

HM emissions and pollution levels in 1990 and 2012

	Pb		Cd		Hg	
	1990	2012	1990	2012	1990	2012
Emissions, t	62	3.7*	0.308	0.117*	0.273	0.117*
Deposition to the country						
Total deposition to the country, t	146	36.46	1.81	0.84	0.48	0.43
- Anthropogenic deposition from national sources, t	10.60	0.69	0.05	0.02	0.03	0.01
- Anthropogenic deposition from other countries, t	71.30	8.39	0.49	0.22	0.15	0.07
- Intercontinental transport (non-EMEP sources), t	5.45	3.56	1.19	0.52	0.01	0.01
- Secondary sources (wind re-suspension), t	58.80	23.81	0.08	0.08	0.28	0.34
Deposition from the country anthropogenic sources						
Deposition to other countries (EMEP region), t	24.80	1.39	0.12	0.04	0.04	0.01
Deposition to the regional seas (Pb - t, Cd, Hg – kg):						
- Baltic Sea	0.10	0.00	0.46	0.10	0.16	0.03
- Black Sea	0.89	0.04	3.99	1.32	1.21	0.19
- Caspian Sea	0.04	0.00	0.20	0.09	0.13	0.02
- Mediterranean Sea	12.70	0.76	67.87	23.99	23.48	4.97
- North Sea	0.11	0.00	0.51	0.05	0.21	0.02
Mean annual air concentrations, ng/m ³	14.50	2.47	0.15	0.06	1.57	1.35

* expert estimates

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	B[a]P		PCDD/Fs		HCB		PCB-153	
	1990	2012	1990	2012	1990	2012	1990	2012
Emissions	t		g TEQ ^a		kg		kg	
	6.2	2.4 ^b	26	32 ^b	0.218	0.065 ^b	3.2 ^b	0.411 ^b
Deposition to the country								
	kg		g TEQ		kg		kg	
Total deposition to the country	1525.4	1292.2	415.6	291.9	1042.2	124.9	39.91	9.08
- Anthropogenic deposition from national sources	918.0	385.8	49.96	60.49	0.05	0.01	1.14	0.14
- Anthropogenic deposition from other countries	456.6	711.6	124.2	55.76	4.72	2.02	7.49	1.34
- Intercontinental transport (global sources) ^c	-	-	15.81	11.48	313.2	41.7	5.82	0.89
- Secondary sources (re-volatilization) ^d	150.8	194.7	225.7	164.2	724.2	81.1	25.45	6.71
Deposition from the country anthropogenic sources								
Deposition to other countries (EMEP region)	711.9	549.7	41.97	49.03	0.04	0.01	1.04	0.14
Deposition to the regional seas								
- Baltic Sea	2.25	3.13	0.11	0.19	2.7E-05	7.8E-06	1.3E-03	1.7E-04
- Black Sea	8.88	13.31	0.33	0.54	2.2E-04	7.7E-05	4.6E-03	8.7E-04
- Caspian Sea	0.17	1.26	0.04	0.06	5.6E-05	1.7E-05	1.1E-03	1.6E-04
- Mediterranean Sea	297.2	193.2	13.27	15.81	1.0E-02	2.7E-03	2.3E-01	2.9E-02
- North Sea	0.28	1.22	0.05	0.07	2.7E-05	5.7E-06	7.1E-04	8.2E-05
Mean annual air concentrations								
	ng/m ³		fg TEQ/m ³		pg/m ³		pg/m ³	
	0.43	0.27	26.39	0.02	205.73	25.90	2.48	0.59

^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