Supplementary Material

Table S1: Emissions (kt/year)

	CH ₄	СО	NH ₃	NMVOC	NO_X	PM ₁₀	PM _{2.5}	SO_2
ALBANIA	179	113	25	33	26	9	6	31
ARMENIA	157	74	15	27	9	6	5	10
AUSTRIA	326	652	65	158	209	45	25	25
AZERBAIJAN	452	174	51	284	118	27	19	195
BELARUS	762	532	143	190	162	36	25	77
BELGIUM	360	784	71	190	269	39	26	128
BOSN. & HERZ.	160	182	17	49	53	42	18	420
BULGARIA	460	697	58	149	211	74	47	798
CROATIA	153	296	46	88	64	23	16	55
CYPRUS	48	37	5	14	17	3	2	11
CZECH REP.	473	470	67	173	256	34	20	184
DENMARK	271	646	86	110	172	45	33	22
ESTONIA	89	173	10	36	34	26	21	61
FINLAND	211	493	36	132	182	48	32	83
FRANCE	2619	4711	727	1246	1109	479	302	415
F. Y. R. O. M	90	103	7	26	40	18	9	102
GERMANY	2089	4017	623	1189	1353	192	109	545
GEORGIA	153	347	39	54	54	10	7	15
GREECE	404	569	71	332	271	67	51	533
HUNGARY	365	568	81	163	184	51	35	366
IRELAND	610	199	109	57	107	21	14	53
ITALY	1837	3895	431	1198	1094	161	113	413
LATVIA	84	316	15	63	41	15	13	11
LITHUANIA	162	187	36	78	69	21	17	35
LUXEMBOURG	17	41	5	13	13	3	2	3
MALTA	19	0	1	8	11	0.6	0.4	8
MOLDOVA	216	140	28	38	65	42	23	120
NETHERLANDS	776	568	135	167	299	39	20	48
NORWAY	217	397	23	189	205	50	43	20
POLAND	1823	3282	296	915	631	282	134	1216
PORTUGAL	514	585	68	284	237	45	36	186
ROMANIA	1210	1390	198	380.1	272	138	97	457
RUSSIA	23394	13019	772	2791	2853	1459	918	2810
SLOVAKIA	197	278	27	74	83	24	16	71
SLOVENIA	100	71	19	40	55	9	7	28
SWEDEN	254	585	50	191	195	53	33	36
-	167	300	55	102	80	19	9	15
SPAIN	1780	2205	454	1035	1459	209	141	1231
TURKEY	2484	2825	426	729	888	365	260	1710
UKRAINE	5143	2923	555	753	1279	516	311	1294
UN. KINGDOM	2256	2127	309	926	1489	150	94	608
YUGOSLAVIA	533	315	68	148	166	82	42	342

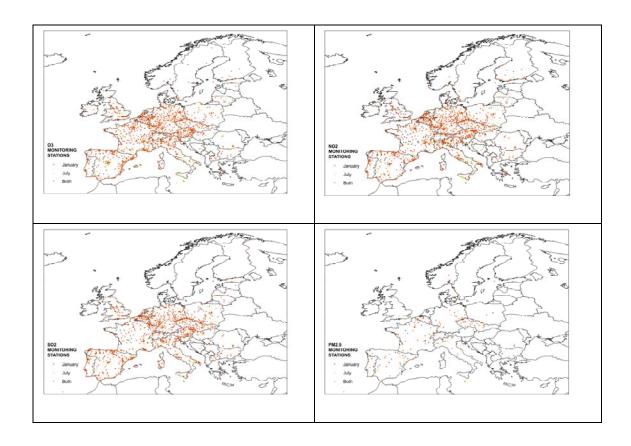


Figure S1: Location of O_3 , NO_2 , SO_2 and $PM_{2.5}$ monitoring stations (red color for monitoring stations active in both months, blue color for monitoring stations active only in January, green color for monitoring stations active only in July)

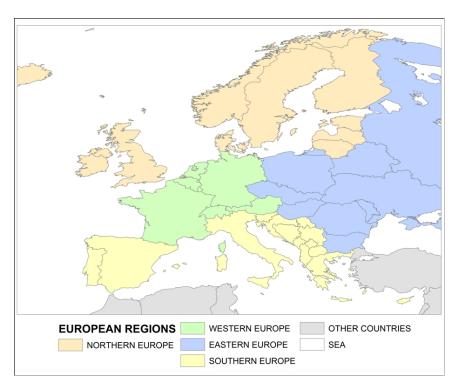


Figure S2: Modeling domain and the regional European grouping used by the United Nations Statistics Department