

Pb, t/y	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Albania	33	34	35	36	37	38	39	40	41	42	43	39	35	32	28	24	20	16
Armenia	11	0.820	0.610	0.790	0.340	0.334	0.009	0.009	0.010	0.005	0.005	0.503	1.0	2.5	2.5	2.5	2.5	2.5
Austria	207	172	120	86	60	16	15	14	13	13	12	12	13	13	14	14	15	15
Azerbaijan	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	14	14	14
Belarus	794	519	450	377	348	147	46	42	41	38	46	41	44	43	45	50	57	59
Belgium	437	405	386	310	249	237	238	253	174	141	104	87	81	77	86	76	71	60
Bosnia and Herzegovina	97	97	97	97	97	97	97	97	97	97	97	91	85	79	72	66	60	54
Bulgaria	436	408	381	353	325	297	279	231	251	224	213	177	105	148	143	115	124	263
Croatia	430	397	364	331	297	264	268	190	183	178	147	107	60	23	16	12	9.1	9.2
Cyprus	16	16	14	14	14	13	12	12	13	11	10	10	9	9	9.1	9.1	8.7	8.6
Czech Republic	269	240	247	232	202	180	165	180	169	157	108	47	47	39	37	47	43	40
Denmark	120	97	88	47	12	12	10	7.7	7.0	7.1	6.8	6.1	5.3	5.0	5.3	5.7	6.1	6.2
Estonia	201	185	121	101	124	84	65	52	46	44	37	34	34	39	38	37	34	40
Finland	327	248	175	99	58	56	35	18	21	29	36	38	40	34	28	24	25	21
France	4258	2852	2070	1813	1609	1434	1263	1112	995	758	239	203	197	144	127	123	115	108
Georgia	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7.0	7.2	7.3	7.5	7.6	7.8	8.0
Germany	1801	1055	761	606	405	331	221	95	93	94	101	104	105	105	104	104	106	106
Greece	505	499	493	488	482	476	470	470	470	470	470	470	470	470	470	470	470	470
Hungary	658	488	208	187	155	129	100	90	82	34	35	34	35	33	36	37	37	35
Iceland	6.4	5.8	5.1	4.5	3.9	3.3	2.7	2.1	1.4	0.816	0.197	0.197	0.197	0.197	0.197	0.197	0.197	0.197
Ireland	125	111	117	101	88	76	63	66	42	39	29	16	15	15	15	15	15	15
Italy	4372	3332	2460	2272	2096	1988	1874	1692	1548	1380	936	703	237	242	256	266	274	274
Latvia	23	19	12	9.9	12	10	12	13	15	14	13	14	14	15	15	15	17	18
Lithuania	47	49	32	28	33	30	18	20	22	19	16	15	15	15	5.2	5.7	6.0	6.8
Luxembourg	77	71	65	59	53	30	26	18	6.8	2.3	1.8	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Malta	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Monaco	3.9	4.0	4.1	3.7	2.1	0.780	0.673	0.564	0.486	0.427	0.059	0.063	0.056	0.046	0.041	0.041	0.030	0.041
Netherlands	338	283	241	216	188	162	112	63	52	44	36	41	45	41	43	39	39	39
Norway	186	143	127	87	24	22	10	10	10	9	7.6	6.8	7.1	7.2	7.7	6.3	6.2	6.7
Poland	1372	1336	986	997	966	937	960	896	736	745	647	610	588	596	600	536	524	573
Portugal	572	589	632	612	583	561	542	521	509	342	144	160	162	166	167	158	153	149
Republic of Moldova	249	220	103	71	23	34	28	22	7.9	11	2.8	3.4	3.3	11	2.3	5.1	5.0	5.0
Romania	585	573	561	550	538	526	514	502	491	420	402	476	398	319	241	162	118	77
Russia (European part)*	3591	3553	3095	3276	2643	2426	2304	2247	2262	2339	2352	2235	2118	2207	330	355	355	343
Serbia and Montenegro**	597	567	538	508	478	448	419	389	359	329	300	275	250	225	200	176	151	126
Slovakia	150	149	148	116	84	71	73	73	70	58	67	68	69	64	70	71	73	65
Slovenia	325	290	286	305	304	193	79	69	53	46	40	24	14	14	14	13	14	14
Spain (EMEP)	2682	1810	1221	1116	1104	933	903	840	780	710	589	390	269	265	260	268	271	272
Sweden	361	317	296	144	51	36	33	33	32	29	26	23	20	19	18	15	14	16
Switzerland	419	379	333	280	248	186	157	138	119	54	32	28	25	22	21	21	20	20
The FYR of Macedonia	210	198	185	173	161	148	136	124	112	99	87	83	79	74	70	66	62	58
Turkey	765	765	765	765	765	765	765	765	765	765	765	717	669	620	572	524	476	428
Ukraine	3878	3586	3293	3001	2709	2417	2124	1832	1540	1248	955	663	145	123	195	304	297	309
United Kingdom	2893	2639	2417	2143	1841	1531	1297	1134	832	478	150	142	131	116	118	109	82	70
Total, t/y	34447	28720	23952	22033	19493	17367	15797	14392	13080	11539	9325	8214	6661	6495	4506	4369	4198	6302

* HELCOM: for 2007 Russia (Eur part) = 355

** for 2007 Serbia = 118; Montenegro = 8.2

Central Asian region

Kazakhstan
Kyrgyzstan
Russia (Asian part)
Tajikistan
Turkmenistan
Uzbekistan
Extended EMEP grid, t/y

2007
652
37
179
64
40
185
7458

Official data of Pb emissions

Expert estimates:

Berdowski J.J.M., Baas J., Bloos J.P.J., Visschedijk A.J.H., Zandveld P.Y.J. [1997] The European Emission Inventory of Heavy Metals and Persistent Organic Pollutants for 1990. TNO Institute of Environmental Sciences, Energy Research and Process Innovation, UBA-FB report 104 02 672/03, Apeldoorn, 239 p.

Expert estimates:

Denier van der Gon, H.A.C., M. van het Bolscher A.J.H. Visschedijk P.Y.J. Zandveld [2005] Study to the effectiveness of the UNECE Persistent Organic Pollutants Protocol and costs of possible additional measures Phase I: Estimation of emission reduction resulting from the implementation of the POP Protocol, TNO report B&O-A R 2005/194

Expert estimates:

CEIP [<http://www.emep-emissions.at/ceip/>]

Expert estimates:

Interpolation of emissions for 2000 and emission projections for 2010 available in TNO [Denier van der Gon et al., 2005]

Expert estimates:

Pb emission value was estimated using official emission data for the European part of Russia and keeping ratio between the European and Asian parts derived from the Global lead inventory [<http://www.ortech.ca/cgeic/index.html>]

Expert estimates:

Global lead inventory [<http://www.ortech.ca/cgeic/index.html>]