipient you must not use or disclose the information in this research in any way. If you received it in error, please tell us immediately by return e-mail and delete the document. We do not guarantee the integrity of any e-mails or attached files and are not responsible for any changes made to them by any other person. MGL has established and implemented a conflicts policy at group level (which may be revised and updated from time to time) (the "Conflicts Policy") pursuant to regulatory requirements (including the FSA Rules) which sets out how we must seek to identify and manage all material conflicts of interest. Nothing in this research shall be construed as a solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any transaction. In preparing this research, we did not take into account your investment objectives, financial situation or particular needs. Before making an investment decision on the basis of this research, you need to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of your particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. This research is based on information obtained from sources believed to be reliable but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in it. Opinions expressed are subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research. Clients should contact analysts at, and execute transactions through, a Macquarie Group entity in their home jurisdiction unless governing law permits otherwise.

## Country-Specific Disclaimers:

**Australia:** In Australia, research is issued and distributed by Macquarie Securities (Australia) Ltd (AFSL No. 238947), a participating organisation of the Australian Securities Exchange. **New Zealand:** In New Zealand, research is issued and distributed by Macquarie Securities (NZ) Ltd, a NZX Firm. **Canada:** In Canada, research is prepared, approved and distributed by Macquarie Capital Markets Canada Ltd, a participating organisation of the Toronto Stock Exchange, TSX Venture Exchange & Montréal Exchange. Macquarie Capital Markets North America Ltd., which is a registered broker-dealer and member of FINRA, accepts responsibility for the contents of reports issued by Macquarie Capital Markets Canada Ltd in the United States and sent to US persons. Any person wishing to effect transactions in the securities described in the reports issued by Macquarie Capital Markets Canada Ltd should do so with Macquarie Capital Markets North America Ltd. The Research Distribution Policy of Macquarie Capital Markets Canada Ltd is to allow all clients that are entitled to have equal access to our research. **United Kingdom:** In the United Kingdom, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated by the Financial Services Authority (No. 193905). **Germany:** In Germany, research is issued and distributed by Macquarie Capital (Europe) Ltd, Niederlassung Deutschland, which is authorised and regulated in the United Kingdom by the Financial Services Authority (No. 193905). **France:** In France, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated in the United Kingdom by the Financial Services Authority (No. 193905). **Hong Kong:** In Hong Kong, research is

issued and distributed by Macquarie Capital Securities Ltd, which is licensed and regulated by the Securities and Futures Commission. **Japan:** In Japan, research is issued and distributed by Macquarie Capital Securities (Japan) Limited, a member of the Tokyo Stock Exchange, Inc. and Osaka Securities Exchange Co. Ltd (Financial Instruments Firm, Kanto Financial Bureau (kin-sho) No. 231, a member of Japan Securities Dealers Association and Financial Futures Association of Japan). **India:** In India, research is issued and distributed by Macquarie Capital Securities (India) Pvt Ltd, which is a SEBI registered Stock Broker having membership with National Stock Exchange of India Limited (INB231246738) and Bombay Stock Exchange Limited (INB011246734). **Malaysia:** In Malaysia, research is issued and distributed by Macquarie Capital Securities (Malaysia) Sdn. Bhd. (Company registration number: 463469-W) which is a Participating Organisation of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission. **Taiwan:** Information on securities/instruments that are traded in Taiwan is distributed by Macquarie Capital Securities Ltd, Taiwan Branch, which is licensed and regulated by the Financial Supervisory Commission. No portion of the report may be reproduced or quoted by the press or any other person without authorisation from Macquarie. **Thailand:** In Thailand, research is issued and distributed by Macquarie Securities (Thailand) Ltd, a licensed securities company that is authorized by the Ministry of Finance, regulated by the Securities and Exchange Commission of Thailand and is an exchange member no. 28 of the Stock Exchange of Thailand. The Thai Institute of Directors Association has disclosed the Corporate Governance Report of Thai Listed Companies made pursuant to the policy of the Securities and Exchange Commission of Thailand. Macquarie Securities (Thailand) Ltd does not endorse the result of the Corporate Governance Report of Thai Listed Companies but this Report can be accessed at:

<http://www.thai-iod.com/en/publications.asp?type=4>. **South Africa:** In South Africa, research is issued and distributed by Macquarie First South Securities (Pty) Limited, a member of the JSE Limited. **Singapore:** In Singapore, research is issued and distributed by Macquarie Capital Securities (Singapore) Pte Ltd (Company Registration Number: 198702912C), a Capital Markets Services license holder under the Securities and Futures Act to deal in securities and provide custodial services in Singapore. Pursuant to the Financial Advisers (Amendment) Regulations 2005, Macquarie Capital Securities (Singapore) Pte Ltd is exempt from complying with sections 25, 27 and 36 of the Financial Advisers Act. All Singapore-based recipients of research produced by Macquarie Capital (Europe) Limited, Macquarie Capital Markets Canada Ltd, Macquarie First South Securities (Pty) Limited and Macquarie Capital (USA) Inc. represent and warrant that they are institutional investors as defined in the Securities and Futures Act. **United States:** In the United States, research is issued and distributed by Macquarie Capital (USA) Inc., which is a registered broker-dealer and member of FINRA. Macquarie Capital (USA) Inc. accepts responsibility for the content of each research report prepared by one of its non-US affiliates when the research report is distributed in the United States by Macquarie Capital (USA) Inc. Macquarie Capital (USA) Inc.'s affiliate's analysts are not registered as research analysts with FINRA, may not be associated persons of Macquarie Capital (USA) Inc., and therefore may not be subject to FINRA rule restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account. Any persons receiving this report directly from Macquarie Capital (USA) Inc. and wishing to effect a transaction in any security described herein should do so with Macquarie Capital (USA) Inc. Important disclosure information regarding the subject companies covered in this report is available at [www.macquarie.com/research/disclosures](http://www.macquarie.com/research/disclosures), or contact your registered representative at 1-888-MAC-STOCK, or write to the Supervisory Analysts, Research Department, Macquarie Securities, 125 W.55th Street, New York, NY 10019.

© Macquarie Group

<b>Auckland</b> Tel: (649) 377 6433	<b>Bangkok</b> Tel: (662) 694 7999	<b>Calgary</b> Tel: (1 403) 218 6650	<b>Hong Kong</b> Tel: (852) 2823 3588	<b>Jakarta</b> Tel: (62 21) 515 1818	<b>Johannesburg</b> Tel: (2711) 583 2000	<b>Kuala Lumpur</b> Tel: (60 3) 2059 8833
<b>London</b> Tel: (44 20) 3037 4400	<b>Manila</b> Tel: (63 2) 857 0888	<b>Melbourne</b> Tel: (613) 9635 8139	<b>Montreal</b> Tel: (1 514) 925 2850	<b>Mumbai</b> Tel: (91 22) 6653 3000	<b>Perth</b> Tel: (618) 9224 0888	<b>Seoul</b> Tel: (82 2) 3705 8500
<b>Shanghai</b> Tel: (86 21) 6841 3355	<b>Singapore</b> Tel: (65) 6231 1111	<b>Sydney</b> Tel: (612) 8232 9555	<b>Taipei</b> Tel: (886 2) 2734 7500	<b>Tokyo</b> Tel: (81 3) 3512 7900	<b>Toronto</b> Tel: (1 416) 848 3500	<b>New York</b> Tel: (1 212) 231 2500

Available to clients on the world wide web at [www.macquarieresearch.com](http://www.macquarieresearch.com) and through Thomson Financial, FactSet, Reuters, Bloomberg, CapitalIQ and TheMarkets.com.

