

Project: **Odlagalište Karepovac u Splitu**

Date: 2015

PRILOG 2. - Novi otpad 1986 - 2018. godine

Basic data

Start of refuse depositing	year	1986	
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	80	[%]

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=G_{s50}/G_{se}) 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

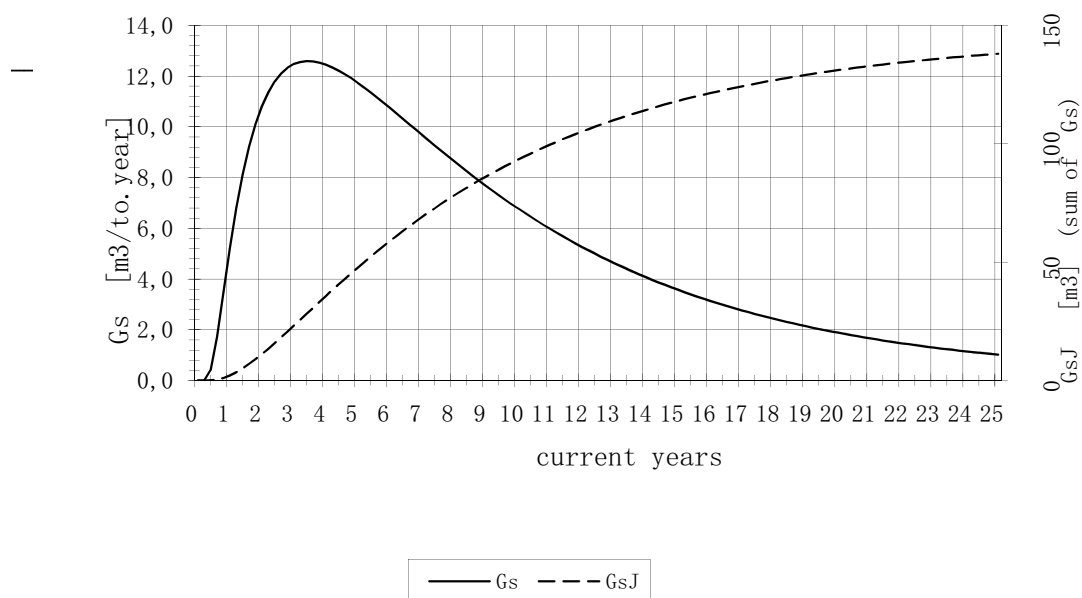
Gpn = true gas production/hour

Epe = quantity of energy/hour

year	Ma [Tons]	Ma-Tot. [Tons]	Gpn [m3/h]	Gpe [m3/h]	Epn [kWh/h]	Epe [kWh/h]
1986	62.000	62.000	0	0	0	0
1987	62.500	124.500	35	28	173	138
1988	63.000	187.500	110	88	544	436
1989	63.500	251.000	197	158	981	785
1990	64.000	315.000	286	229	1.423	1.138
1991	64.500	379.500	371	297	1.844	1.475
1992	65.000	444.500	450	360	2.235	1.788
1993	65.500	510.000	522	417	2.593	2.074
1994	66.000	576.000	587	470	2.917	2.334
1995	66.500	642.500	646	517	3.210	2.568
1996	67.000	709.500	699	559	3.474	2.779
1997	67.500	777.000	747	597	3.712	2.969
1998	68.000	845.000	790	632	3.926	3.141
1999	68.500	913.500	829	663	4.119	3.295
2000	69.000	982.500	864	691	4.294	3.435
2001	69.500	1.052.000	896	717	4.453	3.562
2002	70.000	1.122.000	924	739	4.594	3.676
2003	70.500	1.192.500	950	760	4.721	3.776
2004	71.000	1.263.500	973	778	4.835	3.868
2005	71.500	1.335.000	994	795	4.939	3.951
2006	72.000	1.407.000	1.013	810	5.036	4.029
2007	72.500	1.479.500	1.031	825	5.125	4.100
2008	73.000	1.552.500	1.048	838	5.209	4.167
2009	73.500	1.626.000	1.064	851	5.288	4.230
2010	74.000	1.700.000	1.079	863	5.363	4.290
2011	74.500	1.774.500	1.093	874	5.433	4.347
2012	75.000	1.849.500	1.107	885	5.501	4.400
2013	75.500	1.925.000	1.120	896	5.565	4.452
2014	76.000	2.001.000	1.132	906	5.627	4.502
2015	76.500	2.077.500	1.144	915	5.687	4.549
2016	77.000	2.154.500	1.156	924	5.744	4.596
2017	77.500	2.232.000	1.167	933	5.800	4.640
2018	78.000	2.310.000	1.178	942	5.855	4.684
2019	0	2.310.000	1.189	951	5.908	4.726
2020	0	2.310.000	1.199	959	5.960	4.768
2021	0	2.310.000	1.166	932	5.794	4.635
2022	0	2.310.000	1.082	865	5.377	4.302
2023	0	2.310.000	982	785	4.879	3.903
2024	0	2.310.000	880	704	4.375	3.500
2025	0	2.310.000	784	627	3.896	3.117
2026	0	2.310.000	695	556	3.456	2.765
2027	0	2.310.000	615	492	3.058	2.446
2028	0	2.310.000	543	435	2.701	2.161
2029	0	2.310.000	480	384	2.385	1.908
2030	0	2.310.000	424	339	2.106	1.684
2031	0	2.310.000	374	299	1.859	1.487
2032	0	2.310.000	330	264	1.642	1.314
2033	0	2.310.000	292	234	1.451	1.161
2034	0	2.310.000	258	207	1.284	1.027

2.310.000 [to] = total amount of deposited refuse

Specific gas production 'Gs'



Gas production 'Gp' and total deposited refuse

