

HM emissions and pollution levels in 1990 and 2012

	Pb		Cd		Hg	
	1990	2012	1990	2012	1990	2012
Emissions, t	3878*	159	54*	2.8	36*	6.8
Deposition to the country						
Total deposition to the country, t	2890	598.34	57.99	21.36	17.48	7.00
- Anthropogenic deposition from national sources, t	1410	58.93	20.37	1.08	8.63	1.33
- Anthropogenic deposition from other countries, t	801	85.76	16.39	4.67	3.97	0.72
- Intercontinental transport (non-EMEP sources), t	249	31.08	20.64	14.80	0.14	0.12
- Secondary sources (wind re-suspension), t	649	422.56	0.60	0.82	4.75	4.83
Deposition from the country anthropogenic sources						
Deposition to other countries (EMEP region), t	1870	72.61	25.55	1.25	6.45	0.81
Deposition to the regional seas (Pb - t, Cd, Hg – kg):						
- Baltic Sea	273	10.57	4.00	0.20	0.97	0.12
- Black Sea	49.7	2.56	0.62	0.04	0.13	0.02
- Caspian Sea	3.97	0.21	0.05	0.002	0.03	0.003
- Mediterranean Sea	12.2	0.74	0.12	0.01	0.04	0.01
- North Sea	30.9	1.00	0.47	0.02	0.11	0.01
Mean annual air concentrations, ng/m ³	30.5	4.55	0.52	0.15	1.76	1.39

* expert estimates

POP emissions and pollution levels in 1990 and 2012

	B[a]P		PCDD/Fs		HCB		PCB-153	
	1990	2012	1990	2012	1990	2012	1990	2012
Emissions ^b	t		g TEQ ^a		kg		kg	
	94	93	1022	1041	655	655	275	68
Deposition to the country								
	kg		g TEQ		kg		kg	
Total deposition to the country	39927.6	47199.9	8398.2	6415.7	21276.5	2686.3	707.2	192.1
- Anthropogenic deposition from national sources	28192.1	31323.0	2735.2	2698.9	200.6	194.5	158.6	37.69
- Anthropogenic deposition from other countries	7107.2	6909.7	1636.4	409.0	64.98	2.99	86.51	13.43
- Intercontinental transport (global sources) ^c	-	-	175.00	111.29	4487.3	575.1	70.91	10.49
- Secondary sources (re-volatilization) ^d	4628.3	8967.2	3851.7	3196.6	16523.7	1913.7	391.1	130.5
Deposition from the country anthropogenic sources								
Deposition to other countries (EMEP region)	11687.6	21928.2	1635.7	1727.4	162.9	144.2	71.06	18.26
Deposition to the regional seas								
- Baltic Sea	169.0	353.3	12.90	28.83	3.2E-01	3.2E-01	2.5E-01	1.1E-01
- Black Sea	966.3	1565.7	138.7	145.1	8.7E+00	7.7E+00	5.3E+00	1.3E+00
- Caspian Sea	62.44	146.13	7.51	5.45	7.9E-01	7.5E-01	3.2E-01	6.1E-02
- Mediterranean Sea	123.8	1201.0	45.34	58.61	3.6E+00	3.5E+00	1.3E+00	3.4E-01
- North Sea	24.16	129.26	2.68	8.94	1.6E-01	1.3E-01	5.8E-02	2.8E-02
Mean annual air concentrations	ng/m ³		fg TEQ/m ³		pg/m ³		pg/m ³	
	0.66	0.60	46.50	0.03	281.1	37.08	2.57	0.74

^a Toxicity of PCDD/Fs is expressed according to the NATO toxic equivalents scheme (I-TEQ)

^b Expert estimate

^c Model assessment of B[a]P pollution was focused on the emission sources of the EMEP countries neglecting the intercontinental transport

^d Estimates of secondary sources contribution for B[a]P represent re-volatilization fluxes resulted from the accumulation of pollutant during one year