

## 'What-ifs' linger; downgrade to Reduce Operating risk persists as key earnings drivers hang in the balance; financing risk rises

September 12, 2012

<b>Rating</b> Down from Neutral	<b>Reduce</b>
<b>Target price</b> Reduced from 115	INR 35
<b>Closing price</b> September 10, 2012	INR 42
<b>Potential downside</b>	-16.7%

### Action: Downgrade to Reduce; 12-month TP pegged at INR35

In our view, Adani Power's earnings outlook hinges on of a handful of 'binary outcome' events relating to PPAs and fuel sourcing, wherein the timeline for securing clarity is difficult to assess; in the interim, we expect current (default) coal sourcing mix, PPA tariffs and funding costs to take a toll on earnings. Our revised FY13F/14F/15F earnings estimates for Adani are sharply below consensus; valuation multiples are not compelling.

### Catalyst: Consensus earnings yet to reflect 'financing risk'

Besides the 'operating risk' from fuel supply woes and zero/partial fuel cost pass thru in its long-term PPAs and low utilization level, we believe consensus earnings are yet to reflect the 'financing risk' emanating from project cost overruns, sharply higher gearing (net debt to equity at ~6x) and significant exposure to foreign currency (f/x) debt in the backdrop of a weakening INR. Further, unless refinanced, USxD3.5bn of USD5.4bn total f/x debt is likely to crystallize into higher-cost INR debt in 12-24 months.

### Valuation: Absolute/ relative multiples are not inexpensive

We cut our 12-month TP (based on the milestone risk-adjusted FCFE of feasible projects) for Adani to INR35 on account of weakened earnings outlook, INR/USD depreciation, higher risk profile for projects and balance sheet and lower feasible capacity (9.2GW now vs 13.2GW previously). FY13F/14F valuation multiples (1.6x P/B, 7.8x EV/EBITDA and 12x P/E) are at a premium to private IPPs; not a reason to own the stock.

### Key risks to our view: Favourable outcome(s) of 'what-if' scenarios

Reworking of long-term PPAs; securing linkage coal for Tiroda-II / Kawai.

31 Mar	FY12		FY13F		FY14F		FY15F	
Currency (INR)	Actual	Old	New	Old	New	Old	New	
<b>Revenue (mn)</b>	40,898	138,181	80,268		155,148		172,788	
<b>Reported net profit (mn)</b>	-2,873	34,119	-3,466		8,433		7,696	
<b>Normalised net profit (mn)</b>	-924	34,119	-1,257		8,433		7,696	
<b>FD normalised EPS</b>	-42.39c	15.65	-52.54c		3.52		3.22	
<b>FD norm. EPS growth (%)</b>	-118.6	56.1	na		na		-8.7	
<b>FD normalised P/E (x)</b>	na	N/A	na	N/A	12.0	N/A	13.2	
<b>EV/EBITDA (x)</b>	33.7	N/A	18.0	N/A	7.8	N/A	6.9	
<b>Price/book (x)</b>	1.5	N/A	1.8	N/A	1.6	N/A	1.4	
<b>Dividend yield (%)</b>	na	N/A	na	N/A	na	N/A	na	
<b>ROE (%)</b>	-4.7	33.8	-5.9		13.8		11.1	
<b>Net debt/equity (%)</b>	585.1	282.7	661.9		547.8		455.4	

Key company data: See page 2 for company data and detailed price/index chart.

### Anchor themes

We believe IPPs with operating capacity, front-ended capacity pipelines, credible execution capability, high fuel security (sourcing, pricing) and a healthy off-take mix are potential long-term winners.

### Nomura vs consensus

Our FY14F/15F normalized earnings are 17/40% short of consensus because of expected higher depreciation and interest outgo.

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See Appendix A-1 for analyst certification, important disclosures and the status of non-US analysts.

# Key data on Adani Power

## Income statement (INRmn)

Year-end 31 Mar	FY11	FY12	FY13F	FY14F	FY15F
<b>Revenue</b>	<b>21,352</b>	<b>40,898</b>	<b>80,268</b>	<b>155,148</b>	<b>172,788</b>
Cost of goods sold	-7,213	-23,004	-45,171	-83,229	-96,342
<b>Gross profit</b>	<b>14,139</b>	<b>17,894</b>	<b>35,098</b>	<b>71,919</b>	<b>76,447</b>
SG&A	-3,498	-9,921	-19,439	-33,880	-36,388
Employee share expense	-322	-626	-1,345	-1,676	-1,941
<b>Operating profit</b>	<b>10,319</b>	<b>7,347</b>	<b>14,314</b>	<b>36,363</b>	<b>38,118</b>
<b>EBITDA</b>	<b>12,205</b>	<b>13,252</b>	<b>26,127</b>	<b>58,028</b>	<b>61,869</b>
Depreciation	-1,886	-5,904	-11,813	-21,665	-23,751
Amortisation					
EBIT	10,319	7,347	14,314	36,363	38,118
Net interest expense	-2,360	-5,396	-13,702	-23,222	-24,076
Associates & JCEs					
Other income	0	0	0	0	0
<b>Earnings before tax</b>	<b>7,959</b>	<b>1,952</b>	<b>611</b>	<b>13,141</b>	<b>14,042</b>
Income tax	-3,000	-2,948	-1,869	-4,708	-6,346
<b>Net profit after tax</b>	<b>4,959</b>	<b>-996</b>	<b>-1,257</b>	<b>8,433</b>	<b>7,696</b>
Minority interests	4	72	0	0	0
Other items					
Preferred dividends					
<b>Normalised NPAT</b>	<b>4,963</b>	<b>-924</b>	<b>-1,257</b>	<b>8,433</b>	<b>7,696</b>
Extraordinary items	173	-1,949	-2,209	0	0
<b>Reported NPAT</b>	<b>5,136</b>	<b>-2,873</b>	<b>-3,466</b>	<b>8,433</b>	<b>7,696</b>
Dividends	0	0	0	0	0
<b>Transfer to reserves</b>	<b>5,136</b>	<b>-2,873</b>	<b>-3,466</b>	<b>8,433</b>	<b>7,696</b>

## Valuation and ratio analysis

Reported P/E (x)	18.0	na	na	12.0	13.2
Normalised P/E (x)	18.6	-100.0	-80.7	12.0	13.2
FD normalised P/E (x)	18.6	na	na	12.0	13.2
FD normalised P/E at price target (x)	15.4	na	na	9.9	10.9
Dividend yield (%)	na	na	na	na	na
Price/cashflow (x)	3.4	19.7	16.1	3.2	4.0
Price/book (x)	1.5	1.5	1.8	1.6	1.4
EV/EBITDA (x)	26.6	33.7	18.0	7.8	6.9
EV/EBIT (x)	31.5	60.7	32.8	12.4	11.2
Gross margin (%)	66.2	43.8	43.7	46.4	44.2
EBITDA margin (%)	57.2	32.4	32.5	37.4	35.8
EBIT margin (%)	48.3	18.0	17.8	23.4	22.1
Net margin (%)	24.1	-7.0	-4.3	5.4	4.5
Effective tax rate (%)	37.7	151.1	305.7	35.8	45.2
Dividend payout (%)	0.0	na	na	0.0	0.0
Capex to sales (%)	799.5	302.6	27.3	8.1	0.0
Capex to depreciation (x)	90.5	21.0	1.9	0.6	0.0
ROE (%)	8.5	-4.7	-5.9	13.8	11.1
ROA (pretax %)	4.1	1.8	2.9	7.3	7.7

## Growth (%)

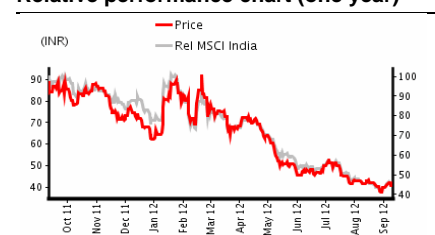
Revenue	391.0	91.5	96.3	93.3	11.4
EBITDA	400.6	8.6	97.2	122.1	6.6
EBIT	395.0	-28.8	94.8	154.0	4.8
Normalised EPS		-118.6	na	na	-8.7
Normalised FDEPS		-118.6	na	na	-8.7

## Per share

Reported EPS (INR)	2.36	-1.32	-1.45	3.52	3.22
Norm EPS (INR)	2.28	-42.39c	-52.54c	3.52	3.22
Fully diluted norm EPS (INR)	2.28	-42.39c	-52.54c	3.52	3.22
Book value per share (INR)	28.84	27.71	23.79	27.32	30.53
DPS (INR)	0.00	0.00	0.00	0.00	0.00

Source: Company data, Nomura estimates

## Relative performance chart (one year)



Source: ThomsonReuters, Nomura research

(%)	1M	3M	12M
Absolute (INR)	2.0	-9.8	-52.1
Absolute (USD)	1.9	-9.7	-59.7
Relative to index	0.8	-15.8	-57.1
Market cap (USDmn)	1,668.9		
Estimated free float (%)	26.5		
52-week range (INR)	96.75/36.8		
3-mth avg daily turnover (USDmn)	2.08		
Major shareholders (%)			
Adani Enterprises Ltd	70.3		

Source: Thomson Reuters, Nomura research

## Notes

For EBITDA calculation, we exclude fuel-related f/x LC cost fluctuation from the reported fuel expense. The same is included in the interest charges

**Cashflow (INRmn)**

Year-end 31 Mar	FY11	FY12	FY13F	FY14F	FY15F
EBITDA	12,205	13,252	26,127	58,028	61,869
Change in working capital	17,761	-3,524	-5,982	-2,028	-10,421
Other operating cashflow	-2,398	-5,035	-13,833	-24,632	-26,093
<b>Cashflow from operations</b>	<b>27,567</b>	<b>4,693</b>	<b>6,312</b>	<b>31,368</b>	<b>25,355</b>
Capital expenditure	-170,709	-123,773	-21,925	-12,622	0
<b>Free cashflow</b>	<b>-143,142</b>	<b>-119,080</b>	<b>-15,613</b>	<b>18,745</b>	<b>25,355</b>
Reduction in investments	-100	0	0	0	0
Net acquisitions					
Reduction in other LT assets	0	0	0	0	0
Addition in other LT liabilities	0	0	0	0	0
Adjustments	0	0	0	0	0
<b>Cashflow after investing acts</b>	<b>-143,242</b>	<b>-119,080</b>	<b>-15,613</b>	<b>18,745</b>	<b>25,355</b>
Cash dividends	0	0	0	0	0
Equity issue	0	0	0	0	0
Debt issue	139,322	140,976	24,414	-17,745	-42,967
Convertible debt issue					
Others	4,816	-1,949	-7,799	0	0
<b>Cashflow from financial acts</b>	<b>144,138</b>	<b>139,028</b>	<b>16,615</b>	<b>-17,745</b>	<b>-42,967</b>
<b>Net cashflow</b>	<b>897</b>	<b>19,947</b>	<b>1,002</b>	<b>1,001</b>	<b>-17,613</b>
Beginning cash	11,654	12,551	32,498	33,500	34,500
Ending cash	12,551	32,498	33,500	34,500	16,887
Ending net debt	232,477	353,505	376,918	358,172	332,818

Source: Company data, Nomura estimates

**Notes**

Capex pegged at ~INR22bn for FY13F and lower in FY14F at ~INR13bn, when we expect most of the capacity to be online

**Balance sheet (INRmn)**

As at 31 Mar	FY11	FY12	FY13F	FY14F	FY15F
Cash & equivalents	12,551	32,498	33,500	34,500	16,887
Marketable securities	0	0	0	0	0
Accounts receivable	4,174	9,462	14,175	22,173	24,655
Inventories	2,836	8,268	8,905	11,419	11,358
Other current assets	5,844	21,254	21,259	25,127	26,549
<b>Total current assets</b>	<b>25,405</b>	<b>71,481</b>	<b>77,839</b>	<b>93,219</b>	<b>79,450</b>
LT investments	100	100	100	100	100
Fixed assets	324,372	442,241	452,352	443,310	419,559
Goodwill					
Other intangible assets	9	16	16	16	16
Other LT assets	0	0	0	0	0
<b>Total assets</b>	<b>349,886</b>	<b>513,837</b>	<b>530,307</b>	<b>536,645</b>	<b>499,124</b>
Short-term debt	21,503	74,865	33,975	36,111	34,439
Accounts payable	3,646	5,608	5,569	10,261	11,878
Other current liabilities	29,557	50,199	49,612	57,272	49,077
<b>Total current liabilities</b>	<b>54,706</b>	<b>130,673</b>	<b>89,156</b>	<b>103,644</b>	<b>95,394</b>
Long-term debt	223,524	311,138	376,442	356,562	315,266
Convertible debt					
Other LT liabilities	3,120	6,023	7,761	11,059	15,388
<b>Total liabilities</b>	<b>281,350</b>	<b>447,834</b>	<b>473,360</b>	<b>471,265</b>	<b>426,048</b>
Minority interest	5,663	5,590	0	0	0
Preferred stock	0	0	0	0	0
Common stock	21,800	21,800	23,932	23,932	23,932
Retained earnings	41,073	38,613	33,014	41,448	49,143
Proposed dividends					
Other equity and reserves					
<b>Total shareholders' equity</b>	<b>62,873</b>	<b>60,413</b>	<b>56,947</b>	<b>65,380</b>	<b>73,076</b>
<b>Total equity &amp; liabilities</b>	<b>349,886</b>	<b>513,837</b>	<b>530,307</b>	<b>536,645</b>	<b>499,124</b>

**Notes**

Leverage quite high at 4.5-6.6x

**Liquidity (x)**

Current ratio	0.46	0.55	0.87	0.90	0.83
Interest cover	4.4	1.4	1.0	1.6	1.6

**Leverage**

Net debt/EBITDA (x)	19.05	26.68	14.43	6.17	5.38
Net debt/equity (%)	369.8	585.1	661.9	547.8	455.4

**Activity (days)**

Days receivable	57.6	61.0	53.7	42.8	49.5
Days inventory	74.2	88.3	69.4	44.6	43.1
Days payable	109.4	73.6	45.2	34.7	41.9
Cash cycle	22.3	75.7	78.0	52.6	50.7

Source: Company data, Nomura estimates

## Investment summary – Downgrade to Reduce

We revisit our investment thesis for Adani Power (Adani) and downgrade the stock to Reduce; our revised FCFE-based 12-month TP for the stock is pegged at INR35 (INR115 previously), implying potential 16.7% downside from the CMP. In our view, Adani's earnings outlook hinges on of a handful of 'binary outcome' regulatory/legal events relating to PPAs and fuel sourcing, wherein the timeline for securing clarity is difficult to assess; in the interim, we expect the existing combination of the coal sourcing mix, long-term PPA tariffs and funding costs to take a toll on earnings. Our FY13F/14F/15F earnings estimates for Adani are well below consensus. On our FY14F earnings estimate, valuation multiples (1.6x P/B, 7.8x EV/EBITDA and 12.0x P/E) are not inexpensive vis-à-vis its peers'.

In our view, the 32% YTD decline in Adani's stock price and progressive consensus earnings downgrades stem from a combination of: 1) persistent fuel supply woes at Mundra (shortfall in supply from Bunyu); 2) diminished prospects of securing domestic linkage coal for Tiroda-II and Kawai due to regulatory developments; 3) project cost overruns and high gearing with significant exposure to f/x debt; and 4) non-remunerative Power Purchase Agreements (PPAs), wherein fuel costs are not a pass thru. As moving parts related to fuel sourcing/PPAs hang in the balance and entail potentially binary outcomes, we believe the earnings outlook for the company appears highly volatile; in the interim, the existing combination of the coal sourcing mix and PPA tariffs is likely to continue to take toll on earnings, in our view.

We update our earnings model for Adani to capture reported financials and disclosures in its FY12 annual report. Together with our revised house assumptions for benchmark seaborne thermal prices, and a weaker INR/USD averaging at 55.5, inferences from management commentary post 1QFY13 earnings and our recent interaction with policymakers, we now expect Adani to post a normalized net loss of INR0.5/share (vs our previous forecast for net profit of INR15.7/share) for FY13F; our revised FY14F/15F normalized net profit forecasts for Adani are 17/40% below consensus, with the bulk of the variance stemming from expected net interest outgo.

We continue to base our target price for Adani on the milestone risk-adjusted FCFE of operational/feasible projects (9.2GW now, vs 13.2GW previously). Our 12-month TP for the stock is now pegged at INR35/share (vs INR115/share previously); the 69% cut comes on: 1) significant deterioration in the earnings outlook; 2) higher risk profile for projects and balance sheet; and 3) exclusion of the proposed capacity at Dahej and Chhindwara (which the company has put on the backburner). On our FY14F earnings, the valuation multiples (1.6x P/B, 7.8x EV/EBITDA and 12.0x P/E) are not inexpensive vis-a-vis its peers'.

**Fig. 1: ADANI – Milestone risk-adjusted FCFE-based value of projects**

INR/USD depreciation, fuel sourcing woes, project cost overruns and higher beta lead to a 37% drop in our milestone risk-adjusted FCFE for Adani

Projects	New	Old	Key reason for variation
<b>OPERATIONAL</b>			
Mundra - I	15.3	20.9	Revised (sharply depreciated) INR/USD forecast, no linkage coal
Mundra - II	(11.7)	15.2	Revised INR/USD, no linkage coal, low PLF + no merchant sales
Mundra - III	9.9	29.6	Revised INR/USD, project cost overrun, pushback in CoD
<b>Total</b>	<b>13.5</b>	<b>65.8</b>	
<b>WORK in PROGRESS</b>			
Tiroda-I	15.2	10.3	Post-merger value, capex completion by FY13
Tiroda-II	0.9	8.3	Diminished prospects of securing linkage coal (no linkage coal assumed)
Kawai	(8.9)	4.9	Diminished prospects of securing linkage coal (no linkage coal assumed)
Chhindwara	-	2.3	Project put on backburner
Dahej	-	6.0	Project put on backburner
<b>Total</b>	<b>7.2</b>	<b>31.8</b>	
<b>Value of projects</b>	<b>20.7</b>	<b>97.6</b>	
Cash (INR/sh)	14.0	17.1	Switch from FY12F to FY13F
<b>Milestone Risk Adjusted FCFE</b>	<b>34.7</b>	<b>114.7</b>	
<b>12-mth TP (Rounded)</b>	<b>35.0</b>	<b>115.0</b>	
Cost of Equity	15.0%	13.0%	Higher risk profile, rise in Beta ups CoE; impacts fair value by INR7/share

Note: We assume the entire capacity at Tiroda-I to be operational by March 2013, in line with company's guidance Source: Nomura estimates

### What do we build in to our base-case earnings forecast?

- **Macro:** [1] We peg the average INR/USD at 55.0 for FY13F and 55.5 for FY14F/15F, in line with current INR/USD rates. [2] Our imported coal price assumption is derived from our Global Metals & Mining team's seaborne thermal coal price forecasts, adjusted for indicative GCV of non-Bunyu coal procured by Adani. [3] Based on short/medium-term PPAs tied up by Adani and the merchant/PPA capacity mix, we peg FY13F, FY14F and FY15F merchant realization at INR4.25/kWh, INR4.1/kWh and INR4/kWh, respectively.
- **Mundra (4620MW):** [1] No domestic coal linkage for Mundra-I or Mundra-II, domestic linkage coal supply for Mundra-III restricted to trigger level (minimum guarantee by Coal India); [2] supply of Bunyu coal at 5.1mt / 7.5mt / 9.0mt in FY13F/14F/15F; [3] Mundra-II (1320MW) to operate at a utilization level of 50% (indicative minimum utilization level) at the existing PPA tariff of INR2.35/kWh (excluding customs duty); [4] project cost pegged at INR250bn at a 80:20 D/E ratio, with ~50% of debt denominated in f/x as of end-FY12.
- **Tiroda (3300MW):** [1] Commercial start-up of Tiroda-I (1980MW) by March 2013; supply of domestic linkage coal restricted to trigger level; [2] no domestic coal linkage for Tiroda-II (1320MW), with fuel mix assumed at 30% domestic non-linkage coal and 70% imported coal; [3] project cost pegged at INR156bn at 80:20 D/E ratio, with ~85% invested up to FY12 wherein ~90% of debt is in f/x (mostly LCs to be converted into term loans).
- **Kawai (1320MW):** [1] Commercial start-up by August 2013; [2] no domestic coal linkage, with fuel mix assumed at 30% domestic non-linkage coal and 70% imported coal; [3] project cost pegged at INR70bn at 80:20 D/E ratio, with ~70% invested up to FY12 wherein ~90% of debt is in f/x (mostly LCs to be converted into term loans)

**Fig. 2: ADANI – Key operating metrics/assumptions**

Overall utilization level likely to remain muted in near term; fuel sourcing + PPA tariffs key to profitability

	FY12	FY13F	FY14F	FY15F
<b>Capacity / Generation</b>				
Capacity (MW) – YE	2,640	5,940	9,240	9,240
Capacity (MW) – Effective	2,295	4,383	8,394	9,240
PLF	68.3%	69.4%	71.0%	74.3%
Gross Generation (mn kWh)	13,721	26,660	52,235	60,129
Sales (mn kWh)	12,350	24,099	47,665	54,340
PPA (% of total)	73.7	63.3	73.7	86.1
<b>Fuel</b>				
INR/USD (Average)	48.0	55.0	55.5	55.5
<b>Coal consumed/required</b>	<b>6.9</b>	<b>13.0</b>	<b>26.0</b>	<b>29.1</b>
Domestic	-	2.6	11.2	12.3
Imported	6.9	10.4	14.8	16.8
<b>Coal Imported</b>	<b>6.9</b>	<b>10.4</b>	<b>14.8</b>	<b>16.8</b>
Bunyu	2.2	5.1	7.5	9.0
Non-Bunyu	4.7	5.3	7.3	7.8
<b>Coal cost (FOB, US\$/ton)</b>	<b>71</b>	<b>53</b>	<b>45</b>	<b>40</b>
Bunyu	36	36	36	36
Non-Bunyu (5100-5400GCV)	102	71	74	80
<b>Coal cost (Landed, INR/ton)</b>	<b>3,287</b>	<b>3,475</b>	<b>3,200</b>	<b>3,314</b>
Mundra (4620MW)	3,287	3,652	2,997	2,745
Tiroda (3300MW)	-	2,143	3,025	3,431
Kawai (1320MW)	-	-	4,712	4,953
<b>Realization / cost (INR/kWh)</b>				
Tariff realization - Blended	3.2	3.2	3.2	3.1
Tariff realization - Merchant/short-term	4.4	4.3	4.1	4.0
Fuel cost - Blended	1.9	1.9	1.7	1.7

Note: Landed = FOB/pit-head price + freight (inland and/or sea) + import duty + port/handling charges

Source: Company data, Nomura estimates

**Fig. 3: ADANI – Nomura vs consensus (INRmn)**

Reported PAT forecast sharply below consensus for FY13-15F

	FY13F	FY14F	FY15F
<b>Consolidated Sales</b>			
Nomura	80,268	155,148	172,788
Consensus	86,454	138,065	168,927
<i>Nomura Vs Consensus (%)</i>	(7.2)	12.4	2.3
<b>Consolidated EBITDA</b>			
Nomura	26,127	58,028	61,869
Consensus	30,718	56,451	68,045
<i>Nomura Vs Consensus (%)</i>	(14.9)	2.8	(9.1)
<b>Consolidated Net Profit (Normalized)</b>			
Nomura	(1,257)	8,433	7,696
Consensus	2,948	10,159	12,750
<i>Nomura Vs Consensus (%)</i>	NM	(17.0)	(39.6)
<b>Reported PAT</b>			
Nomura	(3,466)	8,433	7,696
Consensus	2,835	9,820	12,342
<i>Nomura Vs Consensus (%)</i>	NM	(14.1)	(37.6)

Source: Bloomberg, Nomura estimates

**Fig. 4: ADANI – Change in headline estimates (INR mn)**

Fuel sourcing, project cost escalations &amp; INR depreciation take toll

	FY12	FY13F	FY14F
<b>Revenue</b>			
New	40,898	80,268	155,148
Old	73,521	138,181	NA
<i>% change</i>	(44.4)	(41.9)	
<b>EBITDA</b>			
New	13,252	26,127	58,028
Old	45,278	80,111	NA
<i>% change</i>	(70.7)	(67.4)	
<b>Normalized Net Profit</b>			
New	(924)	(1,257)	8,433
Old	21,852	34,119	NA
<i>% change</i>	NM	NM	
<b>Reported PAT</b>			
New	(2,873)	(3,466)	8,433
Old	21,852	34,119	NA
<i>% change</i>	NM	NM	

Source: Company data, Nomura estimates

**Fig. 5: ADANI – Earnings, FCFE sensitivity to key operating/financial assumptions**

Earnings highly sensitive to blended coal cost, utilization levels

Sensitivity to key assumptions	EPS (INR/sh)			Adj. FCFE (INR/sh)
	FY13F	FY14F	FY15F	
<b>PLF</b>				
Base case	(0.5)	3.5	3.2	35.0
+10% change	(1.0)	5.1	4.9	44.0
-10% change	(0.1)	2.2	1.5	24.0
<i>Sensitivity to 1% variation (%)</i>	8.4	3.8	5.5	3.1
<b>Merchant tariffs</b>				
Base case	(0.5)	3.5	3.2	35.0
+10% change	(0.5)	5.1	4.3	42.0
-10% change	(0.5)	2.0	2.2	27.0
<i>Sensitivity to 1% variation (%)</i>	-	4.4	3.3	2.3
<b>Interest Cost</b>				
Base case	(0.5)	3.5	3.2	35.0
+100bps change	(0.8)	3.1	2.7	32.0
-100bps change	(0.3)	4.0	3.7	37.0
<i>Sensitivity to 1% variation (%)</i>	4.3	1.2	1.5	0.6
<b>O&amp;M Cost</b>				
Base case	(0.5)	3.5	3.2	35.0
+10% change	(0.6)	3.3	2.9	33.0
-10% change	(0.4)	3.8	3.5	37.0
<i>Sensitivity to 1% variation (%)</i>	2.4	0.7	1.0	0.6
<b>Blended Coal Cost (CIF Price/at Mine)</b>				
Base case	(0.5)	3.5	3.2	35.0
+10% change	(2.2)	0.7	(0.3)	10.0
-10% change	1.2	6.3	6.7	60.0
<i>Sensitivity to 1% variation (%)</i>	32.3	7.8	11.0	7.1

Source: Company data, Nomura estimates

### Key changes in assumptions behind our FY13F-15F earnings forecast

Overall, we expect that increased availability of ex-Bunyu coal and the start-up of capacity fired primarily by domestic linkage coal to enable an improvement in Adani's bottom line starting from 2HFY13. Thereafter, we expect earnings to show a sharp rise in FY14 as the majority of the under-construction capacity comes on-stream and Adani utilizes the pre-LTPPA (long-term PPA) time window to sell electricity on a 'merchant basis' (albeit on market-priced / imported coal). However, in the absence of long-term domestic coal linkage for Tiroda-II and Kawai and lack of clarity on refinancing of its project-linked f/x LCs (letters of credit), we expect FY15F net profit to be lower y-y. Our FY14F/15F normalized net profit forecasts for Adani are 17/40% below consensus; however, the disparity vs consensus is smaller at the EBIDTA level (Figure 3)

Key changes in our underlying assumptions for Adani's earnings model –

- **Coal sourcing / pricing:** Our non-Bunyu imported coal price assumption is based on our Global Metals & Mining team's benchmark coal price forecast, adjusted for 1QFY13 actuals and indicative GCV of spot coal procured by Adani. We build in coal supply from Bunyu at 9mtpa in FY15F (vs management guidance of 9mtpa in FY14). Our revised overall coal requirement (in mt) for FY13F/14F/15F is lower than our previous forecast on account of [1] non-availability of domestic linkage coal necessitating higher imports (wherein the quantity required drops due to higher GCV of coal) and [2] push back in capacity commission combined with lower utilization levels.
- **INR/USD exchange rate:** In line with the average INR/USD rate for FY13 (year to date), we peg the average INR/USD rate at 55 for FY13F and 55.5 for FY14F and FY15F. Our new INR/USD assumptions pegs the INR 30-35% lower (depreciated) versus the USD, resulting in a higher CIF cost of imported coal.
- **Merchant tariff realizations:** Based on the existing short/medium-term PPA contracts for Adani and probability merchant tariffs being 'supported' over the next 18 months in the run up to general elections, we raise our merchant realization assumption for Adani by 6% for FY13F to INR4.25/kWh and 9% for FY14F to INR4.1/kWh. Long-term merchant realizations are pegged at INR3.75/kWh (vs INR3.5/kWh previously).

### Key risks to our investment thesis for Adani Power

Along the lines of favourable outcomes in our 'what-if' scenarios for a handful of key variables (elaborated later in the report), risks to our earnings forecast and rating rationale for Adani are summarized below (earnings, TP sensitivity shown in Figure 8).

**Fig. 6: ADANI – Changes to key assumptions**

We lower our INR/USD forecast

	FY13F	FY14F	FY15F
<b>Effective Capacity (MW)</b>			
New	4,383	8,394	9,240
Old	6,383	8,256	9,909
% Change	(31.3)	1.7	(6.8)
<b>Merchant Realization (INR/kWh)</b>			
New	4.3	4.1	4.0
Old	4.0	3.8	3.5
% Change	6.3	9.3	14.3
<b>Blended Fuel Cost (INR/kWh)</b>			
New	1.9	1.7	1.7
Old	1.1	1.4	1.4
% Change	66.8	28.4	24.5
<b>INR/USD (Average)</b>			
New	55.0	55.5	55.5
Old	42.6	41.5	41.1
% Change	29.0	33.6	35.0

Source: Nomura estimates

**Fig. 7: ADANI – Changes in coal mix**

Change in coal import due to slower-than-earlier expected Bunyu ramp up

	FY13F	FY14F	FY15F
<b>Domestic Coal Requirement (mt)</b>			
New	2.6	11.2	12.3
Old	13.4	15.9	19.9
% Change	(80.3)	(29.1)	(38.3)
<b>Imported Coal Requirement (mt)</b>			
New	10.4	14.8	16.8
Old	10.1	13.2	15.1
% Change	2.9	11.7	11.0
<b>Total Coal Requirement (mt)</b>			
New	13.0	26.0	29.1
Old	23.4	29.1	35.0
% Change	(44.6)	(10.6)	(17.1)

Source: Nomura estimates

- *Lower-than-expected landed cost of imported coal* – Besides the domestic/imported coal mix, Adani's earnings are highly sensitive to the landed cost of imported coal (in INR terms), which in turn is an interplay among [1] supply ramp-up from Bunyu, [2] FOB price of seaborne thermal coal, and [3] INR/USD exchange rate fluctuation. A sharp appreciation of the INR and/or below-expected CIF price of ex-Indonesia coal could potentially lead to upward revision in our earnings outlook and TP for the stock.
- *Termination/alteration of fixed cost PPAs* – Adani is looking to rework / exit its long-term PPAs from its Mundra-II (1000MW with GUVNL), Mundra-III (1424MW with Haryana SEBs) and Tiroda-I (1320MW with MSEDCL) facilities, where its bid tariffs rule out indexation of energy charges (ie, fuel cost recovery is fixed at the quoted tariff). A positive outcome on these representations by management could potentially boost Adani's earnings prospects and reduce the risk profile of its projects.
- *Securing domestic linkage coal* – As elaborated in the 'scenario analysis' section of this report, success in securing domestic coal linkages for Mundra I, Mundra-II, Tiroda-II and Kawai could potentially merit an increase in Adani's earnings and TP for the stock.
- *Merchant tariff realizations* – We currently peg Adani's FY13F/14F/15F merchant realizations at INR4.25/kWh, INR4.1/kWh and INR4/kWh, respectively; higher-than-expected merchant tariff realization could merit an earnings and TP increase.
- *CERs could raise earnings, but marginally* – As per a recent company press release of 1.8mn CERs per annum for Mundra-III (at 80-85% utilization level), if Adani were to receive INR600mn annually (pre-tax at EUR4.54/CER, last 1 year average price), our FY14F/15F earnings estimate could go up marginally by 6.3/5.8%.
- *Coal price pooling would lower fuel costs* – If implemented, coal price pooling mechanism would likely improve profitability of Mundra-III and Tiroda-II (facilities eligible to get linkage coal), in our view, as the cost of imported coal would likely decline, albeit partially offset by a higher cost of domestic coal. Further, Adani could divert its low-cost Bunyu coal from Mundra-III to meet coal requirements for its other projects.

## Assessing earnings outlook on 'what-if' scenarios

In our view, Adani's earnings trajectory and fair value of the stock is contingent on a handful of potentially 'binary outcome' scenarios (elaborated below) related to issues including domestic fuel linkage, supply ramp-up from Bunyu and endgame regarding non-remunerative PPAs. Favourable outcome on these issues forms the key risks to our earnings forecast for Adani and investment thesis for the stock.

- *Scenario I: Faster-than-assumed supply ramp up from Bunyu* – Our base-case earnings forecast for Adani assumes coal receipt from Bunyu at 5.1mt / 7.5mt / 9.0mt in FY13F/FY14F/FY15F, respectively. Although supply from Bunyu has been below management guidance over the past few quarters, if production ramp-up and consequent supply is closer to management guidance of 6mt/9mt in FY13/FY14, our FY13F/14F EPS forecast for Adani would rise by 28%/4% respectively; and our 12-mth TP could rise by ~6% to INR37/share, based on our calculations.
- *Scenario II: Termination of PPA with GUVNL (1000MW at INR2.35/kWh from Mundra* – Our base-case earnings forecast for Adani assumes Mundra-II (1320MW) to operate at utilization level of 50% (indicative minimum utilization level as per management) at the existing PPA tariff of INR2.35/kWh (excluding customs duty). Adani has filed a petition in the Supreme Court to terminate this PPA and pay a penalty of INR1bn, as per the terms of the PPA. If the Supreme Court rules in Adani's favour, and Adani is able to ramp-up the utilization level of Mundra-II to 80% and realize a tariff of even INR3/kWh, we estimate our FY14F/15F EPS forecast for Adani could rise by 56-72%, respectively; 12-mth TP could rise by ~37% to INR48/share.
- *Scenario III: 30% linkage coal for Mundra I & II starting FY14* – Our base-case earnings forecast for Adani assumes no domestic coal linkage for Mundra-I, II. However, if the Ministry of Power's (MoPs) request for restoring 30% domestic coal linkage for Mundra-I,II is accepted by the Standing Linkage Committee (SLC), we estimate our FY14F/15F



EPS forecast for Adani could rise by 29%/21% respectively; and our 12-mth TP could rise by ~14% to INR40/share.

- **Scenario IV: Availability of linkage coal for Tiroda-II and Kawai post FY15** – Our base-case earnings forecast for Adani assumes no domestic coal linkage for Tiroda- II and Kawai. Our interaction with policymakers suggests that unless the criterion of “LoA being a pre-requisite for a project being considered by the CEA for eligibility to secure an FSA” is altered, prospects of Kawai and Tiroda-II securing linkage coal, at least up to FY15 (and probably until the end of the XIIth Plan [ie, FY17], in our view), appear dim. If Adani were to secure 9.8mt coal linkage from FY16 onwards, we show the resultant FCFE value of Tiroda-II and Kawai could rise significantly, raising our 12-mth TP by as much as 77% to INR62/share.
- **Scenario V: USD/INR slips to ~60 by FY14** – As against our base-case assumption of USD/INR at 55.5 for the explicit term, if the rupee were to drop to ~60 vs the USD by FY14F, as outlined by our economics team in their report titled *Asia Special Report: India's Chronic Balance of Payments*, dated September 3, 2012, Adani's earnings outlook would likely be severely impacted (fuel cost would rise sharply, exchange rate-related losses would rise, cash requirements for debt servicing/repayment would rise potentially requiring an equity infusion). Our FY13F/14F/15F EPS forecasts for Adani could decrease by 19%/42%/46%; our 12-mth TP could go down by ~26% to INR26/share under such an f/x scenario.

**Fig. 8: ADANI – Scenario analysis for key ‘binary outcome’ variables**

Outcome and timeline for playing out of the scenarios is difficult to assess

	EPS (INR/sh)			Adj. FCFE (INR/sh)
	FY13F	FY14F	FY15F	
<b>Scenario I (Faster supply ramp up from Bunyu )</b>				
Base case				
Bunyu Production (mt)	5.1	7.5	9.0	
EPS	(0.5)	3.5	3.2	35.0
Alternative Case				
Bunyu Production (mt)	6.0	9.0	9.0	
EPS	0.3	4.5	3.3	37.0
% Upside/(downside)	153.8	28.0	4.2	5.7
<b>Scenario II (Termination of PPA with GUVNL)</b>				
Base case				
	(0.5)	3.5	3.2	35.0
Alternative Case				
	(0.5)	5.5	5.6	48.0
% Upside/(downside)	-	56.4	72.7	37.1
<b>Scenario III (30% linkage coal for Mundra I &amp; II starting FY14 )</b>				
Base case				
	(0.5)	3.5	3.2	35.0
Alternative Case				
	(0.5)	4.5	3.9	40.0
% Upside/(downside)	-	28.6	20.7	14.3
<b>Scenario IV (Availability of linkage coal for Tiroda-II and Kawai post FY15 )</b>				
Base case				
	(0.5)	3.5	3.2	35.0
Alternative Case				
	(0.5)	3.5	3.2	62.0
% Upside/(downside)	-	-	-	77.1
<b>Scenario V (USDINR slips to ~60 by FY14)</b>				
Base case				
	(0.5)	3.5	3.2	35.0
Alternative Case				
	(0.6)	2.1	1.8	26.0
% Upside/(downside)	(18.6)	(41.8)	(45.5)	(25.7)

Source: Nomura estimates

## Earnings hinge on fuel sourcing, reworking PPAs

Despite Adani Group's vertical integration and credible execution capability together with Adani Power's front-ended capacity pipeline and a healthy off take mix, we believe the earnings outlook is hampered by two factors – [1] zero/partial fuel-cost pass thru across all its long-term PPAs; and [2] coal sourcing woes (slow ramp-up in supply from Bunyu mines and diminished prospects of securing linkage coal for Tiroda-II, Kawai and Mundra-I,II).

### Adani looking to rework / exit a few of its long-term PPAs...

We note that Adani is looking to rework/exit its long-term PPAs from its Mundra-II (1000MW with GUVNL), Mundra-III (1424MW with Haryana SEBs) and Tiroda-I (1320MW with MSEDCL) facilities, where its bid tariffs rule-out indexation of energy charges (ie, fuel cost recovery is fixed at the quoted tariff).

- Adani is currently in litigation in the Supreme Court for its 1000MW PPA with Gujarat Urja Vikas Nigam from its Mundra-II facility (PPA tariff is set at INR2.35/kWh) wherein it seeks to exit the PPA upon payment of the INR1bn penalty stipulated in the contract. Previously, the Gujarat Electricity Regulator (GERC) and the Appellate Tribunal (APTEL) ruled against Adani on this matter.
- Separately, Adani has filed a petition with the Central Electricity Regulator (CERC) seeking prompt development of a mechanism to revise the tariff under the PPAs with GUVNL and Haryana SEBs (UHBVNL, DHBVNL) on account of: [1] unforeseeable/uncontrollable change in circumstances for the allotment of domestic coal by the Government of India/Coal India; and [2] enactment of New Coal Pricing Regulation by the Government of Indonesia thereby impeding the existing contracts. The CERC is currently examining the maintainability of Adani's petition.
- Adani is also negotiating the tariff for its 1320MW PPA with MSEDCL (the PPA started in August 2012 at a tariff of ~INR2.64/kWh).

At this time, the probability/timeline of Adani being able to rework PPA tariffs or to exit PPAs is difficult to assess. Our base-case earnings forecasts and TP calculation for Adani do not assume any tariff reworking or exit from its existing long-term PPAs

### Prospects of Tiroda-II and Kawai projects securing linkage coal...

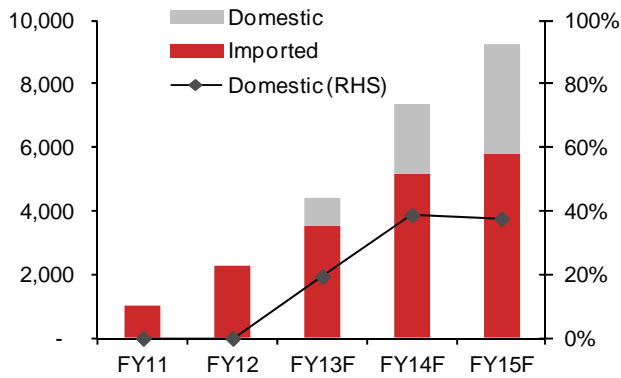
As per management, both Kawai and Tiroda-II are identified XIIth Plan projects by the Government of India and domestic coal allocation (linkage) will be secured in the next 3-4 months when the Standing Linkage Committee (SLC) on coal meets to decide on this issue. We note the following:

- Based on the milestone achievements and offtake tie-ups, we believe both Kawai and Tiroda-II would rank high on the parameters outlined by the Ministry of Power (MoP) in its policy for allocating coal linkage for XIIth Plan projects (see Figure 13).
- However, in the absence of a Letter of Assurance (LoA) from Coal India, both projects do not find a mention in the Central Electricity Authority's (CEA) list of projects eligible to secure linkage coal (via an FSA) from Coal India up to FY15.
- Fuel cost is partially a pass-thru in the case of the LT PPAs of Tiroda-II and Kawai given that there are both an escalable and a fixed energy charge component in the tariff build-up; accordingly, profitability prospects would vary directly with the proportion of domestic linkage coal in the fuel mix.

Our interaction with policymakers suggests that unless the criterion of "a LoA from Coal India being a pre-requisite for a project to be considered by the CEA for eligibility to secure an FSA" is altered, prospects of Kawai and Tiroda-II securing linkage coal, at least up to FY15 (and probably until the end of the XIIth Plan, [ie, FY17]), appear dim. In the absence of further clarity on this issue, our base-case earnings forecast for Adani assumes a fuel mix for Tiroda-II and Kawai of 30% domestic non-linkage coal and 70% imported coal.

**Fig. 9: ADANI – Fuel-type capacity split**

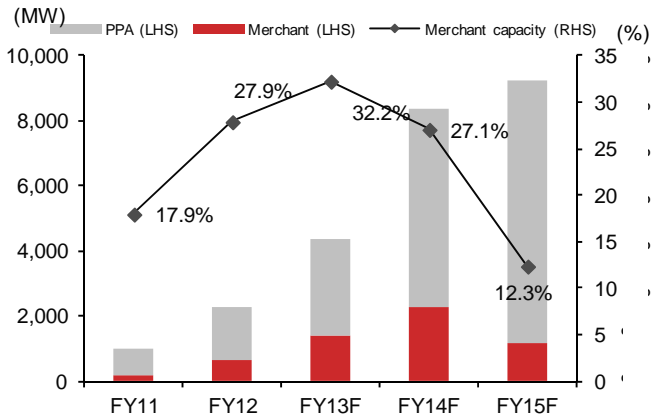
Two-thirds of capacity up to FY15F based on imported spot coal



Source: Company data, Nomura estimates

**Fig. 10: ADANI – Off-take split of effective capacity**

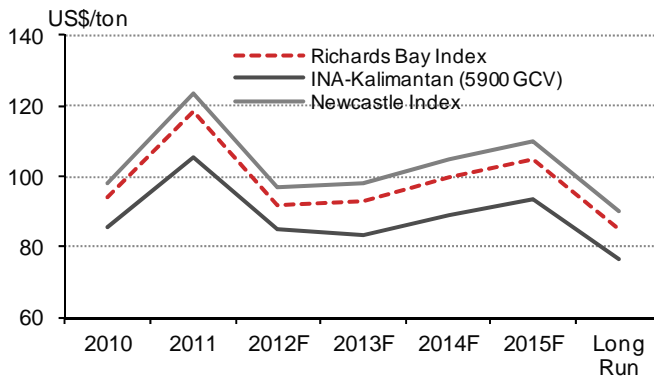
Nearly 50% off-take to remain exposed to merchant/short-term tariffs



Source: Company data, Nomura estimates

**Fig. 11: Nomura's thermal coal price forecast**

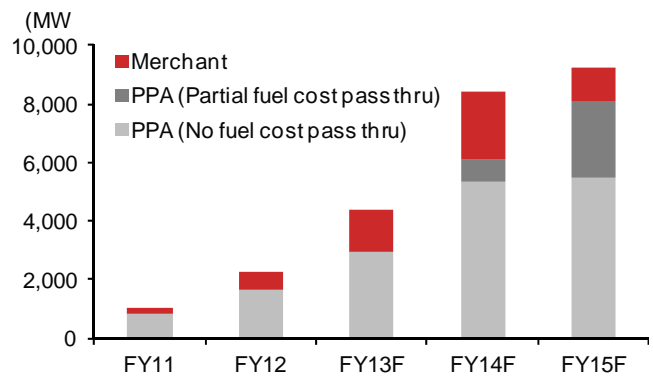
We peg Richards Bay price at USD101/ton in CY12F; USD105/ton in CY13F



Source: Bloomberg, Nomura estimates

**Fig. 12: ADANI – Off-take split of effective coal-fired capacity**

Only 47% of the PPA-linked capacity (FY15F) has a 100% fuel pass-thru



Source: Company data, Nomura estimates

**Fig. 13: Parameters for coal linkage allocation for XIth Plan projects**

Actual drawdown of coal will require at least 85% of off-take routed via long-term PPAs

Parameters	Weight (%)
Projects based on supercritical technology	20
Projects at pit-head or in states where no major projects have been planned in the past	20
Projects using seawater instead of freshwater	10
Progress of land acquisition	
25-50% land acquired	20
50-75% land acquired	30
75-100% land acquired	40
100% land acquired	50
<b>Total</b>	<b>100</b>

Source: Ministry of Power, Nomura research

**Prospects of Mundra-I, II securing linkage coal for 30% of requirement...**

The MoP's request to restore 30% coal linkage (LoA) for a few imported coal-based power projects (including Mundra-I, II) for which linkage was granted in 2010 but later revoked in 2011, remains under consideration by the SLC. Specifically, for Mundra-I, II (2640MW), the SLC has asked the MoP to clarify the 'changed circumstances and technical details' which justify restoration of the LoA. In our view, considering the scarcity of domestic coal, probability of securing domestic coal for a primarily imported-coal fired project in the coastal area (like Mundra-I, II) appears low. Our base-case earnings

forecast for Adani assumes a fuel mix for Mundra-I, II of 100% imported coal from Bunyu (supplemented by spot imported coal to the extent of any shortfall in supply from Bunyu).

**Fig. 14: ADANI – Coal demand-supply ramp-up (mt)**

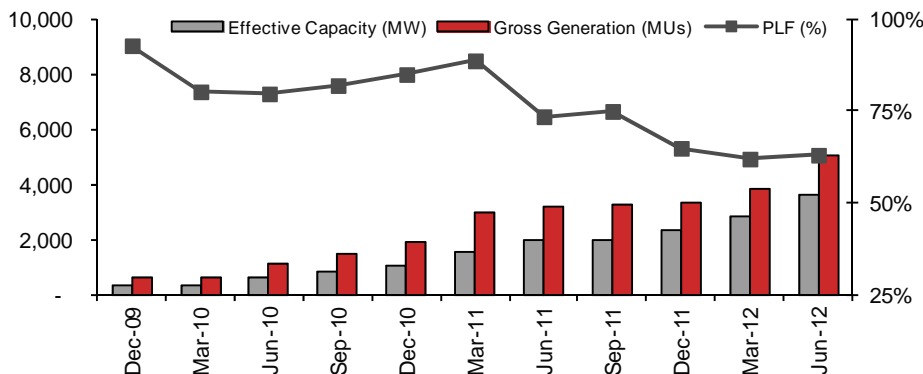
We assume supply from Bunyu at 9mtpa from FY15 onwards; no linkage coal for Tiroda-II and Kawai

	FY11	FY12	FY13F	FY14F	FY15F
<b>Coal-fired Capacity (MW)</b>					
Year-end	1,980	2,640	5,940	9,240	9,240
Effective	1,016	2,295	4,383	8,394	9,240
<b>Coal Requirement (mt)</b>					
<i>Imported</i>	3.5	6.9	10.4	14.8	16.8
Bunyu	-	2.2	5.1	7.5	9.0
Non-Bunyu	3.5	4.7	5.3	7.3	7.8
<i>Domestic</i>	0.3	-	2.6	11.2	12.3
Linkage	0.3	-	1.8	8.7	9.2
e-Auction	-	-	0.8	2.5	3.1
<b>Total</b>	<b>3.8</b>	<b>6.9</b>	<b>13.0</b>	<b>26.0</b>	<b>29.1</b>
<b>Coal Mix (%)</b>					
<i>Domestic</i>	7.8	-	20.3	43.2	42.3
Linkage	7.8	-	13.9	33.6	31.7
e-Auction	-	-	6.4	9.7	10.6
<i>Imported</i>	92.2	100.0	79.7	56.8	57.7
Bunyu	-	31.9	39.2	28.8	31.0
Non-Bunyu	92.2	68.1	40.5	27.9	26.8

Note: Our GCV assumptions are – Bunyu (4800kCal/kg), Non-Bunyu (5200kCal/kg), Domestic (4000kCal/kg)  
 Source: Company data, Nomura estimates

**Fig. 15: ADANI – Quarterly utilization level**

utilization level post the capacity ramp-up period has been on a downward trend



Source: CEA, Company data, Nomura research

## Balance sheet: Sharp rise in leverage is disconcerting

### Project cost escalation, high f/x debt exposure aggravating leverage

In our view, while an uptick in leverage as of FY12 was expected as major projects near completion and revenues and debt repayments are scheduled to manifest from 2HFY13, the magnitude of the debt increase (despite adjustment for INR depreciation), together with the increase in CWIP, suggests project cost escalation for Mundra. Studying Adani's FY12 annual report for disclosures on debt, we note:

- Leverage (net debt/equity) on the consolidated balance sheet shot up to 5.9x as of FY12 vs 3.7x as of FY11;
- 70% of total debt as of FY12 was in foreign currency (f/x); the proportion is unchanged from FY11. For FY12, 26% of the increase in f/x debt (implying 18% of the increase in total debt) was on account of INR depreciation vs the USD.

### Refinancing of f/x LCs (for project finance) critical to keep interest rate in check

While details on the project-specific current and target debt mix are not available, we note that USD3.5bn of Adani's USD5.4bn f/x debt earmarked for funding projects is in the form of 'Bills discounted under LCs to be converted into term loans'. According to management, majority of the f/x LCs are due to be converted into domestic (INR) term loans over the next 24 months, implying that unless these LCs are refinanced (which Adani is actively pursuing), the effective interest rate for the company will rise sharply over the next two years and stabilize at a higher level thereafter. As we currently do not assume refinancing of these f/x LCs, our effective interest rate forecasts for Adani are 4.3%, 6.6% and 7.2% for FY13F, FY14F and FY15F, respectively.

**Fig. 16: ADANI – Consolidated debt mix and leverage**

Project cost escalation, high f/x debt + INR depreciation pushed up leverage to >6x; likely to drop in FY14F

Consolidated Debt (INR mn)	FY11	FY12
<b>Total</b>	<b>245,027</b>	<b>386,003</b>
Secured Loans / Long-term (incl. current portion)	223,524	311,138
Unsecured Loans / Short-term	21,503	74,865
<b>Debt Mix</b>		
<b>Leverage</b>		
Debt / Equity	3.9	6.4
Net Debt / Equity	3.7	5.9

Cons. Debt - Currency wise break up (INR mn)	FY11	FY12
<b>INR (Domestic Currency) Loans</b>	<b>71,043</b>	<b>107,532</b>
INR loans (banks + Fls + others)	45,654	89,895
<b>F/x (Foreign Currency) Loans</b>	<b>173,985</b>	<b>278,471</b>
FX term loans	30,987	62,286
Bills discounted under LC (to be converted to term loan:	135,497	179,230
Bills discounted under LC (w capital facilities)	7,500	36,956
<b>F/x (Foreign Currency) Loans</b>	<b>3,897</b>	<b>5,444</b>
FX term loans	694	1,218
Bills discounted under LC (to be converted to term loans)	3,035	3,504
Bills discounted under LC (w capital facilities)	168	722
<b>Variation in f/x loan (INR mn)</b>		<b>104,487</b>
Attributable to INR depreciation vs USD		25,353
Incremental debt raised		79,133
<i>Exchange Rate (USD/INR) used by Adani Power</i>	<i>44.7</i>	<i>51.2</i>

Source: Company data (FY11, FY12 annual reports), Nomura estimates

## Valuation: 12-month TP lowered to INR35

Our milestone risk-adjusted FCFE-based valuation methodology (which we deploy to value private IPPs) pegs Adani's 12-month target price at INR35, implying 16.7% downside from current levels. Our TP calculation for the stock values Adani's 9240MW of existing/pipeline capacity; we exclude 3960MW of pipeline capacity as the 2640MW Dahej and 1320MW Chhindwara projects have been placed on the backburner. On our FY14F earnings, the stock trades at 1.6x P/B, 7.8x EV/EBITDA and 12.0x P/E.

### Projects still valued on FCFE, adjusted for milestone-risk discounts

We continue to deploy a milestone risk-adjusted FCFE-based methodology to value Adani's power generation projects that appear 'feasible' (ie, operational and under construction/development, but with tangible progress and reasonable likelihood of materializing). The six milestone risks, which capture the risk of a power project from conception to commissioning, apply appropriate discounts to the FCFE value (provided it is not negative) of an under-construction project – in our view, this approach allows investors to objectively view the incremental value ascribed to a project as key prerequisites for commissioning fall into place.

### 'Milestone-risk' adjustments lower base-case FCFE-based fair value by 5%

At 15% cost of equity, based on our earnings forecast, we calculate the FCFE-based value of Adani's 9240MW of projects to be INR22.8/share; adding FY13F cash-on-hand of INR14/share, we estimate the unadjusted fair value of the stock would be INR37/share (rounded). Accordingly, even if we were to disregard the milestone-risk discounts we attribute to various projects, ceteris paribus, we find the current market price leaves no room for upside.

Key points to note in the 'milestone risk' assigned to the FCFE-based value of projects:

- The 30% milestone-risk discount for Tiroda-II (1320MW) and Kawai-II (1320MW) reflects the fuel security risk considering non-eligibility for securing domestic linkage coal as per current regulations and no alternative source of coal being identified. However, as our calculated FCFE for Kawai is negative, we do not apply the 30% milestone-risk discount to its FCFE value in our TP build-up for Adani;
- The 10% milestone risk discount for Tiroda-I (1980MW) reflects off-take tie-ups under long-term PPAs being in the range of 66-85% of the total capacity.

**Fig. 17: India power utilities – 'Milestone-risk' matrix for applying discount to FCFE value of private IPP projects**

Six milestones for coal/gas/hydro project that we track to bring objectivity to the fair value of a project as it progresses towards commissioning

Milestone	Max Risk	
	Weight	Basis / Methodology
Land Acquisition / Possession	15.0%	% of land required for the plant acquired / in possession [Full (NIL), >2/3rd (7.5%), <2/3rd (15%)]
Environment / Forest Clearances	15.0%	Not available / applied (15%); Stage-I / ToR secured (7.5%); All secured (NIL)
Water Availability	5.0%	No allocation (5%); allocation / sea water availability (NIL)
Financial Closure	15.0%	Not secured (15%), secured and/or 100% debt sanction (NIL)
Fuel Security (Sourcing)	30.0%	
Captive (domestic) *		No environment/forest clearance (15%), land for >50% mining area not acquired/possessed (15%)
Captive (imported)		No firm linkage / ownership (15%), no infrastructure for evacuation (15%)
LoA/linkage		FSA (NIL); LoA (15%); None (30%)
Offtake mix	20.0%	% of capacity tied-up in medium/long term PPA [>85% (NIL), 66-85% (10%), <2/3rd (20%)]
<b>Total</b>	<b>100.0%</b>	

Note: \* Risk weight is 15% or 7.5% within each sub-category based on extent of milestone achievement

Source: Nomura research

**Fig. 18: ADANI – 'Milestone-risk' discount matrix for under-construction projects**

Fuel security is the key risk for the Tiroda-II and Kawai projects

Project	Capacity (MW)	Land Availability	Env/Forest Clearance	Water Availability	Fuel Security	Offtake	Financial Closure	Total
Tiroda-I	1,980	-	0.0%	-	0.0%	10.0%	-	10.0%
Tiroda-II	1,320	-	-	-	30.0%	-	-	30.0%
Kawai	1,320	-	0.0%	-	30.0%	-	-	30.0%

Source: Company data, Nomura research

**Fig. 19: ADANI – FCFE-based target price build-up**

Combination of PPA tariffs + non-availability of domestic linkage coal (Tiroda-II, Mundra-I,II and Kawai) pulls down the FCFE value of these projects

Projects	APL's Stake	Capacity (MW)	COD Unit I	Project Equity	Implied P/B	FCFE - FY13F		Milestone Discount	Fair Value	
						Project	APL		(Rs mn)	(Rs/sh)
<b>OPERATIONAL</b>										
Mundra - I	100%	1,320	Oct-09	7,760	4.7	36,631	36,631	-	36,631	15.3
Mundra - II	100%	1,320	Feb-11	17,743	(1.6)	(28,032)	(28,032)	-	(28,032)	(11.7)
Mundra - III	100%	1,980	Nov-11	25,872	0.9	23,799	23,799	-	23,799	9.9
<b>UNDER CONSTRUCTION</b>										
Tiroda-I	100%	1,980	Oct-12	18,526	2.2	40,305	40,305	10%	36,274	15.2
Tiroda-II	100%	1,320	Jun-13	12,580	0.2	3,141	3,141	30%	2,199	0.9
Kawai	100%	1,320	May-13	14,060	(1.5)	(21,256)	(21,256)	0%	(21,256)	(8.9)
<b>PIPELINE</b>										
Chhindwara	100%	1,320	Sep-16	14,780	-	-	-	-	-	-
Dahej	100%	2,640	Oct-16	29,620	-	-	-	-	-	-

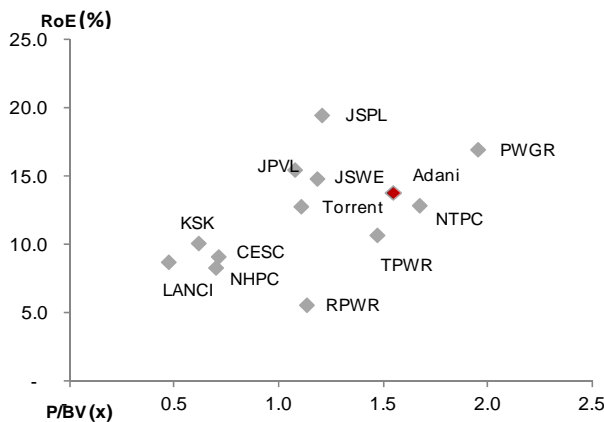
<b>Projects valued</b>	<b>9,240</b>	<b>96,541</b>	<b>0.6</b>	<b>54,589</b>	<b>54,589</b>	<b>49,616</b>	<b>21</b>
<b>Projects valued (US\$ mn)</b>		<b>1,755</b>		<b>993</b>	<b>993</b>	<b>902</b>	
Cost of Equity	15.0%						
Diluted Shares o/s (mn)					2,393	2,393	
<b>Value of projects (INR/share)</b>					<b>23</b>	<b>21</b>	
Cash on hand (FY13E)					33,500	33,500	
Cash (Rs/share)					14.0	14	
<b>Price Target (INR/share)</b>					<b>37</b>	<b>35</b>	

Notes: 1) Milestone discounts are applied to under-construction projects with a positive FCFE, 2) For milestone discount, we have assigned 15% weight to Land Acquisition/Possession, 15% to Environment & Forest Clearances, 30% to Fuel Security, 5% to Water Availability, 15% to Financial Closure and 20% to Offtake Mix; 2) Exchange rate assumption: INR/USD =55

Source: Company data, Nomura estimates

**Fig. 20: India utilities: FY14F RoE vs P/BV**

On FY14F RoE vs P/BV, Adani doesn't appear inexpensive

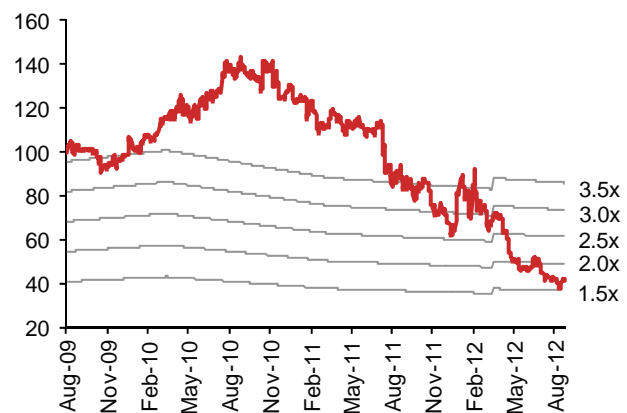


Note: LITL numbers as per Bloomberg consensus

Source: Bloomberg, Nomura estimates

**Fig. 21: ADANI – 1yr forward P/BV chart**

Currently trading at >40% discount to its 1-year average P/BV multiple



Source: Bloomberg, Nomura estimates

**Valuations: FY14F multiples are not cheap, at a marginal premium to private IPPs**

On our FY14F earnings forecasts, the stock trades at 1.6x P/B, 7.8x EV/EBITDA and 12.0x P/E. Based on our earnings forecasts for Adani, we believe FY13F valuation multiples are clearly expensive relative to the corresponding multiples of its peers (private IPPs); FY14F multiples are at a marginal premium to peers'. Accordingly, we note that unless any of the bull-case scenarios do not pan out for Adani and improve its earnings outlook, current multiples do not justify owning the stock.

**Fig. 22: ADANI – Domestic peer valuation comparison**

Relative to its peers, Adani Power's FY13F multiples appear expensive but its FY14F multiples appear more in-line

Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (Local)	P/E			P/B			ROE (%)			EV/EBITDA		
					FY12	FY13F	FY14F	FY12	FY13F	FY14F	FY12	FY13F	FY14F	FY12	FY13F	FY14F
<b>Covered</b>																
Adani Pow er	ADANI IN	Reduce	1,667	42.4	NM	NM	12.0	1.7	1.8	1.6	(1.5)	(2.1)	13.8	33.7	18.0	7.8
JSW Energy	JSW IN	Reduce	1,460	49.4	24.4	11.2	8.4	1.4	1.3	1.2	5.8	12.2	14.8	11.9	7.0	5.6
Lanco Infra **	LANCI IN	Buy	471	10.9	22.8	3.0	2.7	0.6	0.5	0.4	2.4	17.0	16.0	11.9	7.1	7.5
NTPC	NTPC IN	Buy	25,579	172.0	16.2	14.5	13.5	1.9	1.8	1.7	12.9	12.8	12.9	14.0	11.8	10.4
Pow er Grid	PWGR IN	Buy	10,183	122.0	18.6	15.0	12.1	2.4	2.2	2.0	13.6	15.2	17.0	13.7	11.5	10.0
Reliance Pow er	RPWR IN	Reduce	3,999	79.1	33.6	22.7	20.8	1.3	1.2	1.1	3.8	5.4	5.6	60.3	23.9	17.6
<b>Average (Ex. Lanco)</b>					<b>23.2</b>	<b>15.8</b>	<b>13.4</b>	<b>1.7</b>	<b>1.7</b>	<b>1.5</b>	<b>6.9</b>	<b>8.7</b>	<b>12.8</b>	<b>26.7</b>	<b>14.4</b>	<b>10.3</b>
<b>Covered @ TP</b>																
			TP (INR)	Upside												
Adani Pow er			35.0	-17%	NM	NM	9.9	1.4	1.5	1.3				32.4	17.3	7.5
JSW Energy			45.0	-9%	22.3	10.2	7.7	1.3	1.2	1.1				11.4	6.7	5.4
Lanco Infra **			30.0	176%	63.1	8.2	7.4	1.5	1.3	1.1				13.7	8.0	8.2
NTPC			205.0	19%	19.3	17.3	16.0	2.3	2.1	2.0				16.1	13.4	11.8
Pow er Grid			140.0	15%	21.3	17.2	13.9	2.8	2.5	2.2				14.7	12.3	10.6
Reliance Pow er			94.0	19%	40.0	26.9	24.7	1.5	1.4	1.3				67.6	26.0	18.9
<b>Non covered</b>																
CESC	CESC IN	NR	683	303.2	15.4	9.1	7.6	0.8	0.8	0.7	5.2	n.a	9.1	7.4	8.6	9.0
JPVL	JPVL IN	NR	1,401	29.6	19.4	11.4	8.4	1.4	1.2	1.1	7.5	13.0	15.5	14.5	11.5	9.8
JSPL	JSP IN	NR	5,804	344.3	8.1	7.8	6.7	1.8	1.5	1.2	24.6	n.a	19.5	6.9	6.8	6.2
KSK	KSK IN	NR	425	63.3	19.3	8.8	7.0	0.8	0.7	0.6	4.2	8.1	10.1	19.4	15.8	9.4
NHPC	NHPC IN	NR	3,916	17.7	6.7	9.7	8.5	0.8	0.7	0.7	11.7	n.a	8.3	6.3	7.9	6.9
Satluj Jal	SJVN IN	NR	1,425	19.1	7.4	n.a	n.a	1.0	n.a	n.a	14.2	n.a	n.a	4.2	n.a	n.a
Tata Pow er	TPWR IN	NR	4,081	95.4	NM	13.5	13.9	1.9	1.6	1.5	(8.7)	n.a	10.7	9.7	7.5	6.4
Torrent Pow er	TPW IN	NR	1,447	169.8	6.4	n.a	9.0	1.4	1.2	1.1	23.8	13.2	12.8	5.1	6.0	4.9
<b>Average</b>					<b>11.8</b>	<b>10.0</b>	<b>8.8</b>	<b>1.2</b>	<b>1.1</b>	<b>1.0</b>	<b>10.3</b>	<b>11.4</b>	<b>12.3</b>	<b>9.2</b>	<b>9.2</b>	<b>7.5</b>
<b>Overall average</b>					<b>15.0</b>	<b>10.4</b>	<b>9.2</b>	<b>1.4</b>	<b>1.3</b>	<b>1.1</b>	<b>8.9</b>	<b>11.2</b>	<b>13.4</b>	<b>12.2</b>	<b>10.0</b>	<b>7.8</b>

Note: Pricing as of September 10, 2012; \*\* Earnings forecast and TP are under review; NR = Not Rated

Source: Bloomberg for pricing and consensus forecasts for non-rated stocks, Nomura estimates

**Fig. 23: India Power Utilities – Price Performance**

ADANI has sharply underperformed its peers over the past 12 months on deteriorating fuel security and earnings disappointments

Company	B'berg Ticker	Ratings	Current Price (INR)	Absolute price performance (%)				YTD	CY2011
				1m	3m	6m	12m		
<b>BSE SENSEX</b>	<b>SENSEX</b>	<b>NA</b>	<b>17,767</b>	<b>1.2</b>	<b>6.6</b>	<b>(0.3)</b>	<b>7.7</b>	<b>15.0</b>	<b>(24.2)</b>
<b>Private IPPs</b>									
Adani Pow er	ADANI IN	Reduce	42.4	2.0	(11.9)	(43.4)	(49.4)	(32.1)	(52.2)
CESC	CESC IN	NR	303.2	1.0	8.0	(0.9)	6.9	50.5	(44.3)
Indiabulls Pow er	IBPOW IN	NR	11.0	(8.8)	(12.0)	(40.5)	(26.0)	28.8	(70.5)
JPVL	JPVL IN	NR	29.6	(6.5)	(20.7)	(32.7)	(10.7)	(15.5)	(31.7)
JSPL	JSP IN	NR	344.3	(16.1)	(20.3)	(43.7)	(34.0)	(24.0)	(37.2)
JSW Energy	JSW IN	Reduce	49.4	(4.5)	5.0	(27.4)	(13.0)	30.7	(60.3)
Lanco Infratech	LANCI IN	Buy	10.9	(12.5)	(20.5)	(51.3)	(37.3)	14.2	(84.8)
Reliance Pow er	RPWR IN	Reduce	79.1	(11.1)	(19.3)	(42.4)	2.1	11.4	(54.1)
Tata Pow er	TPWR IN	NR	95.4	(4.7)	(0.7)	(11.8)	(4.2)	9.3	(36.1)
Torrent Pow er	TPW IN	NR	169.8	9.9	(12.1)	(22.6)	(24.0)	(13.8)	(29.8)
<b>PSUs</b>									
NHPC	NHPC IN	NR	17.7	(4.3)	(4.3)	(16.2)	(27.7)	(2.2)	(35.5)
NTPC	NTPC IN	Buy	172.0	0.0	10.9	(0.7)	6.1	6.9	(20.5)
Pow er Grid	PWGR IN	Buy	122.0	2.0	13.7	9.5	29.3	21.8	3.6
Satluj Jal	SJVN IN	NR	19.1	(6.6)	(0.8)	(2.3)	(13.8)	0.5	(16.3)

Note: Pricing as of September 10, 2012

Source: Bloomberg, Nomura research



# Appendix A-1

## Analyst Certification

I, Anirudh Gangahar, hereby certify (1) that the views expressed in this Research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of my compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

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Issuer name	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
Adani Power	ADANI IN	INR 42	10-Sep-2012	Reduce	Not rated	

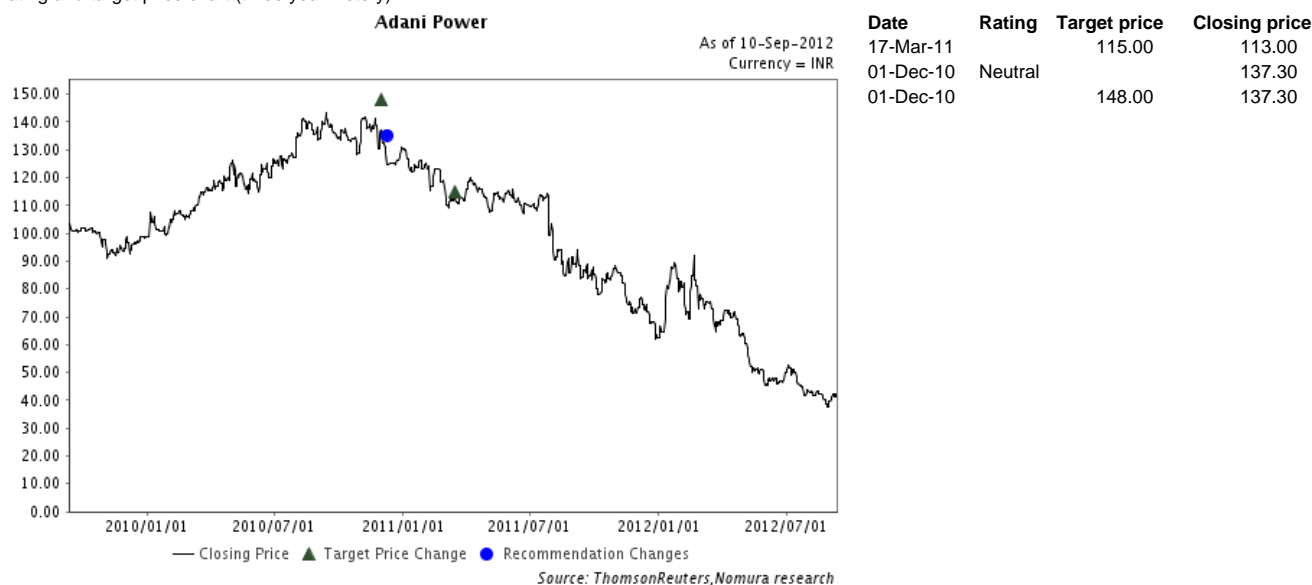
## Previous Rating

Issuer name	Previous Rating	Date of change
Adani Power	Neutral	11-Sep-2012

### Adani Power (ADANI IN)

INR 42 (10-Sep-2012) Reduce (Sector rating: Not rated)

Rating and target price chart (three year history)



For explanation of ratings refer to the stock rating keys located after chart(s)

**Valuation Methodology** We use a FCFE-based methodology to value the company's operational, under-construction, and reasonable-likelihood power generation projects. To capture the risk of a power project from conception to commissioning, we adjust the FCFE value of the projects for 'milestone discounts' (risk weights assigned to the non-achievement of six key milestones we identify for various types of projects). Our TP is INR35/share. A key assumption of our FCFE model is 15% cost of equity.

**Risks that may impede the achievement of the target price** Upside risks: 1) increase in tariff/delay in commencement date of 1000MW PPA with GUVNL; 2) availability of domestic coal supply for Mundra/Tiroda-I (6.6GW); and 3) fuel security for the next 6.6GW target capacity. Downside risks: 1) lower-than-expected merchant tariff realization; 2) lower GCV/higher price of imported coal from Adani Enterprises Ltd (AEL); and 3) shortfall in forecast linkage coal supply at Mundra and Tiroda.

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### STOCKS

A rating of '**Buy**', indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of '**Neutral**', indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of '**Reduce**', indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of '**Suspended**', indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies in certain circumstances including, but not limited to, when Nomura is acting in an advisory capacity in a merger or strategic transaction involving the company.

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### SECTORS

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Benchmarks are as follows: **United States**: S&P 500; **Europe**: Dow Jones STOXX 600; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia.

### Explanation of Nomura's equity research rating system in Japan and Asia ex-Japan

#### STOCKS

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A '**Buy**' recommendation indicates that potential upside is 15% or more. A '**Neutral**' recommendation indicates that potential upside is less than 15% or downside is less than 5%. A '**Reduce**' recommendation indicates that potential downside is 5% or more. A rating of '**Suspended**' indicates that the rating and target price have been suspended temporarily to comply with applicable regulations and/or firm policies in certain circumstances including when Nomura is acting in an advisory capacity in a merger or strategic transaction involving the subject company.

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#### **Target Price**

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