

ANNEX J

MSW Generation by Country – Current Data and Projections for 2025

Country	Income Level	Region	Current Available Data			2025			
			Total Urban Population	MSW Generation Per Capita (kg/capita/day)	Total MSW Generation (tonnes/day)	Total Population	Urban Population	MSW Generation Per Capita (kg/capita/day)	Total MSW Generation (tonnes/day)
Albania	LMI	ECA	1,418,524	0.77	1,088	3,488,000	2,006,000	1.2	2,407
Algeria	LMI	MENA	19,225,335	1.21	23,288	42,882,000	31,778,000	1.45	46,078
Angola	LMI	AFR	8,973,498	0.48	4,329	27,324,000	18,862,000	0.7	13,203
Antigua and Barbuda	HIC	LCR	24,907	5.50	137	101,000	35,000	4.3	151
Argentina	UMI	LCR	33,681,145	1.22	41,096	46,115,000	43,470,000	1.85	80,420
Armenia	LMI	ECA	1,964,525	0.68	1,342	2,908,000	1,947,000	1.2	2,336
Australia	HIC	OECD	16,233,664	2.23	36,164	24,393,000	22,266,000	2.1	46,759
Austria	HIC	OECD	5,526,033	2.40	13,288	8,622,000	6,204,000	2.15	13,339
Bahamas, The	HIC	LCR	252,689	3.25	822	397,000	346,000	2.9	1,003
Bahrain	HIC	MENA	574,671	1.10	630	972,000	875,000	1.6	1,400
Bangladesh	LI	SAR	38,103,596	0.43	16,384	206,024,000	76,957,000	0.75	57,718
Barbados	HIC	LCR	92,289	4.75	438	303,000	152,000	4	608
Belarus	UMI	ECA	7,057,977	0.78	5,479	8,668,000	6,903,000	1.2	8,284
Belgium	HIC	OECD	10,265,273	1.33	13,690	10,742,000	10,511,000	1.8	18,920
Belize	UMI	LCR	124,224	2.87	356	389,000	237,000	2.3	545
Benin	LI	AFR	3,147,050	0.54	1,699	14,460,000	7,286,000	0.75	5,465
Bhutan	LMI	SAR	225,257	1.46	329	819,000	428,000	1.7	728
Bolivia	LMI	LCR	5,587,410	0.33	1,863	12,368,000	9,047,000	0.7	6,333
Botswana	UMI	AFR	860,779	1.03	890	2,265,000	1,591,000	1.4	2,227
Brazil	UMI	LCR	144,507,175	1.03	149,096	228,833,000	206,850,000	1.6	330,960
Brunei Darussalam	HIC	EAP	282,415	0.87	247	526,000	426,000	1.3	554
Bulgaria	UMI	ECA	5,423,113	1.28	6,959	6,551,000	5,011,000	1.6	8,018
Burkina Faso	LI	AFR	2,549,805	0.51	1,288	23,729,000	6,899,000	0.75	5,174
Burundi	LI	AFR	700,922	0.55	384	15,040,000	2,577,000	0.8	2,062
Cameroon	LMI	AFR	7,914,528	0.77	6,082	25,136,000	17,194,000	1	17,194
Canada	HIC	OECD	21,287,906	2.33	49,616	37,912,000	31,445,000	2.2	69,179
Cape Verde	LMI	AFR	274,049	0.50	137	750,000	526,000	0.7	368
Central African Republic	LI	AFR	1,596,934	0.50	795	5,831,000	2,634,000	0.7	1,844
Chad	LI	AFR	2,566,839	0.50	1,288	17,504,000	6,566,000	0.7	4,596
Chile	UMI	LCR	13,450,282	1.08	14,493	19,266,000	17,662,000	1.5	26,493
China	LMI	EAP	511,722,970	1.02	520,548	1,445,782,000	822,209,000	1.7	1,397,755
Colombia	LMI	LCR	29,283,628	0.95	27,918	55,563,000	44,179,000	1.5	66,269
Comoros	LI	AFR	161,070	2.23	359	1,217,000	405,000	2.1	851
Congo, Dem. Rep.	LI	AFR	18,855,716	0.50	9,425	107,481,000	48,980,000	0.75	36,735
Congo, Rep.	LMI	AFR	2,056,826	0.53	1,096	5,362,000	3,678,000	0.75	2,759
Costa Rica	UMI	LCR	2,390,195	1.36	3,260	5,549,000	3,973,000	1.8	7,151
Cote d'Ivoire	LI	AFR	9,006,597	0.48	4,356	26,233,000	15,677,000	0.7	10,974
Croatia	UMI	ECA	2,539,903	0.29	740	4,274,000	2,735,000	0.8	2,188
Cuba	UMI	LCR	8,447,447	0.81	6,822	11,231,000	8,763,000	1.3	11,392
Cyprus	HIC	ECA	595,707	2.07	1,230	1,018,000	760,000	2.1	1,596
Czech Republic	HIC	OECD	7,547,813	1.10	8,326	9,910,000	7,575,000	1.65	12,499
Denmark	HIC	OECD	4,684,754	2.34	10,959	5,578,000	5,027,000	2.15	10,808
Dominica	UMI	LCR	50,793	1.24	63	69,000	55,000	1.6	88
Dominican Republic	LMI	LCR	5,625,356	1.18	6,658	12,172,000	9,523,000	1.5	14,285
Ecuador	LMI	LCR	7,599,288	1.13	8,603	16,074,000	12,027,000	1.5	18,041
Egypt, Arab Rep.	LMI	MENA	29,894,036	1.37	40,822	98,513,000	46,435,000	1.8	83,583
El Salvador	LMI	LCR	3,504,687	1.13	3,945	8,525,000	5,726,000	1.6	9,162
Eritrea	LI	AFR	878,184	0.50	438	7,684,000	2,368,000	0.7	1,658
Estonia	HIC	ECA	931,657	1.47	1,367	1,252,000	903,000	1.7	1,535
Ethiopia	LI	AFR	12,566,942	0.30	3,781	124,996,000	30,293,000	0.65	19,690
Fiji	UMI	EAP	339,328	2.10	712	905,000	557,000	2.1	1,170

ANNEX J (continued)

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Finland	HIC	OECD	3,301,950	2.13	7,030	5,464,000	3,805,000	2.1	7,991
France	HIC	OECD	47,192,398	1.92	90,493	65,769,000	53,659,000	2	107,318
Gabon	UMI	AFR	1,144,675	0.45	521	1,698,000	1,524,000	0.7	1,067
Gambia	LI	AFR	822,588	0.53	438	2,534,000	1,726,000	0.75	1,295
Georgia	LMI	ECA	2,316,296	1.69	3,904	3,945,000	2,272,000	1.85	4,203
Germany	HIC	OECD	60,530,216	2.11	127,816	80,341,000	61,772,000	2.05	126,633
Ghana	LI	AFR	11,680,134	0.09	1,000	31,993,000	19,713,000	0.5	9,857
Greece	HIC	OECD	6,755,967	2.00	13,499	11,236,000	7,527,000	2	15,054
Grenada	UMI	LCR	31,324	2.71	85	108,000	40,000	2.3	92
Guatemala	LMI	LCR	5,237,139	2.00	10,466	19,926,000	11,478,000	2	22,956
Guyana	LMI	LCR	215,946	5.33	1,151	683,000	230,000	3.5	805
Haiti	LI	LCR	3,227,249	1.00	3,233	12,305,000	7,966,000	1.4	11,152
Honduras	LMI	LCR	2,832,769	1.45	4,110	9,682,000	5,544,000	1.8	9,979
Hong Kong, China	HIC	EAP	6,977,700	1.99	13,890	8,305,000	8,305,000	2	16,610
Hungary	HIC	OECD	6,717,604	1.92	12,904	9,448,000	7,011,000	2	14,022
Iceland	HIC	OECD	280,148	1.56	438	337,000	314,000	1.7	534
India	LMI	SAR	321,623,271	0.34	109,589	1,447,499,000	538,055,000	0.7	376,639
Indonesia	LMI	EAP	117,456,698	0.52	61,644	271,227,000	178,731,000	0.85	151,921
Iran, Islamic Rep.	LMI	MENA	46,219,250	0.16	7,197	88,027,000	66,930,000	0.6	40,158
Ireland	HIC	OECD	2,589,698	3.58	9,260	5,275,000	3,564,000	3	10,692
Israel	HIC	MENA	5,179,120	2.12	10,959	8,722,000	8,077,000	2.1	16,962
Italy	HIC	OECD	39,938,760	2.23	89,096	58,079,000	42,205,000	2.05	86,520
Jamaica	UMI	LCR	1,353,969	0.18	247	2,908,000	1,733,000	0.9	1,560
Japan	HIC	OECD	84,330,180	1.71	144,466	121,614,000	86,460,000	1.7	146,982
Jordan	LMI	MENA	3,850,403	1.04	4,000	8,029,000	6,486,000	1.3	8,432
Kenya	LI	AFR	6,615,510	0.30	2,000	57,176,000	16,952,000	0.6	10,171
Korea, South	HIC	OECD	38,895,504	1.24	48,397	49,019,000	41,783,000	1.4	58,496
Kuwait	HIC	MENA	2,683,301	5.72	15,342	3,988,000	3,934,000	4	15,736
Lao PDR	LI	EAP	1,916,209	0.70	1,342	7,713,000	3,776,000	1.1	4,154
Latvia	UMI	ECA	1,549,569	1.03	1,600	2,072,000	1,476,000	1.45	2,140
Lebanon	UMI	MENA	3,244,163	1.18	3,836	4,784,000	4,275,000	1.7	7,268
Lesotho	LMI	AFR	461,534	0.50	230	2,211,000	850,000	0.8	680
Lithuania	UMI	ECA	2,256,263	1.10	2,474	3,102,000	2,193,000	1.5	3,290
Luxembourg	HIC	OECD	390,776	2.31	904	569,000	473,000	2.2	1,041
Macao, China	HIC	EAP	466,162	1.47	685	535,000	535,000	1.75	936
Macedonia, FYR	LMI	ECA	1,341,972	1.06	1,425	2,001,000	1,493,000	1.6	2,389
Madagascar	LI	AFR	4,653,890	0.80	3,734	29,954,000	11,350,000	1.1	12,485
Malawi	LI	AFR	2,288,114	0.50	1,151	21,353,000	6,158,000	0.8	4,926
Malaysia	UMI	EAP	14,429,641	1.52	21,918	33,769,000	27,187,000	1.9	51,655
Maldives	LMI	SAR	70,816	2.48	175	411,000	233,000	2.2	513
Mali	LI	AFR	3,900,064	0.65	2,534	20,589,000	8,987,000	0.95	8,538
Malta	HIC	MENA	384,809	1.78	685	431,000	416,000	2	832
Mauritania	LI	AFR	1,197,094	0.50	603	4,548,000	2,203,000	0.8	1,762
Mauritius	UMI	AFR	519,206	2.30	1,195	1,406,000	674,000	2.2	1,483
Mexico	UMI	LCR	79,833,562	1.24	99,014	124,695,000	102,258	1.75	179
Mongolia	LMI	EAP	1,370,974	0.66	904	3,112,000	1,965,000	0.95	1,867
Morocco	LMI	MENA	15,753,989	1.46	23,014	37,865,000	23,994,000	1.85	44,389
Mozambique	LI	AFR	7,706,816	0.14	1,052	28,954,000	14,493,000	0.5	7,247
Myanmar	LI	EAP	12,847,522	0.44	5,616	55,374,000	24,720,000	0.85	21,012
Namibia	LMI	AFR	708,907	0.50	356	2,560,000	1,226,000	0.9	1,103
Nepal	LI	SAR	3,464,234	0.12	427	38,855,000	10,550,000	0.7	7,385

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Netherlands	HIC	OECD	13,197,842	2.12	27,945	16,960,000	14,860,000	2.1	31,206
New Zealand	HIC	OECD	3,612,147	3.68	13,293	4,764,000	4,229,000	3	12,687
Nicaragua	LMI	LCR	2,848,165	1.10	3,123	7,075,000	4,478,000	1.5	6,717
Niger	LI	AFR	2,162,063	0.49	1,068	26,250,000	5,503,000	0.75	4,127
Nigeria	LI	AFR	73,178,110	0.56	40,959	210,129,000	126,634,000	0.8	101,307
Norway	HIC	OECD	3,605,500	2.80	10,082	5,228,000	4,187,000	2.3	9,630
Oman	HIC	MENA	1,629,404	0.70	1,142	3,614,000	2,700,000	1.15	3,105
Pakistan	LI	SAR	60,038,941	0.84	50,438	224,956,000	104,042,000	1.05	109,244
Panama	UMI	LCR	2,008,299	1.21	2,438	4,267,000	3,501,000	1.65	5,777
Paraguay	LMI	LCR	3,052,320	0.21	630	8,026,000	5,584,000	0.6	3,350
Peru	LMI	LCR	18,678,510	1.00	18,740	34,148,000	25,593,000	1.4	35,830
Philippines	LMI	EAP	58,654,205	0.50	29,315	115,878,000	86,418,000	0.9	77,776
Poland	UMI	ECA	23,398,400	0.88	20,630	36,337,000	23,236,000	1.2	27,883
Portugal	HIC	OECD	6,162,205	2.21	13,616	10,712,000	7,389,000	2.15	15,886
Qatar	HIC	MENA	759,577	1.33	1,014	1,102,000	1,066,000	1.7	1,812
Romania	UMI	ECA	11,648,240	1.04	12,082	19,494,000	11,783,000	1.45	17,085
Russian Federation	UMI	ECA	107,386,402	0.93	100,027	128,193,000	96,061,000	1.25	120,076
Rwanda	LI	AFR	1,573,625	0.52	822	15,220,000	3,831,000	0.85	3,256
Sao Tome and Principe	LI	AFR	88,673	0.49	44	216,000	155,000	0.9	140
Saudi Arabia	HIC	MENA	15,388,239	1.30	20,000	34,797,000	29,661,000	1.7	50,424
Senegal	LI	AFR	4,693,019	0.52	2,438	17,999,000	8,992,000	0.85	7,643
Serbia	UMI	ECA	3,830,299	0.79	3,041	9,959,000	5,814,000	1.05	6,105
Seychelles	UMI	AFR	43,172	2.98	129	94,000	60,000	2.5	150
Sierra Leone	LI	AFR	2,029,398	0.45	904	8,639,000	3,949,000	0.85	3,357
Singapore	HIC	EAP	4,839,400	1.49	7,205	5,104,000	5,104,000	1.8	9,187
Slovak Republic	HIC	OECD	3,036,442	1.37	4,164	5,308,000	3,300,000	1.6	5,280
Slovenia	HIC	ECA	986,862	1.21	1,192	1,941,000	958,000	1.7	1,629
Solomon Islands	LI	EAP	50,992	4.30	219	705,000	183,000	4	732
South Africa	UMI	AFR	26,720,493	2.00	53,425	52,300,000	36,073,000	2	72,146
Spain	HIC	OECD	33,899,073	2.13	72,137	46,623,000	37,584,000	2.1	78,926
Sri Lanka	LMI	SAR	2,953,410	5.10	15,068	20,328,000	3,830,000	4	15,320
St. Kitts and Nevis	UMI	LCR	15,069	5.45	82	61,000	23,000	4	92
St. Lucia	UMI	LCR	44,119	4.35	192	195,000	64,000	4	256
St. Vincent and the Grenadines	UMI	LCR	48,255	1.70	82	125,000	69,000	1.85	128
Sudan	LMI	AFR	12,600,333	0.79	10,000	54,267,000	30,921,000	1.05	32,467
Suriname	UMI	LCR	343,331	1.36	466	482,000	389,000	1.6	622
Swaziland	LMI	AFR	270,983	0.51	137	1,242,000	417,000	0.85	354
Sweden	HIC	OECD	7,662,130	1.61	12,329	9,854,000	8,525,000	1.85	15,771
Switzerland	HIC	OECD	5,490,214	2.61	14,329	7,978,000	6,096,000	2.3	14,021
Syrian Arab Republic	LMI	MENA	9,109,737	1.37	12,493	27,519,000	16,890,000	1.7	28,713
Tajikistan	LI	ECA	1,653,091	0.89	1,479	8,929,000	2,774,000	1.2	3,329
Tanzania	LI	AFR	9,439,781	0.26	2,425	59,989,000	21,029,000	0.55	11,566
Thailand	LMI	EAP	22,453,143	1.76	39,452	68,803,000	29,063,000	1.95	56,673
Togo	LI	AFR	2,390,840	0.52	1,233	9,925,000	5,352,000	0.85	4,549
Tonga	LMI	EAP	22,162	3.71	82	112,000	37,000	3.5	130
Trinidad and Tobago	HIC	LCR	144,645	1.59	2,082	1,401,000	291,000	10	2,910
Tunisia	LMI	MENA	6,063,259	0.81	4,932	12,170,000	8,909,000	1.15	10,245
Turkey	UMI	ECA	48,846,780	1.77	86,301	89,557,000	67,981,000	2	135,962
Turkmenistan	LMI	ECA	2,061,980	0.98	2,027	6,068,000	3,485,000	1.25	4,356

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Uganda	LI	AFR	3,450,140	0.34	1,179	54,011,000	9,713,000	0.65	6,313
United Arab Emirates	HIC	MENA	2,526,336	1.66	4,192	6,268,000	5,092,000	2	10,184
United Kingdom	HIC	OECD	54,411,080	1.79	97,342	65,190,000	59,738,000	1.85	110,515
United States	HIC	OECD	241,972,393	2.58	624,700	354,930,000	305,091,000	2.3	701,709
Uruguay	UMI	LCR	3,025,161	0.11	329	3,548,000	3,333,000	0.6	2,000
Vanuatu	LMI	EAP	33,430	3.28	110	328,000	113,000	3	339
Venezuela, RB	UMI	LCR	22,342,983	1.14	25,507	35,373,000	34,059,000	1.5	51,089
Vietnam	LI	EAP	24,001,081	1.46	35,068	106,357,000	40,505,000	1.8	72,909
Zambia	LI	AFR	4,010,708	0.21	842	16,539,000	6,862,000	0.55	3,774
Zimbabwe	LI	AFR	4,478,555	0.53	2,356	15,969,000	7,539,000	0.7	5,277

Summary by Income Level

Income Level	Number of Countries Included	Current Available Data			Projections for 2025			
		Total Urban Population (millions)	Urban MSW Generation		Projected Population		Projected Urban MSW Generation	
			Per Capita (kg/capita/day)	Total (tonnes/day)	Total Population (millions)	Urban Population (millions)	Per Capita (kg/capita/day)	Total (tonnes/day)
Lower Income	38	343	0.60	204,802	1,637	676	0.86	584,272
Lower Middle Income	42	1,293	0.78	1,012,321	4,011	2,080	1.26	2,618,804
Upper Middle Income	35	572	1.16	665,586	888	619	1.59	987,039
High Income	46	774	2.13	1,649,546	1,112	912	2.06	1,879,590
Total	161	2,982	1.19	3,532,255	7,648	4,287	1.42	6,069,705

Summary by Region

Region	Number of Countries Included	Current Available Data			Projections for 2025			
		Total Urban Population (millions)	Urban MSW Generation		Projected Population		Projected Urban MSW Generation	
			Per Capita (kg/capita/day)	Total (tonnes/day)	Total (millions)	Urban (millions)	Per Capita (kg/capita/day)	Total (tonnes/day)
AFR	42	261	0.65	169,120	1,153	518	0.85	441,840
EAP	17	777	0.95	738,959	2,124	1,230	1.52	1,865,380
ECA	19	227	1.12	254,389	339	240	1.48	354,811
LCR	33	400	1.09	437,545	682	466	1.56	728,392
MENA	16	162	1.07	173,545	379	257	1.43	369,320
OECD	27	729	2.15	1,566,286	1,032	842	2.07	1,742,417
SAR	7	426	0.45	192,411	1,939	734	0.77	567,545
Total	161	2,982	1.19	3,532,255	7,648	4,287	1.42	6,069,705