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Energy reforms

Pakistan nears WACOG implementation as higher prices are notified

Government has attempted to leapfrog gas price rationalization. Gas consumers are likely to face a price hike up to 235% after authorities approved the recently proposed hike, bringing average gas prices closer to Weighted Average Cost of Gas (WACOG) while removing elements of cross-subsidization. A move that will not only help overcome revenue requirement of GasCos (SNGP and SSGC), but also slowdown gas-based circular debt generation; current stock of PKR1.2tn is nearly half of total circular debt. We believe, most producers will pass on this gas price hike, albeit adding heat to high inflation environment, and this also brings us closer to IMF program as legacy subsidies are removed.

Sector wise gas usage for energy

			Current		Proposed		Approved		
Amounts in TOE	**FY20**	**%**	**Rs/mmbtu**	**USD/mmbtu**	**Rs/mmbtu**	**USD/mmbtu**	**Rs/mmbtu**	**USD/mmbtu**	**% change**
Domestic*	7,613,137	48%	402	1.92	755	3.61	868	4.15	116%
Commercial	631,777	4%	1,283	6.14	2,321	11.11	2,321	11.11	81%
Industrial	5,999,387	38%	1,051	5.03	1,675	8.02	1,845	8.83	76%
- Cement	*6,230*	*0%*	1,277	6.11	2,321	11.11	2,321	11.11	*82%*
- Fertilizer (fuel)	*712,723*	*4%*	1,023	4.89	1,857	8.89	1,857	8.89	*82%*
- Pakistan Steel Mills	*18,299*	*0%*	1,054	5.04	1,650	7.89	1,550	7.42	*47%*
- General Industry	*5,262,135*	*33%*	1,054	5.04	1,650	7.89	1,550	7.42	*47%*
Transport (CNG)	1,086,889	7%	1,361	6.51	2,321	11.11	2,321	11.11	71%
Other Government	613,591	4%	780	3.73	780	3.73	780	3.73	0%
Total/wt.avg	**15,944,781**	**100%**	**761**	**3.64**	**1,271**	**6.08**	**1,389**	**6.64**	**83%**
Inc. Fertilizer feed for calculation									
Fertilizer (feed)	*3,836,453*		302	1.44	430	2.06	430	2.06	*42%*
Total inc. Fertilizer (feed)	**19,781,234**		**672**	**3.21**	**1,025**	**4.90**	**1,119**	**5.36**	

Source: Energy Yearbook 2020, OGRA, IMS Research,*weighted average gas tariff

Much-needed move after OGRA Amendment

During Feb'22, two key amendments were made in OGRA Ordinance 2002, in order to 1) remove ring-fencing of RLNG prices and add it to the calculation of WACOG, and 2) empower OGRA for gas price hikes to ensure smoother transmission of cost of gas into notified gas prices. Back in Feb'22, when amendments were made, the prequel to removal of ring-fencing of RLNG prices had assumed a gas price hike in a piecemeal fashion. However, authorities have approved an abrupt hike, effective from 01Jul'22.

Both SNGP and SSGC cannot ideally have a separate measurement mechanism for RLNG prices, since it is comingled and supplied through the same network and consumer meters as the indigenous gas. Consequently, the gas tariff differential added to the woes of GasCos, as the revenue requirements were not being fulfilled by the existing tariff regime. This also kept ring-fencing of RLNG price only limited to accounting judgments and systems, which can only be sufficient to estimate billing and distribution loss. Not only this undermined the concept of ring-fencing, but also gave rise to an overarching problem of Pakistan's economy i.e. gas based circular debt. This will largely be removed as Pakistan nears the WACOG implementation.

This is in line with our expectation of greater Energy sector reforms during 2022, which will lead to turnaround of payouts from companies in the Energy chain, and in turn better price discovery in Energy sector stocks.

Pakistan gas consumption and WACOG

	mmcfd	**% for WACOG**	**US$/mmbtu**
RLNG (power plants)	467		13.00
RLNG (ex-power)	659	15%	16.55
Average gas tariff 01Jul'22	3,745	85%	6.64
Estimated WACOG	**4,871**		**8.13**

Source: Energy Yearbook 2020, OGRA, IMS Research

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The current gas tariff stands at USD3.64/mmbtu, while the imported RLNG is costing the government ~US$16.55/mmbtu (Jun'22). Moreover, the RLNG currently constitutes c.30% of Pakistan's gas needs and it is likely to increase owing to gas reserve depletion in the absence of wildcat discoveries. We estimate, using Energy Yearbook figures from 2020, the effective gas tariff is now USD6.64/mmbtu, where cement companies and CNG consumers will effectively pay the highest cost of USD11.11/mmbtu. Needless to mention, domestic consumers are the most impacted as they face a weighted average hike of 143%. This will likely push headline inflation reading for Jul'22 as gas tariff makes 0.6% of National CPI basked (Urban CPI: 1.08%).

We have also included fertilizer sector's feed consumption into gas usage for energy to find out the overall impact of the recent gas price hike. The weighted average gas price, including fertilizer feed, stands at USD5.4/mmbtu and will stand effective in putting a plug on gas circular debt generation, going forward.

Key beneficiaries in the energy space

Gas utilities: It is pertinent to note that the price hike has also been put forth for power and fertilizer consumers relying directly on MARI and PPL. Moreover, OGRA will likely include the cost of RLNG diversion in the mid-year determination of Estimated Revenue Requirement (ERR) for FY23; only a partial component of RLNG diversion cost is under consideration at the moment. The two GasCos will benefit from timely gas price determination and efficient cost recovery. We highlight, the current petition of SNGP and SSGC with OGRA for revenue determination states a requirement of PKR350bn (at PKR902.89/mmbtu) and PKR 291bn (at PKR 1,013/mmbtu), respectively. This hike will likely improve cash flows for the enabling of investment in large pipeline projects as well as the enhancing of payout capacity.

E&Ps: PPL and OGDC face accumulation of receivables from GasCos, invariably hitting their cash flows and payout capacity. Resultantly, the valuations have become depressed owing to cash getting strapped into gas circular debt. The overdue receivable generation per annum owing to no gas price hike since 2016 stands at PKR19.0/share for PPL and PKR 10.4/share for OGDC. We believe, this will potentially increase the payout and unlock valuations.

Overdue receivables (PKRbn)

OGDC	Dec-16	Mar-22	Change
SSGC	59	164	104
SNGP	17	142	126
Total	**76**	**306**	**230**
Overdue receivable generation per year			**44**
OD rec. generation per share (PKR)			**10.43**
PPL	**Dec-16**	**Mar-22**	**Change**
SSGC+SNGP	40	312	271
Overdue receivable generation per year			**52**
OD rec. generation per share (PKR)			**19.00**
PSO	**Dec-16**	**Mar-22**	**Change**
SNGP	11	208	197
Overdue receivable generation per year			**38**
OD rec. generation per share (PKR)			**79.90**

Source: Company Accounts, IMS Research

PSO: PSO has also been one of the worst affected players from gas circular debt, potentially since the phasing out of furnace oil for power generation since 2017. The domino effect from low collection by SNGP also hits PSO's cash flows, and this gas price hike also enables it in overcoming working capital problems. We believe, a potential price discovery is also in the offing once ERR's of GasCos are approved on the new gas tariff.

IPPs: LNG has been a major contributor in the gas circular debt since 2018-2022 due to diversion to domestic consumers during winter, matched by an inefficient cost recovery system. Gas price is a pass through component of the tariff for IPPs and any increase in the cost of gas would be absorbed in the Energy Purchase Price (KAPCO, ALTN, SPWL, Engro Energy). On the flip side, we anticipate sharp improvement in cashflow recovery and payouts following rationalization of gas prices for IPPs.

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We also present a potential impact of this gas price hike of other sectors which have a potentially negative bearing on earnings owing to cost pressures:

Sector/Scrips	Pre-hike EPS (PKR)	Post-hike EPS (PKR)	Analyst Comments
Cements			
CHCC	23.24	15.93	We expect LUCK and CHCC to take a significant hit, since both have a heavy reliance on gas based electricity and the cost of generation through gas will rise 80% to PKR 20.8/kWh. Also, DGKC will face medium amount of cost pressures, possessing gas-based captive power capacities. On the other hand, remaining cement companies in IMS Universe i.e. KOHC, PIOC, FCCL and MLCF are the least affected from gas price hike. Therefore, any increase in cement prices amid rise in gas tariff will be positive for these players.
KOHC	26.32	26.32	
FCCL	2.63	2.63	
MLCF*	4.78	4.63	
DGKC	7.20	6.13	
LUCK	49.80	34.88	
PIOC	15.09	15.09	
Fertilizer			
FFC	17.63	17.63	Fertilizer companies are likely to fully pass on the increase in gas prices directly on to consumers, led by FFC, in our view. However, due to EFERT receiving gas on PP12, the overall impact is less than FFC, hence we estimate EFERT's EPS to increase by PKR1.29. To recall, the industry recently increased Urea prices by PKR350/bag, hence it is likely that the government may allow an additional price hike of PKR70-85.
EFERT	11.88	13.17	
FFBL	6.21	7.40	
FATIMA	9.23	9.39	
Textiles			
ILP	14.56	13.98	We expect Textile sector earnings to decline by an average c.15%, assuming an average FY23 gas rate of US$8.38/mmbtu (Punjab-based players) and PKR1,350/mmbtu for Sindh-based players (GATM) on the premise that the PKR40bn subsidy will last 3 months. GATM and NML are likely to be impacted the most due to the large gas requirements. The overall gas price hike will further keep earnings in check.
GATM	9.46	6.43	
NML	14.25	9.98	
NCL	15.08	14.33	
KTML	11.18	10.06	
Automobiles			
INDU	173.23	171.14	We estimate earnings of Auto OEMs to be impacted by a mere c.1% by the gas price hikes, due to low gas consumption in the production process.
PSMC	26.12	25.73	
HCAR	17.46	17.25	
MTL	78.55	77.60	
AGTL	42.49	41.86	

Source: Company Accounts, IMS Research

Annexure

Gas tariff (PKR/mmbtu)

	Oct 23'20	Proposed	Approved	%
Domestic Sector				
Upto 0.5hm^3 per month	121	173	173	43%
Upto 1hm^3 per month	300	300	300	0%
Upto 2hm^3 per month	553	SA**	696	26%
Upto 3hm^3 per month	738	1,856	1,836	149%
Upto 4hm^3 per month	1,107	SA*	3,712	235%
Above 4hm^3 per month	1,460	3,712	3,712	154%
Bulk Consumer	780	928	n/a	n/a
Commercial	1,283	2,321	n/a	n/a
Special Commerical (Roti Tandoors)				
Upto 0.5hm^3 per month	110	SA**	SA**	n/a
Upto 1hm^3 per month	110	SA**	SA**	n/a
Upto 2hm^3 per month	220	SA**	SA**	n/a
Upto 3hm^3 per month	220	SA**	SA**	n/a
Above 3hm^3 per month	700	928	928	33%
Ice Factories	1,283	n/a	n/a	n/a
General Industrial	1,054	1,650	1,550	47%
Export Oriented (General Industry)	819	1,450	1,350	65%
Export Oriented (Captive)	852	1,450	1,350	58%
Export (Punjab)*	6.50	0.00	9.00	38%
CNG Region-I	1,371	2,321	2,321	69%
CNG Region-II	1,350	n/a	n/a	n/a
Cement	1,277	2,321	2,321	82%
Fertilizer (Feed)	302	430	430	42%
Fertilizer (Fuel)	1,023	1,857	1,857	82%
Power	857	n/a	n/a	n/a
Captive Power (General Industry)	1,087	1,650	1,550	43%

Source: OGRA, newsflows, IMS Research, *USD/mmbtu, **Slab abolished

Higher reliance on RLNG will increase gas tariffs ahead increase the WACOG based price

USD/mmbtu		RLNG supply ex-power (mmcfd)							
		100	350	600	659	750	1,000	1,250	1,500
Indigenous gas supply (mmcfd)	2,000	7.12	8.12	8.93	9.10	9.35	9.95	10.45	10.89
	2,250	7.07	7.98	8.73	8.89	9.12	9.69	10.18	10.61
	2,500	7.03	7.86	8.56	8.71	8.93	9.47	9.95	10.36
	2,750	6.99	7.76	8.42	8.56	8.77	9.29	9.74	10.14
	3,000	6.96	7.68	8.30	8.43	8.63	9.12	9.56	9.95
	3,250	6.94	7.61	8.19	8.31	8.50	8.98	9.40	9.77
	3,500	6.92	7.55	8.09	8.21	8.39	8.85	9.25	9.62
	3,745	6.90	7.49	8.01	8.13	8.30	8.73	9.12	9.48
	4,000	6.89	7.44	7.94	8.04	8.21	8.63	9.00	9.35
	4,250	6.87	7.40	7.87	7.97	8.13	8.53	8.90	9.23

Source: Energy Yearbook, PPIS, IMS Research

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Buy	Total return expectation of ≥ 15% or expected to outperform the KSE-100 index
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*Based on 12 month horizon unless stated otherwise in the report.

Valuation Methodology: We use multiple valuation methodologies in arriving at a Target Price including, but not limited to, Discounted Cash Flow (DCF), Dividend Discount Model (DDM) and relative multiples based valuations.

Risks: (i) delays in implementation of price hike, (ii) inability of some sectors to pass on the impact, and (iii) low gas availability leading to higher reliance on costly imported fuel amid delays

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