

Project: **Odlagalište Karepovac u Splitu** Date: 2015
 PRILOG 1. - Stari otpad 1960 - 1985. godine

Basic data

Start of refuse depositing	year	1960	
Percentage of gas producing material	Mgs	54	[%]
Decayable carbon in the refuse (st. val.=200 kg/m3)	C	200	[kg/to]
Light decayable material (st. val.=60%)	Sl	60	[%]
Medium decayable material (st. val.=35%)	Sm	35	[%]
Heavy decayable material (st. val.=5%)	Ss	5	[%]
Starting phase of CH ₄ production (st. val.=0,7yr)	Aph	0,7	[year]
1/2- value time for decomp. of Sl (st. val.=3yr)	Zl	3,0	[year]
1/2- value time for decomp. of Sm (st. val.=7,5yr)	Zm	7,5	[year]
1/2- value time for decomp. of Ss (st. val.=15yr)	Zs	15	[year]
Parameter for degree of gasification (st. val.=1,0)	Ks	1,00	--
Average landfill temperature	Tm	35	[°C]
Methane content in the true landfill gas	CH ₄	50	[vol.%]
Heating value of the true landfill gas	Hu	18,0	[kJ/m3]
Percentage of collectable gas	Ge	60	[%]

Specific gas production

current year (1-25) [No.]	specific gas production [m3/to*yr]	specific gas product. in No. years [m3/to]	current year (26-50) [Nr.]	specific gas production [m3/to*yr]	specific gas product. in No. years [m3/to]
0	0,000	0,00			
1	4,876	4,88	26	0,901	137,63
2	10,436	15,31	27	0,800	138,43
3	12,185	27,50	28	0,712	139,14
4	12,234	39,73	29	0,635	139,78
5	11,568	51,30	30	0,566	140,34
6	10,620	61,92	31	0,506	140,85
7	9,590	71,51	32	0,453	141,30
8	8,573	80,08	33	0,406	141,71
9	7,616	87,70	34	0,365	142,07
10	6,738	94,43	35	0,328	142,40
11	5,945	100,38	36	0,296	142,70
12	5,236	105,62	37	0,267	142,96
13	4,606	110,22	38	0,241	143,21
14	4,050	114,27	39	0,218	143,42
15	3,561	117,83	40	0,198	143,62
16	3,130	120,96	41	0,180	143,80
17	2,753	123,72	42	0,163	143,96
18	2,422	126,14	43	0,149	144,11
19	2,133	128,27	44	0,136	144,25
20	1,880	130,15	45	0,124	144,37
21	1,658	131,81	46	0,113	144,49
22	1,464	133,27	47	0,104	144,59
23	1,294	134,57	48	0,095	144,68
24	1,145	135,71	49	0,087	144,77
25	1,015	136,73	50	0,080	144,85

Specific gas production in 50 years	(Gs50)	145	[Nm3/to]
Specific total gasproduction	(Gse)	155	[Nm3/to]
Degree of gasification after 50 years	(Kver=G50/Gse)	93,25	[%]

(standard value Kver appr. 95%, adjust with parameter "Ks"!)

Gas production, energyProject: **Odlagalište Karepovac u Splitu**

Ma = deposited quantity of refuse

Gpe = collectable true gas quantity/hour

Ma-Tot. = total amount of deposited refuse

Epn = theoretical quantity of energy/hour

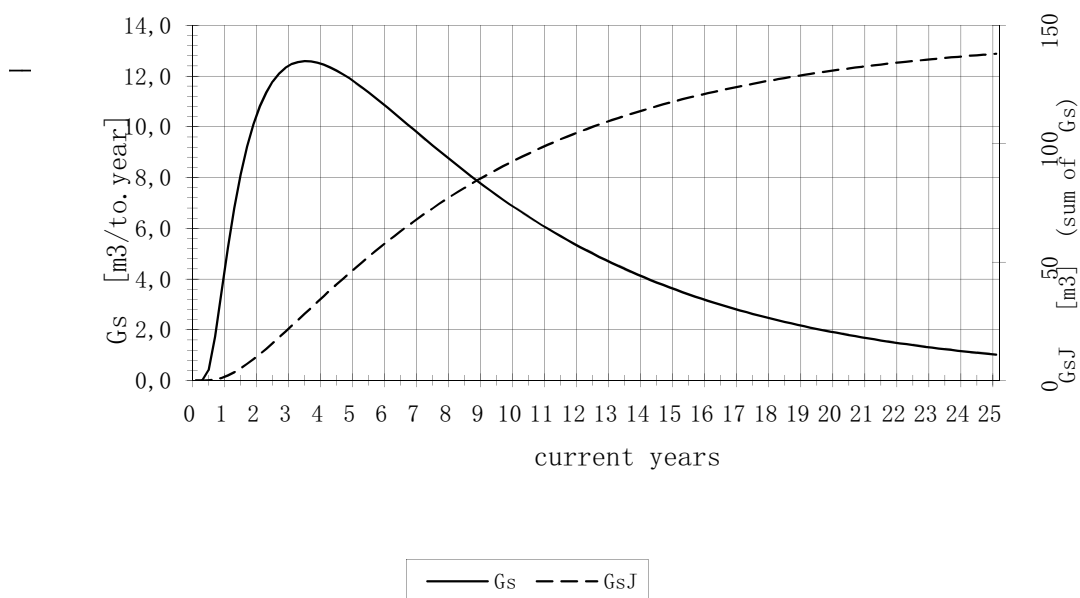
Gpn = true gas production/hour

Epe = quantity of energy/hour

year	Ma [Tons]	Ma-Tot. [Tons]	Gpn [m3/h]	Gpe [m3/h]	Epn [kWh/h]	Epe [kWh/h]
1960	61.500	61.500	0	0	0	0
1961	61.500	123.000	34	21	170	102
1962	61.500	184.500	107	64	534	321
1963	61.500	246.000	193	116	960	576
1964	61.500	307.500	279	167	1.387	832
1965	61.500	369.000	360	216	1.790	1.074
1966	61.500	430.500	435	261	2.161	1.297
1967	61.500	492.000	502	301	2.496	1.497
1968	61.500	553.500	562	337	2.795	1.677
1969	61.500	615.000	616	369	3.060	1.836
1970	61.500	676.500	663	398	3.296	1.977
1971	61.500	738.000	705	423	3.503	2.102
1972	61.500	799.500	741	445	3.686	2.211
1973	61.500	861.000	774	464	3.847	2.308
1974	61.500	922.500	802	481	3.988	2.393
1975	61.500	984.000	827	496	4.112	2.467
1976	61.500	1.045.500	849	510	4.221	2.533
1977	61.500	1.107.000	869	521	4.318	2.591
1978	61.500	1.168.500	886	531	4.402	2.641
1979	61.500	1.230.000	901	540	4.476	2.686
1980	61.500	1.291.500	914	548	4.542	2.725
1981	61.500	1.353.000	925	555	4.600	2.760
1982	61.500	1.414.500	936	561	4.651	2.791
1983	61.500	1.476.000	945	567	4.696	2.818
1984	61.500	1.537.500	953	572	4.736	2.842
1985	61.500	1.599.000	960	576	4.772	2.863
1986	0	1.599.000	966	580	4.803	2.882
1987	0	1.599.000	972	583	4.831	2.899
1988	0	1.599.000	943	566	4.686	2.811
1989	0	1.599.000	874	524	4.344	2.606
1990	0	1.599.000	792	475	3.938	2.363
1991	0	1.599.000	710	426	3.529	2.117
1992	0	1.599.000	632	379	3.141	1.885
1993	0	1.599.000	560	336	2.785	1.671
1994	0	1.599.000	495	297	2.463	1.478
1995	0	1.599.000	438	263	2.175	1.305
1996	0	1.599.000	386	232	1.919	1.152
1997	0	1.599.000	341	204	1.694	1.016
1998	0	1.599.000	301	180	1.495	897
1999	0	1.599.000	265	159	1.319	792
2000	0	1.599.000	234	141	1.166	699
2001	0	1.599.000	207	124	1.031	618
2002	0	1.599.000	183	110	912	547
2003	0	1.599.000	163	98	808	485
2004	0	1.599.000	144	86	717	430
2005	0	1.599.000	128	77	636	382
2006	0	1.599.000	114	68	566	340
2007	0	1.599.000	101	61	504	302
2008	0	1.599.000	90	54	449	270

1.599.000 [to] = total amount of deposited refuse

Specific gas production 'Gs'



Gas production 'Gp' and total deposited refuse

