

Comparison of Biogas Produced and Electricity Generated & Conclusions
Figures in (b), (c), (d)pertain to the period 1 October 2012-30 September 2013
Figures (b1), (c1), (d1)pertain to the period 1 October 2013-30 June 2014.

Serial No.	Location of the Project	Actual gas production in cu.m.		Actual elec generated for production of gas in (c/c1) in KWH		Elec to be generated in KWH as per industry norms of 1.2 KWH for 1 CuM of gas, (c) x 1.2		Gas required for actual electricity generated in (d) in cu. m. (d) / 1.2		Gas flared in one year in cu. m.	
		(c)	(c1)	(d)	(d1)	(e)	(e1)	(f)	(f1)	(g)=(c)-(f)	(g1)=(c1)-(f1)
1.	Aundh Ward Office	377681	77318	11306	742	453217	92781	9421	618	368260	76700
2.	Hsg Board Yerwada	67297	NIL	1872	NIL	80756	NIL	1560	NIL	65737	NIL
3.	Katraj Railway Museum	169074	73302	9526	2945	202889	87962	7938	2454	161136	70848
4.	Bavdhan, S. No19/6+7+5	312125	54176	66816	12960	374550	65011	55680	45147	256445	9029
5.	Hadapsar Ramp No. 1	249250	62374	5280	NIL	299100	74848	4400	NIL	244850	62374
6.	Hadapsar Ramp No. 2	112325	NIL	560	NIL	134790	NIL	467	NIL	111858	NIL
7.	Model Colony	408320	54520	88820	16200	489984	65424	74017	13500	334303	41020
8.	Katraj Garbage Ramp No. 1	219450	57788	87345	21367	263340	69345	72788	17806	146663	39982
9.	Katraj Garbage Ramp No. 2	239356	57961	83455	19969	287227	69553	69546	16641	169810	41320
10.	Peshave Pk 1	280124	50016	66450	8050	336149	60019	55375	6708	224749	43308
11	Katraj Garbage Ramp No. 3	NA	9048	NA	606	NA	10857	NA	505	NA	8543
12	Katraj Garbage Ramp No. 4	NA	9313	NA	526	NA	11175	NA	438	NA	8875
13	KK Market	NA	11614	NA	3738	NA	13936	NA	3107	NA	8507
14	Wanavadi	NA	15732	NA	NIL	NA	18878	NA	NIL	NA	15732
15	Peshave Pk 2	NA	60612	NA	9281	NA	72734	NA	7734	NA	52878
16	Phule Nagar	NA	60897	NA	10312	NA	73076	NA	8593	NA	52304
17	Taljai Pathar1	NA	74074	NA	814	NA	88888	NA	678	NA	73396
18	Taljai Pathar2	NA	46956	NA	46956	NA	56347	NA	39130	NA	7826
19	Dhanori	NA	43920	NA	618	NA	52704	NA	515	NA	43405
20	Baner	NA	119	NA	NIL	NA	143	NA	NIL	NA	119
Totals		2435001	819740	421430	155084	2922001	983681	351192	163574	2083810	656166
	Avj/month	202917	91082	35120	17232	243500	109298	29266	18175	173651	72907

Conclusions:

1. The comparison is for two periods i.e. 1 October 2012-30 September 2013 (12 months) and 1 October 2013-30 June 2014 (9 months).
2. The shortfall in electricity generation vis-à-vis industry norms remained at approximately 85 % over the period from 1 October 2012-30 June 2014. The plants should produce 1.2 KWH of electricity for 1 cu. meter of gas. PMC should investigate this shortfall in efficiency.
3. Monthly power generation was 35120 KWH for the period 1 October 2012-30 September 2013 while it was 17232 KWH for the nine-month period ending 30 June 2014. The production of electricity has dropped by 50 % in spite of increasing capacity by 100 %. This is because gas production is half although the quantity of garbage to be given to the plants is twice because of double the number of plants. Clearly, the bio gas plants are not at all cost-effective.
4. 173651 cu m of gas was being flared every month from 1 October 2012 to 30 June 2014. This monthly figure during the nine-month period from 1 October 2013 to 30 June 2014 is 72907 cu m. The drop in flaring is because of drop in monthly generation of gas. PMC should ascertain the reasons for flaring such large quantities of methane.
5. PMC currently has the ability to process about 800 tonnes of MSW daily against the generation of 1500-1600 tonnes. The crucial point is whether the PMC has been giving more than the required quantity of mixed MSW to bio-methanisation and other plants and paying for it to the plant operators without the operator producing additional gas, electricity and specified products, as applicable. If so, it would mean loss of hard cash to PMC with the possible pollution of ground water because the wet garbage would lie around on the premises of the plants without being processed. ***This is a very critical aspect and needs consideration because PMC is awarding repeat contracts for technologies that have been failing.***

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