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3003 Berne, august 2007

SEPARATELY COLLECTED WASTE FOR RECYCLING 2006; QUANTITIES AND RATES

Population 2006: 7,507 mio residents

Paper

<u>Year</u>	<u>Domestic production</u>	<u>Total consumption</u>	<u>Consumption per capita</u>	<u>Collection per capita</u>
1960	480'000 t	494'000 t	91 kg	29 kg
1970	731'000 t	961'000 t	153 kg	47 kg
1980	914'000 t	1'065'000 t	167 kg	59 kg
1985	1'019'000 t	1'161'000 t	178 kg	70 kg
1986	1'087'000 t	1'242'000 t	191 kg	76 kg
1987	1'147'200 t	1'326'900 t	200 kg	84 kg
1988	1'215'600 t	1'369'800 t	207 kg	92 kg
1989	1'258'900 t	1'436'695 t	214 kg	100 kg
1990	1'294'700 t	1'447'443 t	213 kg	105 kg
1991	1'259'000 t	1'430'411 t	209 kg	107 kg
1992	1'304'800 t	1'387'800 t	201 kg	108 kg
1993	1'331'800 t	1'385'300 t	199 kg	108 kg
1994	1'408'100 t	1'499'500 t	214 kg	125 kg
1995	1'434'460 t	1'526'679 t	216 kg	131 kg
1996	1'460'480 t	1'481'904 t	211 kg	141 kg
1997	1'582'513 t	1'609'411 t	227 kg	141 kg
1998	1'591'238 t	1'651'957 t	232 kg	149 kg
1999	1'753'568 t	1'718'625 t	240 kg	153 kg
2000	1'780'244 t	1'770'949 t	246 kg	158 kg
2001	1'749'536 t	1'687'033 t	232 kg	161 kg
2002	1'804'629 t	1'649'415 t	226 kg	158 kg
2003	1'817'144 t	1'615'946 t	219 kg	153 kg
2004	1'777'302 t	1'664'260 t	224 kg	157 kg
2005	1'752'049 t	1'671'294 t	224 kg	167 kg
2006	1'684'706 t	1'655'735 t	221 kg	170 kg
<u>Year</u>	<u>Used paper collection</u>	<u>Rate of return in % of consumption</u>	<u>Used paper in production</u>	<u>Rate of used paper in production (%)</u>
1960	160'000 t	32.4 %	137'000 t	28.5 %
1970	297'000 t	30.9 %	210'000 t	28.7 %
1980	376'000 t	35.3 %	320'000 t	35.0 %
1985	503'000 t	43.3 %	449'000 t	44.1 %
1986	498'000 t	40.1 %	465'000 t	42.8 %
1987	553'100 t	41.7 %	485'700 t	42.3 %
1988	613'100 t	44.8 %	564'600 t	46.4 %
1989	674'100 t	46.9 %	611'123 t	48.5 %
1990	715'400 t	49.4 %	617'009 t	47.7 %
1991	732'200 t	51.2 %	582'062 t	46.2 %
1992	744'800 t	53.7 %	659'500 t	50.5 %
1993	753'949 t	54.4 %	701'146 t	52.6 %
1994	874'900 t	58.3 %	798'330 t	56.7 %
1995	925'644 t*	60.6 %	874'500 t	61.0 %
1996	999'283 t*	67.4 %	947'565 t	64.9 %
1997	1'003'461 t*	62.3 %	1'032'081 t	65.2 %
1998	1'061'925 t*	64.3 %	1'081'509 t	68.0 %

1999	1'093'713 t*	63.6 %	1'111'093 t	63.4 %
2000	1'137'050 t*	64.2 %	1'145'536 t	64.3 %
2001	1'168'410 t*	69.3 %	1'109'201 t	63.4 %
2002	1'159'615 t*	70.3 %	1'089'211 t	60.4 %
2003	1'129'190 t*	69.9 %	1'059'512 t	58.3 %
2004	1'163'503 t*	69.9 %	968'375 t	54.5 %
2005	1'243'816 t*	74.4 %	939'117 t	53.6 %
2006	1'278'667 t*	77.2 %	958'985 t	56.9 %

* of which approx. 5 % extraneous material, impurities

Source: Swiss Cellulose, Paper and Board Industry (ZPK)

Glass (bottle glass)

Year	Consumption	Collection	Collection area of VGV ¹	Collection per capita	Rate of collection (% of consumption)
1973		12'238 t		1.9 kg	
1984		126'557 t		19.5 kg	
1985		132'465 t		20.5 kg	46 %
1986		130'746 t		20.0 kg	
1987		140'118 t		21.5 kg	
1988		155'601 t		23.3 kg	
1989	298'500 t	164'188 t		24.8 kg	55 %
1990	275'050 t	178'781 t	37'114 t	26.3 kg	65 %
1991	280'230 t	198'960 t	51'158 t	29.4 kg	71 %
1992	294'519 t	212'054 t	49'179 t	31.0 kg	72 %
1993	292'889 t	229'260 t	51'140 t	33.2 kg	78.3 %
1994	288'344 t	241'921 t	51'326 t	34.7 kg	83.9 %
1995	309'000 t	262'767 t ^{*2}	47'539 t	37.4 kg	84.9 %
1996	290'000 t	258'813 t ^{*3}	48'120 t	36.6 kg	89.3 %
1997	310'535 t	283'208 t ^{*4}	51'882 t	39.9 kg	91.2 %
1998	308'000 t	280'587 t ^{*5}	59'724 t	39.4 kg	91.2 %
1999	305'278 t	282'687 t ^{*6}	59'542 t	39.6 kg	92.6 %
2000	316'886 t	289'094 t ^{*7}	60'011 t	40.1 kg	91.2 %
2001	320'265 t	293'683 t ^{*8}	248'765 t	40.4 kg	91.7 %
2002	312'425 t	293'055 t ^{*9}	227'300 t	40.0 kg	93.8 %
2003	315'060 t	301'433 t ^{*10}	231'731 t	40.9 kg	95.7 %
2004	318'016 t	303'977 t ^{*11}	209'294 t	41.0 kg	95.6 %
2005	323'208 t	308'167 t ^{*12}	210'204 t	41.3 kg	95.3 %
2006	322'483 t	308'170 t *	215'645 t	41.0 kg	95.6 %

¹ VGV: Ordinance on beverage containers

² Collection quantity Vetro-Recycling: 125'000 t; collection quantity third party: 138'000 t

³ Collection quantity Vetro-Recycling: 112'000 t; collection quantity third party: 147'000 t

⁴ Collection quantity Vetro-Recycling: 112'330 t; collection quantity third party: 170'878 t davon 99'000 t Export

⁵ Collection quantity Vetro-Recycling: 92'211 t; collection quantity third party: 188'376 t;

for construction materials, isolation materials or export: 188'696 t

⁶ Collection quantity Vetro-Recycling: 79'490 t; collection quantity communes and third party: 203'197 t;

export to foreign glassworks, for construction materials, for isolation materials: 204'082 t

⁷ Collection quantity Vetro-Recycling: 98'384 t; collection quantity communes and third party: 190'710 t;

of which processed into glass sand: 77'000 t, export: 114'000 t

⁸ Collection quantity Vetro-Recycling 97'870 t; collection quantity communes and third party: 195'813 t; recycled in Switzerland for the production of new glass packaging: 97'870 t; to construction materials, isolation materials or export: 195'813 t; fraction of waste glass used in production: 63.8%, in tons: 126'929 t incl. fabrication fragments; production: 199'012 t

⁹ Used in Switzerland for the production of new glass 94'000 t, for export 122'000 t, alternative recycling 77'000 t (as replacement for sand, gravel or something else)

¹⁰ Used in Switzerland for the production of new glass 92'000 t, for export 142'000 t, alternative recycling 68'000 t (as replacement for sand, gravel or something else)

¹¹ Used in Switzerland for the production of new glass 86'840 t, alternative recycling 47'452 t, for export 169'685 t

¹² Alternative recycling 44'352 t, for export 172'544 t

* contains fabrication fragments and approx. 5% of extraneous material

Source: Vetro-Recycling AG, FOEN, SVUG

Aluminium

<u>Year</u>	<u>Alu consumption</u> <u>(Switzerland)</u>	<u>Delivered to end-users</u> <u>(home/office (HO) and packaging (P))</u>
1989	ca. 160'000 t	
1990	ca. 152'600 t	
1991	ca. 131'900 t	76'200 t
1992	120'900 t	71'600 t
1993	117'100 t (16.8 kg/cap.)	66'200 t (HO 3.2%, P 13.5%)
1994	ca. 146'505 t (20.9 kg/cap.)	66'600 t (HO 3.3%, 2200 t; P 13.8%, 9200 t)
1995	131'012 t (18.4 kg/cap.)	68'200 t (HO 3.7%, 2500 t; P 12.6%, 8600 t)
1996	119'100 t (16.8 kg/cap.)	
1997	143'600 t (20.8 kg/cap.)	64'900 t (HO 3.2%, 2100 t; P 14.8%, 9600 t)
1998	165'900 t (23.4 kg/cap.)	59'700 t (HO 3.5%, 2100 t; P 12.7%, 7600 t)
1999	ca. 157'000 t	54'200 t (HO 4.6%, 2400 t; P 13.6%, 7400 t)
2000	ca. 171'200 t (24.1 kg/cap.)	63'300 t (HO 5%, 3165 t; P 14%, 8862 t)
2001	ca. 164'900 t (23.2 kg/cap.)	61'000 t (HO 5%, 3050 t; P 14%, 8540 t)
2002	ca. 150'900 t (21.3 kg/cap.)	no spec. (HO 5%, P 14%)
2003	ca. 153'600 t (21.6 kg/cap.)	no specifications possible
2004	ca. 172'600 t (23.6 kg/cap.)	no specifications possible
2005	164'400 t (22.2 kg/cap.)	no specifications possible; P 12-18%

Aluminium (cont.)

<u>Year</u>	<u>Consumption</u> (from households, including cans)		
1988	885 t		
1989	1270 t		
1990	1520 t		
1991	1896 t	Rate of return:	16 % of consumption for home/office (HO) and packaging (P)
1992	2421 t	Rate of return:	21 % of 11'400 t
1993	2380 t	Rate of return:	22 % of 11'000 t
1994	2460 t	Rate of return:	22 % of 11'400 t
1995	2400 t	Rate of return:	22 % of 11'000 t of consumption for HO and P
1996	2140 t*	Rate of return:	21 % of 10'000 t of consumption for HO and P
1997	2200 t	Rate of return:	19 % of 11'700 t of consumption for HO and P
1998	2200 t	Rate of return:	23 % of 9'700 t of consumption for HO and P
1999	2138 t	Rate of return:	22 % of 9'800 t of consumption for HO and P
2000	2400 t	Rate of return:	20 % of 12'027 t of consumption for HO and P
2001	3150 t	Rate of return:	27 % of 11'590 t of consumption for HO and P
2002	3557 t		
2003	ca. 3800 t	Estimated; no statistics were collected by the branch	
2004	ca. 4200 t	Estimated; no statistics were collected by the branch	
2005	ca. 4560 t	Estimated by Igora	
2006	5200 t	Data by Igora	

* Not included in this collection quantity are pans, fellos and other coarse-grained metals from households. The reasons for the reduction of the collection quantity in the last years are:

- the robustness of the partition of alu-packagings decreases steadily;
- the treatment in the sorter-centrals has improved with the result, that less waste is mentioned in the statistics.

Production from recycled products	1997:	7'900 t	2000:	6'100 t
	1998:	15'100 t	2001:	3'500 t
	1999:	6'100 t	from 2002:	0 t

Aluminium (beverage cans)

<u>Year</u>	<u>Consumption</u>	<u>Collection</u>	<u>Returning rate</u> (% of consumption)
1987	1580 t	300 t	19 %
1988	1670 t	350 t	21 %
1989	1610 t	500 t	31 %
1990	1510 t	604 t	40 %
1991	1700 t	835 t	49 %

1992	1839 t	1250 t	68 %
1993	1735 t	1380 t	80 %
1994	1759 t	1460 t	83 %
1995	1634 t	1442 t ¹	85 %
1996	1358 t	1180 t	87 %
1997	1351 t	1310 t ²	88 %
1998	1552 t	1385 t	89 %
1999	1755 t (120 mio pieces)	1580 t (110 mio pieces)	90 %
2000	1957 t (140 mio pieces)	1778 t (127 mio pieces)	91 %
2001	2585 t (2370 t	91.6 %
2002	2871 t (185 mio pieces, +32%)	2630 t (170 mio pieces)	91 %
2003	3479 t (224 mio pieces)	> 2900 t (187 mio pieces)	> 85 % (estimated)
2004	3685 t (237 mio pieces)	3250 t (209 mio pieces)	88 %
2005	4150 t (267 mio pieces)	3750 t (241 mio pieces)	90 %
2006	4847 t (260 mio pieces)	4370 t (280 mio pieces)	90 %

¹ Collection quantity: 1392 t; 50 t cans are not under the application of the VGV

² Collection quantity: 1195 t

Containers for pet-food

1997:	48 % (consumption 115 mio pieces)
1998:	55 %
1999:	60 % (396 t)
2000:	65 % (440 t)
2001:	70 % (475 t)
2002:	75% (ca. 510 t)
2003	
2004	80% (ca. 540 t; 91 mio pieces)
2005	80 % (consumption 120 mio pieces)

Food in tubes

15 % (consumption 56 mio pieces)
20 %
25 % (162 t)
30 % (190 t)
35 % (305 t)
40 % (ca. 260 t)
50% (ca. 325 t; 58 mio pieces)
55 % (consumption ca. 180 mio pieces, of which 71 mio pieces larger than 15 g)

Used as aluminium cans, pet-food containers and tubes: 3300 t

Collection: 2400 t corresp. 73%

Source: IGORA-Genossenschaft, SVUG

PET (beverage bottles)

Year	Consumption	Collection	Rate of return (% of consumption)
1991	4'175 t	548 t	13 %
1992	6'196 t	3'300 t ¹	53 %
1993	8'473 t	6'136 t ²	72 %
1994	13'623 t	9'454 t	70 %
1995	17'023 t	12'609 t	74 %
1996	18'245 t	14'448 t	79 %
1997	21'471 t	17'086 t	79.6 %
1998	24'081 t	19'100 t	79.1 %
1999	27'600 t	22'700 t ³	82 %
2000	30'000 t	24'700 t ³	82 %
2001	31'522 t (756 mio bottles)	26'000 t ³ (622 mio bottles)	82 %
2002	37'783 t (ca. 1 bil. bottles)	27'248 t ³ (700 mio bottles)	72 % ⁴
2003	45'836 t (ca. 1,2 bil. bottles)	32'597 t ³ (870 mio bottles)	71 % ⁴
2004	42'325 t (ca. 1,1 bil. bottles)	31'495 t ³ (850 mio bottles)	74 % ⁴
2005	42'156 t (ca. 1,14 bil. bottles)	31'604 t ³ (856 mio bottles)	75 % ⁴
2006	42'700 t (ca. 1,27 bil. bottles)	32'366 t ³ (959 mio bottles)	76 %

¹ 1992: Amount collected by PRS: 3250 t, separately collected: 50 t

² 1993: Amount collected by PRS: 6091 t, separately collected: 45 t

³ 2005, 2004, 2003, 2002, 2001, 2000 und 1999: Amount collected by PRS and other collectors

⁴ Pure PET, without lids and labels

Source: Schweiz. Verein für umweltgerechte Getränkeverpackungen (SVUG)

Tinplate (cans)

<u>Year</u>	<u>Consumption</u>	<u>Collection</u>	<u>Rate of return (% of consumption)</u>
1987		200 t	
1988	21'300 t	640 t	3 %
1989	19'850 t	1'787 t	9 %
1990	20'000 t	3'800 t	19 %
1991	20'700 t	5'600 t	28 %
1992	19'700 t	7'100 t	36 %
1993	19'700 t	7'700 t	39 %
1994	19'940 t	8'770 t	44 %
1995	19'800 t	9'500 t	48 %
1996	20'000 t	11'000 t	55 %
1997	18'800 t	11'450 t	61 %
1998	18'400 t	11'600 t	63 %
1999	18'200 t	12'000 t	66 %
2000	18'200 t	12'200 t	67 %
2001	17'200 t	12'000 t	70 %
2002	16'000 t	12'000 t	75 % (export 40%)
2003	16'000 t ¹	12'600 t ¹	79 % (export 40%)
2004	15'800 t	12'500 t	79 %
2005	15'200 t	12'000 t	79 %
2006	16'000 t	12'800 t	80 %

¹ Estimation FOEN, according to rates indicated by FERRO Recycling

Source: FERRO Recycling

Textiles

<u>Year</u>	<u>Collection*</u>
1992	17'000 t
1993	20'800 t
1994	22'300 t
1995	27'000 t
1996	30'000 t
1997	32'000 t
1998	31'000 t
1999	32'000 t
2000	32'000 t
2001	40'000 t
2002	42'500 t (members of coord. point 37'500 t, others ca. 5000 t)
2003	42'000 t (members of coord. point 37'200 t, others ca. 5000 t)
2004	44'000 t (members of coord. point 38'873 t, others ca. 5000 t)
2005	45'000 t (members of coord. point 40'046 t, others ca. 5000 t)
2006	47'000 t (members of coord. point 41'695 t, others ca. 5000 t)

* Amount of textiles and shoes collected by Contex, Satex, Solitex, Texaid and Textura (including estimation FOEN of other collections)

Source: Koordinationsstelle für die Textilsammlungen in der Schweiz: Contex, Satex, SoliTex, Texaid

Batteries

<u>Year</u>	<u>Consumption</u>	<u>Collection</u>	<u>Rate of return in % of consumption</u>
1990	3650 t	1)	1)
1991	3574 t	1)	1)
1992	3379 t	1)	1)
1993	3888 t	2240 t	58 %
1994	3440 t	2240 t	60 %
1995	3617 t	1980 t	54 %
1996	3293 t	2220 t	67 %
1997	3377 t	2018 t	60 %
1998	3387 t	2211 t	65 %
1999 ²	3652 t ²	2207 t ²	60 %
2000	3465 t	2376 t	68 %
2001	3800 t ³ (INOBAT 3460 t)	2332 t	61.4 %
2002	3800 t ³ (INOBAT 3509 t)	2327 t	61.2 %
2003	3800 t ³ (INOBAT 3563 t)	2448 t	64.4 %
2004	3800 t ³	2500 t	66.6 %
2005	3800 t	2360 t	62.1 %
2006	3737 t	2457 t	66.4 %

¹ No reliable data available

² Estimation FOEN

³ Data INOBAT + built-in batteries

1/3 communal collection points

1/3 detail retailers (distributors)

1/3 others (authorities, schools, military, etc.)

Source: INOBAT

Electrical and electronical appliances

<u>Year</u>	<u>Collection</u> ¹	<u>Collection per capita</u>
2001 ²	38'100 t	5.3 kg
2002	37'400 t ³	5.1 kg
2003	71'600 t (29'623 Swico)	9.7 kg
2004	76'023 t (36'409 Swico)	10.3 kg
2005	82'500 t (Sens 42'903 t, Swico 39'597 t)	11.0 kg
2006	98'700 t (Sens 53'400 t, Swico 45'300 t)	13.1 kg

¹ Amount collected by S.EN.S / Swico (data from the annual S.EN.S. report)

S.EN.S and Swico collect only appliances from recycling companies with an appropriate license. There are also companies with a cantonal ORDEA-license, which are not considered in this amount.

² There is a detailed examination in the report "E-waste in Switzerland 2001"

³ The reduction of 2002 compared to the previous year results from the withdrawal of a big company from the S.EN.S-recovery system.

Source: S.E.N.S