

## HM emissions and pollution levels in 1990 and 2012

	Pb		Cd		Hg	
	1990	2012	1990	2012	1990	2012
Emissions, t	3.8	0.038*	0.056	0.005*	0.108	0.052*
Deposition to the country						
Total deposition to the country, kg	189	30.83	1.09	0.47	0.45	0.24
- Anthropogenic deposition from national sources, kg	3.58	0.03	0.06	0.004	0.06	0.01
- Anthropogenic deposition from other countries, kg	139	5.37	0.48	0.16	0.20	0.05
- Intercontinental transport (non-EMEP sources), kg	2.68	1.50	0.52	0.27	0.00	0.00
- Secondary sources (wind re-suspension), kg	44.1	23.92	0.04	0.03	0.19	0.17
Deposition from the country anthropogenic sources						
Deposition to other countries (EMEP region), kg	2680	24.43	39.52	3.12	30.74	7.43
Deposition to the regional seas (Pb – kg, Cd, Hg – g):						
- Baltic Sea	15.5	0.21	0.21	0.02	0.15	0.05
- Black Sea	18.6	0.10	0.25	0.01	0.17	0.03
- Caspian Sea	2.04	0.02	0.03	0.002	0.05	0.01
- Mediterranean Sea	628	7.42	9.33	0.96	5.48	1.70
- North Sea	26.1	0.26	0.37	0.03	0.22	0.05
Mean annual air concentrations, ng/m <sup>3</sup>	37.7	5.44	0.16	0.06	1.55	1.28

\* 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	t		g TEQ <sup>a</sup>		kg		kg	
	3.3E-05 <sup>b</sup>	3.3E-05 <sup>b</sup>	2.4	2.4 <sup>b</sup>	---	---	0.033 <sup>b</sup>	0.006 <sup>b</sup>
Deposition to the country	kg		g TEQ		kg		kg	
Total deposition to the country	1.4E-01	2.9E-01	2.7E-01	1.1E-01	3.5E-01	4.0E-02	5.8E-02	9.2E-03
- Anthropogenic deposition from national sources	2.6E-05	2.6E-05	1.9E-02	2.0E-02	0.0E+00	0.0E+00	5.1E-05	9.6E-06
- Anthropogenic deposition from other countries	1.3E-01	2.6E-01	1.0E-01	2.7E-02	4.4E-03	1.8E-04	2.4E-02	2.1E-03
- Intercontinental transport (global sources) <sup>c</sup>	1.5E-08	7.5E-07	7.7E-03	6.0E-03	1.2E-01	1.7E-02	4.0E-03	6.0E-04
- Secondary sources (re-volatilization) <sup>d</sup>	1.4E-02	3.1E-02	1.4E-01	6.2E-02	2.2E-01	2.3E-02	3.0E-02	6.5E-03
Deposition from the country anthropogenic sources								
Deposition to other countries (EMEP region)	9.9E-03	1.3E-02	8.5E+00	8.0E+00	0.0E+00	0.0E+00	2.3E-02	4.3E-03
Deposition to the regional seas								
- Baltic Sea	3.1E-05	7.2E-05	2.1E-02	1.7E-02	0.0E+00	0.0E+00	2.3E-05	4.9E-06
- Black Sea	1.2E-05	5.1E-05	1.5E-02	2.4E-02	0.0E+00	0.0E+00	2.6E-05	6.5E-06
- Caspian Sea	4.1E-07	6.3E-06	3.0E-03	4.1E-03	0.0E+00	0.0E+00	8.4E-06	1.8E-06
- Mediterranean Sea	9.7E-04	1.9E-03	9.6E-01	9.5E-01	0.0E+00	0.0E+00	2.0E-03	4.1E-04
- North Sea	2.9E-05	9.2E-05	1.9E-02	2.3E-02	0.0E+00	0.0E+00	2.8E-05	5.1E-06
Mean annual air concentrations	ng/m <sup>3</sup>		fg TEQ/m <sup>3</sup>		pg/m <sup>3</sup>		pg/m <sup>3</sup>	
	5.9E-02	9.4E-02	4.0E+01	1.4E-02	2.1E+02	2.4E+01	9.7E+00	1.5E+00

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

<sup>b</sup> Expert estimate

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

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