5. Atmospheric Supply of Mercury to the Baltic Sea in 2015

In this chapter the results of model evaluation of mercury atmospheric input to the Baltic Sea and its sub-basins for 2015 is presented. Modelling of mercury atmospheric transport and deposition was carried out using MSC-E Eulerian Heavy Metal transport model MSCE-HM (*Travnikov and Ilyin*, 2005). Latest available official information on mercury emission from EMEP countries, including all HELCOM countries, was used in computations. Based on these data annual and monthly levels of mercury deposition to the Baltic Sea region have been obtained and contributions of HELCOM countries emission sources to the deposition over the Baltic Sea are estimated. Model results were compared with observed levels of mercury concentrations in air and precipitation measured at monitoring sites around the Baltic Sea in 2015.

5.1. Mercury emissions

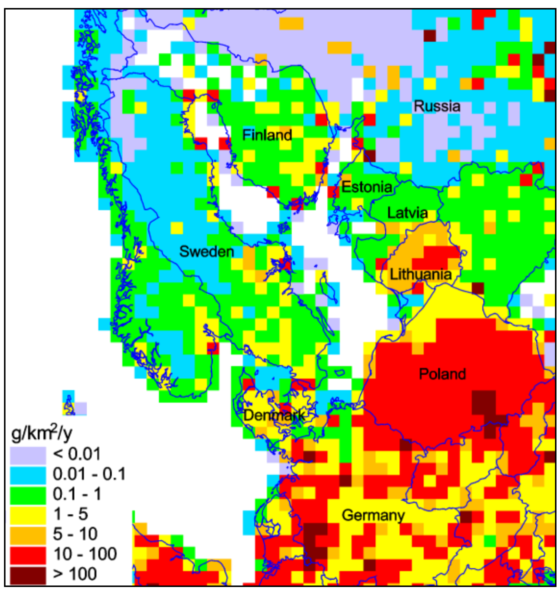


Figure 5.1. Annual anthropogenic emissions of mercury in the Baltic Sea region for 2015, g/km^2/year.

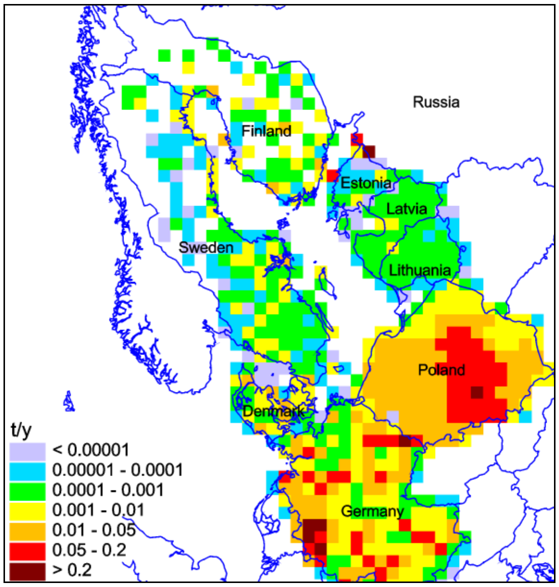


Figure 5.2. Annual mercury emission from Public Power sector for 2015, t/grid cell/y (white color means no information).

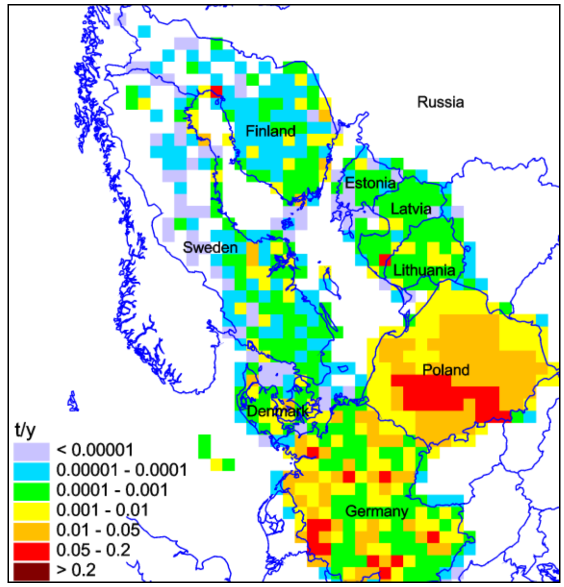


Figure 5.3. Annual mercury emission from Industry sector for 2015, t/grid cell/y (white color means no information).

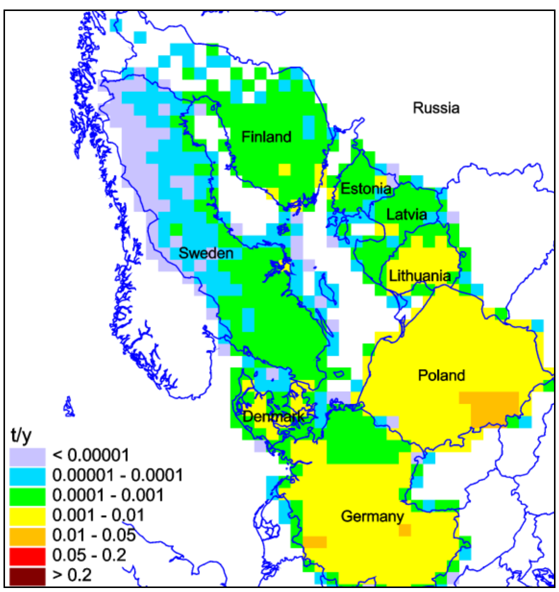


Figure 5.4. Annual mercury emission from Other Stationary Combustion sector for 2015, t/grid cell/y (white color means no information).

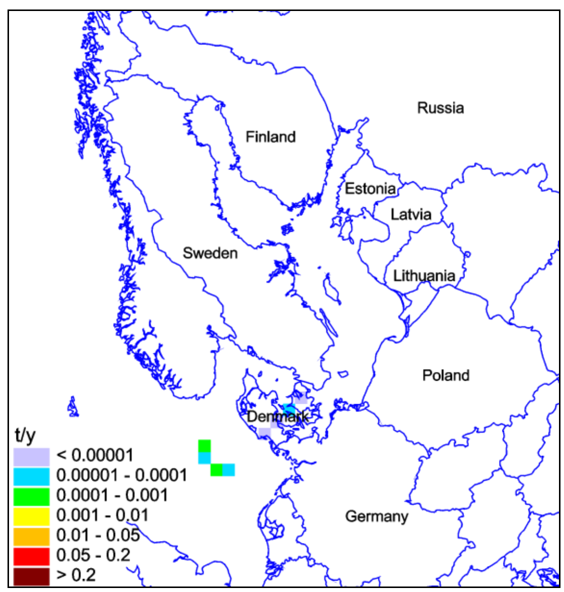


Figure 5.5. Annual mercury emission from Fugitive Emissions sector for 2015, t/grid cell/y (white color means no information).

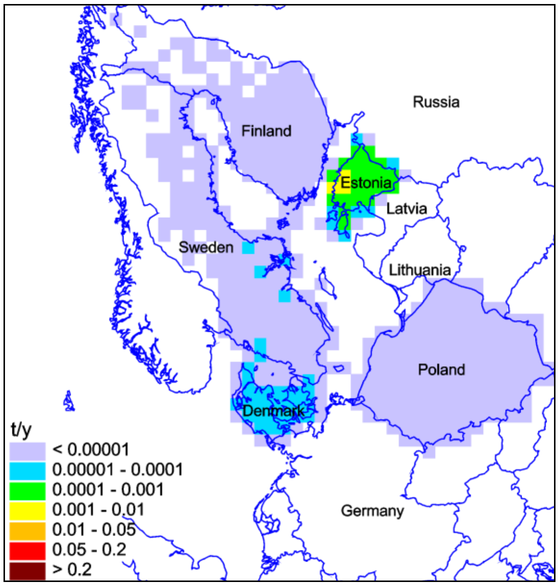


Figure 5.6. Annual mercury emission from Solvents sector for 2015, t/grid cell/y (white color means no information).

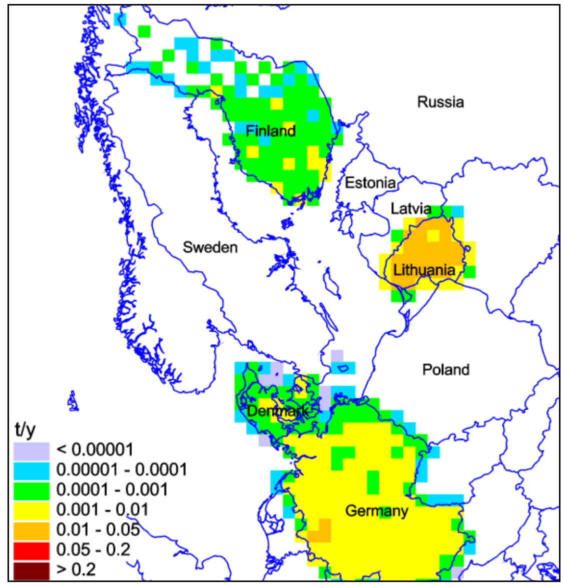


Figure 5.7. Annual mercury emission from Road Transport sector for 2015, t/grid cell/y (white color means no information).

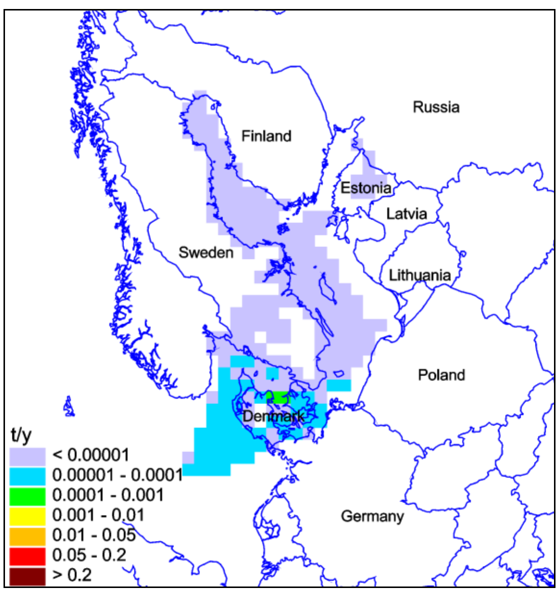


Figure 5.8. Annual mercury emission from Shipping Emissions sector for 2015, t/grid cell/y (white color means no information).

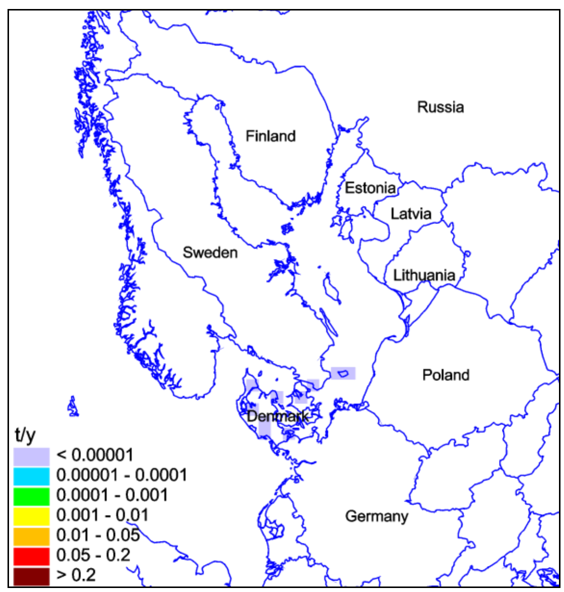


Figure 5.9. Annual mercury emission from Aviation sector for 2015, t/grid cell/y (white color means no information).

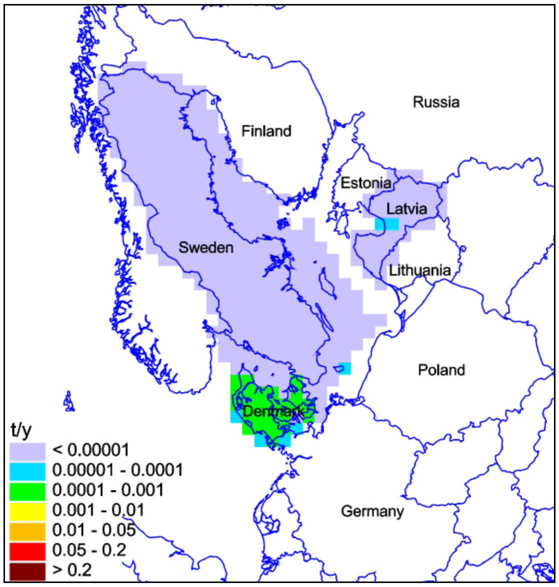


Figure 5.10. Annual mercury emission from Off Road sector for 2015, t/grid cell/y (white color means no information).

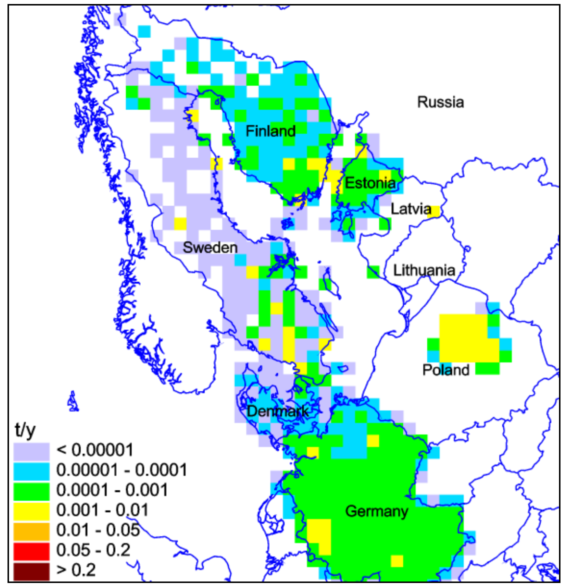


Figure 5.11. Annual mercury emission from Waste sector for 2015, t/grid cell/y (white color means no information).

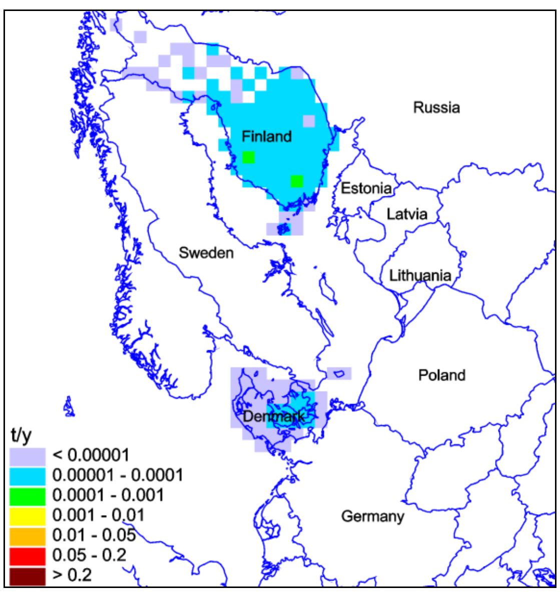


Figure 5.12. Annual mercury emission from Agricultural Other sector for 2015, t/grid cell/y (white color means no information).

Table 5.1. Annual anthropogenic mercury emissions of HELCOM countries from different sectors for 2015, tonnes/year

GNFR emission sector	Sector name	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia[1]	Sweden
A	Public Power	0.133	0.494	0.166	5.574	0.022	0.026	5.379	15.700	0.125
B	Industry	0.087	0.004	0.365	2.659	0.022	0.090	4.171	0.802	0.136
C	Other Stationary Combustion	0.034	0.011	0.034	0.350	0.027	0.039	0.984		0.025
D	Fugitive Emissions	0.0004			NA		0.004	0.007		
E	Solvents	0.001	0.012	3.5E-07	0.003	7.7E-06	0.033	3.9E-06		0.0005
F	Road Transport	0.023		0.045	0.431	NA	8.186	NA		0.040
G	Shipping Emissions	0.004		0.002	0.010		0.0001	6.0E-05		7.0E-05
H	Aviation	9.8E-06	NA	NA	NE	NE	NE	NA		NE
I	Off Road	0.013	2.1E-05	0.001	0.017	0.0002				2.5E-06
J	Waste	0.001	0.021	0.021	0.052	0.004	0.004	0.035		0.033
L	Agricultural Other	0.0004		0.004			0.0003	NA		NA
M	Other	NO	NO	NO	NA	NA	NO	NA	0.178	0.052
Total		0.297	0.542	0.637	9.095	0.076	8.382	10.576	16.680	0.413

NO – not occurring, an activity or process does not exist within a country.
NA – not applicable, the process or activity exists but emissions are considered never to occur.
NE – not estimated, emissions occur but have not been estimated or reported in this submission.
[1] – Mercury emission from Public Power sector (A) for 2015 was estimated by CEIP, emissions for other sectors were officially reported by Russia.

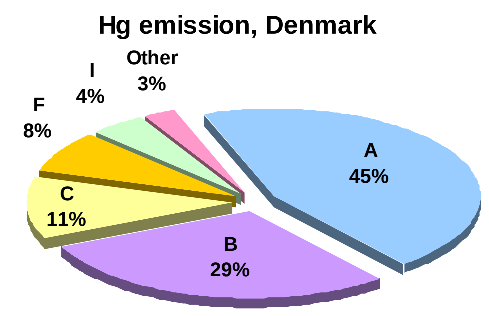


Figure 5.13. Contributions of different sectors to annual mercury emissions of Denmark in 2015

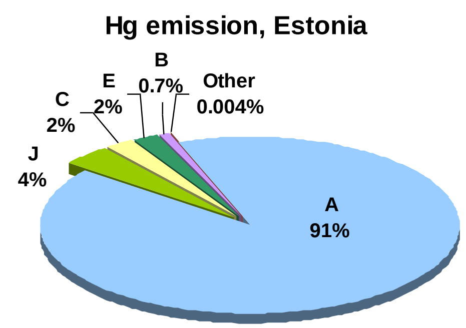


Figure 5.14. Contributions of different sectors to annual mercury emissions of Estonia in 2015

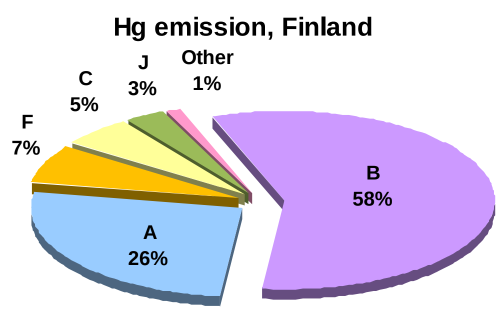


Figure 5.15. Contributions of different sectors to annual mercury emissions of Finland in 2015

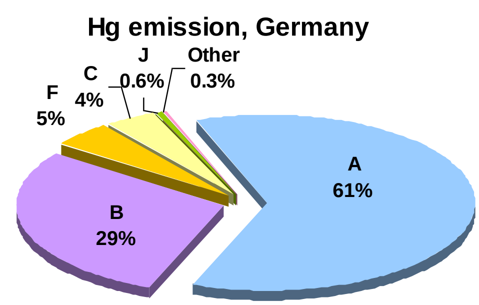


Figure 5.16. Contributions of different sectors to annual mercury emissions of Germany in 2015

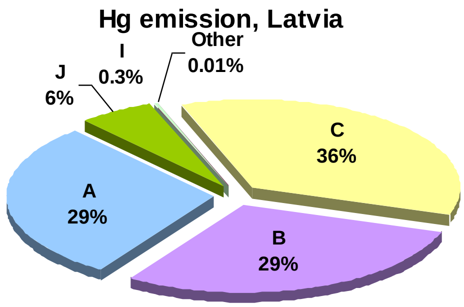


Figure 5.17. Contributions of different sectors to annual mercury emissions of Latvia in 2015

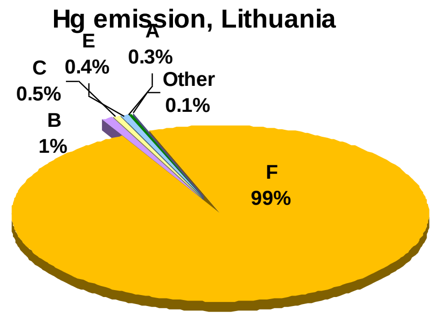


Figure 5.18. Contributions of different sectors to annual mercury emissions of Lithuania in 2015

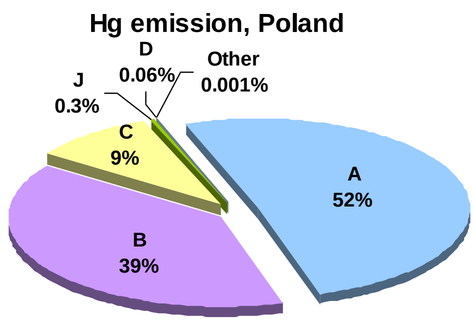


Figure 5.19. Contributions of different sectors to annual mercury emissions of Poland in 2015

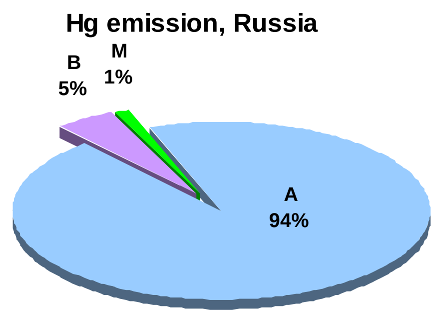


Figure 5.20. Contributions of different sectors to annual mercury emissions of Russia in 2015

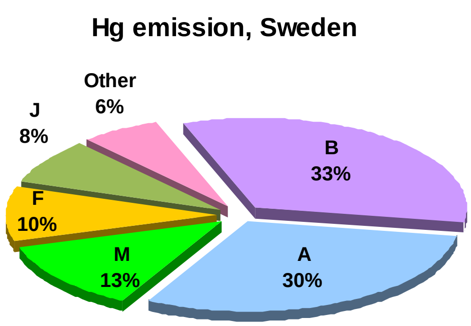


Figure 5.21. Contributions of different sectors to annual mercury emissions of Sweden in 2015

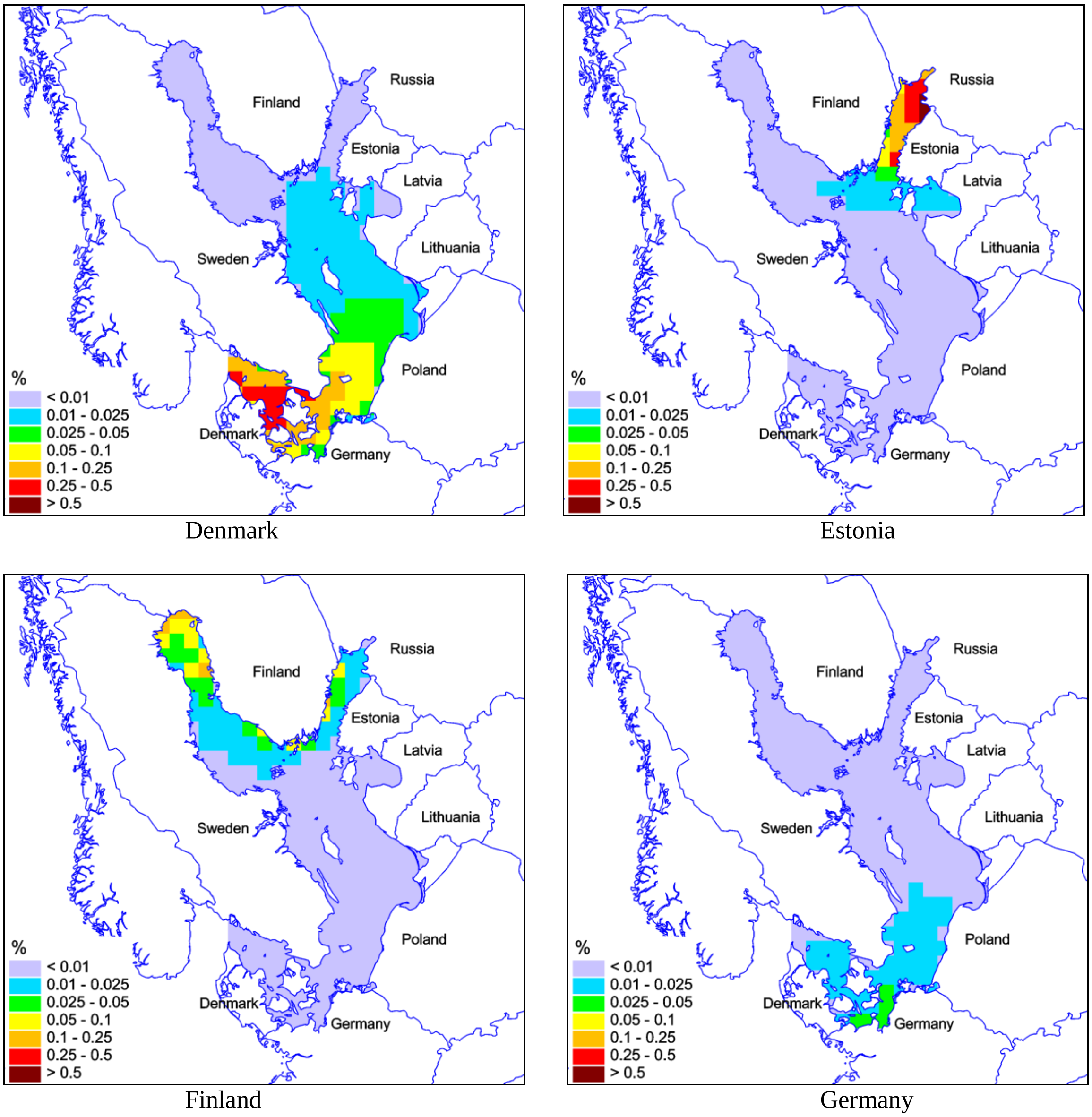
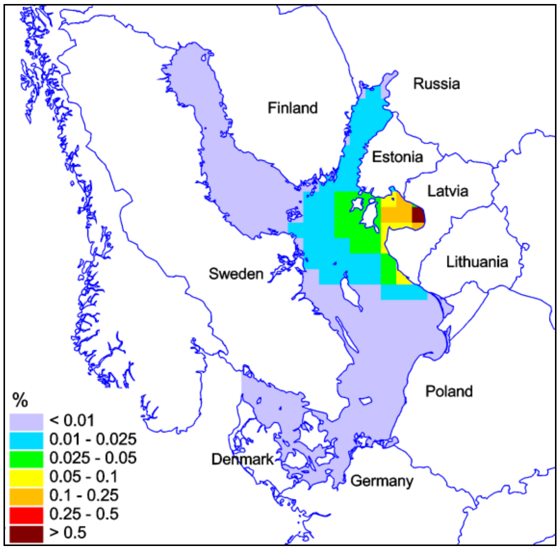
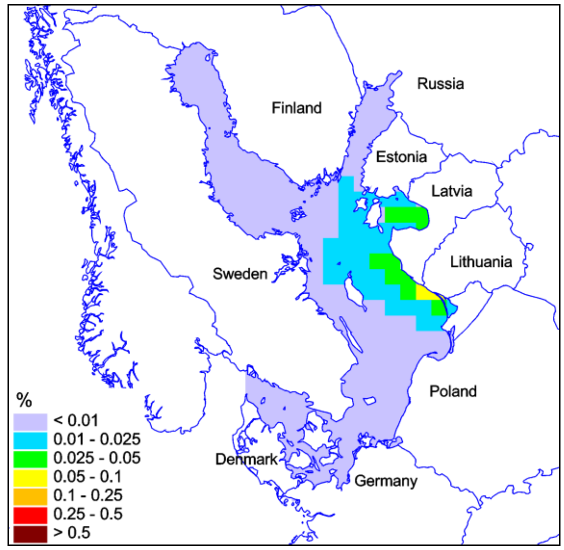


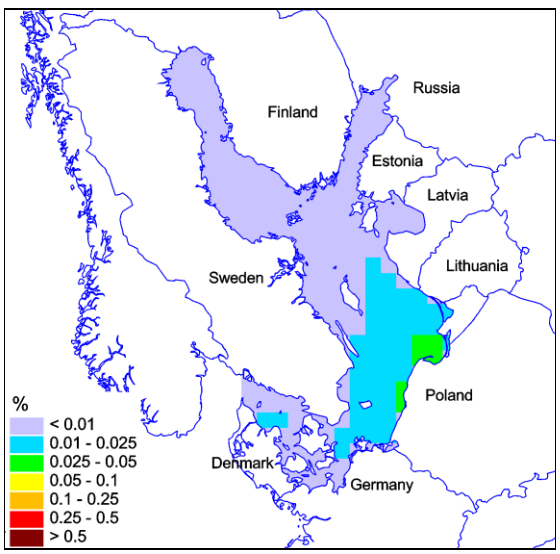
Figure 5.22. Fractions of annual anthropogenic mercury emissions of HELCOM Parties deposited to the Baltic Sea in 2015 (expressed as a percent of national anthropogenic emission deposited to the particular grid cells).



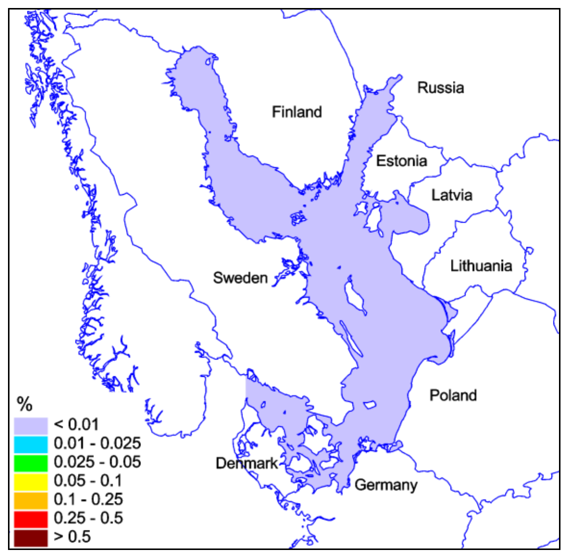
Latvia



Lithuania

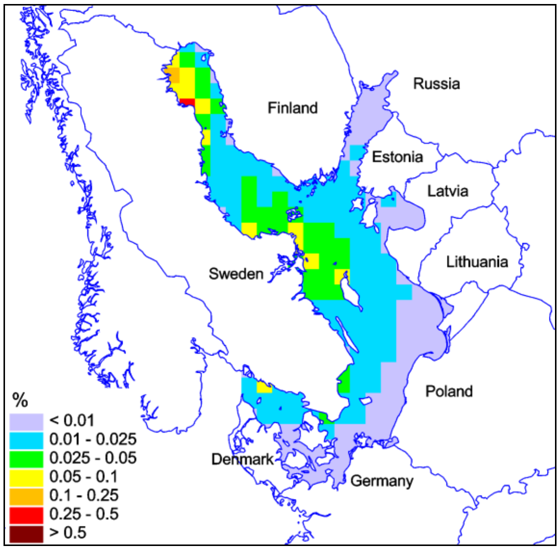


Poland



Russia

Figure 5.22. (cont.) Fractions of annual anthropogenic mercury emissions of HELCOM Parties deposited to the Baltic Sea in 2015 (expressed as a percent of national anthropogenic emission deposited to the particular grid cells).



Sweden

Figure 5.22. (cont.) Fractions of annual anthropogenic mercury emissions of HELCOM Parties deposited to the Baltic Sea in 2015 (expressed as a percent of national anthropogenic emission deposited to the particular grid cells).

Table 5.2. Annual anthropogenic **mercury** emissions of HELCOM countries and other EMEP countries in period 1990-2015, tonnes/year (Expert estimates of emissions are shaded, (*Tista et al.*, 2017a))

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
DK	3.2	3.3	3.0	2.9	2.6	2.3	2.5	2.0	1.7	1.5	1.0	0.882	0.855
EE	1.2	1.0	0.857	0.674	0.676	0.637	0.633	0.639	0.572	0.547	0.550	0.535	0.539
FI	1.1	0.944	0.852	0.637	0.678	0.750	0.810	0.604	0.584	1.2	0.615	0.792	0.708
DE	35	29	25	22	21	20	19	19	19	18	18	17	16
LV	0.277	0.247	0.207	0.182	0.143	0.109	0.113	0.103	0.093	0.088	0.074	0.085	0.073
LT	0.618	0.656	0.425	0.360	0.327	0.260	0.247	0.230	0.250	0.212	0.182	0.174	0.200
PL	14	14	14	14	13	13	13	12	12	11	10	10	9.9
RU	16	13	11	12	10	10	10	9.6	9.4	9.9	10	10	10
SE	1.5	1.2	1.2	1.0	1.0	0.958	1.0	0.846	0.851	0.855	0.736	0.576	0.611
AL	0.273	0.143	0.066	0.054	0.037	0.044	0.037	0.023	0.023	0.022	0.024	0.027	0.025
AM	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348
AT	2.1	2.0	1.6	1.4	1.2	1.2	1.2	1.1	0.949	0.936	0.892	0.959	0.924
AZ	0.040	0.040	0.041	0.042	0.042	0.096	0.096	0.098	0.109	0.121	0.124	0.140	0.144
BY	1.1	1.1	0.879	0.721	0.602	0.511	0.297	0.310	0.392	0.380	0.358	0.522	0.565
BE	5.7	5.4	5.4	3.4	3.8	3.0	3.0	3.5	2.4	2.8	3.0	2.6	3.6
BA	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
BG	2.4	2.0	1.8	1.8	1.9	2.0	1.9	2.0	1.8	1.6	1.5	1.4	1.3
HR	1.2	1.1	1.1	0.352	0.321	0.316	0.307	0.354	0.376	0.401	0.505	0.509	0.554
CY	0.093	0.090	0.098	0.104	0.108	0.104	0.110	0.108	0.105	0.106	0.108	0.107	0.109
CZ	7.5	7.4	7.3	7.5	7.2	7.4	5.9	5.5	5.2	3.7	2.9	2.9	2.9
FR	25	25	24	22	22	21	20	15	14	12	12	10	9.4
GE	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069
GR	13	13	13	13	13	13	13	13	12	12	11	11	10
HU	3.1	3.1	2.8	2.8	2.8	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.0
IS	0.008	0.008	0.009	0.021	0.021	0.023	0.028	0.028	0.027	0.028	0.027	0.027	0.028
IE	0.813	0.805	0.729	0.732	0.674	0.666	0.693	0.658	0.458	0.407	0.437	0.429	0.404
IT	12	11	11	10	10	10	9.8	10.0	9.5	8.8	9.2	9.4	9.2
KZ	21	22	22	22	22	23	22	21	21	20	20	20	20
KY	0.618	0.618	0.618	0.618	0.618	0.618	0.618	0.618	0.618	0.618	0.618	0.629	0.640
LI	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04	2.E-04
LU	0.413	0.396	0.374	0.392	0.351	0.227	0.170	0.125	0.086	0.213	0.267	0.281	0.142
MT	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.685	0.536
MC	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
ME	0.073	0.076	0.063	0.058	0.049	0.019	0.066	0.062	0.078	0.075	0.073	0.057	0.085
NL	3.6	3.0	2.6	2.1	1.7	1.5	1.3	1.1	0.872	0.977	1.1	0.916	0.803
NO	1.4	1.3	1.2	0.869	0.954	0.769	0.797	0.808	0.762	0.801	0.649	0.596	0.560
PT	3.3	3.4	3.8	3.3	3.1	3.4	3.0	3.3	3.5	3.5	3.1	2.9	3.1
MD	0.659	0.509	0.352	0.262	0.247	0.218	0.228	0.240	0.238	0.236	0.243	0.264	0.184
RO	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2	7.2	6.3	6.7	7.3	6.8
RUA	8.0	6.9	5.9	6.1	5.4	5.4	5.2	4.9	4.8	5.1	5.2	5.2	5.3
RS	1.9	1.4	1.7	1.6	1.6	1.5	1.6	1.7	1.7	1.4	1.7	1.7	1.8
SK	19	14	9.2	7.6	6.1	4.1	7.4	8.0	7.6	4.2	4.6	3.8	3.1
SI	0.314	0.289	0.287	0.265	0.254	0.215	0.196	0.218	0.232	0.207	0.204	0.190	0.217
ES	15	15	16	15	15	17	15	14	15	16	13	12	12
CH	6.6	6.0	5.7	5.3	4.8	4.0	3.7	3.4	2.6	2.3	1.8	1.4	1.0
TJ	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2
MK	0.621	0.569	0.524	0.499	0.416	0.439	0.493	0.522	0.594	0.527	0.538	0.562	0.590
TR	18	18	18	18	18	18	18	18	18	18	18	18	18
TM	0.521	0.600	0.679	0.758	0.837	0.916	0.875	0.834	0.793	0.752	0.711	0.626	0.541
UA	36	35	34	33	32	31	30	29	28	27	26	25	5.9
GB	37	38	36	22	21	20	15	12	11	8.3	8.3	8.1	7.2
UZ	6.0	6.2	6.3	6.5	6.7	6.9	6.9	6.9	7.0	7.0	7.0	6.8	6.5

Table 5.2 (continued). Annual anthropogenic **mercury** emissions of HELCOM countries and other EMEP countries in period 1990-2015, tonnes/year (Expert estimates of emissions are shaded, (*Tista et al.*, 2017a))

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
DK	0.879	0.736	0.700	0.626	0.595	0.604	0.464	0.442	0.390	0.305	0.344	0.334	0.297
EE	0.619	0.569	0.548	0.550	0.679	0.598	0.468	0.653	0.657	0.579	0.689	0.680	0.542
FI	0.842	0.792	0.897	1.0	0.880	0.829	0.777	0.946	0.657	0.763	0.705	0.952	0.637
DE	16	15	14	13	12	11	10.1	11	10	10.0	9.6	9.2	9.1
LV	0.074	0.076	0.079	0.089	0.097	0.079	0.070	0.080	0.077	0.162	0.091	0.071	0.076
LT	0.184	0.191	0.209	0.226	0.234	0.224	0.221	0.224	0.213	0.199	0.204	0.190	0.686
PL	10	10	10.0	10	10	10	9.5	9.6	9.6	9.9	10	9.6	11
RU	11	12	14	14	13	13	12	13	13	14	15	16	17
SE	0.690	0.706	0.655	0.512	0.545	0.491	0.536	0.510	0.500	0.456	0.484	0.431	0.413
AL	0.029	0.024	0.055	0.056	0.101	0.124	0.118	0.137	0.156	0.174	0.193	0.212	0.231
AM	0.348	0.348	0.348	0.348	0.348	0.347	0.346	0.345	0.344	0.343	0.342	0.341	0.340
AT	0.968	0.938	0.978	0.997	0.999	1.0	0.893	0.990	0.980	0.985	1.0	0.991	0.974
AZ	0.147	0.154	0.208	0.269	0.422	0.436	0.466	0.490	0.480	0.482	0.472	0.298	0.308
BY	0.603	0.632	0.649	0.716	0.741	0.814	0.914	0.854	0.863	0.924	0.859	0.794	0.729
BE	3.5	3.3	1.9	1.9	3.1	3.5	1.7	1.7	1.6	1.2	1.4	1.5	1.1
BA	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
BG	2.2	2.1	1.6	1.8	1.6	1.4	1.0	0.910	0.976	0.831	0.779	0.775	0.787
HR	0.582	0.588	0.609	0.583	0.616	0.590	0.527	0.552	0.530	0.502	0.501	0.499	0.484
CY	0.092	0.092	0.091	0.093	0.091	0.092	0.077	0.062	0.067	0.068	0.078	0.097	0.089
CZ	2.9	3.0	3.0	3.1	3.0	3.0	2.6	2.8	2.8	2.4	2.2	2.2	2.1
FR	6.8	6.4	6.4	6.3	4.9	4.6	4.2	4.5	4.6	4.0	3.7	3.9	3.4
GE	0.069	0.069	0.069	0.069	0.069	0.068	0.068	0.069	0.070	0.070	0.156	0.216	0.218
GR	9.8	9.3	8.8	8.4	7.9	7.4	7.0	6.5	6.3	6.2	6.0	5.8	5.7
HU	2.0	1.9	1.6	1.5	1.3	1.4	1.2	1.4	1.3	1.2	1.015	1.023	1.116
IS	0.029	0.064	0.067	0.083	0.092	0.074	0.061	0.061	0.059	0.049	0.040	0.043	0.050
IE	0.413	0.415	0.443	0.420	0.411	0.409	0.365	0.361	0.339	0.356	0.345	0.338	0.354
IT	9.1	9.8	9.9	10	11	10	8.4	8.7	8.6	8.4	8.2	8.2	8.2
KZ	20	20	20	20	19	19	19	19	19	19	19	19	19
KY	0.652	0.663	0.675	0.686	0.697	0.709	0.720	0.732	0.743	0.754	0.766	0.777	0.789
LI	2.E-04	3.E-04	3.E-04	3.E-04	2.E-04	2.E-04	3.E-04	3.E-04	3.E-04	3.E-04	3.E-04	2.E-04	2.E-04
LU	0.201	0.155	0.193	0.289	0.264	0.156	0.058	0.063	0.052	0.080	0.157	0.062	0.078
MT	0.582	0.582	0.603	0.610	0.627	0.561	0.561	0.007	0.000	0.001	0.013	0.008	0.005
MC	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002
ME	0.079	0.078	0.064	0.076	0.062	0.087	0.050	0.087	0.087	0.087	0.087	0.087	0.087
NL	0.756	0.929	0.952	0.886	0.836	0.717	0.669	0.615	0.719	0.643	0.605	0.549	0.559
NO	0.561	0.583	0.572	0.514	0.489	0.459	0.336	0.394	0.335	0.317	0.314	0.264	0.238
PT	2.4	2.4	2.7	2.3	2.1	2.0	2.0	1.8	1.7	1.7	1.7	1.7	1.8
MD	0.269	0.282	0.300	0.237	0.282	0.283	0.199	0.162	0.180	0.181	0.154	0.166	0.166
RO	6.3	5.9	5.4	5.1	5.1	4.4	2.6	2.2	2.4	2.2	1.9	2.0	2.1
RUA	5.9	6.1	7.2	7.2	6.8	6.5	6.1	6.5	6.9	7.4	7.8	8.2	8.6
RS	1.9	2.1	1.8	2.0	2.0	2.0	1.7	1.8	1.8	1.5	1.5	1.2	1.5
SK	2.7	3.1	2.8	3.4	2.6	2.7	1.1	1.3	1.1	1.2	1.2	1.2	1.1
SI	0.208	0.189	0.193	0.175	0.180	0.180	0.158	0.190	0.191	0.183	0.178	0.155	0.153
ES	11	11	11	10	9.4	8.5	7.3	6.8	6.5	6.3	5.5	5.4	5.4
CH	0.680	0.701	0.722	0.755	0.754	0.757	0.709	0.730	0.709	0.687	0.677	0.658	0.660
TJ	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4
MK	0.442	0.428	0.310	0.310	0.334	0.324	0.288	0.303	0.343	0.300	0.255	0.258	0.251
TR	18	17	17	17	17	16	16	16	16	16	16	16	16
TM	0.456	0.372	0.287	0.292	0.297	0.302	0.307	0.312	0.317	0.322	0.327	0.332	0.337
UA	30	6.6	6.0	16	7.6	6.8	5.6	6.8	6.8	6.8	6.8	6.1	4.9
GB	7.8	6.7	7.4	7.5	7.0	6.9	6.5	6.4	5.9	5.6	5.9	5.3	4.8
UZ	6.3	6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9

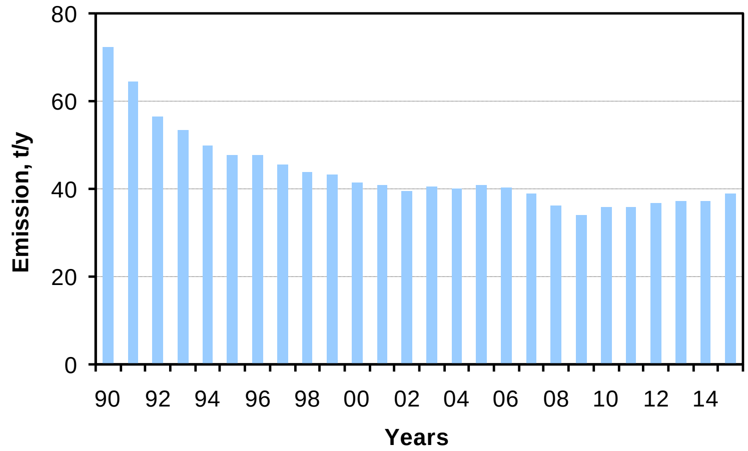


Figure 5.23. Time-series of annual **mercury** emissions of HELCOM countries in 1990-2015, tonnes/ year.

5.2 Annual total deposition of mercury

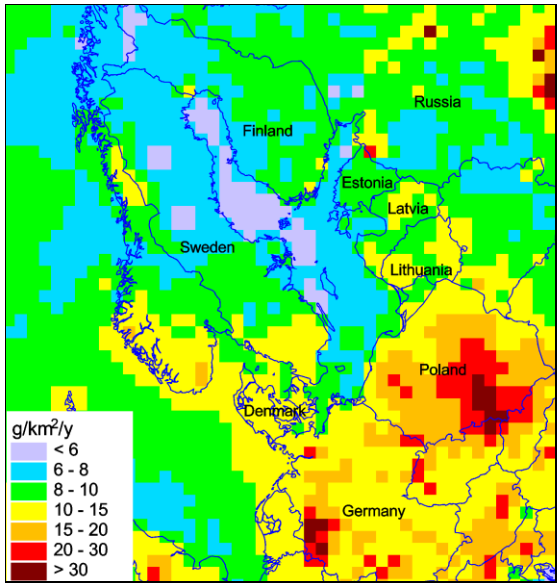


Figure 5.24. Annual total deposition fluxes of **mercury** over the Baltic Sea region for 2015, g/km^2/year.

5.3 Monthly total deposition of mercury

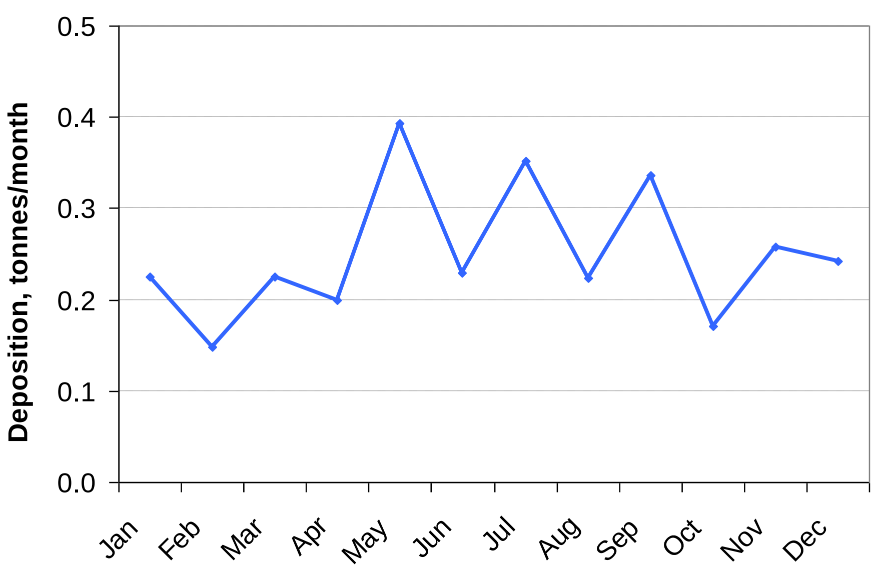


Figure 5.25. Monthly total deposition of **mercury** to the Baltic Sea for 2015, tonnes/month.

Table 5.3. Monthly total deposition of **mercury** to the Baltic Sea for 2015, tonnes/month.

Month	Hg deposition
Jan	0.23
Feb	0.15
Mar	0.22
Apr	0.20
May	0.39
Jun	0.23
Jul	0.35
Aug	0.22
Sep	0.34
Oct	0.17
Nov	0.26
Dec	0.24

5.4 Source allocation of mercury deposition

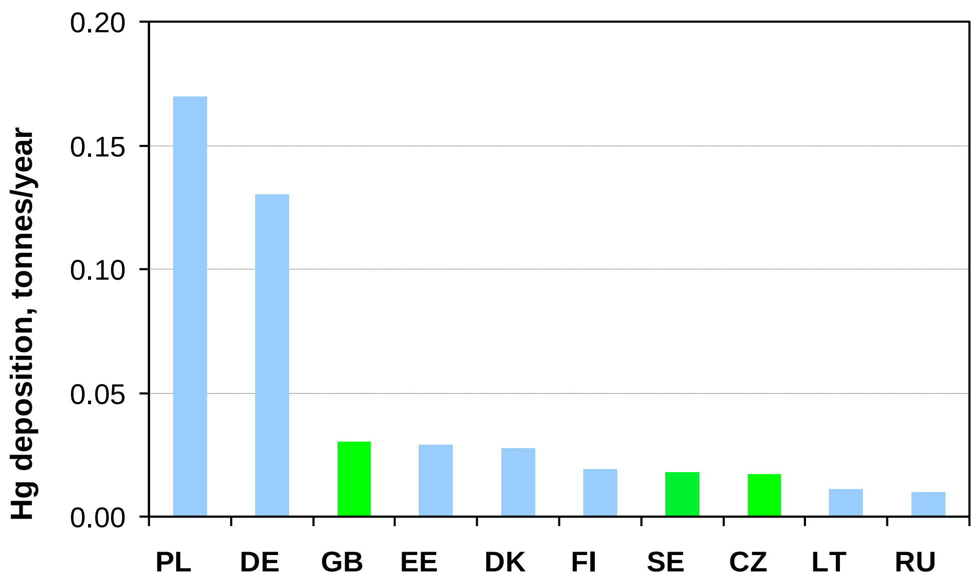


Figure 5.26. Top ten countries with the highest contribution to annual deposition of **mercury** over the Baltic Sea for 2015, tonnes/year. Green bars indicate non-EMEP countries.

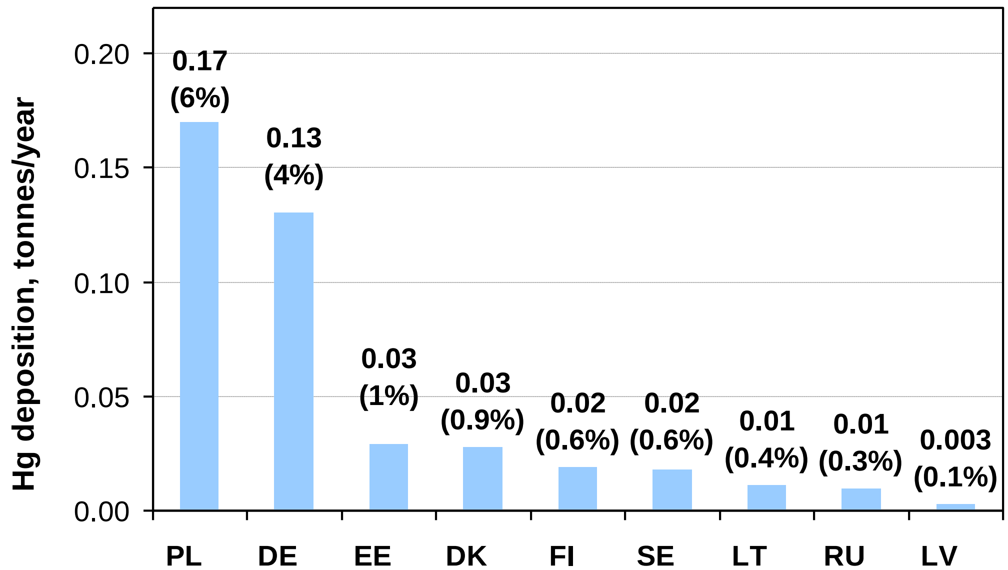


Figure 5.27. Sorted contributions (in %) of HELCOM countries to total deposition of **mercury** over the Baltic Sea for 2015.

HELCOM countries emissions of mercury contributed 14% to the total annual mercury deposition over the Baltic Sea. Contribution of other EMEP countries accounted for 4%. Significant contribution was made by other emission sources, in particular, non-EMEP emissions sources, natural emissions, and re-emission of mercury (82%).

Table 5.4. Two most significant contributors to the annual total deposition of **mercury** to the nine Baltic Sea sub-basins for 2015.

Sub-basin	Country(1)	%	Country(2)	%	*, %
ARC	PL	2	DE	2	89
BOB	FI	4	SE	2	90
BOS	PL	2	DE	1	92
BAP	PL	8	DE	5	80
GUF	EE	11	PL	2	80
GUR	PL	5	DE	2	86
KAT	DE	5	PL	4	82
SOU	DE	7	DK	7	74
WEB	DE	13	PL	5	73
BAS	PL	6	DE	4	82

* - contribution of non-EMEP emissions sources, natural emissions, and re-emission of mercury.

5.5 Comparison of model results with measurements

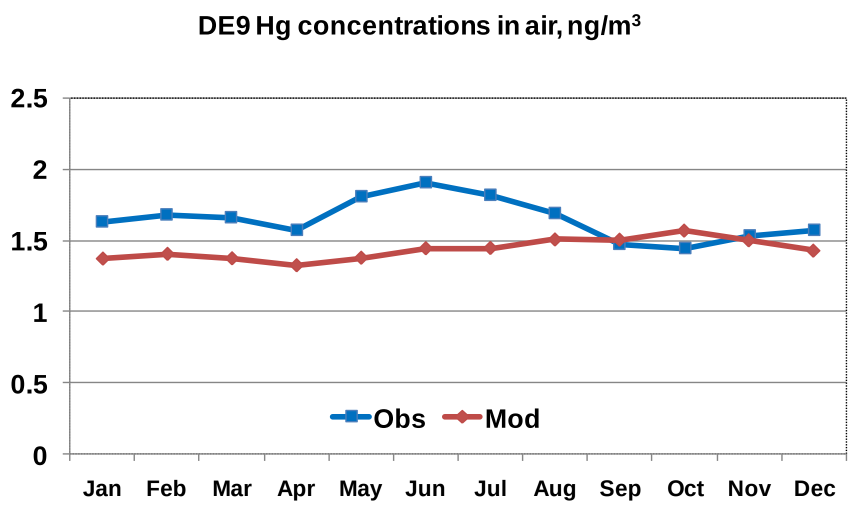


Figure 5.28. Comparison of calculated monthly mean Hg concentrations in air for 2015 with measurements of the station Zingst (DE9). Units: ng / m^3.

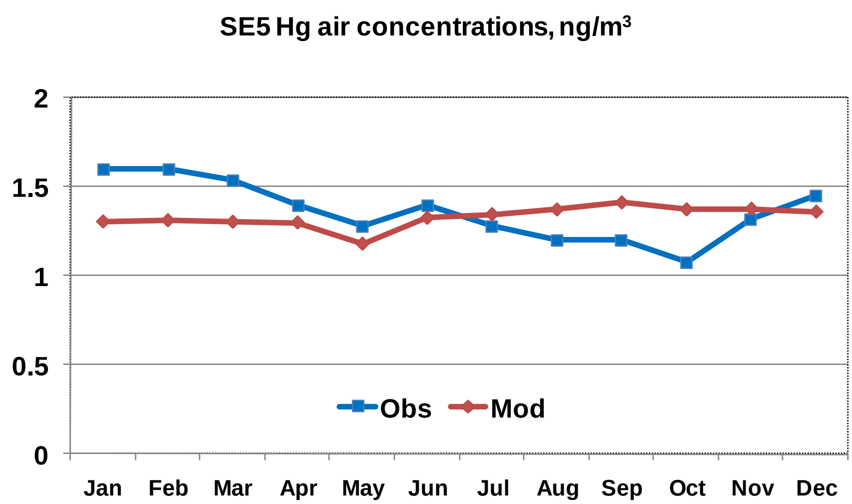


Figure 5.29. Comparison of calculated monthly mean Hg concentrations in air for 2015 with measurements of the station Bredkälen (SE5). Units: ng / m^3.

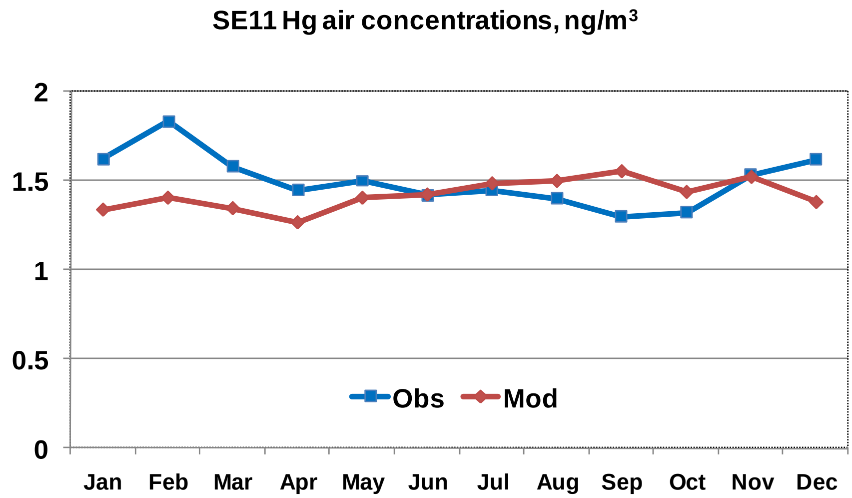


Figure 5.30. Comparison of calculated monthly mean Hg concentrations in air for 2015 with measurements of the station Vavihill (SE11). Units: ng / m^3.

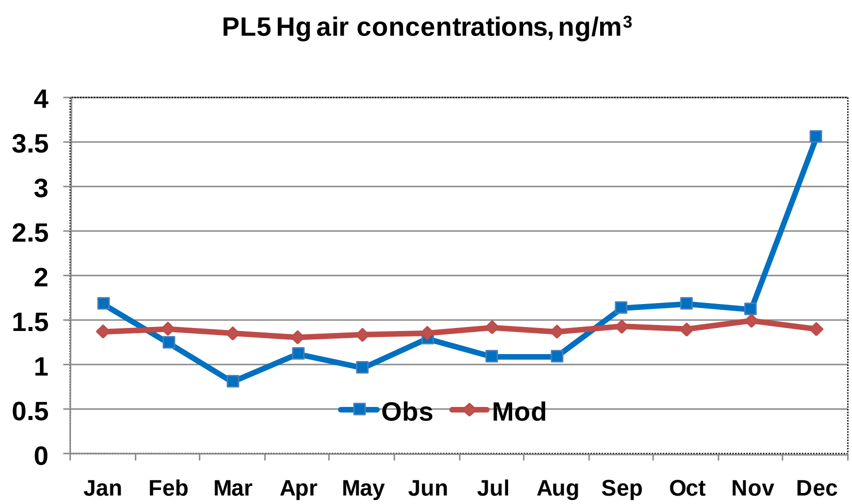


Figure 5.31. Comparison of calculated monthly mean Hg concentrations in air for 2015 with measurements of the station Diabla Gora (PL5). Units: ng / m^3.

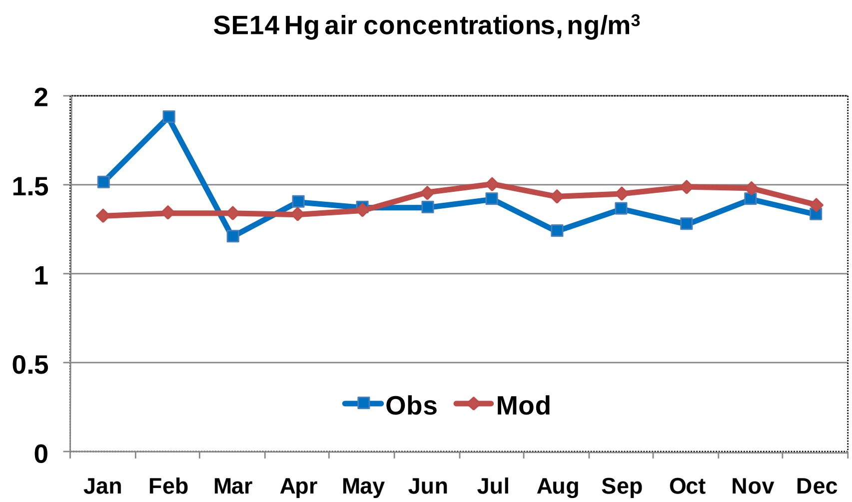


Figure 5.32. Comparison of calculated monthly mean Hg concentrations in air for 2015 with measurements of the station Råö (SE14). Units: ng / m^3.

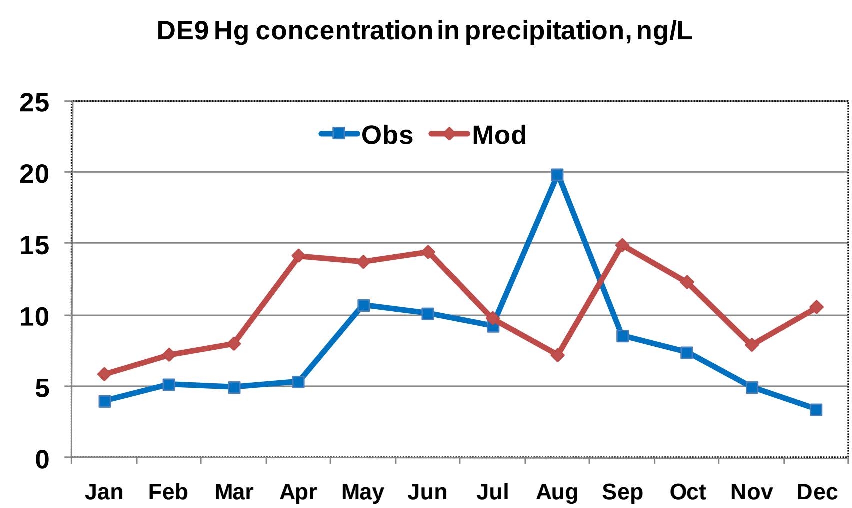


Figure 5.33. Comparison of calculated monthly mean Hg concentrations in precipitation for 2015 with measurements of the station Zingst (DE9). Units: ng/L.

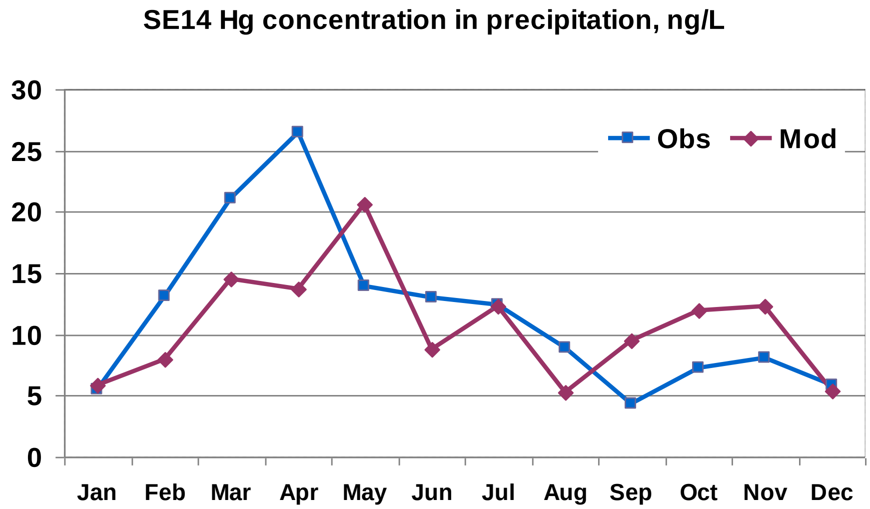


Figure 5.34. Comparison of calculated monthly mean Hg concentrations in precipitation for 2015 with measurements of the station Råö (SE14). Units: ng/L.

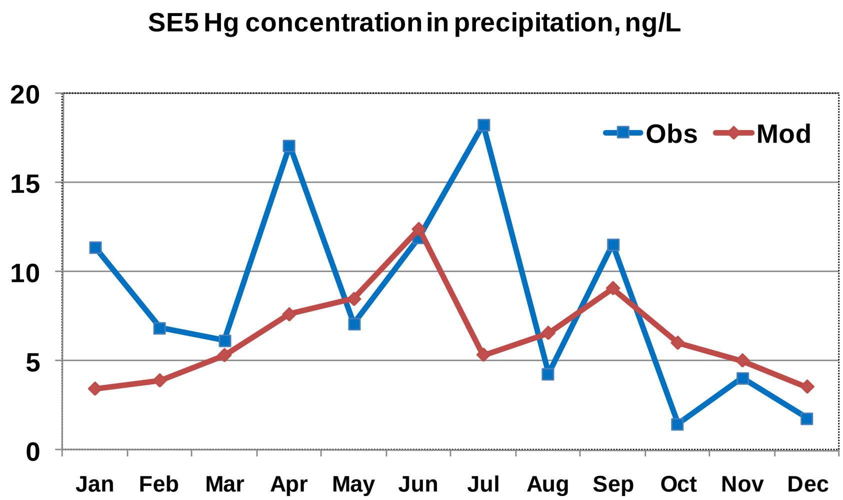


Figure 5.35. Comparison of calculated monthly mean Hg concentrations in precipitation for 2015 with measurements of the station Bredkälen (SE5). Units: ng/L.

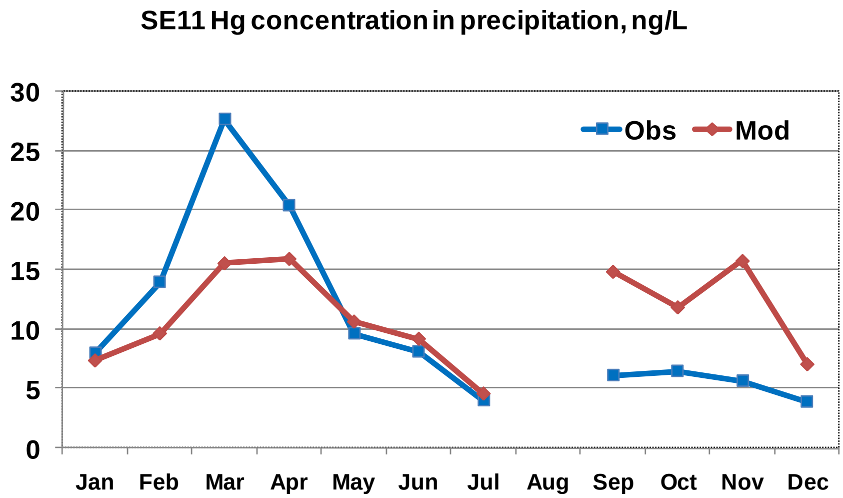


Figure 5.36. Comparison of calculated monthly mean Hg concentrations in precipitation for 2015 with measurements of the station Vavihill (SE11). Units: ng/L.

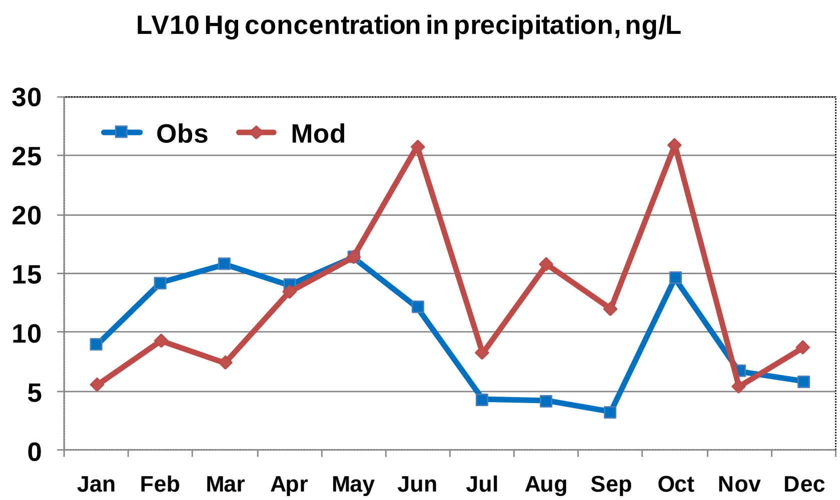


Figure 5.37. Comparison of calculated monthly mean Hg concentrations in precipitation for 2015 with measurements of the station Rucava (LV10). Units: ng/L.

Deviation of modelled annual mean concentrations of mercury in air from the observed ones is about ±10% or even less. For concentrations in precipitation the relative bias between modelled and observed values is ±50%. The main uncertainties of mercury measurements are connected with limited information on speciation of mercury anthropogenic emissions and with current understanding of mercury atmospheric chemistry.

5.6 Concluding remarks

- Mercury emissions from HELCOM countries have decreased by 46% from 1990 to 2015. Emissions in 2015 were higher by 4.4% comparing to emissions in 2014.
- Annual deposition of mercury to the Baltic Sea has declined by 34% from 1990 to 2015. Mercury deposition in 2015 was 12% lower comparing to 2014.
- The contribution of anthropogenic sources of HELCOM countries to total mercury deposition over the Baltic Sea was estimated to 14%. Essential contribution belongs to the global and natural sources and re-emission (82%) and anthropogenic sources of other EMEP countries (4%).
- The most significant contributions to mercury deposition over the Baltic Sea were made by Poland (6%) and Germany (4%).
- Modelling results for mercury were generally within accuracy of ±10% for concentrations in air and ±50% for concentrations in precipitation in comparison to measurements, obtained around the Baltic Sea in 2015.