#### July 04, 2012

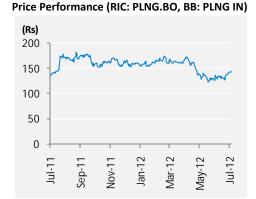
Deepak Pareek deepakpareek@plindia.com +91-22-66322241

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Rating	BUY
Price R:	s149
Target Price Rs	s176
Implied Upside 18	8.1%
Sensex 17	,463
Nifty 5	,303

(Prices as on July 04, 2012)

Trading data			
Market Cap. (Rs bi	n)		109.7
Shares o/s (m)			750.0
3M Avg. Daily valu	ie (Rs m)		422.5
Major shareholde	rs		
Promoters			50.00%
Foreign			14.28%
Domestic Inst.			7.11%
Public & Other			28.61%
Stock Performanc	e		
(%)	1M	6M	12M
Absolute	13.9	(5.4)	6.9
Relative	4.7	(15.3)	14.1
How we differ fro	m Consens	sus	
EPS (Rs)	PL	Cons.	% Diff.
2013	13.6	14.1	-3.1
2014	13.2	15.2	-13.1



Source: Bloomberg

## **Petronet LNG**

## Concerns priced in; offers decent upside

PLNG has witnessed ~20% correction from its highs on account of regulatory concerns over LNG terminals and cap on marketing margins. This, coupled with limited near-term earnings trigger, led to the subdued stock performance. However, we believe potential regulatory concerns are exaggerated and near-term flattish earnings profile overlooks the strong earnings potential, starting FY15. We maintain a **'BUY'** on the stock with revised target of Rs176/share (~19% upside).

- Concerns over potential regulation overblown: Currently, there is no regulation for LNG terminals in India. However, our analysis of the various regulations across geographies highlights the fact that some of the concerns over the potential third-party access of new LNG terminals or expanded capacity is exaggerated. International countries have increasingly been more liberal towards regulation of the LNG terminals.
- Dwindling domestic production unlikely to lower LNG intake capacity: Likely take-or-pay agreement for all the incremental Dahej expansion would reflect Dahej terminal's first-mover advantage in a scenario of tighter domestic gas supplies. This, coupled with opening of newer demand centres on account of newer pipelines, likely reforms in key user industries (led by fertilizer) and likely upward revision of the domestic gas prices is likely to put to rest concerns over utilisation of the upcoming incremental capacity at Dahej.
- Outlook: PLNG's utility nature of business (stable regasification margins and term contracts), low regulatory risks and expanding volumes on account of strong demand estimates, hold it in good stead. We believe that the concerns over the regulatory intervention on the marketing margin front as well as PNGRB regulating regasification charges are exaggerated.

Key financials (Y/e March)	2011	2012	2013E	<b>2014</b> E
Revenues (Rs m)	131,973	227,039	330,091	426,576
Growth (%)	23.9	72.0	45.4	29.2
EBITDA (Rs m)	12,161	18,373	17,047	20,768
PAT (Rs m)	6,195	10,795	10,233	9,880
EPS (Rs)	8.3	14.4	13.6	13.2
Growth (%)	53.1	74.3	(5.2)	(3.4)
Net DPS (Rs)	2.0	2.5	2.9	3.3
Profitability & Valuation	2011	2012	2013E	2014E
EBITDA margin (%)	9.2	8.1	5.2	4.9
RoE (%)	25.2	34.8	26.2	21.3
RoCE (%)	14.4	19.4	14.3	13.7

		0.110		-1.0
RoCE (%)	14.4	19.4	14.3	13.7
EV / sales (x)	1.1	0.6	0.4	0.3
EV / EBITDA (x)	11.5	7.2	8.3	6.9
PE (x)	18.0	10.3	10.9	11.3
P / BV (x)	4.2	3.2	2.6	2.2
Net dividend yield (%)	1.3	1.7	1.9	2.2

Source: Company Data; PL Research

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## **Investment Argument**

#### **Concerns over potential regulation overblown**

PLNG stock price has corrected by 11% since MoPNG proposed to hold consultations to finalise the eligibility conditions for registration as LNG infrastructure (http://www.petroleum.nic.in/Ing.pdf), inter alia, specifying minimum capacity, open access commitment, physical specification etc. While there is no mention about regulating regasification tariffs or marketing margins, the implied concern emanating from the move is if there is an open access, the tariffs are bound to be fixed in such scenario by the regulator. While the PNGRB act currently empowers the board to have requirements only related to registration of LNG terminals, market participants are getting increasingly jittery over the potential regulation of the regasification tariffs. Moreover, the open access model would adversely impact the marketing margins earned by the company in such a scenario. Moreover, the markets continue to remain concerned over the regulation of the marketing margins by PNGRB.

We believe the concerns are exaggerated and see limited risk on above counts on the following rationale:

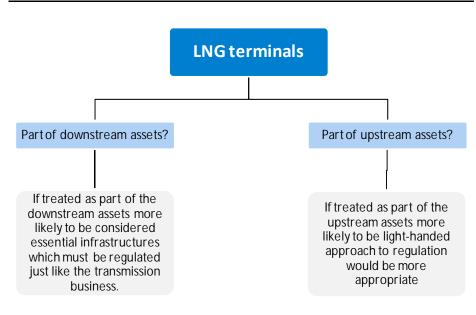
- As per the current provisions, LNG terminals are essential facilities for natural gas production and such activity has as per act, been excluded from regulatory ambit, except for the need of registration of entities desirous of establishing and operating LNG terminal after the board is established.
- PNGRB Act contains exhaustive list of facilities that the Act considers "infrastructure facilities" and LNG terminals does not form a part of the same. Thus, we believe, LNG terminals essentially form part of the upstream activity in the Indian regulatory parlance.
- The entire assets base and business of LNG regasification falls within economic activities in "competitive segment' where FDI is permitted on OGL basis.
- Regasified LNG competes in the market place with indigenous gas and also with other alternative fuels; thus, there is a check over the pricing power and margins in the industry.

The government is likely to engage in a consultative process with industry players and has invited their views on the subject. We believe any intent to regulate the regasification tariffs are likely to be strongly opposed by the players in the segment. Moreover, the same would be detrimental to the growth of the natural gas market in the country. The intent of the possible regulation is to secure optimum utilisation of the infrastructure and avoid drain of scarce financial resources on infructuous investments. As the LNG infrastructure in the country is still at a nascent stage, we do not expect the regulation in the LNG value chain on a medium term basis.

#### Should LNG terminals be regulated?

Currently there is an absence of regulation of the LNG terminals in India. However, our analysis of the various regulations across the geographies highlights the fact that some of the recent concerns over the potential third party access of the new LNG terminal or expanded capacity is exaggerated. International countries have increasingly been more liberal towards the regulation of the LNG terminals.





Source: PL Research

#### LNG regulation in the US

Terminals had traditionally been subjected to open access obligations as FERC initially regulated LNG terminals in the same manner as pipelines by imposing cost of service rates. However, in 2002, the Hackberry decision changed the landscape: FERC terminated open access requirements (i.e. tariff requirements and non-discriminatory rates) for LNG import terminals in an attempt to encourage more LNG site development, later codified in the Energy Policy Act in 2005. FERC limited its review of LNG terminal proposals to their safety, security and environmental aspects. Thus, FERC decided that new LNG terminals should not be subjected to open access regulations and should be treated as proprietary assets. However, the interstate pipelines continue to be regulated by FERC.

FERC policy change was based on the following assumptions:

- Heavy handling of the LNG terminals was discouraging the development of new LNG projects and supplies
- Investors in a "full-supply-chain" LNG project require assured access to terminal capacity
- FERC treated LNG as another gas supply source for US markets and concluded that like competing gas supplies, LNG should not be subject to price regulation or to the requirements to offer open access service.

#### LNG regulation in the Europe

Under EU regulations, there are provisions that allow developers of import terminals to provide certain criteria which are required to be met, apply for an exemption for having to offer third-party access. In such circumstances, the developer is then able to enter into long-term contracts to underpin the investment risks and earn a return of return commensurate with the investment. The broad policy drivers behind such arrangements were in the need to encourage merchant investment in infrastructure that was not, by its very nature, a monopoly and to encourage competition.

Other EU member states have increasingly started to use the third-party access exemption provisions of the Second Gas Directive as a means of attracting investments in the LNG segment. For example: Italy and Netherlands have approved TPA exemption.

Risk of having a mandatory requirement to offer access to non-monopoly infrastructure to others in exchange of monopoly infrastructure rate of return would drive away potential investors. In view of the fact that India has a large unmet demand for natural gas that current or projected supplies cannot meet, it would be prudent for the country to consider the investment friendly environment in the LNG terminals.

#### What if the regulation comes?

If PNGRB were to regulate the marketing margins as well as Regasification tariffs, the next question which comes to the foreground is what would be the returns ensured to the regulated terminals. Currently, it is pertinent to note that the City Gas distribution companies are provided with pre-tax IRR of 14% on the network and compression charges. Similarly, cross-country pipelines are allowed a return of 12% pre-tax. We believe that in a potentially regulated environment, the returns allowed to be earned by RLNG terminal should be higher than returns on CGD companies and cross-country pipelines, considering the quasi-upstream nature of the assets. Thus, we believe that even in an adverse scenario, the IRR provided to the RLNG terminal should be around 16%

Tariffs(Rs TBTU's)	15%	16%	17%
Dahej Terminal regasification charges	28.1	28.7	29.4
% change from current regas charges	-19.7%	-17.9%	-16.1%
Kochi Terminal regasification charges	50.8	52.8	54.9
% change from current regas assumption	-3.9%	-	3.9%

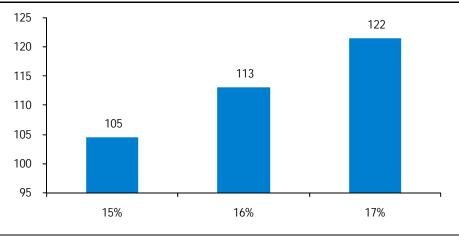
tariff structure @ various lovals of allowed rate

Source: Company Data, PL Research

Evhibit 2.

The table above shows the LNG regasification tariffs for Dahej terminal at various levels of allowed returns. If the regulator fixes a tariff based on 16% project IRR, we expect the fair value in such an event to fall to Rs113/share. While the tariffs for the Dahej terminal having a provision for 5% annual escalation currently stands at Rs35/mmbtu, it would stand reduced at Rs28.1/mmbtu on account of the regulatory cap on the returns earned. Similarly, 16% IRR on the Kochi terminal would provide the regasification tariffs at Rs47/mmbtu.



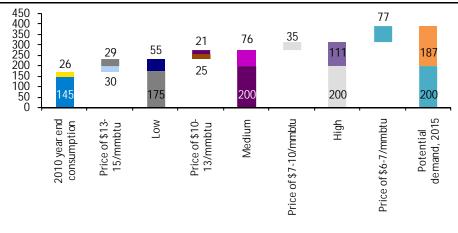


Source: Company Data, PL Research

#### Dwindling domestic production unlikely to lower LNG intake capacity

It is being perceived by a section of investors that the declining domestic gas production is likely to adversely impact the future intake capacity of spot LNG in the country. It is pertinent to note that any decline in spot LNG requirements severely impacts the profitability of PLNG as it foregoes both the marketing margins as well as the regasification margins on the spot volumes. Petronet LNG's import capacity will rise from 10MMTPA currently to 15MMTPA by the end of FY13, as the Kochi terminal is commissioned. This would further rise to 18MMTPA post the commission of the second Jetty at Dahej terminal (end FY14). Post the commissioning of the additional Regasification capacity and two storage tankers, the nameplate capacity would reach to 20MMTPA (end of FY15). Thus, doubling of the capacity by the end of FY15 would lead to incremental ~39mmscmd capacity.

Given the fact that consumption of the LNG has a natural ceiling based on availability of the domestic gas sources, a section of market participants is questioning the placement of significant LNG volumes in wake of limited domestic gas supplies over the next 4-5 years. The concerns gets further compounded due to lack of significant linkages with Petronet LNG for the incremental capacity (mere 14% of the incremental capacity).





#### Source: PL Research

However, we believe Petronet LNG is unlikely to see a major challenge in terms of placement of LNG, going ahead. Following are our rationale for the same:

Dahej's first mover's advantage to cater to northern markets: PLNG is at the forefront of the incremental LNG supplies in the country, with first mover's advantage in established gas markets in the country scoring over the upcoming RLNG terminals in the country. The LNG re-gasification capacity in the country is projected to increase four-fold in the next five years. At present, the country has a LNG re-gasification capacity of 13.6 MMTPA, which is expected to gallop to 53.5 MMTPA by 2016-17 as new terminals are commissioned. We believe, Petronet LNG with significant part of this additional capacity, will remain as a strong play on the increasing LNG demand in the country.

- Likely firm offtake contracts with GSPC, GAIL and IOC for 5.0MMTPA incremental capacity at Dahej: Our interaction with the company management highlights the fact that concerns over future utilisation of the demand does not exist. Management highlighted that PLNG is expected to enter into contracts with GAIL, GSPC, IOC and BPCL for offtake of 5.0MMTPA volumes from the incremental Dahej capacity. Commenting on the potential users of same, management highlighted that these volumes are likely to be consumed by Refineries, Petrochemicals and CGD.
- Newer pipelines to open up new demand centres: India is expected to see a significant increase in the pipeline capacity as the network capacity is likely to increase from 8000kms to 15,000kms over the period of next 5-6 years. We believe that newer pipelines will open up new demand centres (particularly liquid replacement demand). Natural gas contributes ~10% of country's energy mix, compared to 35% in case of crude oil. Thus, connectivity with newer regions is likely to lead to substitution of liquid fuel demand with natural gas demand.
- **Reforms to pave the way for incremental LNG consumption:** Government is currently mulling over a new investment Urea policy which is likely to incentivise the new players to establish a gas-based Urea plant. India currently imports ~6MT of urea (21% of its requirement). Moreover, as per the 12th five-year plan, India plans to increase its installed capacity of 22MT to 33.7MT by 2017. As per the fertilizer ministry estimates, incremental gas demand from the fertilizer sector based on government friendly policies could be to the tune of ~40 mmscmd. According to Media and Industry sources, Group of Ministers (GoM) has given in-principle nod to the New Investment Policy (NIP 2012) to attract investments in the urea sector. Policy is yet to get an approval from the cabinet. Government has linked the subsidy of urea with the gas prices between US\$6.5-US\$14/mmbtu. We believe that the policy is positive for the sector as new investment is likely to kick-off post announcement.

Moreover, limited domestic gas supplies over the medium term, lends us to believe the LNG is likely to be saviour of last resort for meeting the domestic gas demand.

Upward revision in domestic natural gas prices: Increase in the domestic gas prices, coupled with reduction in its spread with LNG prices, is likely to result in increased acceptance of LNG in the country. RIL is currently pitching with the government to increase in prices for the gas production from the KG-D6. Similarly, NIKO, its JV partner at D-6, is also estimating gas prices to be increased from 2014 onwards. Thus, increased price would largely result in more acceptance of LNG in the country.

#### Kochi terminal to de-risk going ahead

We expect gradual de-risking of the Kochi terminal, going ahead, which augers well for the company's business model. PLNG expects to replace the liquid fuel demand via LNG in the southern region.

According to the management, there is demand to the tune of around 35mmscmd (equivalent to around 9MMTPA) in the southern markets. Thus, we believe the concerns over the utilisation of the Kochi terminal seem exaggerated. Talking about the potential demand from the non-regulated sectors, management highlighted that likely demand on GAIL's upcoming southern grid is likely to be around 15-18mmscmd (3.8MMTPA to 4.6MMTPA). Commenting on the potential user profile, management highlighted that it is likely to be led by refineries (Kochi refinery of BPCL and MRPL's refinery), petrochemical and steel sector (Salem steel power plant).

Various media reports have been highlighting the fact that PLNG is currently in discussion to procure additional gas for the terminal, any supply tie-ups would lend stronger visibility over the utilisation of the terminal.

# Firm spot LNG prices and declining crude oil prices – a short term imbalance

Spot LNG prices have strengthened during the current quarter with prices for the Indian spot LNG trading at around US\$13.6/mmbtu (implied crude oil price of US\$79.2/bbls, including 5% import duty which exists only on LNG and not on crude oil imports). On the other hand, crude oil prices have corrected significantly over the last one month with prices currently around US\$97/bbls. Similarly, the Naphtha prices have also corrected significantly over the last one month and currently trades at US\$85/bbls. Thus, the slope for the spot LNG has increased with regards to the crude oil prices.

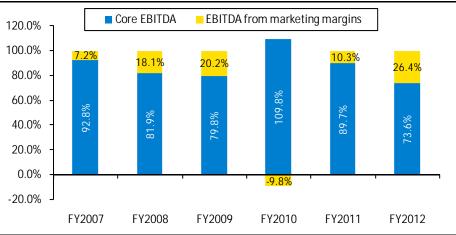




Source: PL Research

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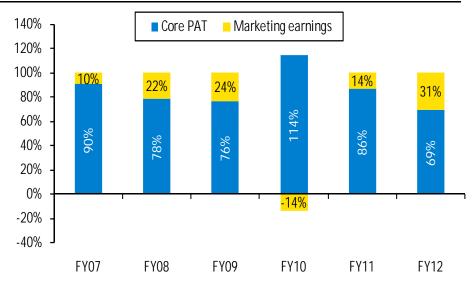
On account of the strong demand environment led by shortage of the domestic gas, coupled with strength in crude oil prices, Petronet LNG earned strong marketing margins on the spot volumes. According to our understanding, the share of the marketing earnings in EBITDA has increased to Rs4.83bn (26% of EBITDA) in FY12, up from Rs1.25bn (10% of EBITDA) in FY11. On the bottom-line front, the impact was even higher, with marketing earnings forming around 14% and 31% of the PAT for FY11 and FY12, respectively.





Source: PL Research, Company Data

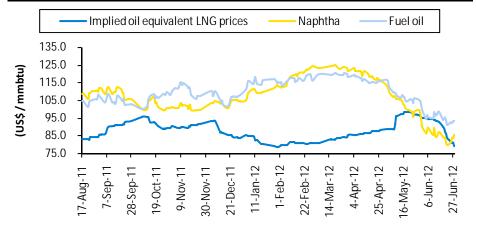




Source: PL Research, Company Data

However, we believe that the trend of strong marketing margins is expected to halt in the near term, as crude oil prices have corrected at a steep pace, coupled with decline in Naphtha cracks. Similarly, the spread between the fuel oil prices and the spot LNG prices has declined significantly during the current quarter. Our understanding along with our previous interaction with Petronet LNG has revealed that pricing of the spot LNG contracts is governed by the price of alternative fuels as well. Thus, we believe, risks over significant erosion of the marketing margins, coupled with lower spot LNG volumes, exists in the near term.

Exhibit 8: Naphtha prices, fuel oil and Implied crude oil equivalent prices of LNG



Source: Bloomberg, PL Research

The discount for spot LNG prices over Naphtha and fuel oil prices averaged around 30-31% during Q4FY12. However, the discounts have declined to around 12-14% in the current quarter. Similarly, at the current juncture, LNG prices trades at only a slight discount to Naphtha prices and at around 15% discount to the fuel oil prices. Given the cost involved with regasification of LNG and transportation to the consumers, we believe there is a requirement of atleast a 6-8% discount to alternative liquid fuels prices.

Thus, we believe the significant decline in the discount to the alternative liquid fuel is likely to result in a decline in marketing margins on the spot volumes and in turn, adversely impacting the profitability over the next few quarters. Moreover, the concern exists over the potential impact of high LNG prices on the demand side and hence the utilisation levels of PLNG's Dahej terminal in the near term.

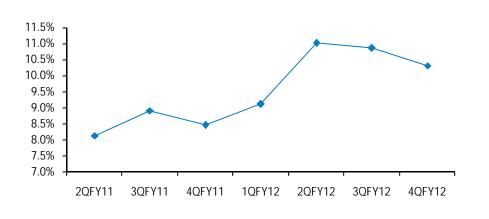
While we believe, oil indexation to the LNG prices is likely to be strong in medium term in case of Asian markets compared to historical levels *(refer section Global LNG markets for details)*, the current situation of abnormally lower discount for spot LNG to alternative fuel prices is unlikely to persist for longer period of time. Thus, we believe, any stock price reaction resultant to decline in profitability on account of weaker marketing margins would be providing an attractive entry for long-term investors.

## **Key Concerns**

#### Re-pricing of the short-term LNG deal by Petronet at higher linkages

PLNG had entered into short-term LNG procurement contract to the tune of ~1.5-1.6MMTPA prior to the Japanese nuclear accident and the said contracts are expiring at the end of CY2012. Our understanding and interaction with management highlights the fact that these contracts have more attractive linkages to the crude oil prices as compared to the current spot LNG prices. To highlight the same, as per our calculation, PLNG's average short term and spot procurement price for Q4FY12 was US\$12.22/mmbtu and management commentary post result also highlighted that procurement cost of the spot and short-term contract was US\$~12.5/mmbtu (implying an linkage of 10.5% to quarterly average of Brent oil prices). However, the spot LNG prices for India destination for Q4FY12 stood at US\$13.55/mmbtu.

Exhibit 9: PLNG spot and short term Linkage to Brent oil prices



Source: PL Research, Company Data

Thus, there remains a risk that renegotiations of these contracts in current tighter LNG market could attract higher linkages to the crude oil prices. We believe that higher linkages to the crude oil prices could adversely impact the marketing margins earned on the short term and spot volumes. We are currently building marketing margins of Rs25/mmbtu in FY13 and FY14, respectively (22% and 25% of the PAT for respective years) down from Rs46.7/mmbtu as per our calculation in FY12.

## Placed of expensive Gorgon gas in the markets

PLNG has entered into a contract to procure 1.44MMTPA of LNG from Gorgon project in Australia beginning CY14. The said volumes are likely to be processed for PLNG's upcoming terminal at Kochi. Petronet LNG has been silent over the pricing of the gas procured from Gorgon (management stating prices being cheaper compared to Naphtha prices). However, as per the news reports in Indian Petro, the gas is procured at linkage of ~15.75% to the crude oil prices. Given the fact that southern gas markets are in nascent stage of development, the consumption of such expensive gas molecules is likely to be tough. Consequently, we are building a slower ramp-up of Kochi terminal.

#### Exhibit 10: LNG prices for gas procured from Gorgon

Crude oil prices (US\$/bbls)	70.0	80	90	100
Gorgon Import prices (FOB+ shipping prices) (US\$/mmbtu)	11.3	12.76	14.25	15.75
Slope with JCC prices	16.09%	15.95%	15.83%	15.75%
Import duty (%)	5.2%	5.2%	5.2%	5.2%
Gas prices(CIF) (US\$/mmbtu)	11.8	13.4	15.0	16.6
Regas margins (US\$/mmbtu)	1.0	1.0	1.0	1.0
Fin, customer handling, surveyor chgs, regas boil-off) (US\$/mmbtu)	0.2	0.2	0.2	0.2
Ex-terminal Price of gas (US\$/mmbtu)	13.0	14.6	16.2	17.8
Cost of transportation (US\$/mmbtu)	1.0	1.0	1.0	1.0
Cost at customers (US\$/mmbtu)	14.0	15.6	17.2	18.8
Implied product cost (US\$/bbls)	82	91	100	109
Implied product spreads over crude (US\$/bbls)	11.6	10.8	9.9	9.1

Source: PL Research

## **Outlook and Valuation**

PLNG's utility nature of business (stable regasification margins and term contracts), low regulatory risks (regasification margins are not currently under PNGRB's purview) and expanding volumes on account of strong demand estimates, hold it in good stead. We believe the concerns over the regulatory intervention on the marketing margin front as well as PNGRB regulating regas charges are exaggerated. We expect gradual de-risking of the Kochi terminal, going ahead, which augurs well for the company's business model. Increase in news flows on the new LNG terminal planned on the east coast and capacity expansion at Dahej is likely to be a growth trigger for the company, going ahead.

#### Exhibit 11: Key stock price triggers

Particulars	Expected Time period	Expectation	Impact
Signing of take or pay agreement for proposed incremental Dahej capacity with GAIL, GSPC, IOC and BPCL	Over the period of next six months	Positive	Lends visibility to utilisation of incremental capacity at Dahej
Re-pricing of the short-term LNG deal of ~ 1.5-1.6MMTPA	Post CY2012	Negative	PLNG's current short-term contracts signed before Japanese fiasco. As per our understanding, increased crude linkages to lead to lower marketing margins
New Urea Investment policy	Likely to be announced shortly	Positive	Boosts LNG demand in the country
Reforms in power sector	Not defined	-	-
Timely completion of Dahej Jetty	Q4CY13	Neutral	-
Timely completion of Phase-II of southern grid pipelines	Q4CY13	Neutral	-

Source: PL Research, Company Data

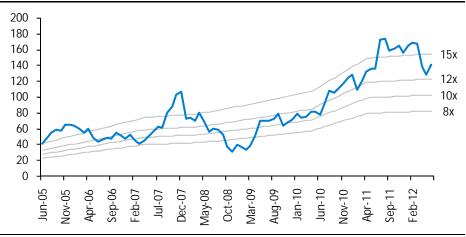
#### **Exhibit 12: Key Assumptions**

Y/e March	FY10	FY11	FY12	FY13E	FY14E
Dahej volumes processed (TBTU)	405	444	551	559	594
Total Volumes processed (MMTPA)	7.9	8.7	10.8	11.0	11.7
Regasification charges (Rs per mmbtu)	30.6	32.2	33.8	35.5	36.8
Marketing charges (Rs per mmbtu)	(8.0)	36.4	46.7	25.0	25.0
Kochi Installed capacity (TBTU)	-	-	-	-	255
Kochi volumes processed (TBTU)	-	-	-	-	51.6
Total Volumes processed (MMTPA)	-	-	-	-	1.0
Regasification charges (Rs per mmbtu)	-	-	-	-	55

Source: Company Data, PL Research

On the valuation front, the stock has traded at an average of 13x one-year forward core earnings excluding the marketing margins over FY05 to till date. The stock is currently trading at 13.5x FY14 core P/E. However, given the fact that company is executing major projects viz. Jetty and additional regasification capacity at Dahej and new terminal at Kochi, earnings profile is likely to be subdued over next couple of years. Profitability impact of these projects is likely to accrue from FY15 as we expect core EPS (ex-marketing margins) to increase to Rs16/share from Rs10.8/share in FY14. Thus, on account of the strong earnings potential post FY14, we believe the implied target PE multiple seems justified. We maintain a **'BUY'** on the stock with revised target of Rs176/share (~23% upside). Reduction in the target price from our earlier estimate is on account of lower marketing volumes post FY14. Earnings estimates, on the other hand, stands revised downwards on account of lower marketing margins assumptions on account of expectation of strength in LNG prices in the medium term.





Source: Company Data, Bloomberg, PL Research

Exhibit 14: One-year forward rolling PE of PLNG



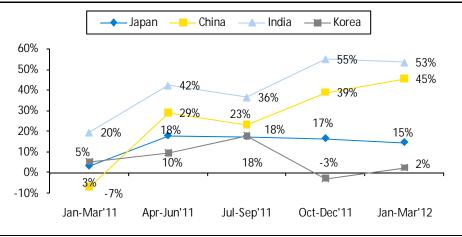
Source: Company Data, Bloomberg, PL Research

## **Global LNG markets**

#### Medium term outlook

Strong LNG demand in Asian LNG markets, coupled with strong utilization of the LNG export capacities and limited incremental supplies over the next couple of years, is likely to keep LNG markets tighter over the medium term, thereby, ensuring a slope to LNG at +13% to the crude oil prices.

Global LNG export terminals are operating at near capacity evidenced from the 90% plus utilizations witnessed in Dec-Mar'12. Import demand is being fuelled by Japan which has seen a 15% YoY growth in imports (in Jan-Apr'12) on the back of shift from nuclear power to LNG to satisfy their energy requirement post the earthquake and tsunami in Mar'11. Nuclear-based power generation (once contribution around third of Japan's power generation), has come to halt with closure of the final plant in May 2012. Temporary shutdown of all nuclear reactors (49.9GW in Japan was completed in May'12) and Japan is now preparing to restart reactors with government plans to restart couple of reactors. However, there is a stiff public opposition to the move.





Source: PL Research, Bloomberg

As per the recent report published by Oxford energy institute, the total LNG demand outlook for the Japan is expected to remain strong in CY2012 with demand witnessing a growth over CY11 (which witnessed a strong ~15% growth over CY10).

Exhibit 16: Japanese LNG demand likely to remain strong in near term

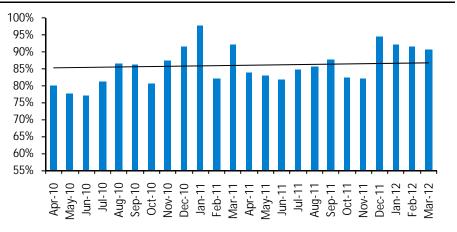
Particulars	2009	2010	2011	2012	2013	2014	2015
Base case					73.6	74.8	76.8
Renuclearisation	66.4	69.8	80.1	82.4	73.3	74.4	75.5
Denuclearisation					83.3	85	84.8

Source: Oxford Energy Institute

Thus, the result is buoyant LNG demand conditions and a tight market situation in terms of supply which has led to spot LNG prices remaining at elevated levels despite the recent sharp correction seen in alternate energy prices *viz.* crude, coal.

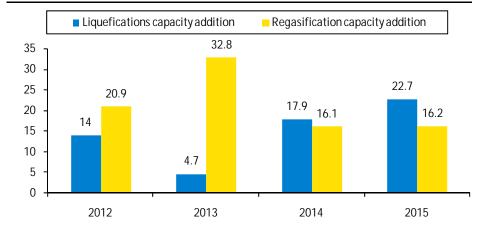
In addition, markets like China and India have shown strong growth in demand, exhibiting a 43% and 53% YoY growth, respectively in LNG imports YTD (Jan-Mar'12 & Jan-Apr'12). Demand growth in China is supported by the increased LNG import infrastructure, coupled with strong demand, while the demand growth in India has been largely driven by the dwindling production from the RIL's KG-D6. Thus on an overall basis, the demand is expected to remain strong over the next couple of years.

Exhibit 17: Global LNG capacity utilization



Source: PL Research, Bloomberg

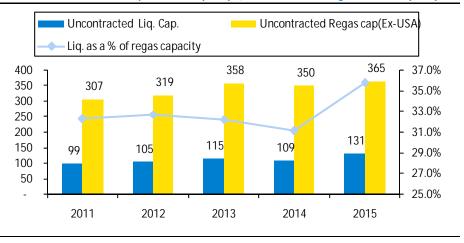
However, our analysis of the incremental supply situation does not provide a rosy picture. Based on the data of upcoming LNG export terminals, we believe, the supply situation is not expected to improve anytime soon, given limited capacity additions in the next two years (~19 MT) (7% of installed capacity). Given the fact that global LNG markets witnessed a volume growth of 17.7MMTPA in 2011(source: IGU), the incremental supplies looks small compared to the demand potential. Even excluding Japan, the LNG markets witnessed a growth of 9.5MMTPA.





Source: PL Research, IGU

Our analysis of the incremental export capacity as % of the total un-contracted regasification capacity is likely to decline based on the Bloomberg data for the LNG contracts. According to IGU, global spot LNG market for CY11 stood at 62MMTPA, while the contracted volumes during the period stood at 179.5MMTPA. Based on the Bloomberg data (reorganized according to project schedules of IGU), long term contracts (with duration of more than four years) are likely to witness an increase of 82MMTPA over CY12-CY15, while the contracts ending during the same period stands at 35.3MMTPA. This coupled with incremental LNG supplies of 59.5MMTPA (assuming full utilization), leads to increase of mere 12.6MMTPA of the incremental spot supplies (20% increase over CY12-15). However, over the same, period the uncontracted regasification facilities is likely to increase by 58.2MMTPA, thereby leading to strong linkages for the spot LNG prices. However, restarting of the nuclear power plants in Japan would act as a barrier for the further increase in the linkages from the current levels.





Source: PL Research, IGU, Bloomberg

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Thus, we expect LNG markets to remain tight over the medium term which, in turn, would result in stronger slope to crude oil prices.

Crude oil prices Linkages (%)	80	85	90	95	100	105	110	115	120
12.50%	10.0	10.6	11.3	11.9	12.5	13.1	13.8	14.4	15.0
13.00%	10.4	11.1	11.7	12.4	13.0	13.7	14.3	15.0	15.6
13.50%	10.8	11.5	12.2	12.8	13.5	14.2	14.9	15.5	16.2
14.00%	11.2	11.9	12.6	13.3	14.0	14.7	15.4	16.1	16.8
14.50%	11.6	12.3	13.1	13.8	14.5	15.2	16.0	16.7	17.4
15.00%	12.0	12.8	13.5	14.3	15.0	15.8	16.5	17.3	18.0
15.50%	12.4	13.2	14.0	14.7	15.5	16.3	17.1	17.8	18.6

Exhibit 20:	Spot LNG	prices at	various	linkages
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Source: PL research

#### Long-term Outlook

From the long-term perspective, the debate continues to exist over the possible impact of the US LNG exports in the market as the incremental supplies are contingent on FERC clearances. However, having said that USA could prove to be a game changer on the global LNG with ~82MMTPA of proposed LNG export terminals (of which ~19MMTPA Sabine terminal has already been cleared by the FERC). Similarly, Canada's Kitmat BC LNG terminal and Douglas Island terminal could also add ~7MMTPA of the supplies. Thus, North America has a potential to add ~ 89MMTPA volumes in the longer term.

However, on account of the long lead time ~5-7 years for a terminal to become operationally significant, LNG volumes from US are expected only post 2018-19. Moreover, the shale gas discoveries in China could also play a game changer as the same could result in decline in Chinese LNG imports.

#### Exhibit 21: Planned LNG export terminal in USA

Particulars	Capacity (BCFD)	Capacity (mt)
Approved		
Sabine Pass	2.6	19.0
Proposed		
Freeport TX	1.8	13.1
Corpus Chisti TX	1.8	13.1
Coos Bay, OR	0.9	6.6
Lake Charles LA	2.4	17.5
Hackberry LA	1.7	12.4
Sub Total		62.8
Total		81.8

Source: PL Research, FERC

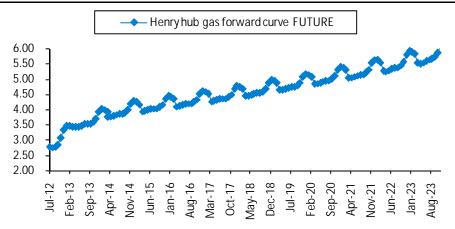
#### Exhibit 22: LNG terminal Construction period

Process	Timeline
Identifying a location	Start
Secure permits from FERC and DOE for non FTA export	12 months
Secure long-term supply agreements with customers	6-12 months
Engage an E&C firm	12 months
Obtain financing from banks, public markets, internal sources, and strategic partners	3-6 months
Make final investment decision and give full notice to proceed to the selected E&C company	3 months
Complete construction	36 months
Total	5-7 years

Source: PL Research

As per Cheniere Inc., delivered gas prices in Asia could be around ~US\$10-12/mmbtu depending on the Henry Hub natural gas prices. This price offered to Asia consumer implies an oil equivalent price of US\$57-72/bbl (an indexation of 11%-13.8% to long term crude oil prices of US\$90/bbls).





Source: PL Research, Bloomberg

Exhibit 24: Delive	ered price to Asiar	customers from	North America
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Henry Hub prices (in US\$/mmbtu)	4.0	4.50	5.00	5.50	6.00	6.50
Capacity charge (in US\$/mmbtu)	2.5	2.5	2.5	2.5	2.5	2.5
Shipping (in US\$/mmbtu)	2.8	2.8	2.8	2.8	2.8	2.8
Fuel costs (in US\$/mmbtu)	0.6	0.6	0.6	0.6	0.6	0.6
Delivered costs (in US\$/mmbtu)	9.9	10.4	10.9	11.4	11.9	12.4

Source: PL Research, Company Data

Currently, the Henry Hub forward curve reflects prices rising from the current lows to level of US\$5.5/mmbtu over the longer range. Based on the same, the Asian LNG prices would be ~US\$11.4/mmbtu. According to a research by Oxford Energy institute, the full cycle break-even cost (all source F&D cost and cash operating costs) for a sample of large natural gas operators, including some shale specialists reflects that break-even gas prices stands at around US\$4.0/mmbtu for US companies; thus, current prices are unsustainable in the longer run. Industry experts such as Poten partners also foresee US natural gas prices to increase to US\$6/mmbtu by mid of the decade.

Another major supply factor over the longer term is supplies from Australia, which as per IEA requires around US\$6-7/mmbtu in terms of liquefaction cost and transportation costs due to high capital cost of the Australian LNG terminals. This, coupled with prevailing domestic gas prices in Australia, would require around US\$11-12/mmbtu as minimum realisations.

Thus, we believe the supplies from Northern America could result in long-term slope to crude oil prices reducing slightly to a range between 12-13% from near term expectation of 13.5-14.5%. This is based on the premise that the global LNG supplies would largely track the upcoming demand potential and there is unlikely to be a significant capacity addition before the visible demand potential.

Y/e March	2011	2012	2013E	<b>2014E</b>
Net Revenue	131,973	227,039	330,091	426,576
Raw Material Expenses	118,012	205,867	309,701	401,666
Gross Profit	13,961	21,171	20,390	24,911
Employee Cost	306	298	467	547
Other Expenses	1,494	2,501	2,876	3,595
EBITDA	12,161	18,373	17,047	20,768
Depr. & Amortization	1,847	1,842	1,842	3,114
Net Interest	1,931	1,609	882	4,260
Other Income	680	849	1,000	1,400
Profit before Tax	9,063	15,771	15,323	14,794
Total Tax	2,868	4,975	5,090	4,914
Profit after Tax	6,195	10,795	10,233	9,880
Ex-Od items / Min. Int.	_	_	_	_
Adj. PAT	6,195	10,795	10,233	9,880
Avg. Shares O/S (m)	750.0	750.0	750.0	750.0
EPS (Rs.)	8.3	14.4	13.6	13.2

#### Cash Flow Abstract (Rs m)

Y/e March	2011	2012	2013E	<b>2014E</b>
C/F from Operations	9,079	12,386	9,701	15,734
C/F from Investing	(14,766)	203	(15,150)	(11,250)
C/F from Financing	3,826	(4,325)	9,342	313
Inc. / Dec. in Cash	(1,861)	8,264	3,893	4,797
Opening Cash	3,405	1,575	9,839	13,732
Closing Cash	1,544	9,839	13,732	18,529
FCFF	8,002	12,595	9,413	(42,220)
FCFE	12,895	13,043	22,142	(34,765)

Y/e March	2011	2012	<b>2013E</b>	<b>2014E</b>
Growth				
Revenue (%)	23.9	72.0	45.4	29.2
EBITDA (%)	43.7	51.1	(7.2)	21.8
PAT (%)	53.1	74.3	(5.2)	(3.4)
EPS (%)	53.1	74.3	(5.2)	(3.4)
Profitability				
EBITDA Margin (%)	9.2	8.1	5.2	4.9
PAT Margin (%)	4.7	4.8	3.1	2.3
RoCE (%)	14.4	19.4	14.3	13.7
RoE (%)	25.2	34.8	26.2	21.3
Balance Sheet				
Net Debt : Equity	1.1	0.6	0.7	0.6
Net Wrkng Cap. (days)	(8)	(3)	1	1
Valuation				
PER (x)	18.0	10.3	10.9	11.3
P / B (x)	4.2	3.2	2.6	2.2
EV / EBITDA (x)	11.5	7.2	8.3	6.9
EV / Sales (x)	1.1	0.6	0.4	0.3
Earnings Quality				
Eff. Tax Rate	31.6	31.5	33.2	33.2
Other Inc / PBT	7.5	5.4	6.5	9.5
Eff. Depr. Rate (%)	5.2	5.2	5.2	3.4
FCFE / PAT	208.2	120.8	216.4	(351.9)

Balance Sheet Abstract (Rs m)						
Y/e March	2011	2012	<b>2013E</b>	2014E		
Shareholder's Funds	26,802	35,198	42,925	49,922		
Total Debt	29,891	30,340	43,069	50,524		
Other Liabilities	3,480	3,630	4,037	4,430		
Total Liabilities	60,173	69,168	90,031	104,877		
Net Fixed Assets	47,146	58,115	72,422	81,958		
Goodwill	_	_	_	_		
Investments	11,649	1,399	1,399	1,399		
Net Current Assets	1,377	9,654	16,209	21,519		
Cash & Equivalents	1,575	9,839	13,732	18,529		
Other Current Assets	14,241	22,758	31,914	40,491		
Current Liabilities	14,439	22,943	29,437	37,500		
Other Assets	_	_	_	_		
Total Assets	60,173	69,168	90,031	104,877		

#### Quarterly Financials (Rs m)

Y/e March	Q2FY12	Q3FY12	Q4FY12	Q1FY13E
Net Revenue	53,669	63,303	63,754	74,699
EBITDA	4,484	5,032	4,230	4,231
% of revenue	8.4	7.9	6.6	5.7
Depr. & Amortization	463	463	458	460
Net Interest	458	345	342	350
Other Income	201	164	221	200
Profit before Tax	3,763	4,389	3,651	3,621
Total Tax	1,160	1,435	1,200	1,231
Profit after Tax	2,603	2,954	2,451	2,390
Adj. PAT	2,603	2,954	2,451	2,390

#### **Key Operating Metrics**

2011	2012	2013E	<b>2014E</b>
379	372	409	530
34	103	106	243
28	34	31	32
	379 34	379 372   34 103	379 372 409   34 103 106

Source: Company Data, PL Research.

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PL's Recommendation Nomenclature					
BUY	:	Over 15% Outperformance to Sensex over 12-months	Accumulate	:	Outperformance to Sensex over 12-months
Reduce	:	Underperformance to Sensex over 12-months	Sell	:	Over 15% underperformance to Sensex over 12-months
Trading Buy	:	Over 10% absolute upside in 1-month	Trading Sell	:	Over 10% absolute decline in 1-month
Not Rated (NR)	:	No specific call on the stock	Under Review (UR)	:	Rating likely to change shortly

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