

Table S1. Analytical results of input waste materials.

Inlet waste	Dry matter	Total moisture	Bulk density (raw)	Ash Ad (at 550 °C) Oven	Ash Ad (at 550 °C) TGA	Ash Ad (at 900 °C) TGA	Combustible matter h ^d	Volatile matter V ^d	HHV ^d	LHV ^d	C ^d	H ^d	N ^d	S ^d	O ^d	C ^d /H ^d	O ^d /N ^d
	%	%	kg/dm3	%	%	%	%	%	MJ/kg	MJ/kg	%	%	%	%	%		
LDPE	83.76	16.24	0.17	14.44	14.35	13.34	85.65	84.40	38.73	36.17	69.07	12.08	0.36	0.06	4.08	5.72	11.33
SS	27.97	72.03	0.88	49.88	49.20	47.41	50.80	44.47	11.78	10.94	27.66	3.88	3.73	1.14	14.39	7.13	3.86
PR	29.21	70.79	0.08	17.84	17.73	13.02	82.27	76.79	17.81	16.6	44.00	5.58	0.46	0.08	32.15	7.89	69.89
RDF	92.80	7.20	0.14	6.84	6.81	5.79	93.19	87.96	35.21	33.02	69.85	10.28	0.38	0.06	12.62	6.79	33.21
TP	95.62	4.38	0.35	7.02	6.99	5.91	93.01	86.07	26.17	24.91	62.31	5.82	0.46	0.03	24.39	10.71	53.02
PES	97.91	2.09	0.21	7.21	7.17	6.83	92.83	69.69	33.84	32.34	75.03	7.02	1.92	1.31	7.55	10.69	3.93
Measurement uncertainty	-	3.1	-	9.0	-	-	-	1.9	3.0	-	4.6	3.1	6.1	6.4	-	-	-

Note: ^d means in dry matter. Oven means that the measurement of ash content was done gravimetrically according to the standard EN 15403:2011. TGA means that the measurement of ash content was done thermogravimetrically by LECO instrument TGA 601. HHV means high heating value. LHV means low heating value.

Table S2. Analytical results of waste blends.

Waste blend	Volume ratio	Weight ratio	Dry matter		Ash A ^d (at 550 °C) Oven	Volatile matter V ^d	HHV ^d	LHV ^d	C ^d	H ^d	N ^d	S ^d	O ^d
			1st day	7th day									
			wt%										
LDPE : SS	4:1	272 : 352	61.84	96.40	26.39	67.87	28.26	26.43	54.02	8.61	0.81	0.29	9.88
LDPE : SS : PR	4:2:1	170 : 440 : 20	52.13	94.95	33.44	59.00	22.6	21.16	43.19	6.74	1.2	0.38	15.05
RDF : SS	1.3:1	175 : 440	64.64	94.95	34.49	59.50	22.19	20.82	42.74	6.36	1.29	0.41	14.71
TP : SS	3:1	367.5 : 308	75.29	97.47	16.82	73.78	21.19	20.15	52.03	4.79	0.67	0.17	25.52
RDF : SS : PR	3:1:1	200 : 440 : 40	57.48	83.59	32.72	60.09	21.74	20.27	46.41	6.86	1.17	0.34	12.5
PES : SS : PR	3:1:1	310 : 440 : 40	61.41	80.21	23.52	54.10	24.99	23.78	55.93	5.68	1.85	1.32	11.7
LDPE : SS	6:1	357 : 308	71.07	92.82	27.08	72.51	31.75	29.73	59.98	9.51	0.74	0.26	2.43
LDPE : SS : PR	3:1:1	255 : 440 : 35	59.33	84.55	31.64	67.23	26.31	24.47	54.9	8.69	0.9	0.32	3.55
Measurement uncertainty	-	-	-	-	9.0	1.9	3.0	-	4.6	3.1	6.1	6.4	-

Note: ^d means in dry matter. Oven means that the measurement of ash content was done gravimetrically according to the standard EN 15403:2011. HHV means high heating value. LHV means low heating value.

Table S3. Comparable groups.

Temperature °C	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	800-900	900-1000
Null hypothesis "medians of groups are equal" is not rejected.	LDPE TP	NaN	PES RDF	PES RDF	LDPE SS	RDF TP	RDF TP	RDF TP	NaN	NaN
	PES RDF		PES TP	PR SS	PES PR					
	PR SS				PES RDF					
	RDF SS				PES TP					
					PR TP					
					RDF TP					

Note: NaN means no comparable groups were found.

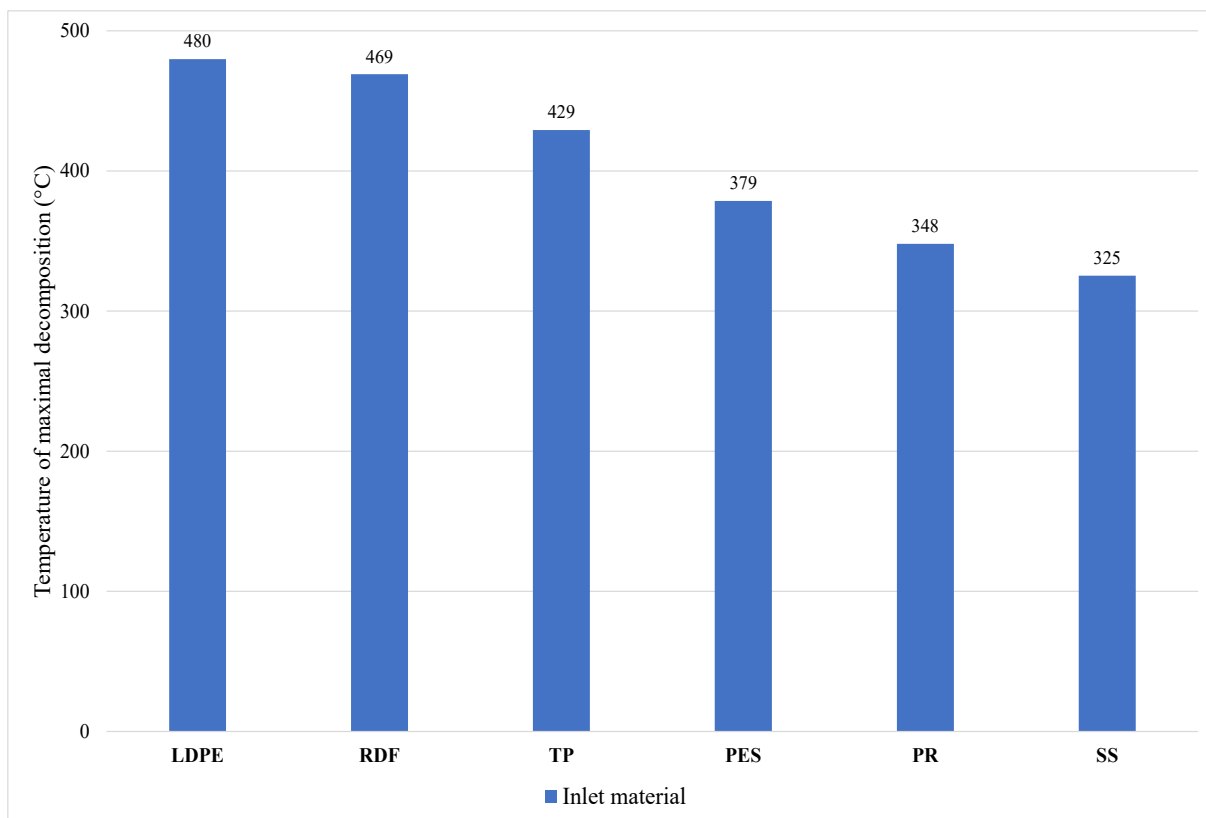


Fig. S1. Temperatures of maximum weight losses in TGA experiments for inlet waste materials.

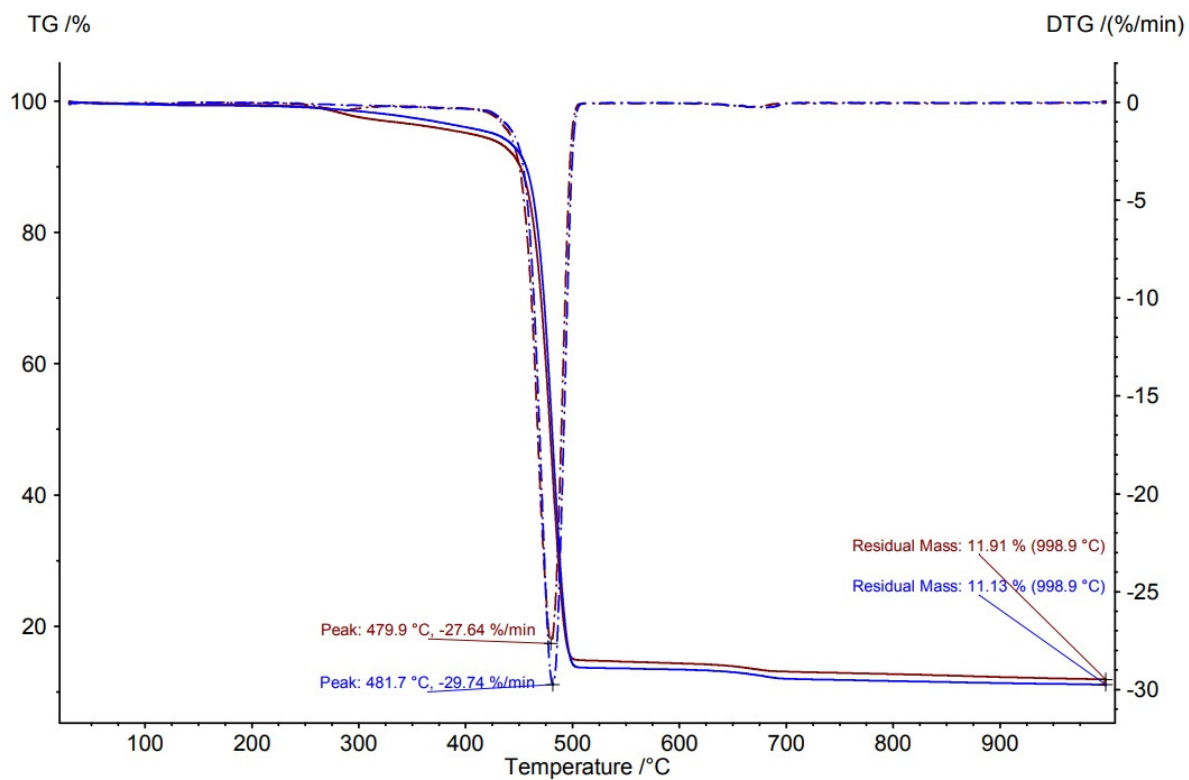


Fig. S2. TGA reproducibility of LDPE waste material.

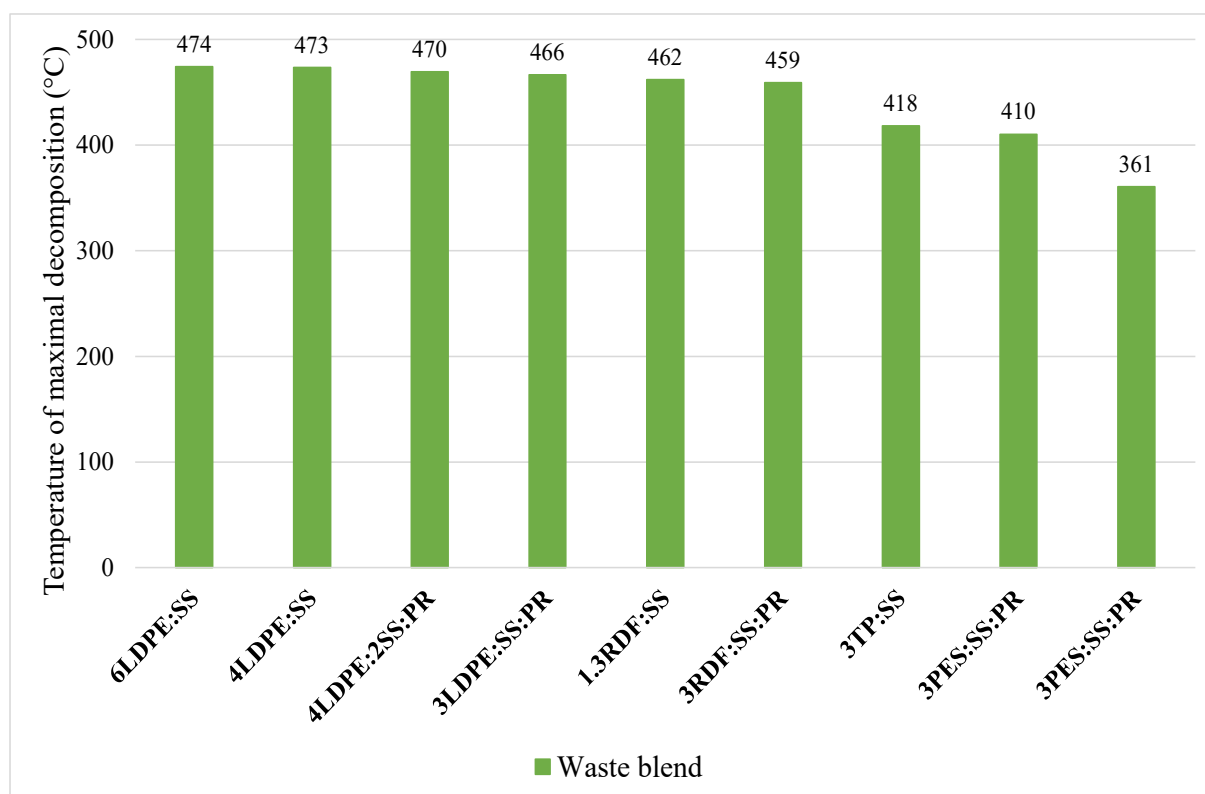


Fig. S3. Temperatures of maximum weight losses in thermal TGA experiments for waste blends.

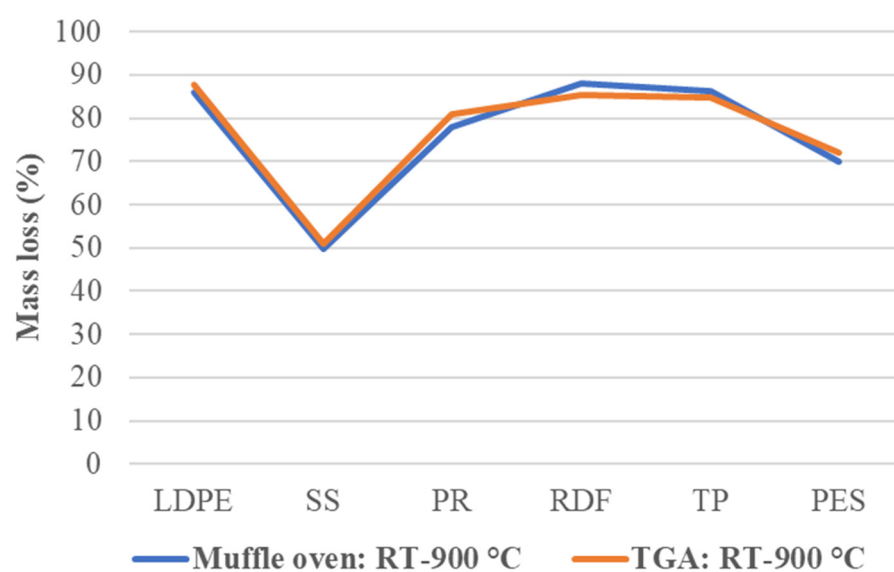


Fig. S4. Comparison of mass change measured by TGA and by the standard method in a muffle oven.

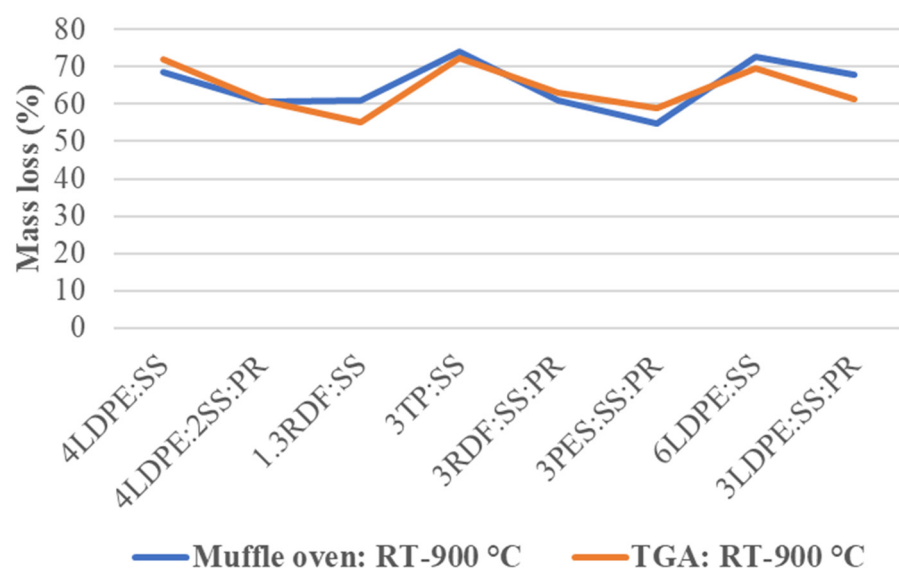


Fig. S5. Comparison of mass change measured by TGA and by the standard method in a muffle oven.