

Table 1: Waste flow rates at different diversion rate (SC50 and SC60)

<i>Fraction</i>	<i>SC50, ton</i>	<i>SC50, %</i>	<i>SC60, ton</i>	<i>SC60, %</i>
<i>Paper and Cardboard</i>	7,052	4.74%	7,170	4.82%
<i>Mixed Recyclable</i>	6,493	4.36%	6,664	4.48%
<i>Glass</i>	5,979	4.02%	6,098	4.10%
<i>Biowaste</i>	42,770	28.75%	50,053	33.6%
<i>Others</i>	12,141	8.16%	19,263	12.9%
<i>Residual Waste</i>	74,311	50.0%	59,498	40.0%
<i>Total Waste</i>	148,746	100%	148,746	100%

Table 2: Distance between each municipality and the receiving waste treatment plant

	<i>Biowaste</i>	<i>Glass, MRW, Paper, WEEE, ...</i>	<i>Inert Waste, non recyclables, ...</i>	<i>Residual Wastes</i>
<i>Municipality ID</i>	<i>Composting, km</i>	<i>MRF, km</i>	<i>Landfill, km</i>	<i>MBT, km</i>
1	80	26	33	30
2	83	10	11	9
3	101	14	4	4
4	96	17	9	5
5	86	17	12	8
6	78	23	30	27
7	96	12	5	2
8	89	11	6	4
9	86	17	24	18
10	85	9	11	9
11	88	9	7	5
12	84	11	9	7
13	74	26	33	30
14	83	14	14	12
15	90	14	12	10
16	99	14	6	3
17	78	23	30	28
<i>Average distance covered</i>	87	16	13	12

Table 3: Energy demand of unit process

<i>Plant</i>	<i>Energy demand, kWh/t</i>	<i>Energy production, kWh/t</i>
<i>Platform</i>	0,0074	\
<i>MRF / MBT</i>	0,045	\
<i>Composting Plant</i>	39,83	\
<i>Anaerobic Digestion</i>	\	0,0244

Table 4: Avoided emissions of the materials re-processing (expressed per tonne of secondary material produced) [31].

<i>Process</i>	<i>Recycle Efficiency</i>	<i>Energy Consumption Mj_{eq}</i>	<i>Global Warming Kg CO₂_{eq}</i>	<i>Acidification SO₂_{eq}</i>	<i>Human Toxicity 1,4 DCB_{eq}</i>	<i>Photochemical ozone creation kg C₂H₄_{eq}</i>
<i>Paper</i>	83.3 %	- 14,708	- 445	- 2.377	- 92	- 0.172
<i>Polyethylene Terephthalate (PET)</i>	81.0 %					
<i>Polyethylene high density (HDPE)</i>	81.0%	- 15,940	- 427	- 1.397	- 179	- 0.416
<i>Polypropylene (PP)</i>	81.0 %					
<i>Aluminium</i>	100.0 %	- 174,634	- 8,868	- 52.803	- 40,507	- 16.156
<i>Ferrous materials</i>	100.0 %	- 14,676	- 1,292	- 4.072	- 84	- 1,114
<i>Glass</i>	83.5 %	- 6,415	- 643	- 3.642	- 146	- 0.232

Table 5: Disaggregated environmental indicators as evaluated for each scenario

Scenario	Separate Collection (%)	Acidification Potential (Mg SO2-eq)		Global Warming Potential 100 (Gg CO2-eq)		Human Toxicity (Gg 1,4 Dichlorobenzene- eq)		Photo-oxidant formation (Mg Ethene-eq)		Eutrophication Potential (Mg PO4- eq)	
		M	E	M	E	M	E	M	E	M	E
A	50	-67,8	24,9	-20,6	87,8	-8,5	-3,3	-9,40	19,1	3	51,2
B	60	-61,2	15,0	-15,4	56,3	-8,6	-2,5	-7,80	12,3	6,8	17,6
C	50	-76,4	17,0	-28,4	48,5	-3,3	-2,5	-11,8	0,60	-3,9	4,40
D	60	-103	19,4	-34,2	19,1	-3,8	-0,4	-13,9	4,40	-5	4,60