

Network of European Zero Waste Municipalities LIST OF COMMITED CITIES / MUNICIPALITIES

Below you can find the list of European municipalities that have committed to work towards zero waste in Europe.

www.zerowasteeurope.eu

info@zerowasteeurope.eu

There are currently **302 municipalities** with a total of **6.971.424 people** going for Zero Waste in the European Union!

Croatia	Population:	Waste generation:	Separate coll. rate:	Residual waste:
Baska	1674	330 kg per capita	46 %	178 kg per person/year
Dobrinj	2078	330 kg per capita	46 %	178 kg per person/year
Krk	6281	330 kg per capita	46 %	178 kg per person/year
Malinska-Dubasnica	3134	330 kg per capita	46 %	178 kg per person/year
Omisalj	2983	330 kg per capita	46 %	178 kg per person/year
Osijek	115000	222 kg per capita	8.5 %	204 kg per person/year
Punat	1973	330 kg per capita	46 %	178 kg per person/year
Vrbnik	1260	330 kg per capita	46 %	178 kg per person/year

Zero Waste municipalities: 8 **Zero Waste population:** 134,383

Hungary	Population:	Waste generation:	Separate coll. rate:	Residual waste:
Alsónémedi	5205	kg per capita	%	0 kg per person/year
Budakeszi	13863	kg per capita	%	0 kg per person/year
Csömör	9253	kg per capita	%	0 kg per person/year
Gyöngyös	30190	kg per capita	%	0 kg per person/year
Kaposhomok	481	kg per capita	%	0 kg per person/year
Nagyszentjános	1791	kg per capita	%	0 kg per person/year
Szorgalmatos	1091	kg per capita	%	0 kg per person/year
Tét	4020	kg per capita	%	0 kg per person/year
Törökbálint	13207	kg per capita	%	0 kg per person/year
Vép	3322	kg per capita	%	0 kg per person/year

Italy	Population:	Waste generation:	Separate coll. rate:	Residual waste:
Acquapendente	5544	379.97 kg per capita	37.98 %	239 kg per person/year
Agerola	7590	335.94 kg per capita	72.63 %	94 kg per person/year
Alcamo	45504	440.66 kg per capita	47.9 %	233 kg per person/year
Alessano	6432	373.12 kg per capita	19.56 %	302 kg per person/year
Altivole	6826	315.03 kg per capita	84.40 %	50 kg per person/year
Amaroni	1859	278.42 kg per capita	21.72 %	220 kg per person/year
Aprilia	72496	517.39 kg per capita	21.57 %	408 kg per person/year
Arcade	4438	395.42 kg per capita	87.04 %	51 kg per person/year
Asolo	9065	304.35 kg per capita	85.90 %	46 kg per person/year
Barga	10085	477.84 kg per capita	79.95 %	100 kg per person/year
Bassano Romano	5013	455.63 kg per capita	11.71 %	405 kg per person/year
Bellusco	7380	386.72 kg per capita	77.27 %	89 kg per person/year
Benevento	60504	394.74 kg per capita	64.17 %	142 kg per person/year
Bertinoro	11184	523 kg per capita	63.3 %	194 kg per person/year
Biancavilla	24026	324.31 kg per capita	33.32 %	217 kg per person/year
Binetto	2214	578.29 kg per capita	16.85 %	486 kg per person/year
Bitetto	11994	390.00 kg per capita	14.63 %	335 kg per person/year
Bitritto	11251	413.97 kg per capita	14.37 %	355 kg per person/year
Borso del Grappa	6020	349.36 kg per capita	86.44 %	49 kg per person/year
Boscoreale	28350	388.28 kg per capita	54.05 %	178 kg per person/year
Boscotrecase	10353	470.33 kg per capita	43.79 %	268 kg per person/year
Breda di Piave	7865	345.70 kg per capita	87.43 %	45 kg per person/year
Buseto Palizzolo	2983	425.54 kg per capita	47.33 %	225 kg per person/year
Caerano S. Marco	8103	323.49 kg per capita	85.96 %	48 kg per person/year
Cairo Montenotte	13276	507.50 kg per capita	58.85 %	213 kg per person/year

Calcinaia	12285	491.01 kg per capita	79.79 %	103 kg per person/year
Candiolo	5679	328 kg per capita	70 %	98 kg per person/year
Capannori	46373	449.62 kg per capita	84.61 %	72 kg per person/year
Capranica	6554	395.32 kg per capita	9.3 %	359 kg per person/year
Caprarola	5480	371.12 kg per capita	56.9 %	163 kg per person/year
Capurso	15735	500.60 kg per capita	17.01 %	415 kg per person/year
Carbonera	11233	358.70 kg per capita	86.24 %	50 kg per person/year
Carbonia	29821	413.43 kg per capita	61.23 %	161 kg per person/year
Carmignano	14398	465.20 kg per capita	63.88 %	172 kg per person/year
Casale sul Sile	12961	350.94 kg per capita	84.40 %	56 kg per person/year
Casier	11238	398.03 kg per capita	84.81 %	64 kg per person/year
Casoria	77874	427.97 kg per capita	59.66 %	175 kg per person/year
Cassino	35913	417.54 kg per capita	63.05 %	154 kg per person/year
Castelbuono	305464	353.40 kg per capita	36.76 %	226 kg per person/year
Castelcucco	2233	378.36 kg per capita	87.97 %	49 kg per person/year
Castelfranco Veneto	33802	430.86 kg per capita	82.57 %	77 kg per person/year
Castello di Godego	7197	331.01 kg per capita	83.94 %	56 kg per person/year
Cavaso del Tomba	3030	328.85 kg per capita	78.10 %	72 kg per person/year
Ceglie Messapica	20243	360.64 kg per capita	45.63 %	198 kg per person/year
Cerignola	58295	481.97 kg per capita	9.02 %	438 kg per person/year
Cerveteri	37214	584.54 kg per capita	13.65 %	508 kg per person/year
Cerzeto	1354	240.96 kg per capita	24.26 %	182 kg per person/year
Civita Castellana	16526	404.32 kg per capita	6.42 %	380 kg per person/year
Civitanova Marche	41778	580.58 kg per capita	68.22 %	186 kg per person/year
Cogorno	5657	615.46 kg per capita	20.88 %	492 kg per person/year
Collesano	305464	353.40 kg per capita	36.76 %	226 kg per person/year
Colorno	9104	500.00 kg per capita	80.2 %	100 kg per person/year
Corchiano	3907	229.18 kg per capita	65.84 %	80 kg per person/year
Cornuda	6262	383.96 kg per capita	86.29 %	54 kg per person/year

Crescentino	8086	295 kg per capita	63.3 %	109 kg per person/year
Crespano del Grappa	4532	397.58 kg per capita	81.67 %	75 kg per person/year
Crocetta del Montello	6117	343.49 kg per capita	82.87 %	62 kg per person/year
Crova	423	263 kg per capita	54.8 %	121 kg per person/year
Ferentino	21272	483.68 kg per capita	7.97 %	449 kg per person/year
Ferla	2531	323.83 kg per capita	15.67 %	275 kg per person/year
Fontanetto Po	1242	220 kg per capita	63.1 %	81 kg per person/year
Fonte	6064	333.20 kg per capita	86.39 %	47 kg per person/year
Formello	12855	370.04 kg per capita	63.93 %	137 kg per person/year
Forte dei Marmi	7642	1185.95 kg per capita	69.49 %	367 kg per person/year
Frigento	3854	234.48 kg per capita	68.1 %	75 kg per person/year
Gagliano del Capo	5262	426.23 kg per capita	18.19 %	349 kg per person/year
Giavera del Montello	5189	333.04 kg per capita	83.45 %	57 kg per person/year
Giffoni Sei Casali	5277	321.69 kg per capita	76.76 %	77 kg per person/year
Giovinazzo	20575	474.52 kg per capita	15.61 %	403 kg per person/year
Giulianova	24110	636.04 kg per capita	66.32 %	216 kg per person/year
Gratteri	305464	353.40 kg per capita	36.76 %	226 kg per person/year
Istrana	9298	319.23 kg per capita	85.99 %	48 kg per person/year
La Spezia	93990	511.05 kg per capita	37.35 %	322 kg per person/year
Ladispoli	40891	568.03 kg per capita	17.26 %	471 kg per person/year
Latronico	4599	285.79 kg per capita	39.61 %	174 kg per person/year
Lerici	10362	615.48 kg per capita	16.55 %	517 kg per person/year
Levanto	5550	629.82 kg per capita	70.26 %	189 kg per person/year
Loria	9278	287.88 kg per capita	85.55 %	43 kg per person/year
Lozzolo	837	310 kg per capita	66.5 %	105 kg per person/year
Lucca	89290	655.90 kg per capita	66.06 %	223 kg per person/year
Maiori	5607	576.60 kg per capita	63.77 %	213 kg per person/year
Manoppello	6987	403.04 kg per capita	72.4 %	113 kg per person/year
Manziana	7640	290.59 kg per capita	52.71 %	139 kg per person/year

Marcignago	2471	365.78 kg per capita	71.35 %	106 kg per person/year
Margherita di Savoia	12097	534.22 kg per capita	39.04 %	326 kg per person/year
Marineo	6701	250.74 kg per capita	47.53 %	133 kg per person/year
Marta	3510	335.50 kg per capita	40.48 %	201 kg per person/year
Maser	5088	356.20 kg per capita	87.37 %	46 kg per person/year
Maserada sul Piave	9387	352.79 kg per capita	85.46 %	53 kg per person/year
Melpignano	2237	648.03 kg per capita	48.35 %	337 kg per person/year
Mirabello Monferrato	1399	144 kg per capita	60.3 %	58 kg per person/year
Modugno	38569	519.30 kg per capita	14.58 %	446 kg per person/year
Monastier di Treviso	4206	553.13 kg per capita	83.91 %	94 kg per person/year
Monfumo	1417	282.07 kg per capita	85.52 %	42 kg per person/year
Monsano	3423	358.61 kg per capita	61.42 %	140 kg per person/year
Monte San Pietro	11029	398.32 kg per capita	78.38 %	88 kg per person/year
Montebelluna	31336	413.46 kg per capita	84.53 %	66 kg per person/year
Montefiascone	13556	453.54 kg per capita	42.94 %	263 kg per person/year
Monterotondo	40682	396.19 kg per capita	3.1 %	384 kg per person/year
Montignoso	10365	552.05 kg per capita	69.25 %	171 kg per person/year
Montorio al Vomano	8239	296.89 kg per capita	70.28 %	89 kg per person/year
Morciano di Leuca	3380	461.81 kg per capita	22.16 %	360 kg per person/year
Morgano	4516	402.67 kg per capita	86.78 %	56 kg per person/year
Napoli	978399	511.13 kg per capita	22.02 %	399 kg per person/year
Narni	19931	433.87 kg per capita	40.92 %	260 kg per person/year
Nervesa della Battaglia	6932	355.43 kg per capita	84.80 %	57 kg per person/year
Nocera Inferiore	46386	419.48 kg per capita	37.83 %	264 kg per person/year
Olgiate Comasco	11479	421.27 kg per capita	62.08 %	160 kg per person/year
Oriolo Romano	3805	167.93 kg per capita	56.78 %	73 kg per person/year
Oristano	32015	456.08 kg per capita	61.17 %	178 kg per person/year
Paderno del Grappa	2188	375.35 kg per capita	84.47 %	60 kg per person/year
Paese	21792	356.09 kg per capita	84.83 %	57 kg per person/year
Palazzolo Acreide	8873	391.99 kg per capita	8.95 %	360 kg per person/year

Paliano	8336	294.48 kg per capita	57.28 %	126 kg per person/year
Palo del Colle	21695	418.44 kg per capita	10.58 %	376 kg per person/year
Parete	11365	422.30 kg per capita	70.18 %	127 kg per person/year
Parma	189996	504.00 kg per capita	65.3 %	176 kg per person/year
Pederobba	7547	380.72 kg per capita	81.81 %	72 kg per person/year
Piana degli Albanesi	6286	255.33 kg per capita	57.44 %	110 kg per person/year
Piano di Sorrento	13159	515.16 kg per capita	61.55 %	201 kg per person/year
Pieve a Fosciana	2412	468.91 kg per capita	68 %	150 kg per person/year
Pollenza	6635	352.30 kg per capita	77.22 %	81 kg per person/year
Ponzano Veneto	12465	339.95 kg per capita	84.83 %	54 kg per person/year
Portici	55537	413.07 kg per capita	61.7 %	161 kg per person/year
Possagno	2173	331.80 kg per capita	87.25 %	43 kg per person/year
Povegliano	5210	357.53 kg per capita	85.96 %	54 kg per person/year
Preganziol	16921	368.18 kg per capita	87.55 %	48 kg per person/year
Prevalle	6989	424.35 kg per capita	78.66 %	93 kg per person/year
Quinto di Treviso	9808	415.45 kg per capita	85.13 %	62 kg per person/year
Ragusa	73030	460.51 kg per capita	17.19 %	382 kg per person/year
Ravello	2500	584.18 kg per capita	62.49 %	222 kg per person/year
Resana	9517	307.60 kg per capita	84.53 %	49 kg per person/year
Riano	10398	290.32 kg per capita	59.86 %	119 kg per person/year
Riese Pio X	11057	303.16 kg per capita	85.50 %	45 kg per person/year
Rignano Flaminio	10311	313.07 kg per capita	61.34 %	122 kg per person/year
Roncade	14234	377.75 kg per capita	87.26 %	49 kg per person/year
Salve	4720	712.91 kg per capita	19.99 %	577 kg per person/year
San Biagio di Callalta	13091	371.96 kg per capita	86.87 %	52 kg per person/year
San Germano Vercellese	1784	216 kg per capita	59.3 %	89 kg per person/year
San Sebastiano al Vesuvio	9257	451.12 kg per capita	62.81 %	171 kg per person/year
San Zenone degli Ezzelini	7383	284.06 kg per capita	85.94 %	43 kg per person/year
Sant'Agnello	9102	499.71 kg per capita	59.93 %	205 kg per person/year
Sant'Oreste	16756	58.32 kg per capita	2.92 %	57 kg per person/year

Santa Maria Capua Vetere	32900	542.72 kg per capita	46.93 %	293 kg per person/year
Santomenna	450	235.25 kg per capita	52.49 %	113 kg per person/year
Saronno	39422	407.44 kg per capita	70.75 %	122 kg per person/year
Sasso Marconi	14612	508.00 kg per capita	72.4 %	142 kg per person/year
Senigallia	45027	536.21 kg per capita	57.95 %	230 kg per person/year
Seravezza	13197	548.84 kg per capita	75.82 %	137 kg per person/year
Silea	10198	447.67 kg per capita	82.41 %	80 kg per person/year
Somma Vesuviana	35368	449.44 kg per capita	56.35 %	198 kg per person/year
Sparanise	7489	451.95 kg per capita	66.9 %	153 kg per person/year
Spresiano	11830	377.94 kg per capita	84.99 %	60 kg per person/year
Susegana	12047	410.07 kg per capita	83.83 %	70 kg per person/year
Terlizzi	27107	481.32 kg per capita	19.82 %	390 kg per person/year
Terracina	45682	625.94 kg per capita	31.67 %	431 kg per person/year
Tiggiano	2877	357.76 kg per capita	25.77 %	268 kg per person/year
Tivoli	56759	533.35 kg per capita	11.32 %	474 kg per person/year
Torre Annunziata	42868	402.96 kg per capita	59.21 %	165 kg per person/year
Torre del Greco	86793	519.11 kg per capita	34.08 %	343 kg per person/year
Travaccò Siccomario	4471	415.67 kg per capita	76.97 %	100 kg per person/year
Travacò Siccomario	4471	415.67 kg per capita	76.97 %	100 kg per person/year
Trecase	9094	377.83 kg per capita	39.64 %	230 kg per person/year
Trevignano	10784	298.38 kg per capita	86.47 %	42 kg per person/year
Trevignano Romano	5703	504.89 kg per capita	54.54 %	232 kg per person/year
Treviso	83145	488.50 kg per capita	72.63 %	137 kg per person/year
Tronzano Vercellese	3598	237 kg per capita	67.3 %	78 kg per person/year
Umbertide	16656	518.35 kg per capita	71.07 %	150 kg per person/year
Vedelago	16656	282.16 kg per capita	85.27 %	42 kg per person/year
Vercelli	46393	329 kg per capita	67.8 %	109 kg per person/year
Vetralla	14021	491.28 kg per capita	17.14 %	408 kg per person/year

Vico Equense	21019	440.16 kg per capita	65.01 %	154 kg per person/year
Villa Basilica	1652	482.45 kg per capita	72.79 %	135 kg per person/year
Villa Verde	384	249.97 kg per capita	64.25 %	90 kg per person/year
Villorba	18032	421.93 kg per capita	81.77 %	80 kg per person/year
Vimercate	25497	525.92 kg per capita	68.17 %	168 kg per person/year
Vinchio	677	251 kg per capita	71 %	73 kg per person/year
Vinovo	14423	272 kg per capita	62 %	103 kg per person/year
Volpago del Montello	10186	356.44 kg per capita	85.08 %	53 kg per person/year
Zenson di Piave	1800	393.33 kg per capita	89.32 %	43 kg per person/year
Zero Branco	11278	320.66 kg per capita	81.31 %	61 kg per person/year

Zero Waste municipalities: 181 **Zero Waste population:** 4.967.901

Romania	Population:	Waste generation:	Separate coll. rate:	Residual waste:
Avrig	12095	272 kg per capita	15 %	231 kg per person/year
Calnic	1161	272 kg per capita	10 %	245 kg per person/year
Mihai Viteazu	5749	272 kg per capita	10 %	245 kg per person/year
Recas	7782	272 kg per capita	5 %	258 kg per person/year
San Crai	1023	289.21 kg per capita	10 %	260 kg per person/year
Targu Lapus	11744	212.5 kg per capita	58.54 %	89 kg per person/year

Zero Waste municipalities: 6 **Zero Waste population:** 39.554

Slovenia	Population:	Waste generation:	Separate coll. rate:	Residual waste:
Bled	5252	442 kg per capita	64 %	159 kg per person/year
Borovnica	4153	333.72 kg per capita	76.13 %	80 kg per person/year
Gorje	2869	223 kg per capita	64 %	80 kg per person/year
Ljubljana	380287	283 kg per capita	61 %	110 kg per person/year
Log-Dragomer	3465	333.72 kg per capita	76.13 %	80 kg per person/year
Vrhnika	16477	333.72 kg per capita	76.13 %	80 kg per person/year

Spain	Population:	Waste generation:	Separate coll. rate:	Residual waste:
Aizarnazabal	775	285.18 kg per capita	72.00 %	80 kg per person/year
Alegia	1756	361.45 kg per capita	86.48 %	51 kg per person/year
Altafulla	4928	675.25 kg per capita	51.58 %	331 kg per person/year
Altzaga	165	306.41 kg per capita	67.28 %	101 kg per person/year
Anoeta	1872	367.45 kg per capita	73.81 %	99 kg per person/year
Antzuola	2193	350.37 kg per capita	81.58 %	67 kg per person/year
Arama	217	217.05 kg per capita	85.86 %	33 kg per person/year
Arboç	5517	343.1 kg per capita	53.31 %	161 kg per person/year
Arenys de Mar	15224	500.05 kg per capita	34.14 %	330 kg per person/year
Aretxabaleta	6995	341.59 kg per capita	82.49 %	61 kg per person/year
Argentona	11920	456.25 kg per capita	69.48 %	141 kg per person/year
Arrasate	22052	389.50 kg per capita	77.00 %	89 kg per person/year
Artesa de Lleida	1519	226.3 kg per capita	45.66 %	124 kg per person/year
Ataun	1700	254.40 kg per capita	79.30 %	53 kg per person/year
Azkoitia	11480	334.66 kg per capita	75.55 %	84 kg per person/year
Badia del Vallès	13531	379.6 kg per capita	33.54 %	254 kg per person/year
Balenyà	3728	324.85 kg per capita	77.88 %	75 kg per person/year
Balsareny	3474	386.9 kg per capita	35.01 %	251 kg per person/year
Beizama	167	402.33 kg per capita	64.69 %	145 kg per person/year
Bellvís	2371	365 kg per capita	58.64 %	153 kg per person/year
Bergara	14831	334.76 kg per capita	78.91 %	73 kg per person/year
Bidegoiean	524	413.42 kg per capita	68.24 %	132 kg per person/year
Bisbal d'Empordà	10793	448.95 kg per capita	37.48 %	282 kg per person/year
Castellbisbal	12369	412.45 kg per capita	51 %	202 kg per person/year
Celrà	5028	313.9 kg per capita	61.4 %	122 kg per person/year
Centelles	7346	430.7 kg per capita	27.84 %	314 kg per person/year

Cerdanyola del Vallès	57642	412.45 kg per capita	33.92 %	276 kg per person/year
Cruïlles, monells i S.Sadurní de l'heura	1273	532.9 kg per capita	42.69 %	309 kg per person/year
Cunit	12416	711.75 kg per capita	31.69 %	491 kg per person/year
Elgeta	1121	398.31 kg per capita	81.16 %	76 kg per person/year
Ezkio-Itsaso	609	241.34 kg per capita	64.00 %	87 kg per person/year
Figaró-montmany	1110	427.05 kg per capita	60.41 %	171 kg per person/year
Gaintza	120	391.15 kg per capita	63.19 %	145 kg per person/year
Gatzaga	244	531.53 kg per capita	91.25 %	48 kg per person/year
Gelida	7123	372.3 kg per capita	27.22 %	272 kg per person/year
Girona	97292	386.9 kg per capita	37.64 %	243 kg per person/year
Ibarra	4268	158.03 kg per capita	83.60 %	27 kg per person/year
Ikaztegieta	464	357.45 kg per capita	81.99 %	68 kg per person/year
Irura	1665	357.45 kg per capita	73.09 %	96 kg per person/year
Itsasondo	666	234.48 kg per capita	84.23 %	37 kg per person/year
Lazkao	5465	276.75 kg per capita	76.19 %	66 kg per person/year
Legazpi	8608	258.20 kg per capita	82.62 %	46 kg per person/year
Legorreta	1468	248.07 kg per capita	72.59 %	69 kg per person/year
Lezo	6007	233.01 kg per capita	84.23 %	37 kg per person/year
Lliçà de Vall	6426	467.2 kg per capita	70.56 %	140 kg per person/year
Manlleu	20435	405.15 kg per capita	69.6 %	126 kg per person/year
Masllorenç	534	427.05 kg per capita	36.71 %	273 kg per person/year
Mataró	124099	416.1 kg per capita	32.11 %	283 kg per person/year
Miravet	778	197.1 kg per capita	83.52 %	33 kg per person/year
Molins de Rei	24878	401.5 kg per capita	44.21 %	225 kg per person/year
Mutiloa	262	379.09 kg per capita	64.00 %	136 kg per person/year
Olaberria	957	523.58 kg per capita	77.00 %	120 kg per person/year
Ordizia	9803	271.32 kg per capita	75.91 %	68 kg per person/year
Ormaiztegi	1305	267.81 kg per capita	72.10 %	75 kg per person/year
Palafolls	9081	580.35 kg per capita	31.93 %	400 kg per person/year
Papiol	4041	419.75 kg per capita	42.92 %	243 kg per person/year
Pinell De Brai	1113	262.8 kg per capita	68.42 %	84 kg per person/year

Porqueres	4509	445.3 kg per capita	41.32 %	263 kg per person/year
Premià de Mar	28136	401.5 kg per capita	31.1 %	277 kg per person/year
Riudecanyes	1170	372.3 kg per capita	57.91 %	160 kg per person/year
Rubí	74468	394.2 kg per capita	28.61 %	284 kg per person/year
Sant Antoni de Vilamajor	5717	463.55 kg per capita	76.62 %	111 kg per person/year
Sant Cugat del Vallès	86108	397.85 kg per capita	44.91 %	222 kg per person/year
Sant Fost de Campsentelles	8539	496.4 kg per capita	29.85 %	352 kg per person/year
Sant Jaume de Llierca	799	427.05 kg per capita	44.31 %	239 kg per person/year
Sant Jaume dels Domenys	2556	438 kg per capita	32.95 %	298 kg per person/year
Sant Joan de Vilatorrada	10793	390.55 kg per capita	45.53 %	215 kg per person/year
Sant Martí de Centelles	1109	361.35 kg per capita	75.91 %	90 kg per person/year
Sant Sadurní D'Anoia	12603	394.2 kg per capita	79.25 %	83 kg per person/year
Sant Vicenç de Torelló	2013	354.05 kg per capita	63.06 %	131 kg per person/year
Santa Coloma de Gramenet	120029	354.05 kg per capita	19.79 %	287 kg per person/year
Santa Margarida i els Monjos	7288	525.6 kg per capita	49.2 %	268 kg per person/year
Santa Maria D'Oló	1060	357.7 kg per capita	69.38 %	111 kg per person/year
Santa Perpètua de Mogoda	25473	368.65 kg per capita	30.32 %	258 kg per person/year
Segura	1480	245.39 kg per capita	72.28 %	69 kg per person/year
Sitges	29140	762.85 kg per capita	35.55 %	495 kg per person/year
Subirats	3027	500.05 kg per capita	50.17 %	250 kg per person/year
Terrassa	215055	339.45 kg per capita	32.68 %	231 kg per person/year
Tolosa	18836	359.62 kg per capita	77.00 %	83 kg per person/year
Usurbil	6168	365.47 kg per capita	77.04 %	84 kg per person/year
Valls	24649	427.05 kg per capita	41.48 %	252 kg per person/year
Vidreres	7748	551.15 kg per capita	41.56 %	325 kg per person/year
Vila-rodona	1261	306.6 kg per capita	70.53 %	92 kg per person/year
Vilafranca del Penedès	38929	478.15 kg per capita	33.27 %	320 kg per person/year
Vilanova de Prades	132	529.25 kg per capita	32.63 %	360 kg per person/year

Villabona	5882	207.82 kg per capita	77.69 %	48 kg per person/year
Zaldibia	1558	225.33 kg per capita	79.85 %	47 kg per person/year
Zegama	1527	304.17 kg per capita	78.00 %	67 kg per person/year
Zestoa	3656	370.60 kg per capita	75.33 %	93 kg per person/year
Zizurkil	2994	357.45 kg per capita	61.99 %	139 kg per person/year

Zero Waste municipalities: 90 **Zero Waste population:** 1.328.160

United

Kingdom Population: Waste generation: Separate coll. rate: Residual waste:

Bute 6500 617.53 kg per capita 40 % 370 kg per person/year

Zero Waste municipalities: 1 **Zero Waste population:** 6.500



Zero Waste? Our Network
ZW Business The ZW Lifestyle

The ZW Municipality

The

Network of European Zero Waste Municipalities

What defines a "Zero Waste Municipality" is the firm and verifiable commitment to move towards Zero Waste and the results that it delivers.

Zero Waste Europe brings together and represents the European municipalities that have openly committed to the goal of continuously reducing waste generation and improving waste separate collection and hence redesigning the relationship between people and waste.





Download a list of all Zero Waste municipalities.

Browse data from Zero Waste municipalities:

Search for...

All countries

All cities

✓

Municipalities following the Zero Waste Roadmap



BENCHMARK EUROPEAN MUNICIPALITIES AGAINST EACH OTHER

What does it mean to be a Zero Waste municipality?

The network of European municipalities towards Zero Waste comprises frontrunners in the field of waste resource and management such as the best performing entity in Europe, the Contarina district in Italian region of Veneto. However the aim of ZWE is not only to give visibility to best performers but also to facilitate and recognise the commitment of those municipalities who, albeit maybe currently throwing unsatisfactory results, are firmly committed to consistently advance towards Zero Waste.

For this purpose the membership of the Network of Zero Waste Municipalities in Europe is structured in two categories:

1st Category – Municipalities working towards Zero Waste

The guidelines established by the Zero Waste International Alliance about the conditions that a municipality has to fulfil in order to qualify and enter the network of **Municipalities Working Towards Zero Waste** are the following:

- Adopt a commitment to implement residential collection programs for recyclables and organics (including food scraps) by a given date
- Consider all discards generated in the municipality whether or not they are directly controlled by the municipality (such as discards generated in the institutional, commercial and industrial sectors). Communities should exercise control over those sectors they are directly responsible for and influence those sectors that they are not directly responsible for.
- Advocate for redesign of problem materials that are not recyclable or compostable. Consider local actions/campaigns to encourage redesigns.
- Report progress annually toward Zero Waste Plan milestones.
- Implement a pay-as-you-throw rate structure or other financial incentives for residents (if allowed by state/provincial or national regulations) to encourage them to waste less and recycle more.
- Establish a Zero Waste Advisory Board or multi-stakeholder process (involving residents, businesses, staff or elected officials, Zero Waste experts, and nongovernmental organizations) to participate in the development and implementation of a Zero Waste Plan or Strategy, assess critical steps, define workarounds or retabling of deadlines and development of similar key policy, program and facility implementation decisions.
- Conduct audits of discarded materials at least every 5 years in order to: analyze the progress of the Zero Waste Plan, assess what is left in discarded materials, define strategies and campaigns to achieve further improvements, provide feedback to manufacturers and work with them to redesign materials, products

and packaging that are hardly or not reusable, recyclable, or compostable, .

- Oppose any kind of combustion technologies that operate above 93°C, both those already operating ("legacy incinerators") and those in planning or development in their jurisdiction or region. Communities with existing incinerators must commit in writing to phase out all burning in next contract with service providers or when alternative facilities are available.
- Define quantitative targets for the mid-term (within 10 years) and long-term (within 20 years). These could include a residual waste reduction target (e.g. "less than 50 kgs per person by 2020) or a reduction by a further amount within 10 years (e.g. "reduce by 80% remaining discards"), or adoption of "darn close to Zero".

These actions should be included in either a formal Zero Waste resolution and/or a Zero Waste Plan or Strategy signed by the person with jurisdictional authority (Mayor, Manager, Council, District, or otherwise, depending on the local regulatory framework and defined responsibilities for the parties locally).

The municipalities committed to Zero Waste are marked with a blue pin in this map.

2nd - Category - Best practices Municipalities

In order to qualify as best practice the municipality will need to generate a maximum amount of 75kg of residual waste -what is finally sent for disposal- per person per year.

The municipalities committed to Zero Waste are marked with a blue pin in this map and they are also highlighted with a star.



Co-funded by the **Europe for Citizens Programme** of the European Union

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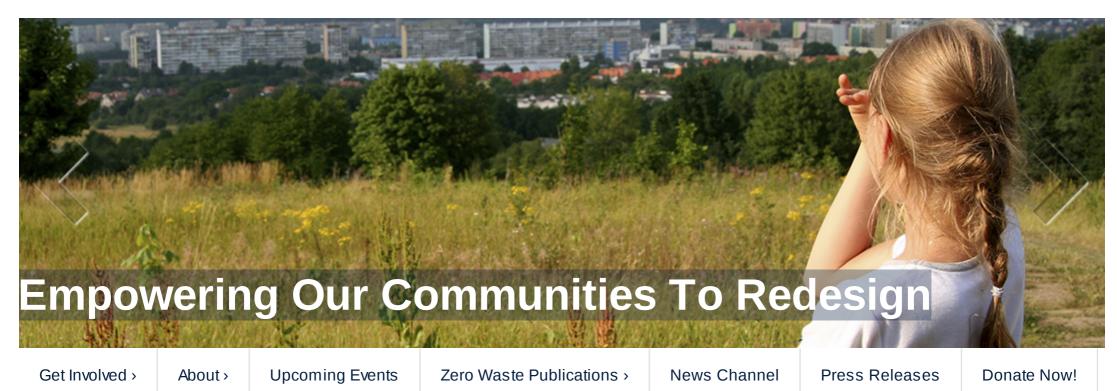
Zero Waste?

Our Network

The ZW Municipality

The ZW Business

The ZW Lifestyle



Our Network

At national and local levels there are many organisations and municipalities promoting the Zero Waste strategy as a way to make Europe more sustainable.

Local groups are responsible for promoting ZW, managing and monitoring the network of Zero Waste municipalities -to see the list of

municipalities in the Zero Waste network click here— and engaging with companies and decision-makers.

To become member of Zero Waste Europe the organisation has to agree with the ZWE principles and the ZW hierarchy. To become a member contact us.

Local groups members of Zero Waste Europe are:

Amigos de la Tierra

Both Ends – Netherlands

Estratègia Catalana Residu Zero -Catalonia, Spain

Humusz – Zero Waste Hungary

Retorna

Residuo Cero Madrid

UKWiN – United Kingdom

Za Zemiata – Bulgaria

Owaste Germany

Zero Waste Brussels

Zero Waste France

Zero Waste Italy

Zero Waste Montenegro

Zero Waste North West - Northern Ireland, UK

Zero Waste Slovenia Zero Waste Romania

Zero Waste UK Alliance

Zero Zabor - Basque Country, Spain

Aspirant member:

Zero Waste Heroes



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Tw eet







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ZW Gipuzkoa

New Zero Waste groups are appearing in the region of Gipuzkoa in the spanish Basque Country. Following the experience of Usurbil, a municipality that has achieved 88% separate collection after only two years of implementation of the door-to-door collection, and after the municipalities of Hernani and Oiartzun joined this system of separate collection, 7 new groups of citizen-led Zero Zabor (Zero Waste) groups have appeared in the region of Guipuzkoa in the spanish Basque Country.

Usurbil was pioneer in challenging separate collection by on-road container (which was achieving rates consistently below 40%) and decided to implement a door-to-door collection system. Hernani (20,000 inhabitants) and Oiartzun followed this example a year later and currently the three of them achieve above 75% of separate collection.

However the region of Guipuzkoa still insists in building an incinerator and, in view of the success of the Zero Zabor experiences, has speeded-up the works to stop other municipalities from joining the Zero Waste model. Moreover the Guipuzkoa region refuses to increase the current composting capacity of only 2.500tn and the 4.400tn of high quality organic waste that is separately collected can't be composted -as the European waste hierarchy would request-.

But the Zero Waste philosophy counts with the support not only of some highly committed municipalities but also of citizen groups that are tirelessly working to spread the word that reducing waste and increasing recycling is not only necessary but also possible. By replicating the experienced pioneered by Usurbil and followed by Hernani, Oiartzun and others, Guipuzkoa could create more jobs, less pollution and more local economy. In Gipuzkoa a struggle between the past and the future is taking place, between those who want to burn waste and those who want to reuse and recycle resources. The Zero Waste strategy is showing the alternative to end-ofpipe obsolete technologies and with the new groups in the Basque Country and the already existing Catalan Zero Waste network, change is happening in Spain.

Websites of the Zero Waste groups in Euskadi -Spanish Basque Country-:

- http://www.gipuzkoazz.com/zerozabor
- http://zerozabor.ning.com/
- http://zarautz0zabor.wordpress.com/
- http://zerozaborzumaian.wordpress.com/
- http://usurbilzz.wordpress.com/
- http://www.blogak.com/gipuzkoasinincineradora/

See this video about Zero Zabor to see the motivation of the people:

Tw eet **17** in Share 0 0



Brussels, 2.7.2014 COM(2014) 398 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Towards a circular economy:
A zero waste programme for Europe

{SWD(2014) 206 final} {SWD(2014) 211 final}

EN EN

Towards a circular economy: A zero waste programme for Europe

1. Introduction: a circular economy in support of sustainable growth

Valuable materials are leaking from our economies. In a world where demand and competition for finite and sometimes scarce resources will continue to increase, and pressure on resources is causing greater environmental degradation and fragility, Europe can benefit economically and environmentally from making better use of those resources. Since the industrial revolution, our economies have developed a 'take-make-consume and dispose' pattern of growth — a linear model based on the assumption that resources are abundant, available, easy to source and cheap to dispose of. It is increasingly being understood that this threatens the competitiveness of Europe.

Moving towards a more circular economy is essential to deliver the resource efficiency agenda established under the Europe 2020 Strategy for smart, sustainable and inclusive growth. Higher and sustained improvements of resource efficiency performance are within reach and can bring major economic benefits.

Circular economy systems keep the added value in products for as long as possible and eliminates waste. They keep resources within the economy when a product has reached the end of its life, so that they can be productively used again and again and hence create further value. Transition to a more circular economy requires changes throughout value chains, from product design to new business and market models, from new ways of turning waste into a resource to new modes of consumer behaviour. This implies full systemic change, and innovation not only in technologies, but also in organisation, society, finance methods and policies. Even in a highly circular economy there will remain some element of linearity as virgin resources are required and residual waste is disposed of.

Industry already recognises the strong business case for improving resource productivity. It is estimated that resource efficiency improvements all along the value chains could reduce material inputs needs by 17%-24% by 2030² and a better use of resources could represent an overall savings potential of €630 billion per year for European industry.³ Business driven studies based on product-level modelling demonstrate significant material cost saving opportunities for EU industry from circular economy approaches and a potential to boost EU GDP by up to 3.9%⁴ by creating new markets and new products and creating value for business. It is not surprising therefore that companies are continually working to improve resource management, but they are held back by a range of market barriers.

The high-level European Resource Efficiency Platform, ⁵ bringing together selected governments, businesses and civil society organisations, called for action to move to a more circular economy, which relies more on reuse and high-quality recycling and much less on primary raw materials.

² Meyer, B. et al (2011) "Macroeconomic modelling of sustainable development and the links between the economy and the environment". Study for the European Commission (DG Environment), available at http://ec.europa.eu/environment/enveco/studies_modelling/pdf/report_macroeconomic.pdf

¹ COM(2010) 2020, COM(2011) 21.

³ "Guide to resource efficiency in manufacturing: Experiences from improving resource efficiency in manufacturing companies". Europe INNOVA (2012).

⁴ Ellen MacArthur Foundation (2012) Towards the Circular Economy: Economic and business rationale for an accelerated transition.

⁵ http://ec.europa.eu/environment/resource efficiency/re platform/index en.htm.

With the *Roadmap to a Resource Efficient Europe* in 2011,⁶ the Commission proposed a framework for action and underlined the need for an integrated approach across many policy areas and levels. The main ideas of the Roadmap are now developed in the Seventh Environment Action Programme (7th EAP).⁷

Moving to more circular economic models promises a much brighter future for the European economy. It would allow Europe to rise to the current and future challenges of global pressure on resources and rising insecurity of supply. Pumping resources back into productive use again and again, cutting waste and reducing dependence on uncertain supplies is a direct route to improving resilience and competitiveness. By helping to decouple economic growth from resource use and its impacts, it offers the prospect of sustainable growth that will last.

Resource productivity in the EU grew by 20% in 2000-2011, but this may be in part due to the effects of the recession. Maintaining this rate would lead to a further 30% increase by 2030 and could boost GDP by nearly 1%, while creating over two million jobs more than under a business-as-usual scenario. Stepping up efforts to increase resource productivity will go hand in hand with existing objectives of Community policy such as reducing carbon emission, increasing energy efficiency, sustainable reindustrialisation of the EU economy, and securing access to raw materials, whilst reducing environmental impacts and greenhouse gas emissions.

There is a wide range of proven measures to promote resource efficiency that have shown pay-offs and the potential to be applied on a more systematic basis. The steps needed to ensure that these changes are job-rich are also being undertaken, in particular in the Communication on Green Employment and the Green Action Plan for SMEs.⁹

2. Setting up an enabling policy framework

Markets are an important driver of resource efficiency and circular economy, as materials and energy have become the principal input costs for many companies. However, whilst markets are already driving change there are a number of market barriers to effective and efficient management of resources. Waste prevention, ecodesign, reuse and similar measures could bring net savings of €600 billion, or 8% of annual turnover, for businesses in the EU, while reducing total annual greenhouse gas emissions by 2-4%. However, for this to happen the market barriers that prevent these opportunities from being developed need to be overcome.

Whilst resource productivity can benefit a wide range of sectors, it will also allow European firms to benefit from the fast growth in markets for eco-industries, which are forecast to double between 2010 and 2020. Internationally, resource-efficiency improvements are in demand across a wide range of industrial sectors.

Existing infrastructure, business models and technology, together with established behaviour keep economies 'locked-in' to the linear model. Companies may lack the information, confidence and capacity to move to circular economy solutions. The financial system often fails to provide for investment in efficiency improvements or innovative business models, which are perceived as more risky and complex, deterring many traditional investors. Conventional consumer habits can also hinder new products and services development. Such

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⁶ COM(2011) 571.

OJ L 354, 28.12.2013, p. 171–200.

⁸ Modelling the Economic and Environmental Impacts of Change in Raw Material Consumption (2014), Cambridge Econometrics et al.

⁹ Reference to Communications to be adopted simultaneously

¹⁰ The opportunities to business of improving resource efficiency (2013), AMEC et al.

barriers tend to persist in a context where prices do not reflect the real costs of resource use to society, and where policy fails to provide strong and consistent signals for the transition to a circular economy.

Building on evidence of key products, materials and value chains, the Commission will work with stakeholders to develop an enabling framework for the circular economy using measures which combine smart regulation, market-based instruments, research and innovation, incentives, information exchange and support for voluntary approaches. Such a framework will contribute to the objective of a sustainable industrial renaissance in the EU and rely on proactive consumers and business, with a special focus on SMEs. Internationally, the EU should work closely with other partners, both at the multilateral and bilateral level, so as to ensure the maximum impact of the circular economy concept.

The Commission will:

further analyse the major market and governance failures which hamper the avoidance and reuse of material waste, taking account of the heterogeneity of material types and their uses, to contribute to an enabling policy framework for resource efficiency at EU level.

2.1. Designing and innovating for a circular economy

Circular economy approaches 'design out' waste and typically involve innovation throughout the value chain, rather than relying solely on solutions at the end of life of a product. For example, they may include:

reducing the quantity of materials required to deliver a particular service (lightweighting); lengthening products' useful life (durability);

reducing the use of energy and materials in production and use phases (efficiency);

reducing the use of materials that are hazardous or difficult to recycle in products and production processes (substitution);

creating markets for secondary raw materials (recyclates) materials (based on standards, public procurement, etc.);

designing products that are easier to maintain, repair, upgrade, remanufacture or recycle (ecodesign);

developing the necessary services for consumers in this regard (maintenance/repair services, etc.):

incentivising and supporting waste reduction and high-quality separation by consumers;

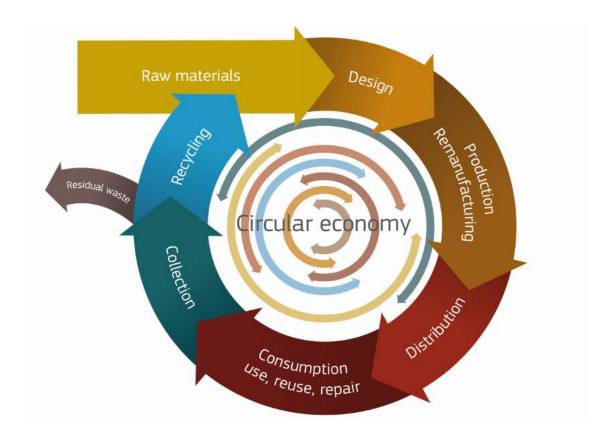
incentivising separation, collection systems that minimise the costs of recycling and reuse;

facilitating the clustering of activities to prevent by-products from becoming wastes (industrial symbiosis); and

encouraging wider and better consumer choice through renting, lending or sharing services as an alternative to owning products, while safeguarding consumer interests (in terms of costs, protection, information, contract terms, insurance aspects etc).

An important starting-point is the design of production processes, products and services. Products can be redesigned to be used longer, repaired, upgraded, remanufactured or eventually recycled, instead of being thrown away. Production processes can be based more on the reusability of products and raw materials, and the restorative capacity of natural resources, while innovative business models can create a new relationship between companies and consumers.

The following conceptual diagram illustrates in a simplified way the main phases of a circular economy model, with each of them presenting opportunities in terms of reducing costs and dependence on natural resources, boosting growth and jobs, as well as limiting waste and harmful emissions to the environment. The phases are interlinked, as materials can be used in a cascading way, for instance; industry exchanges by-products, products are refurbished or remanufactured or consumers choose product-service systems. The aim is to minimise the resources escaping from the circle so that the system functions in an optimal way.



Some EU policies and instruments already provide tools and incentives in line with the circular economy model. The waste hierarchy that underlies our waste legislation is leading progressively to adoption of the preferred options of waste prevention, preparation for reuse and recycling, and discourages landfilling. Chemicals policy aims at phasing out toxic substances of very high concern. Some ecodesign measures for energy-related products include requirements on durability and to facilitate recycling. The Bioeconomy Strategy¹¹ promotes the sustainable and integrated use of biological resources and waste streams for the production of food, energy and bio-based products. Climate policy creates incentives to save energy and reduce greenhouse gas emissions.

A common and coherent EU framework for promoting the circular economy will help bring such elements together with Horizon 2020 to address the research and innovation challenge.¹²

In order to support design and innovation for a more circular economy, the Commission will:

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¹¹ COM(2012) 60

¹² See the annex to this Communication.

under the EU Research and Innovation Programme (Horizon 2020), demonstrate the opportunities for moving towards a circular economy at European level with large-scale innovation projects targeted at cooperation within and between value chains, fostering skills development and supporting the market application of innovative solutions;

establish a reinforced partnership to support research and innovative policies for the circular economy;

facilitate the development of more circular models for products and services, including through a more coherent product policy, and further develop the application of the Ecodesign Directive by paying further attention to resource efficiency criteria, including for the future priority product groups in the 2015- 2017 Work Plan; and

encourage the cascading principle in the sustainable use of biomass, taking into account all biomass using sectors so that biomass can be utilised in a most resource efficient way.

2.2. Unlocking investment in circular economy solutions

The EU and the Member States should encourage investment in circular economy innovation and its take-up, and, against the background of the reform of the financial system, address barriers to mobilise more private financing for resource efficiency. Recent Commission proposals on non-financial reporting, ¹³ long-term financing ¹⁴ and occupational pension funds ¹⁵ have integrated requirements to disclose relevant environmental information to investors or consider investment risks related to the scarcity of resources and climate change.

In order to reduce the risk for investors, innovative financial instruments are being developed, such as the Natural Capital Financing Facility of the Commission and the European Investment Bank. Public private partnerships (PPP) are also effective instruments for leveraging private action and investment in resource efficiency. The Sustainable Process Industry through Resource and Energy Efficiency (SPIRE) PPP and the Bio-Based Industries Joint Technology Initiative are actively contributing to circular economy goals.

Policy has a further role in providing the right signals for investment in resource efficiency by eliminating environmentally harmful subsidies and switching taxation away from labour towards pollution and resources. Progress on environmental tax reform in EU Member States is addressed within the European Semester of economic policy coordination.

In order to unlock investment in the circular economy, the Commission will:

take up promising areas identified by the Resource Efficiency Finance Roundtable¹⁶ including innovative financial instruments, reflecting resource issues in accounting rules for companies, clarifying the sustainability responsibilities of financial institutions (fiduciary duties), developing methodologies for 'resource stress tests' for companies, and exploring the potential of the bonds market to channel additional finance for resource efficiency projects;

prepare guidance on the possibilities offered by the new public procurement directives in the field of Green Public Procurement (GPP), and a recommendation on monitoring Member States' performance in achieving the indicative 50% GPP target ¹⁷, support innovative

¹⁴ COM(2014) 168.

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¹³ COM(2013) 207.

¹⁵ COM(2014) 167.

¹⁶ MEMO/13/110.

¹⁷ COM/2008/400

instruments, such as pre-commercial procurement and public procurement for innovation, and facilitate the establishment of GPP networks among public authorities; and

further integrate circular economy priorities into EU funding and encourage Member States to use available EU funding in programmes and projects on the circular economy, in particular through the European Structural and Investment Funds..

2.3. Harnessing action by business and consumers and supporting SMEs

Business and consumers remain the key actors in the transition to a more circular economy. Upstream and downstream decisions in the value chain need to be better connected, providing coherent incentives between producers, investors, distributors, consumers and recyclers, and ensuring a fair distribution of costs and benefits. Market mechanisms need to be employed to ensure the most efficient allocation and use of resources, and where there are market failures or innovation bottlenecks, these must be addressed. Functioning secondary materials markets need to be developed. Particular attention should be paid to enabling entrepreneurs to tap into potential new markets linked to circular economy, and to ensuring that the necessary skills base is available in the labour market. Consumers should be empowered to make informed choices through better information on green credentials of different products.

The European Resource Efficiency Platform has identified ¹⁸ significant opportunities for business at different stages in the 'loop' feeding back materials back into the production process or various segments of the supply chain of origin or in other supply chains.. These are based on experience of successful initiatives that could be scaled up and applied more widely, and include:

in the production phase, sustainable sourcing standards, voluntary schemes led by industry and retailers, and industrial symbiosis to provide markets for by-products;

in the distribution phase, improving information on the resources contained in products and how they can be repaired or recycled, referred to in the recommendations of the Platform as a 'product passport'; and

in the consumption phase, collaborative consumption models based on lending, swapping, bartering and renting products, and product service systems to get more value out of underutilised assets or resources (e.g. cars, tools, lodging).

The Environmental Footprint pilot phase set out in the Commission's *Building the Single Market for Green Products* Communication¹⁹ is bringing stakeholders together to develop a common, agreed way for measuring the environmental impact of products and organisations. After the pilot phase, the Commission will assess whether these methods are successful so that they can be applied in existing or new instruments to improve environmental performance of products.

Such measures should be scaled up to ensure good framework conditions and a level playing-field for existing and new businesses to adapt to global resource megatrends, to reward the best companies, to encourage new entrepreneurs to develop the business solutions of tomorrow, to test them on the market and to provide credible information to consumers. The multi-stakeholder process launched in the context of the European Consumer Agenda²⁰

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http://ec.europa.eu/environment/resource efficiency/documents/erep manifesto and policy recommendations 31-03-2014.pdf

COM(2013) 196 and Commission Recommendation 2013/179/EU.

²⁰ COM (2012) 225

has highlighted the need for <u>effective tools against misleading and unfounded environmental</u> claims.

The labour force has to be equipped with the relevant skills in order to ensure an effective, job-rich transition. The Green Employment Communication creates the framework for unlocking the job creation opportunities of a more circular and resource-efficient economy. National, regional and local authorities and social partners also have an important role in developing targeted and coordinated support in the form of investment, infrastructure, technology and skills, in particular focusing on the needs of SMEs. They are also well positioned to facilitate a shift of consumer choice to more sustainable products and services, and encourage behavioural change.

To support action by business, in particular SMEs and consumers, the Commission will:

build on the results of the Environmental Footprint pilot phase running until 2016 and set out how to apply the use of environmental impact measurement in product and process design and in providing consumers with better information on environmentally sustainable choices;

trigger broad stakeholder cooperation through coordination and support action under Horizon 2020 and its instruments, including the European Institute of Innovation and Technology, the European Structural and Investment Funds, the Eco-innovation Action Plan, the Green Action Plan for SMEs, and the European Consumer Agenda;

build on the Raw Materials European Innovation Partnership stakeholder commitments that are directly linked to resource productivity;

support job creation and skills development through enhanced policy coordination, directing European funding to programmes and schemes that support green growth, improving information and monitoring, including through the European Semester process, and working with social partners, education and training institutions and other stakeholders; and

support best practices exchanges at the international level.

3. Modernising waste policy and targets: waste as a resource

Turning waste into a resource is part of 'closing the loop' in circular economy systems. The objectives and targets set in European legislation have been crucial drivers of improved waste management; they stimulate innovation in recycling and reuse, limit landfilling, reduce losses of resources and create incentives for behavioural change. But in the EU we still generate about five tonnes of waste per person per year on average, and little more than a third of that is effectively recycled.

The European Union has set out its political commitment²³ to reduce waste generation, to recycle waste into a major, reliable source of raw materials for the Union, to recover energy only from non-recyclable materials and to virtually eliminate landfilling. Taking waste policy further will bring significant benefits for growth and job creation at relatively low or no cost, while contributing to a better environment. With respect to global markets, an ambitious waste policy is expected to drive innovation and help make EU companies even more competitive in the provision of waste management services and offer new market opportunities to EU exporters.

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²¹ COM (2012) 173

²² COM (2014) 446

²³ 7th EAP

3.1. Defining waste targets for a move to a recycling society

Europe has made substantial progress in turning waste into a resource and promoting sustainable ways of waste management such as recycling. However, performance varies considerably between Member States. Six have already effectively eliminated the landfilling of municipal waste, reducing it from 90% to less than 5% in the past 20 years and reaching recycling rates of 85% in certain regions. In others over 90% of waste is still landfilled and less than 5% is recycled.

Strong policy signals are needed to create longer-term predictability for investment and change so that materials, such as plastics, glass, metals, paper, wood, rubber and other recyclables, re-enter the economy as secondary raw materials at competitive prices. Setting clear recycling targets for the period to 2030 will provide such predictability. Separate collection at source along with sound methodologies to calculate recycling rates will ensure high quality recycling and contribute to the development of markets for the supply of high quality secondary raw materials. To that effect, the existing measurement method to assess what is actually recycled should be clarified as some Member States currently report waste collected as waste recycled despite significant material loss between these phases. Landfilling of all recyclable waste shall be prevented by 2025. Member States should endeavour to virtually eliminate landfill by 2030. Energy recovery, including waste-to-energy recovery and use of bio-fuels, will have a role to play with respect to non-reusable and non-recyclable waste. This will require more efficient use of the unevenly spread energy recovery capacity currently available in the EU, together with measures to avoid overcapacity.

Successful implementation can create more than 180 000 direct jobs in the EU by 2030, in addition to the estimated 400 000 jobs that will be created by the implementation of the waste legislation in force²⁴. They will lead to satisfying between 10 and 40% of the raw material demand in the EU, while contributing to achieving the 2030 EU target to reduce greenhouse gas emissions by 40% - 62 Mt of CO2eq per year would be avoided in 2030.

In order to boost the economic, social and environmental benefits gained from the better management of municipal waste, the Commission proposes to:

- boost reuse and recycling of municipal waste to a minimum of 70% by 2030;
- increase the recycling rate for packaging waste to 80% by 2030, with interim targets of 60% by 2020 and 70% by 2025, including targets for specific materials;
- ban the landfilling of recyclable plastics, metals, glass, paper and cardboard, and biodegradable waste by 2025, while Member States should endeavour to virtually eliminate landfill by 2030²⁵;
- further promote the development of markets for high quality secondary raw materials, including through evaluating the added value of end-of-waste criteria for specific materials.
- Clarify the calculation method for recycled materials in order to ensure a high recycling quality level.

²⁴ SWD(2014) 207

A certain proportion of 'residual' waste is non-recoverable and may therefore be landfilled, since no alternative treatment option is currently available. This would be limited to a maximum of 5 %.

3.2. Delivering simplification and better implementation of waste legislation

Targets leave flexibility to Member States to decide how to achieve them. However, there is significant potential to further simplify and improve the implementation of waste legislation at national level and to reduce the current disparities.

In 2012, the Commission developed a Waste Management Scoreboard and roadmaps with specific recommendations for the Member States with the weakest performance. It will continue to focus particular attention on the Member States with the largest distance to the targets, seeking to address, in partnership with them, implementation weaknesses at an early stage.

Economic measures have proved instrumental in improving national waste management, in particular through landfill and incineration taxes, pay-as-you-throw and extended producer responsibility schemes, or incentives for local authorities to promote prevention, reuse and recycling. Landfill bans have also proved effective. Setting minimum requirements for producer responsibility schemes at EU level will help cut costs and eliminate barriers faced by producers having to respect several national schemes in the EU.

European funds can support Member States' efforts focusing on integrated waste management including separate collection, reuse and recycling infrastructure. Landfilling or stand-alone incineration should not be supported in future.

Making the best use of available waste management capacity in the EU would require better planning and information-sharing and may involve tolerating more shipments of waste within the EU towards the most modern and efficient installations, at least as a transitional measure.

There is scope for further streamlining and facilitating national-level data collection and reporting, and increasing the reliability of data and its consistency across the EU. Adopting common indicators will facilitate better monitoring and benchmarking of Member States' performance. ²⁶

Actions to further simplify the waste *acquis* and ensure effectiveness and efficiency will build on efforts undertaken already to cut the administrative costs of waste policy, for example, through exemptions from requirements for take-back for certain SMEs or efforts to put in place mandatory electronic data interchange for waste shipments.

To ensure that the benefits from EU legislation are delivered via simplification and better implementation, the Commission proposes to:

- address overlaps amongst waste targets and align definitions;
- significantly simplify reporting obligations for Member States, including clarifying and streamlining calculation methods for municipal, landfill and packaging waste targets;
- allow Member States to exempt SMEs or undertakings collecting and/or transporting very small quantities of non-hazardous waste, from the general permit or registration requirements under the Waste Framework Directive;
- introduce annual reporting through a single entry point for all waste data and make waste statistics consistent with the requirements of EU waste legislation, while benchmarking national methodologies against statistical standards;

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For instance, four calculation methods are allowed for the recycling target on municipal waste. Depending on the method chosen, the results might be quite different (around 20%).

- require the development of computerised data monitoring systems and third-party data verification in Member States;
- establish an early warning mechanism to ensure that Member States put in place an appropriate set of measures to meet targets on time;
- lay down minimum operating conditions for extended producer responsibility schemes
 that could be further developed at national level or in EU guidance documents, and
 promote the use of economic instruments in Member States; and
- promote direct investment in waste management options at the top of the waste hierarchy (prevention, re-use, recycling).

3.3. Tackling specific waste challenges

Tailor-made approaches are needed to address particular waste challenges related to significant loss of resources or environmental impacts.

Waste prevention: As a first priority affecting all the phases in a circular economy, it should be ensured that less waste is generated. Waste prevention programmes have recently been adopted by the Member States, as required by the Waste Framework Directive, and are currently reviewed by the European Environment Agency. Following their assessment, the Commission will develop initiatives promoting good practices in waste prevention in the EU.

Marine litter: Marine litter pollutes beaches, causes harm to marine life and creates a long-term waste problem which is expensive to clean up. The 7th EAP calls for a Union-wide quantitative headline reduction target supported by source-based measures.

Full implementation of the measures in the revised EU waste legislation package could deliver marine litter reductions of 13% by 2020 and 27% by 2030. Setting a dedicated reduction target for 2020 would give a clear signal to Member States currently developing measures to achieve 'good environmental status' for marine waters by the 2020 deadline under the Marine Strategy Framework Directive, and would provide an impetus for the development of marine litter action plans within the four Regional Sea Conventions. Other EU-level measures, incorporating inter alia the results of the ongoing evaluation of the Port Reception Facilities Directive²⁷, will also contribute to the achievement of the target. A second stage of the reduction target will be developed in due time, based on further analysis of the reduction potential from other land- and sea-based sources, and taking into account the commitment made at Rio+20 to achieve significant marine litter reductions by 2025.

Construction and demolition waste: Markets for recycled materials are essential to increasing the recycling rate of construction and demolition waste. Design for better management of construction and demolition waste, increasing recyclability and recycled content in construction materials, will be included in a framework for the assessment of the environmental performance of buildings, as outlined in the Commission's Communication on Resource Efficiency Opportunities in the Building Sector.²⁸

Furthermore, under the proposed early warning mechanism, Member States' performance will be monitored against the target of 70% recycling by 2020, with measures including increased landfill charges for construction and demolition waste, or additional sorting obligations on major demolition sites to improve the quality of recyclates.

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²⁷ Directive 2000/59/EC

²⁸ COM(2014) 445

Food waste:

It has been estimated that up to 30% of all food produced around the world is lost or wasted. The Commission is considering presenting specific proposals to reduce food waste.

Hazardous waste: Proper management of hazardous waste remains a challenge, with data on the actual treatment path missing for part of this waste stream. As a first step, record-keeping and traceability will be strengthened through the setting-up of hazardous waste registries and identifying capacities and bottlenecks in Member States' hazardous waste management systems. These registries might be progressively expanded to other types of waste like it is already the case in several Member States.

Plastic waste: Plastic production in the EU is expected to increase at a rate of 5% annually. While only 24% of plastic waste is recycled, close to 50% is landfilled, and the rest is incinerated. The public consultation on plastic waste carried out by the Commission in 2013²⁹ pointed to significant potential for using plastic more sustainably and showed strong support for eliminating the landfilling of plastics and for the better design of plastics and plastic products. The Commission's recent proposal allowing Member States to restrict the use of plastic bags, ³⁰ and the proposals in this Communication for increased recycling and abandoning landfilling are important steps to improve plastic waste management.

Recycling of critical raw materials: While all raw materials are important, critical raw materials deserve particular attention as their production worldwide is concentrated in few countries, while many of them have low substitutability and low recycling rates. The Commission promotes efficient use and recycling of critical raw materials in the framework of the Raw Materials Initiative³¹ and the European Innovation Partnership on Raw Materials.

Illegal waste shipments: The Commission will step up action to ensure compliance with relevant EU legislation, in particular Regulation (EC) No 1013/2006 on shipments of waste as recently amended in order to reinforce waste shipment inspections.

Recycling of phosphorus: Phosphorus is a vital resource for food production, but it has significant security-of-supply risks and its current use involves waste and losses at every stage of its lifecycle. Following the Consultative Communication on the sustainable use of phosphorus, ³² the Commission is developing a framework for further action.

To address specific waste challenges the Commission:

proposes an aspirational target of reducing **marine litter** by 30% by 2020 for the ten most common types of litter found on beaches, as well as for fishing gear found at sea, with the list adapted to each of the four marine regions in the EU;

envisages measures to stimulate markets in recycled materials derived from **construction and demolition waste** and develop a common EU assessment framework for the environmental performance of buildings;

proposes that Member States develop national food-waste prevention strategies and endeavour to ensure that **food waste** in the manufacturing, retail/distribution, food service/hospitality sectors and households is reduced by at least 30 % by 2025;

³⁰ COM(2013) 761.

²⁹ COM(2013) 123.

³¹ COM(2011) 25

³² COM(2013) 517.

envisages developing a proper registry system for at least **hazardous waste** in all Member States;

further to its proposal to reduce the use of lightweight **plastic** bags, proposes that plastics be banned from landfill by 2025;

Proposes that Member States shall include measures regarding collection and recycling of waste containing significant amounts of critical raw materials in their national waste management plans; and

is considering developing a policy framework on **phosphorus** to enhance its recycling, foster innovation, improve market conditions and mainstream its sustainable use in EU legislation on fertilisers, food, water and waste.

4. Setting a resource efficiency target

In the 7th EAP, Member States and the European Parliament agreed that the European Union should establish indicators and set targets for resource efficiency, and assess whether it would be appropriate to include a lead indicator and target in the European Semester. Following wide consultations, resource productivity, as measured by GDP relative to Raw Material Consumption (RMC), has been identified as a candidate for a resource productivity target.³³

A realistic target to increase resource productivity, endorsed by the EU and its Member States would focus political attention and tap the currently overlooked potential of a circular economy to create sustainable growth and jobs and increase the coherence of EU policy.It would be a proportionate way to ensure this coherence and encourage action.

The EU is already forecast to increase its resource productivity by 15% between 2014 and 2030 under a business- as- usual scenario. Using smart policies to promote the transition to a more circular economy, as called for by the European Resource Efficiency Platform, it would be possible to double this rate. While contributing significantly to the sustainability dimension of growth, increasing resource productivity by 30% would also have a positive impact on job creation and growth of GDP.³⁴

Industry would benefit from this improvement in resource productivity through enhanced competitiveness.³⁵ Resource costs can make up a significant part of their cost structure, and they need available and predictable supplies.³⁶ There would be both immediate financial gains, and longer term strategic benefits, as growing global demand drives up resource prices and volatility. Becoming most resource efficient will therefore help Europe meet its reindustrialisation objective.

A resource productivity target, while not binding and set at the level of the EU, would provide an impetus for those Member States that do not already have a target at national level to develop measures that take account of resource use. It would lead to more balanced measures, that consider the wider economic, social and environmental consequences and fill this gap.

RMC is an aggregate indicator measuring (in tonnes) all the material resources used in the economy, while taking into account the resource use embedded in imports. Currently it is available for the EU and some Member States. Countries for which RMC is not yet available can use Domestic Material Consumption in the meantime.

³⁴ SWD (2014) 211.

³⁵ Stakeholders preferred RMC as a measure of resource use because it captures the resource use embedded in both imported and domestically produced products, and so allows for a fair comparison of their respective resource efficiency.

³⁶ Recent studies on the steel and aluminium sectors show that raw materials make up around 30 to 40 per cent of their cost structures, larger than for example labour costs.

Member States would be free to undertake the balance of policies and actions that are most economically and environmentally advantageous in line with wider policy objectives. In doing so, they would benefit from a range of already proven - but not widely deployed - good practice that they could adopt and tailor to their own needs and circumstances. The review of the Europe 2020 strategy is currently underway³⁷ supported by public consultation to gather all views on its development. The Commission therefore considers that any decision on setting a resource productivity headline target should be taken in the review, after taking into account the results of public consultation together with recommendations of the European Resource Efficiency Platform.

To ensure that policy makers are aware of the overall picture of resource pressures on the environment, other indicators, in particular for water use and finite land resources, need to be taken into account. Eurostat has published a Resource Efficiency Scoreboard since 2013 as part of the Europe 2020 indicators. This is designed to monitor implementation of the *Roadmap to a Resource Efficient Europe*, communicate the link between resources and engage stakeholders further in the process of measuring societal progress beyond GDP.

In order to tap the potential of resource efficiency in the context of sustainable growth:

- the Commission will take the recommendations of the European Resource Efficiency Platform on a headline target for resource efficiency into account together with outcomes of the public consultation in the ongoing review of the Europe 2020 strategy;
- In parallel, the Resource Efficiency Scoreboard used to monitor indicators of the use of resources other than carbon and materials (in particular, land and water) will be developed further; and
- National statistical offices should work to establish a commonly accepted methodology within the European Statistical System in order to calculate raw material consumption at national level.

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³⁷ COM(2014) 130 of 19.3.2014; Taking stock of the Europe 2020 Strategy for smart, sustainable and inclusive growth.

http://epp.eurostat.ec.europa.eu/portal/page/portal/europe 2020 indicators/ree scoreboard.



Zero Waste?

Our Network

The ZW Municipality

The ZW Business

The ZW Lifestyle



Zero Waste Case Studies

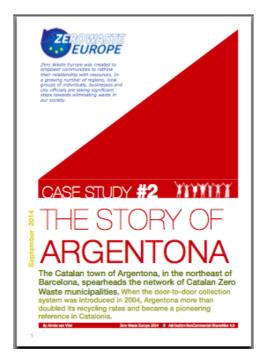
The Zero Waste Case Studies are the testimonies of the successful development and implementation of zero waste strategies in Europe. Today, these case studies show that, in contrast with the outdated idea of burning or burying our waste, preventing, reusing and recycling it create jobs and resilience, save money, and protect the environment and public health. Moreover, these Zero Waste efforts go hand-in-hand with clean production, producer responsibility, and waste minimization programs for dangerous and hard-torecycle materials. Together, these practical, bottom-up strategies provide some of the best decentralized urban solutions for reducing climate pollution and conserving energy and natural resources.

CASE STUDY 1 – The Story of Capannori



Located in the North of Italy, Capannori has one of the highest municipal recycling rates in Europe. This zero waste town is an example of strong policy decisions and community participation achieving groundbreaking results. This case study reviews the story of their success to date.

CASE STUDY 2 – The Story of **Argentona**



The Catalan town of Argentona, in the northeast of Barcelona, spearheads the network of Catalan Zero Waste municipalities. When the door-to-door collection system was introduced in 2004, Argentona more than doubled its recycling rates and became a pioneering reference in Catalonia.

Available in: Bulgarian, Catalan,

CASE STUDY 3 – Slovenian **Trailblazers**



In a country that until 2001 had no national targets for separate collection of waste, the case of the small municipality of Vrhnika in Slovenia shows how a community can make strides towards a Zero Waste objective in a short time.

How did this small area go from landfilling everything to recycling most of its MSW

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English, French, Italian, Polish, Romanian Spanish. Coming soon: Euskera.

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CASE STUDY 4 – The Story of **Contarina**



The public company Contarina serves the districts of Priula and Treviso in Northern Italy, the best performers in waste

CASE STUDY 5 – The Story of Ljubljana



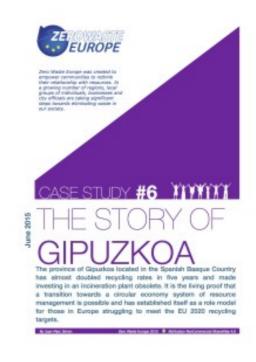
The Slovenian capital is the first capital in Europe to declare the Zero Waste goal and in 2014 separately collected 61% of its municipal waste. The city has

in 20 years?

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CASE STUDY 6 - The Story of Gipuzkoa



The province of Gipuzkoa, in Spanish Basque Country, has managed to almost prevention and recycling in a wide area in Europe. What is the secret for Contarina to recycle two times the European average and generate five times less residual waste? This and more you will find out in this case study

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committed to halving the amount of residuals and increasing separate collection to 78% by 2025.

How did Ljubljana manage to become EU's best performing capital when 10 years ago had barely started implementing separate collection?

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double their recycling rates in 4 years. In 2011 they struggled to meet EU targets and now they are above the 2020's goals and intend to keep improving.

Gipuzkoa still has a long way till Zero Waste, but is already proving that laggards can move very quickly. Do you want to know how?

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