



FINLAND'S INFORMATIVE INVENTORY REPORT 2023

Air Pollutant Emissions 1980-2021

under the UNECE CLRTAP and the EU NECD

Part 7 - Annexes

March 2023

FINNISH ENVIRONMENT INSTITUTE  
Centre for Sustainable Consumption and Production  
Environmental Management in Industry – Air Emissions Team

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Cover photo Part 5: Marja-Leena Nenonen (2006) Kivijäkälä (Stone lichen), Ympäristöhallinnon kuvapankki

## **Annex 1**

### **Implied emission factor tables for fuel combustion in 2021 (2023 submission)**

Updated March 2023 (TF)

## NOx Implied emission factors in Finnish air pollutant inventory for 2021

2021	NOx	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.072108914	t/TJ
2021	NOx	1A1a	ANIMAL-BASED FUELS	0.082156507	t/TJ
2021	NOx	1A1a	ASPHALTENE	0.020582841	t/TJ
2021	NOx	1A1a	BARK	0.065511627	t/TJ
2021	NOx	1A1a	BIO PELLETS (NON-WOOD)	0.182196220	t/TJ
2021	NOx	1A1a	BIO PYROLYSIS OIL	0.100000000	t/TJ
2021	NOx	1A1a	BLAST FURNACE GAS	0.007827049	t/TJ
2021	NOx	1A1a	CHIPS FROM ROUNDWOOD	0.082043323	t/TJ
2021	NOx	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.076191630	t/TJ
2021	NOx	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.085555316	t/TJ
2021	NOx	1A1a	COAL (S=1.0%)	0.069481625	t/TJ
2021	NOx	1A1a	COKE OVEN GAS	0.007827049	t/TJ
2021	NOx	1A1a	CREOSOTED WOOD	0.062741281	t/TJ
2021	NOx	1A1a	CUTTER CHIPS ETC.	0.072702714	t/TJ
2021	NOx	1A1a	DEINKING WASTE	0.089859155	t/TJ
2021	NOx	1A1a	DEMOLITION WOOD	0.111344190	t/TJ
2021	NOx	1A1a	FOREST RESIDUE CHIPS	0.119069450	t/TJ
2021	NOx	1A1a	FOREST RESIDUE CHIPS	0.078432173	t/TJ
2021	NOx	1A1a	GASIFIED WASTE	0.233477084	t/TJ
2021	NOx	1A1a	GASOIL (FOR NON-ROAD USE)	0.112075850	t/TJ
2021	NOx	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.125935550	t/TJ
2021	NOx	1A1a	HEAVY FUEL OIL (S<0,1%)	0.082156507	t/TJ
2021	NOx	1A1a	HEAVY FUEL OIL (S<0,5%)	0.115509468	t/TJ
2021	NOx	1A1a	HEAVY FUEL OIL (S<1%)	0.100594148	t/TJ
2021	NOx	1A1a	HYDROGEN	0.069553223	t/TJ
2021	NOx	1A1a	IMPREGNATED WOOD	0.126445257	t/TJ
2021	NOx	1A1a	INDUSTRIAL BIOGAS	0.155979448	t/TJ
2021	NOx	1A1a	INDUSTRIAL WASTE	0.100835214	t/TJ
2021	NOx	1A1a	LANDFILL GAS	0.009822048	t/TJ
2021	NOx	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.091127172	t/TJ
2021	NOx	1A1a	LIGNIN	0.059038842	t/TJ
2021	NOx	1A1a	LIQUEFIED NATURAL GAS (LNG)	0.016049261	t/TJ
2021	NOx	1A1a	LIQUID GAS	0.216931926	t/TJ
2021	NOx	1A1a	MILLED PEAT	0.088328455	t/TJ
2021	NOx	1A1a	MOTOR GASOLINE (S=0.001%)	0.104484305	t/TJ
2021	NOx	1A1a	MUNICIPAL WASTE - unsorted	0.088724400	t/TJ
2021	NOx	1A1a	NATURAL GAS	0.052695538	t/TJ
2021	NOx	1A1a	NATURAL GAS	0.040881604	t/TJ
2021	NOx	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.093947266	t/TJ
2021	NOx	1A1a	OTHER FOSSIL GAS	7.135444772	t/TJ
2021	NOx	1A1a	OTHER FOSSIL SOLID	0.065398457	t/TJ
2021	NOx	1A1a	OTHER NON-FOSSIL GAS	0.048321620	t/TJ
2021	NOx	1A1a	OTHER NON-FOSSIL LIQUID	0.132942546	t/TJ
2021	NOx	1A1a	OTHER NON-FOSSIL SOLID	0.192260391	t/TJ
2021	NOx	1A1a	OTHER NON-FOSSIL SOLID	0.059211034	t/TJ
2021	NOx	1A1a	OTHER WASTE	0.125590821	t/TJ
2021	NOx	1A1a	OTHER WOOD RESIDUE	0.049762856	t/TJ
2021	NOx	1A1a	PAPER	0.068070445	t/TJ
2021	NOx	1A1a	PLASTIC WASTE	0.075500703	t/TJ
2021	NOx	1A1a	PLYWOOD RESIDUE	0.096494576	t/TJ
2021	NOx	1A1a	RECOVERED FUEL (REF 1)	0.102582787	t/TJ
2021	NOx	1A1a	RECOVERED FUEL (REF 2)	0.097982847	t/TJ
2021	NOx	1A1a	RECOVERED FUEL (REF 3)	0.100832182	t/TJ
2021	NOx	1A1a	RECOVERED WOOD	0.089881765	t/TJ

2021	NOx	1A1a	RECYCLED AND WASTE OILS	0.080594422	t/TJ
2021	NOx	1A1a	REFINERY GAS	0.024738755	t/TJ
2021	NOx	1A1a	REFUSE-DERIVED FUEL (RDF)	0.041936211	t/TJ
2021	NOx	1A1a	SAWDUST	0.114526245	t/TJ
2021	NOx	1A1a	SAWDUST AND CUTTER CHIPS	0.085052887	t/TJ
2021	NOx	1A1a	SOD PEAT	0.196339306	t/TJ
2021	NOx	1A1a	SOLID RECOVERED FUEL (SRF)	0.041165681	t/TJ
2021	NOx	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.095594533	t/TJ
2021	NOx	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.070571529	t/TJ
2021	NOx	1A1a	WOOD RESIDUE CHIPS	0.099615705	t/TJ
2021	NOx	1A1a	WOOD STUMP CHIPS	0.075359300	t/TJ
2021	NOx	1A1b	COKE (S=1.0%)	0.159064833	t/TJ
2021	NOx	1A1b	HEAVY FUEL OIL (S<1%)	0.052250707	t/TJ
2021	NOx	1A1b	INDUSTRIAL BIOGAS	0.024829304	t/TJ
2021	NOx	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.049550725	t/TJ
2021	NOx	1A1b	LIQUID GAS	0.052250707	t/TJ
2021	NOx	1A1b	NATURAL GAS	0.044923675	t/TJ
2021	NOx	1A1b	OTHER FOSSIL GAS	0.024829304	t/TJ
2021	NOx	1A1b	OTHER FOSSIL LIQUID	0.036997255	t/TJ
2021	NOx	1A1b	OTHER MEDIUM DISTILLATES	0.046110725	t/TJ
2021	NOx	1A1b	PETROLEUM COKE	0.020206683	t/TJ
2021	NOx	1A1b	REFINERY GAS	0.035045644	t/TJ
2021	NOx	1A2a	BLAST FURNACE GAS	0.025981077	t/TJ
2021	NOx	1A2a	COKE (S=1.0%)	1.001048439	t/TJ
2021	NOx	1A2a	COKE OVEN GAS	0.135078586	t/TJ
2021	NOx	1A2a	DIESEL OIL (S=001%)	0.043699282	t/TJ
2021	NOx	1A2a	GASOIL (FOR NON-ROAD USE)	0.021867265	t/TJ
2021	NOx	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.071492735	t/TJ
2021	NOx	1A2a	LIQUID GAS	0.244909767	t/TJ
2021	NOx	1A2a	NATURAL GAS	0.152974212	t/TJ
2021	NOx	1A2a	NATURAL GAS	0.096138421	t/TJ
2021	NOx	1A2a	OTHER FOSSIL SOLID	0.011692930	t/TJ
2021	NOx	1A2a	WOOD RESIDUE CHIPS	0.237632708	t/TJ
2021	NOx	1A2b	COAL (S=1.0%)	0.170000000	t/TJ
2021	NOx	1A2b	COKE (S=1.0%)	0.089113991	t/TJ
2021	NOx	1A2b	HEAVY FUEL OIL (S<1%)	0.142956096	t/TJ
2021	NOx	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.112357163	t/TJ
2021	NOx	1A2b	LIQUEFIED NATURAL GAS (LNG)	0.070000000	t/TJ
2021	NOx	1A2b	LIQUID GAS	0.113211792	t/TJ
2021	NOx	1A2b	NATURAL GAS	0.085527261	t/TJ
2021	NOx	1A2b	OTHER HEAVY DISTILLATES	0.089113991	t/TJ
2021	NOx	1A2c	DIESEL OIL (S=001%)	0.100000000	t/TJ
2021	NOx	1A2c	GASIFIED WASTE	0.026176127	t/TJ
2021	NOx	1A2c	GASOIL (FOR NON-ROAD USE)	0.047898905	t/TJ
2021	NOx	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.240521168	t/TJ
2021	NOx	1A2c	HEAVY FUEL OIL (S<0,1%)	0.057489124	t/TJ
2021	NOx	1A2c	HEAVY FUEL OIL (S<1%)	0.868805696	t/TJ
2021	NOx	1A2c	HYDROGEN	0.065377778	t/TJ
2021	NOx	1A2c	INDUSTRIAL BIOGAS	0.070000000	t/TJ
2021	NOx	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.298781746	t/TJ
2021	NOx	1A2c	LIQUEFIED NATURAL GAS (LNG)	0.033895415	t/TJ
2021	NOx	1A2c	LIQUID GAS	0.037362340	t/TJ
2021	NOx	1A2c	NAPHTHA	0.100000000	t/TJ
2021	NOx	1A2c	NATURAL GAS	0.032518417	t/TJ
2021	NOx	1A2c	OTHER FOSSIL GAS	3.172687142	t/TJ
2021	NOx	1A2c	OTHER FOSSIL LIQUID	0.034350084	t/TJ

2021	NOx	1A2c	OTHER NON-FOSSIL GAS	0.070000000	t/TJ
2021	NOx	1A2c	REFINERY GAS	0.034401306	t/TJ
2021	NOx	1A2c	TALL PITCH AND OIL	0.056812994	t/TJ
2021	NOx	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.043724967	t/TJ
2021	NOx	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.096582825	t/TJ
2021	NOx	1A2d	ANIMAL-BASED FUELS	0.053068759	t/TJ
2021	NOx	1A2d	AROMATIC GAS	0.157642584	t/TJ
2021	NOx	1A2d	BARK	0.097364772	t/TJ
2021	NOx	1A2d	BIO PELLETS (NON-WOOD)	0.053068759	t/TJ
2021	NOx	1A2d	BIOGAS FROM WASTEWATER TREATMENT	0.026152163	t/TJ
2021	NOx	1A2d	BIOLOGICAL SLURRY	0.044832279	t/TJ
2021	NOx	1A2d	BLACK LIQUOR	0.059373841	t/TJ
2021	NOx	1A2d	CHIPS FROM ROUNDWOOD	0.087213963	t/TJ
2021	NOx	1A2d	COAL (S=1.0%)	0.086494691	t/TJ
2021	NOx	1A2d	CREOSOTED WOOD	0.053068759	t/TJ
2021	NOx	1A2d	DEMOLITION WOOD	0.053068759	t/TJ
2021	NOx	1A2d	FOREST RESIDUE CHIPS	0.070648313	t/TJ
2021	NOx	1A2d	FOREST RESIDUE CHIPS	0.093661897	t/TJ
2021	NOx	1A2d	GASOIL (FOR NON-ROAD USE)	0.126916525	t/TJ
2021	NOx	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.248918568	t/TJ
2021	NOx	1A2d	HEAVY FUEL OIL (S<0,1%)	0.056477370	t/TJ
2021	NOx	1A2d	HEAVY FUEL OIL (S<0,5%)	1.421686747	t/TJ
2021	NOx	1A2d	HEAVY FUEL OIL (S<1%)	0.194589363	t/TJ
2021	NOx	1A2d	HYDROGEN	0.153700197	t/TJ
2021	NOx	1A2d	INDUSTRIAL BIOGAS	0.070000000	t/TJ
2021	NOx	1A2d	INDUSTRIAL WASTE	0.204817400	t/TJ
2021	NOx	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.141194109	t/TJ
2021	NOx	1A2d	LIQUEFIED NATURAL GAS (LNG)	0.034722567	t/TJ
2021	NOx	1A2d	LIQUID GAS	0.199603329	t/TJ
2021	NOx	1A2d	METHANOL	0.156726416	t/TJ
2021	NOx	1A2d	MILLED PEAT	0.109375075	t/TJ
2021	NOx	1A2d	NATURAL GAS	0.053016077	t/TJ
2021	NOx	1A2d	NATURAL GAS	0.090423641	t/TJ
2021	NOx	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.120765238	t/TJ
2021	NOx	1A2d	OTHER FOSSIL LIQUID	0.588464582	t/TJ
2021	NOx	1A2d	OTHER FUEL	1.008796426	t/TJ
2021	NOx	1A2d	OTHER INDUSTRIAL AROMATIC GAS	12.609955320	t/TJ
2021	NOx	1A2d	OTHER NON-FOSSIL LIQUID	0.320914050	t/TJ
2021	NOx	1A2d	OTHER WOOD RESIDUE	0.031179093	t/TJ
2021	NOx	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.084899864	t/TJ
2021	NOx	1A2d	PAPER	0.084629612	t/TJ
2021	NOx	1A2d	PLASTIC WASTE	0.091039811	t/TJ
2021	NOx	1A2d	RECOVERED FUEL (REF 1)	0.089257658	t/TJ
2021	NOx	1A2d	RECOVERED FUEL (REF 2)	0.053068759	t/TJ
2021	NOx	1A2d	RECOVERED WOOD	0.078324178	t/TJ
2021	NOx	1A2d	RECYCLED AND WASTE OILS	0.053068759	t/TJ
2021	NOx	1A2d	SAWDUST AND CUTTER CHIPS	0.107760140	t/TJ
2021	NOx	1A2d	SULPHITE LIQUOR	0.111252697	t/TJ
2021	NOx	1A2d	TALL PITCH AND OIL	0.066977296	t/TJ
2021	NOx	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.094086792	t/TJ
2021	NOx	1A2d	WOOD RESIDUE CHIPS	0.086681058	t/TJ
2021	NOx	1A2e	ANIMAL-BASED FUELS	0.106261377	t/TJ
2021	NOx	1A2e	BIO-FUEL OIL	0.076099869	t/TJ
2021	NOx	1A2e	CHIPS FROM ROUNDWOOD	0.109816644	t/TJ
2021	NOx	1A2e	COAL (S=1.0%)	0.123590814	t/TJ
2021	NOx	1A2e	COKE (S=1.0%)	0.170000000	t/TJ

2021	NOx	1A2e	FOREST RESIDUE CHIPS	0.126630577	t/TJ
2021	NOx	1A2e	GASOIL (FOR NON-ROAD USE)	0.099807427	t/TJ
2021	NOx	1A2e	HEAVY FUEL OIL (S<1%)	0.083471901	t/TJ
2021	NOx	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.102023133	t/TJ
2021	NOx	1A2e	LIQUEFIED NATURAL GAS (LNG)	0.033581436	t/TJ
2021	NOx	1A2e	LIQUID GAS	0.052874441	t/TJ
2021	NOx	1A2e	MILLED PEAT	0.195463847	t/TJ
2021	NOx	1A2e	NATURAL GAS	0.037733888	t/TJ
2021	NOx	1A2e	NATURAL GAS	0.050892733	t/TJ
2021	NOx	1A2e	OTHER NON-FOSSIL GAS	0.015027909	t/TJ
2021	NOx	1A2e	OTHER NON-FOSSIL LIQUID	0.233497979	t/TJ
2021	NOx	1A2e	OTHER NON-FOSSIL SOLID	0.120000000	t/TJ
2021	NOx	1A2e	RECOVERED WOOD	0.195589555	t/TJ
2021	NOx	1A2e	SAWDUST	0.115345300	t/TJ
2021	NOx	1A2e	SAWDUST AND CUTTER CHIPS	0.211050961	t/TJ
2021	NOx	1A2e	SOD PEAT	0.098039216	t/TJ
2021	NOx	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.255666818	t/TJ
2021	NOx	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.100000000	t/TJ
2021	NOx	1A2f	CHIPS FROM ROUNDWOOD	0.079886519	t/TJ
2021	NOx	1A2f	COAL (S=1.0%)	0.279288439	t/TJ
2021	NOx	1A2f	COKE (S=1.0%)	0.111611197	t/TJ
2021	NOx	1A2f	COKE OVEN GAS	0.017469436	t/TJ
2021	NOx	1A2f	DIESEL OIL (S=0.01%)	0.098740737	t/TJ
2021	NOx	1A2f	FOREST RESIDUE CHIPS	0.124038462	t/TJ
2021	NOx	1A2f	GASOIL (FOR NON-ROAD USE)	0.101076470	t/TJ
2021	NOx	1A2f	HEAVY FUEL OIL (S<1%)	0.129080632	t/TJ
2021	NOx	1A2f	INDUSTRIAL BIOGAS	0.070000000	t/TJ
2021	NOx	1A2f	INDUSTRIAL WASTE	0.071704871	t/TJ
2021	NOx	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.147184420	t/TJ
2021	NOx	1A2f	LIQUID GAS	0.149160684	t/TJ
2021	NOx	1A2f	NATURAL GAS	0.101374918	t/TJ
2021	NOx	1A2f	NATURAL GAS	0.033419758	t/TJ
2021	NOx	1A2f	OTHER FOSSIL GAS	0.070000000	t/TJ
2021	NOx	1A2f	OTHER FOSSIL LIQUID	0.149903973	t/TJ
2021	NOx	1A2f	OTHER FOSSIL SOLID	0.059754059	t/TJ
2021	NOx	1A2f	OTHER HEAVY DISTILLATES	0.036927319	t/TJ
2021	NOx	1A2f	OTHER NON-FOSSIL GAS	0.070000000	t/TJ
2021	NOx	1A2f	OTHER WASTE	0.173186264	t/TJ
2021	NOx	1A2f	PETROLEUM COKE	0.318056190	t/TJ
2021	NOx	1A2f	PLASTIC WASTE	0.071704871	t/TJ
2021	NOx	1A2f	RECOVERED FUEL (REF 1)	0.299807946	t/TJ
2021	NOx	1A2f	RECYCLED AND WASTE OILS	0.266755809	t/TJ
2021	NOx	1A2f	RUBBER WASTE	0.250967050	t/TJ
2021	NOx	1A2f	SAWDUST AND CUTTER CHIPS	0.254643645	t/TJ
2021	NOx	1A2f	SOLID RECOVERED FUEL (SRF)	0.083655683	t/TJ
2021	NOx	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.133504919	t/TJ
2021	NOx	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.313376039	t/TJ
2021	NOx	1A2gvii	LIQUID GAS	0.532021042	t/TJ
2021	NOx	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.294909553	t/TJ
2021	NOx	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.128267761	t/TJ
2021	NOx	1A2gviii	BARK	0.099281066	t/TJ
2021	NOx	1A2gviii	BIOGAS FROM WASTEWATER TREATMENT	0.099593857	t/TJ
2021	NOx	1A2gviii	CHIPS FROM ROUNDWOOD	0.035942949	t/TJ
2021	NOx	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.099940512	t/TJ
2021	NOx	1A2gviii	CREOSOTED WOOD	0.132309462	t/TJ
2021	NOx	1A2gviii	CUTTER CHIPS ETC.	0.097517980	t/TJ

2021	NOx	1A2gviii	DEMOLITION WOOD	0.027829176	t/TJ
2021	NOx	1A2gviii	DIESEL OIL (S=001%)	0.218910484	t/TJ
2021	NOx	1A2gviii	FOREST RESIDUE CHIPS	0.109325047	t/TJ
2021	NOx	1A2gviii	FOREST RESIDUE CHIPS	0.040072382	t/TJ
2021	NOx	1A2gviii	GASIFIED WASTE	0.167845276	t/TJ
2021	NOx	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.131859196	t/TJ
2021	NOx	1A2gviii	HAZARDOUS WASTE	0.098736106	t/TJ
2021	NOx	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.061625512	t/TJ
2021	NOx	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.107493062	t/TJ
2021	NOx	1A2gviii	HEAVY FUEL OIL (S<1%)	0.174097134	t/TJ
2021	NOx	1A2gviii	INDUSTRIAL BIOGAS	0.070000000	t/TJ
2021	NOx	1A2gviii	LANDFILL GAS	0.143111751	t/TJ
2021	NOx	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.216433865	t/TJ
2021	NOx	1A2gviii	LIQUEFIED NATURAL GAS (LNG)	0.070000000	t/TJ
2021	NOx	1A2gviii	LIQUID GAS	0.070062553	t/TJ
2021	NOx	1A2gviii	MILLED PEAT	0.074834429	t/TJ
2021	NOx	1A2gviii	MUNICIPAL WASTE - unsorted	0.085460703	t/TJ
2021	NOx	1A2gviii	NAPHTHA	0.106976744	t/TJ
2021	NOx	1A2gviii	NATURAL GAS	0.366927678	t/TJ
2021	NOx	1A2gviii	NATURAL GAS	11.625203441	t/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	NOx	1A2gviii	TRY	0.184652278	t/TJ
2021	NOx	1A2gviii	OTHER HEAVY DISTILLATES	0.089238310	t/TJ
2021	NOx	1A2gviii	OTHER NON-FOSSIL GAS	0.156068920	t/TJ
2021	NOx	1A2gviii	OTHER NON-FOSSIL LIQUID	0.058008613	t/TJ
2021	NOx	1A2gviii	OTHER NON-FOSSIL SOLID	0.081945710	t/TJ
2021	NOx	1A2gviii	OTHER WASTE	0.097113735	t/TJ
2021	NOx	1A2gviii	OTHER WOOD RESIDUE	0.125007460	t/TJ
2021	NOx	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.234819980	t/TJ
2021	NOx	1A2gviii	PLASTIC WASTE	0.128695533	t/TJ
2021	NOx	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.146932861	t/TJ
2021	NOx	1A2gviii	RECOVERED WOOD	0.069461176	t/TJ
2021	NOx	1A2gviii	RECYCLED AND WASTE OILS	0.065048775	t/TJ
2021	NOx	1A2gviii	SAWDUST	0.106361006	t/TJ
2021	NOx	1A2gviii	SAWDUST AND CUTTER CHIPS	0.058348174	t/TJ
2021	NOx	1A2gviii	SOD PEAT	0.138545380	t/TJ
2021	NOx	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.058727108	t/TJ
2021	NOx	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.090705989	t/TJ
2021	NOx	1A2gviii	WASTE PELLETS	0.109994223	t/TJ
2021	NOx	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.215182533	t/TJ
2021	NOx	1A2gviii	WOOD RESIDUE CHIPS	0.107781187	t/TJ
2021	NOx	1A2gviii	WOOD STUMP CHIPS	0.027113929	t/TJ
2021	NOx	1A3ai(i)	KEROSENE (JET FUEL)	0.331518532	t/TJ
2021	NOx	1A3aii(i)	AVIATION GASOLINE	0.075699898	t/TJ
2021	NOx	1A3aii(i)	KEROSENE (JET FUEL)	0.272391819	t/TJ
2021	NOx	1A3bi	DIESEL OIL (S=001%)	0.360635912	t/TJ
2021	NOx	1A3bi	MOTOR GASOLINE (S=0.001%)	0.040496611	t/TJ
2021	NOx	1A3bi	NATURAL GAS	0.018822423	t/TJ
2021	NOx	1A3bii	DIESEL OIL (S=001%)	0.378917973	t/TJ
2021	NOx	1A3bii	MOTOR GASOLINE (S=0.001%)	0.399011739	t/TJ
2021	NOx	1A3bii	NATURAL GAS	0.019844195	t/TJ
2021	NOx	1A3biii	DIESEL OIL (S=001%)	0.163020608	t/TJ
2021	NOx	1A3biii	NATURAL GAS	0.182904026	t/TJ
2021	NOx	1A3biv	DIESEL OIL (S=001%)	0.749914313	t/TJ
2021	NOx	1A3biv	MOTOR GASOLINE (S=0.001%)	0.103944347	t/TJ
2021	NOx	1A3c	GASOIL (FOR NON-ROAD USE)	1.568558494	t/TJ
2021	NOx	1A3dii	DIESEL OIL (S=001%)	1.539388397	t/TJ

2021	NOx	1A3dii	GASOIL (FOR NON-ROAD USE)	1.313265184	t/TJ
2021	NOx	1A3dii	HEAVY FUEL OIL (normal, S>1%)	1.403561206	t/TJ
2021	NOx	1A3dii	MOTOR GASOLINE (S=0.001%)	0.408214258	t/TJ
2021	NOx	1A3ei	NATURAL GAS	0.048527574	t/TJ
2021	NOx	1A4ai	FOREST WOODFUEL	0.080000000	t/TJ
2021	NOx	1A4ai	GASOIL (FOR NON-ROAD USE)	0.083773704	t/TJ
2021	NOx	1A4ai	HEAVY FUEL OIL (S<1%)	0.080000000	t/TJ
2021	NOx	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.086959234	t/TJ
2021	NOx	1A4ai	MOTOR GASOLINE (S=0.001%)	0.100000000	t/TJ
2021	NOx	1A4ai	NAPHTHA	0.100000000	t/TJ
2021	NOx	1A4ai	NATURAL GAS	0.050664161	t/TJ
2021	NOx	1A4ai	SOD PEAT	0.122340128	t/TJ
2021	NOx	1A4aii	GASOIL (FOR NON-ROAD USE)	0.303574317	t/TJ
2021	NOx	1A4aii	MOTOR GASOLINE (S=0.001%)	0.139475587	t/TJ
2021	NOx	1A4bi	FOREST WOODFUEL	0.080000000	t/TJ
2021	NOx	1A4bi	HEAVY FUEL OIL (S<1%)	0.080000000	t/TJ
2021	NOx	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.080000000	t/TJ
2021	NOx	1A4bi	LIQUID GAS	0.050000000	t/TJ
2021	NOx	1A4bi	NATURAL GAS	0.050000000	t/TJ
2021	NOx	1A4bi	PARAFFIN	0.080000000	t/TJ
2021	NOx	1A4bi	SOD PEAT	0.100000000	t/TJ
2021	NOx	1A4bii	GASOIL (FOR NON-ROAD USE)	0.918942496	t/TJ
2021	NOx	1A4bii	MOTOR GASOLINE (S=0.001%)	0.194991350	t/TJ
2021	NOx	1A4ci	CHIPS FROM ROUNDWOOD	0.074156933	t/TJ
2021	NOx	1A4ci	COAL (S=1.0%)	0.170000000	t/TJ
2021	NOx	1A4ci	FOREST WOODFUEL	0.080000000	t/TJ
2021	NOx	1A4ci	HEAVY FUEL OIL (S<1%)	0.080000000	t/TJ
2021	NOx	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.080000000	t/TJ
2021	NOx	1A4ci	LIQUID GAS	0.050000000	t/TJ
2021	NOx	1A4ci	NATURAL GAS	0.050000000	t/TJ
2021	NOx	1A4ci	OTHER NON-FOSSIL SOLID	0.019053876	t/TJ
2021	NOx	1A4ci	RECOVERED WOOD	0.090784044	t/TJ
2021	NOx	1A4ci	SOD PEAT	0.099442287	t/TJ
2021	NOx	1A4ci	WOOD RESIDUE CHIPS	2.240802676	t/TJ
2021	NOx	1A4cii	GASOIL (FOR NON-ROAD USE)	0.235020019	t/TJ
2021	NOx	1A4cii	MOTOR GASOLINE (S=0.001%)	0.073672378	t/TJ
2021	NOx	1A4ciii	GASOIL (FOR NON-ROAD USE)	1.286962841	t/TJ
2021	NOx	1A5a	AVIATION GASOLINE	0.083333333	t/TJ
2021	NOx	1A5a	FOREST WOODFUEL	0.100000000	t/TJ
2021	NOx	1A5a	HEAVY FUEL OIL (S<1%)	0.080000000	t/TJ
2021	NOx	1A5a	KEROSENE (JET FUEL)	0.223028544	t/TJ
2021	NOx	1A5a	LANDFILL GAS	0.050000000	t/TJ
2021	NOx	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.265536724	t/TJ
2021	NOx	1A5a	LIQUID GAS	0.050000000	t/TJ
2021	NOx	1A5a	OTHER PETROLEUM PRODUCTS	0.080000000	t/TJ

#### NM VOC Implied emission factors in Finnish air pollutant inventory for 2021

2021	NM VOC	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.007431219	t/TJ
2021	NM VOC	1A1a	ANIMAL-BASED FUELS	0.003000000	t/TJ
2021	NM VOC	1A1a	ASPHALTENE	0.001000000	t/TJ
2021	NM VOC	1A1a	BARK	0.004705129	t/TJ
2021	NM VOC	1A1a	BIO PELLETS (NON-WOOD)	0.003000000	t/TJ
2021	NM VOC	1A1a	BIO PYROLYSIS OIL	0.001000000	t/TJ
2021	NM VOC	1A1a	BLAST FURNACE GAS	0.001000000	t/TJ
2021	NM VOC	1A1a	CHIPS FROM ROUNDWOOD	0.007412974	t/TJ

2021	NMVOC	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.050000000	t/TJ
2021	NMVOC	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.050000000	t/TJ
2021	NMVOC	1A1a	COAL (S=1.0%)	0.004658606	t/TJ
2021	NMVOC	1A1a	COKE OVEN GAS	0.001000000	t/TJ
2021	NMVOC	1A1a	CREOSOTED WOOD	0.003000000	t/TJ
2021	NMVOC	1A1a	CUTTER CHIPS ETC.	0.007728942	t/TJ
2021	NMVOC	1A1a	DEINKING WASTE	0.003000000	t/TJ
2021	NMVOC	1A1a	DEMOLITION WOOD	0.024939734	t/TJ
2021	NMVOC	1A1a	FOREST RESIDUE CHIPS	0.041846800	t/TJ
2021	NMVOC	1A1a	FOREST RESIDUE CHIPS	0.014174873	t/TJ
2021	NMVOC	1A1a	GASIFIED WASTE	0.004000000	t/TJ
2021	NMVOC	1A1a	GASOIL (FOR NON-ROAD USE)	0.004131548	t/TJ
2021	NMVOC	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.001778713	t/TJ
2021	NMVOC	1A1a	HEAVY FUEL OIL (S<0,1%)	0.003000000	t/TJ
2021	NMVOC	1A1a	HEAVY FUEL OIL (S<0,5%)	0.001861905	t/TJ
2021	NMVOC	1A1a	HEAVY FUEL OIL (S<1%)	0.001918369	t/TJ
2021	NMVOC	1A1a	HYDROGEN	0.001000000	t/TJ
2021	NMVOC	1A1a	IMPREGNATED WOOD	0.003000000	t/TJ
2021	NMVOC	1A1a	INDUSTRIAL BIOGAS	0.003108213	t/TJ
2021	NMVOC	1A1a	INDUSTRIAL WASTE	0.009874916	t/TJ
2021	NMVOC	1A1a	LANDFILL GAS	0.001000000	t/TJ
2021	NMVOC	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.002034974	t/TJ
2021	NMVOC	1A1a	LIGNIN	0.003000000	t/TJ
2021	NMVOC	1A1a	LIQUEFIED NATURAL GAS (LNG)	0.001000000	t/TJ
2021	NMVOC	1A1a	LIQUID GAS	0.001448542	t/TJ
2021	NMVOC	1A1a	MILLED PEAT	0.003548730	t/TJ
2021	NMVOC	1A1a	MOTOR GASOLINE (S=0.001%)	0.001000000	t/TJ
2021	NMVOC	1A1a	MUNICIPAL WASTE - unsorted	0.021001945	t/TJ
2021	NMVOC	1A1a	NATURAL GAS	0.002117245	t/TJ
2021	NMVOC	1A1a	NATURAL GAS	0.001005930	t/TJ
2021	NMVOC	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.003000000	t/TJ
2021	NMVOC	1A1a	OTHER FOSSIL GAS	0.638182309	t/TJ
2021	NMVOC	1A1a	OTHER FOSSIL SOLID	0.012725798	t/TJ
2021	NMVOC	1A1a	OTHER NON-FOSSIL GAS	0.001000000	t/TJ
2021	NMVOC	1A1a	OTHER NON-FOSSIL LIQUID	0.050000000	t/TJ
2021	NMVOC	1A1a	OTHER NON-FOSSIL SOLID	0.003987461	t/TJ
2021	NMVOC	1A1a	OTHER NON-FOSSIL SOLID	0.010000000	t/TJ
2021	NMVOC	1A1a	OTHER WASTE	0.010134395	t/TJ
2021	NMVOC	1A1a	OTHER WOOD RESIDUE	0.009104069	t/TJ
2021	NMVOC	1A1a	PAPER	0.010000000	t/TJ
2021	NMVOC	1A1a	PLASTIC WASTE	0.001613760	t/TJ
2021	NMVOC	1A1a	PLYWOOD RESIDUE	0.003000000	t/TJ
2021	NMVOC	1A1a	RECOVERED FUEL (REF 1)	0.010000000	t/TJ
2021	NMVOC	1A1a	RECOVERED FUEL (REF 2)	0.027175692	t/TJ
2021	NMVOC	1A1a	RECOVERED FUEL (REF 3)	0.009856260	t/TJ
2021	NMVOC	1A1a	RECOVERED WOOD	0.015554340	t/TJ
2021	NMVOC	1A1a	RECYCLED AND WASTE OILS	0.003000000	t/TJ
2021	NMVOC	1A1a	REFINERY GAS	0.034335038	t/TJ
2021	NMVOC	1A1a	REFUSE-DERIVED FUEL (RDF)	0.003000000	t/TJ
2021	NMVOC	1A1a	SAWDUST	0.006888875	t/TJ
2021	NMVOC	1A1a	SAWDUST AND CUTTER CHIPS	0.005480863	t/TJ
2021	NMVOC	1A1a	SOD PEAT	0.012370793	t/TJ
2021	NMVOC	1A1a	SOLID RECOVERED FUEL (SRF)	0.010000000	t/TJ
2021	NMVOC	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.014404543	t/TJ
2021	NMVOC	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.028634735	t/TJ
2021	NMVOC	1A1a	WOOD RESIDUE CHIPS	0.027139185	t/TJ

2021	NMVOC	1A1a	WOOD STUMP CHIPS	0.014525972	t/TJ
2021	NMVOC	1A1b	COKE (S=1.0%)	0.000938679	t/TJ
2021	NMVOC	1A1b	INDUSTRIAL BIOGAS	0.001000000	t/TJ
2021	NMVOC	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.003664185	t/TJ
2021	NMVOC	1A1b	NATURAL GAS	0.001263536	t/TJ
2021	NMVOC	1A1b	OTHER FOSSIL GAS	0.001000000	t/TJ
2021	NMVOC	1A1b	OTHER FOSSIL LIQUID	0.003902953	t/TJ
2021	NMVOC	1A1b	OTHER MEDIUM DISTILLATES	0.004152767	t/TJ
2021	NMVOC	1A1b	PETROLEUM COKE	0.004000000	t/TJ
2021	NMVOC	1A1b	REFINERY GAS	0.001776235	t/TJ
2021	NMVOC	1A2a	BLAST FURNACE GAS	0.000895756	t/TJ
2021	NMVOC	1A2a	COKE OVEN GAS	0.000580232	t/TJ
2021	NMVOC	1A2a	DIESEL OIL (S=001%)	0.001000000	t/TJ
2021	NMVOC	1A2a	GASOIL (FOR NON-ROAD USE)	0.001032270	t/TJ
2021	NMVOC	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.001000000	t/TJ
2021	NMVOC	1A2a	LIQUID GAS	0.000182308	t/TJ
2021	NMVOC	1A2a	NATURAL GAS	0.001000000	t/TJ
2021	NMVOC	1A2a	NATURAL GAS	0.000600983	t/TJ
2021	NMVOC	1A2a	WOOD RESIDUE CHIPS	0.050000000	t/TJ
2021	NMVOC	1A2b	COAL (S=1.0%)	0.004000000	t/TJ
2021	NMVOC	1A2b	COKE (S=1.0%)	0.001000000	t/TJ
2021	NMVOC	1A2b	HEAVY FUEL OIL (S<1%)	0.000728341	t/TJ
2021	NMVOC	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.001146309	t/TJ
2021	NMVOC	1A2b	LIQUEFIED NATURAL GAS (LNG)	0.001000000	t/TJ
2021	NMVOC	1A2b	LIQUID GAS	0.001998832	t/TJ
2021	NMVOC	1A2b	NATURAL GAS	0.001000000	t/TJ
2021	NMVOC	1A2b	OTHER HEAVY DISTILLATES	0.001000000	t/TJ
2021	NMVOC	1A2c	GASIFIED WASTE	0.004000000	t/TJ
2021	NMVOC	1A2c	GASOIL (FOR NON-ROAD USE)	0.001000000	t/TJ
2021	NMVOC	1A2c	HEAVY FUEL OIL (S<0,1%)	0.002292728	t/TJ
2021	NMVOC	1A2c	HEAVY FUEL OIL (S<1%)	0.000920286	t/TJ
2021	NMVOC	1A2c	HYDROGEN	0.001000000	t/TJ
2021	NMVOC	1A2c	INDUSTRIAL BIOGAS	0.023439733	t/TJ
2021	NMVOC	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.000883608	t/TJ
2021	NMVOC	1A2c	LIQUEFIED NATURAL GAS (LNG)	0.001000000	t/TJ
2021	NMVOC	1A2c	LIQUID GAS	0.000271282	t/TJ
2021	NMVOC	1A2c	NAPHTHA	0.000033898	t/TJ
2021	NMVOC	1A2c	NATURAL GAS	0.001000000	t/TJ
2021	NMVOC	1A2c	OTHER FOSSIL GAS	0.001000000	t/TJ
2021	NMVOC	1A2c	OTHER NON-FOSSIL GAS	0.023439733	t/TJ
2021	NMVOC	1A2c	TALL PITCH AND OIL	0.000996795	t/TJ
2021	NMVOC	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.030807744	t/TJ
2021	NMVOC	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.009560475	t/TJ
2021	NMVOC	1A2d	ANIMAL-BASED FUELS	0.003000000	t/TJ
2021	NMVOC	1A2d	AROMATIC GAS	0.000839206	t/TJ
2021	NMVOC	1A2d	BARK	0.002697375	t/TJ
2021	NMVOC	1A2d	BIO PELLETS (NON-WOOD)	0.003000000	t/TJ
2021	NMVOC	1A2d	BIOGAS FROM WASTEWATER TREATMENT	0.001000000	t/TJ
2021	NMVOC	1A2d	BIOLOGICAL SLURRY	0.003000000	t/TJ
2021	NMVOC	1A2d	BLACK LIQUOR	0.000947545	t/TJ
2021	NMVOC	1A2d	CHIPS FROM ROUNDWOOD	0.005290941	t/TJ
2021	NMVOC	1A2d	COAL (S=1.0%)	0.003000000	t/TJ
2021	NMVOC	1A2d	CREOSOTED WOOD	0.003000000	t/TJ
2021	NMVOC	1A2d	DEMOLITION WOOD	0.003000000	t/TJ
2021	NMVOC	1A2d	FOREST RESIDUE CHIPS	0.003345494	t/TJ
2021	NMVOC	1A2d	FOREST RESIDUE CHIPS	0.004000000	t/TJ

2021	NM VOC	1A2d	GASOIL (FOR NON-ROAD USE)	0.001000000	t/TJ
2021	NM VOC	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.001000000	t/TJ
2021	NM VOC	1A2d	HEAVY FUEL OIL (S<0,1%)	0.001943990	t/TJ
2021	NM VOC	1A2d	HEAVY FUEL OIL (S<0,5%)	0.001000000	t/TJ
2021	NM VOC	1A2d	HEAVY FUEL OIL (S<1%)	0.001404680	t/TJ
2021	NM VOC	1A2d	HYDROGEN	0.001162830	t/TJ
2021	NM VOC	1A2d	INDUSTRIAL BIOGAS	0.001000000	t/TJ
2021	NM VOC	1A2d	INDUSTRIAL WASTE	0.009211509	t/TJ
2021	NM VOC	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.001073240	t/TJ
2021	NM VOC	1A2d	LIQUEFIED NATURAL GAS (LNG)	0.001000000	t/TJ
2021	NM VOC	1A2d	LIQUID GAS	0.001000162	t/TJ
2021	NM VOC	1A2d	METHANOL	0.000956708	t/TJ
2021	NM VOC	1A2d	MILLED PEAT	0.002617199	t/TJ
2021	NM VOC	1A2d	NATURAL GAS	0.000992587	t/TJ
2021	NM VOC	1A2d	NATURAL GAS	0.001000000	t/TJ
2021	NM VOC	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.003000000	t/TJ
2021	NM VOC	1A2d	OTHER FOSSIL LIQUID	0.001000000	t/TJ
2021	NM VOC	1A2d	OTHER FUEL	0.003000000	t/TJ
2021	NM VOC	1A2d	OTHER INDUSTRIAL AROMATIC GAS	0.004000000	t/TJ
2021	NM VOC	1A2d	OTHER NON-FOSSIL LIQUID	0.022454778	t/TJ
2021	NM VOC	1A2d	OTHER WOOD RESIDUE	0.010000000	t/TJ
2021	NM VOC	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.003000000	t/TJ
2021	NM VOC	1A2d	PAPER	0.010000000	t/TJ
2021	NM VOC	1A2d	PLASTIC WASTE	0.002999628	t/TJ
2021	NM VOC	1A2d	RECOVERED FUEL (REF 1)	0.010000000	t/TJ
2021	NM VOC	1A2d	RECOVERED FUEL (REF 2)	0.003000000	t/TJ
2021	NM VOC	1A2d	RECOVERED WOOD	0.003000000	t/TJ
2021	NM VOC	1A2d	RECYCLED AND WASTE OILS	0.003000000	t/TJ
2021	NM VOC	1A2d	SAWDUST AND CUTTER CHIPS	0.006334925	t/TJ
2021	NM VOC	1A2d	SULPHITE LIQUOR	0.003000000	t/TJ
2021	NM VOC	1A2d	TALL PITCH AND OIL	0.000987576	t/TJ
2021	NM VOC	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.010000000	t/TJ
2021	NM VOC	1A2d	WOOD RESIDUE CHIPS	0.008368019	t/TJ
2021	NM VOC	1A2e	ANIMAL-BASED FUELS	0.049983188	t/TJ
2021	NM VOC	1A2e	BIO-FUEL OIL	0.001000000	t/TJ
2021	NM VOC	1A2e	CHIPS FROM ROUNDWOOD	0.004000000	t/TJ
2021	NM VOC	1A2e	COAL (S=1.0%)	0.004000000	t/TJ
2021	NM VOC	1A2e	COKE (S=1.0%)	0.004000000	t/TJ
2021	NM VOC	1A2e	FOREST RESIDUE CHIPS	0.050000000	t/TJ
2021	NM VOC	1A2e	GASOIL (FOR NON-ROAD USE)	0.001000000	t/TJ
2021	NM VOC	1A2e	HEAVY FUEL OIL (S<1%)	0.001000000	t/TJ
2021	NM VOC	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.001320836	t/TJ
2021	NM VOC	1A2e	LIQUEFIED NATURAL GAS (LNG)	0.001000000	t/TJ
2021	NM VOC	1A2e	LIQUID GAS	0.001000000	t/TJ
2021	NM VOC	1A2e	MILLED PEAT	0.014232866	t/TJ
2021	NM VOC	1A2e	NATURAL GAS	0.001000000	t/TJ
2021	NM VOC	1A2e	NATURAL GAS	0.001000000	t/TJ
2021	NM VOC	1A2e	OTHER NON-FOSSIL GAS	0.001000000	t/TJ
2021	NM VOC	1A2e	OTHER NON-FOSSIL LIQUID	0.050000000	t/TJ
2021	NM VOC	1A2e	OTHER NON-FOSSIL SOLID	0.004000000	t/TJ
2021	NM VOC	1A2e	RECOVERED WOOD	0.003000000	t/TJ
2021	NM VOC	1A2e	SAWDUST	0.004000000	t/TJ
2021	NM VOC	1A2e	SAWDUST AND CUTTER CHIPS	0.050000000	t/TJ
2021	NM VOC	1A2e	SOD PEAT	0.050000000	t/TJ
2021	NM VOC	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.010000000	t/TJ
2021	NM VOC	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.050000000	t/TJ

2021	NM VOC	1A2f	CHIPS FROM ROUNDWOOD	0.050000000	t/TJ
2021	NM VOC	1A2f	COAL (S=1.0%)	0.001527908	t/TJ
2021	NM VOC	1A2f	COKE OVEN GAS	0.001000000	t/TJ
2021	NM VOC	1A2f	DIESEL OIL (S=001%)	0.001000000	t/TJ
2021	NM VOC	1A2f	FOREST RESIDUE CHIPS	0.050000000	t/TJ
2021	NM VOC	1A2f	GASOIL (FOR NON-ROAD USE)	0.001022009	t/TJ
2021	NM VOC	1A2f	HEAVY FUEL OIL (S<1%)	0.001000000	t/TJ
2021	NM VOC	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.001000000	t/TJ
2021	NM VOC	1A2f	LIQUID GAS	0.000587059	t/TJ
2021	NM VOC	1A2f	NATURAL GAS	0.000226769	t/TJ
2021	NM VOC	1A2f	NATURAL GAS	0.001000000	t/TJ
2021	NM VOC	1A2f	OTHER FOSSIL GAS	0.001000000	t/TJ
2021	NM VOC	1A2f	OTHER FOSSIL LIQUID	0.001000000	t/TJ
2021	NM VOC	1A2f	OTHER HEAVY DISTILLATES	0.001000000	t/TJ
2021	NM VOC	1A2f	OTHER NON-FOSSIL GAS	0.001000000	t/TJ
2021	NM VOC	1A2f	OTHER WASTE	0.001643216	t/TJ
2021	NM VOC	1A2f	PETROLEUM COKE	0.000304729	t/TJ
2021	NM VOC	1A2f	RECOVERED FUEL (REF 1)	0.010000000	t/TJ
2021	NM VOC	1A2f	RECYCLED AND WASTE OILS	0.000984166	t/TJ
2021	NM VOC	1A2f	SAWDUST AND CUTTER CHIPS	0.001000000	t/TJ
2021	NM VOC	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.050000000	t/TJ
2021	NM VOC	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.053280378	t/TJ
2021	NM VOC	1A2gvii	LIQUID GAS	0.796352070	t/TJ
2021	NM VOC	1A2gvii	MOTOR GASOLINE (S=0.001%)	1.053280229	t/TJ
2021	NM VOC	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.010000000	t/TJ
2021	NM VOC	1A2gviii	BARK	0.015481477	t/TJ
2021	NM VOC	1A2gviii	BIOGAS FROM WASTEWATER TREATMENT	0.002194127	t/TJ
2021	NM VOC	1A2gviii	CHIPS FROM ROUNDWOOD	0.002775304	t/TJ
2021	NM VOC	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000037584	t/TJ
2021	NM VOC	1A2gviii	CREOSOTED WOOD	0.003000000	t/TJ
2021	NM VOC	1A2gviii	CUTTER CHIPS ETC.	0.003335674	t/TJ
2021	NM VOC	1A2gviii	DEMOLITION WOOD	0.000767468	t/TJ
2021	NM VOC	1A2gviii	DIESEL OIL (S=001%)	5.495829656	t/TJ
2021	NM VOC	1A2gviii	FOREST RESIDUE CHIPS	0.016756138	t/TJ
2021	NM VOC	1A2gviii	FOREST RESIDUE CHIPS	0.013715811	t/TJ
2021	NM VOC	1A2gviii	GASIFIED WASTE	0.004000000	t/TJ
2021	NM VOC	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.001132880	t/TJ
2021	NM VOC	1A2gviii	HAZARDOUS WASTE	0.010000000	t/TJ
2021	NM VOC	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.001000000	t/TJ
2021	NM VOC	1A2gviii	HEAVY FUEL OIL (S<1%)	0.001617608	t/TJ
2021	NM VOC	1A2gviii	INDUSTRIAL BIOGAS	0.001000000	t/TJ
2021	NM VOC	1A2gviii	LANDFILL GAS	0.011558960	t/TJ
2021	NM VOC	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.012486575	t/TJ
2021	NM VOC	1A2gviii	LIQUID GAS	0.040536704	t/TJ
2021	NM VOC	1A2gviii	MILLED PEAT	0.001948090	t/TJ
2021	NM VOC	1A2gviii	MUNICIPAL WASTE - unsorted	0.003192735	t/TJ
2021	NM VOC	1A2gviii	NAPHTHA	0.001000000	t/TJ
2021	NM VOC	1A2gviii	NATURAL GAS	0.001838805	t/TJ
2021	NM VOC	1A2gviii	NATURAL GAS	0.001000000	t/TJ
2021	NM VOC	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.003000000	t/TJ
2021	NM VOC	1A2gviii	OTHER HEAVY DISTILLATES	0.001000000	t/TJ
2021	NM VOC	1A2gviii	OTHER NON-FOSSIL GAS	0.000985230	t/TJ
2021	NM VOC	1A2gviii	OTHER NON-FOSSIL LIQUID	0.050000000	t/TJ
2021	NM VOC	1A2gviii	OTHER NON-FOSSIL SOLID	0.007236301	t/TJ
2021	NM VOC	1A2gviii	OTHER WASTE	0.003000000	t/TJ
2021	NM VOC	1A2gviii	OTHER WOOD RESIDUE	0.010000000	t/TJ

2021	NM VOC	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.003000000	t/TJ
2021	NM VOC	1A2gviii	PLASTIC WASTE	0.003000000	t/TJ
2021	NM VOC	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.001000000	t/TJ
2021	NM VOC	1A2gviii	RECOVERED WOOD	0.004730357	t/TJ
2021	NM VOC	1A2gviii	RECYCLED AND WASTE OILS	0.001000000	t/TJ
2021	NM VOC	1A2gviii	SAWDUST	0.010000000	t/TJ
2021	NM VOC	1A2gviii	SAWDUST AND CUTTER CHIPS	0.008361414	t/TJ
2021	NM VOC	1A2gviii	SOD PEAT	0.036843455	t/TJ
2021	NM VOC	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.004730614	t/TJ
2021	NM VOC	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.012710062	t/TJ
2021	NM VOC	1A2gviii	WASTE PELLETS	0.003000000	t/TJ
2021	NM VOC	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.061896909	t/TJ
2021	NM VOC	1A2gviii	WOOD RESIDUE CHIPS	0.035163556	t/TJ
2021	NM VOC	1A2gviii	WOOD STUMP CHIPS	0.012528912	t/TJ
2021	NM VOC	1A3ai(i)	KEROSENE (JET FUEL)	0.035657784	t/TJ
2021	NM VOC	1A3aii(i)	AVIATION GASOLINE	0.495458637	t/TJ
2021	NM VOC	1A3aii(i)	KEROSENE (JET FUEL)	0.030107634	t/TJ
2021	NM VOC	1A3bi	DIESEL OIL (S=001%)	0.003711609	t/TJ
2021	NM VOC	1A3bi	MOTOR GASOLINE (S=0.001%)	0.021633397	t/TJ
2021	NM VOC	1A3bi	NATURAL GAS	0.008726942	t/TJ
2021	NM VOC	1A3bii	DIESEL OIL (S=001%)	0.020290290	t/TJ
2021	NM VOC	1A3bii	MOTOR GASOLINE (S=0.001%)	0.132453635	t/TJ
2021	NM VOC	1A3bii	NATURAL GAS	0.009376017	t/TJ
2021	NM VOC	1A3biii	DIESEL OIL (S=001%)	0.004605932	t/TJ
2021	NM VOC	1A3biii	NATURAL GAS	0.011692446	t/TJ
2021	NM VOC	1A3biv	DIESEL OIL (S=001%)	0.145425987	t/TJ
2021	NM VOC	1A3biv	MOTOR GASOLINE (S=0.001%)	0.643007687	t/TJ
2021	NM VOC	1A3c	GASOIL (FOR NON-ROAD USE)	0.088212218	t/TJ
2021	NM VOC	1A3dii	DIESEL OIL (S=001%)	0.086316532	t/TJ
2021	NM VOC	1A3dii	GASOIL (FOR NON-ROAD USE)	0.054035493	t/TJ
2021	NM VOC	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.063331010	t/TJ
2021	NM VOC	1A3dii	MOTOR GASOLINE (S=0.001%)	1.955004041	t/TJ
2021	NM VOC	1A3ei	NATURAL GAS	0.001000000	t/TJ
2021	NM VOC	1A4ai	FOREST WOODFUEL	0.003000000	t/TJ
2021	NM VOC	1A4ai	HEAVY FUEL OIL (S<1%)	0.005000000	t/TJ
2021	NM VOC	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.004978738	t/TJ
2021	NM VOC	1A4ai	MOTOR GASOLINE (S=0.001%)	0.001000000	t/TJ
2021	NM VOC	1A4ai	NAPHTHA	0.001000000	t/TJ
2021	NM VOC	1A4ai	NATURAL GAS	0.004784351	t/TJ
2021	NM VOC	1A4ai	SOD PEAT	0.166489807	t/TJ
2021	NM VOC	1A4aii	GASOIL (FOR NON-ROAD USE)	0.049446806	t/TJ
2021	NM VOC	1A4aii	MOTOR GASOLINE (S=0.001%)	0.418619286	t/TJ
2021	NM VOC	1A4bi	FOREST WOODFUEL	0.368565875	t/TJ
2021	NM VOC	1A4bi	HEAVY FUEL OIL (S<1%)	0.005000000	t/TJ
2021	NM VOC	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.005000000	t/TJ
2021	NM VOC	1A4bi	LIQUID GAS	0.005000000	t/TJ
2021	NM VOC	1A4bi	NATURAL GAS	0.005000000	t/TJ
2021	NM VOC	1A4bi	PARAFFIN	0.005000000	t/TJ
2021	NM VOC	1A4bi	SOD PEAT	0.200000000	t/TJ
2021	NM VOC	1A4bii	GASOIL (FOR NON-ROAD USE)	0.165762513	t/TJ
2021	NM VOC	1A4bii	MOTOR GASOLINE (S=0.001%)	1.288288479	t/TJ
2021	NM VOC	1A4ci	CHIPS FROM ROUNDWOOD	0.004000000	t/TJ
2021	NM VOC	1A4ci	COAL (S=1.0%)	0.004000000	t/TJ
2021	NM VOC	1A4ci	FOREST WOODFUEL	0.003000000	t/TJ
2021	NM VOC	1A4ci	HEAVY FUEL OIL (S<1%)	0.005000000	t/TJ
2021	NM VOC	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.005000000	t/TJ

2021	NMVOC	1A4ci	LIQUID GAS	0.005000000	t/TJ
2021	NMVOC	1A4ci	NATURAL GAS	0.005000000	t/TJ
2021	NMVOC	1A4ci	OTHER NON-FOSSIL SOLID	0.004000000	t/TJ
2021	NMVOC	1A4ci	RECOVERED WOOD	0.003000000	t/TJ
2021	NMVOC	1A4ci	SOD PEAT	0.198684747	t/TJ
2021	NMVOC	1A4ci	WOOD RESIDUE CHIPS	0.050000000	t/TJ
2021	NMVOC	1A4cii	GASOIL (FOR NON-ROAD USE)	0.044034458	t/TJ
2021	NMVOC	1A4cii	MOTOR GASOLINE (S=0.001%)	2.613726368	t/TJ
2021	NMVOC	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.059479858	t/TJ
2021	NMVOC	1A5a	AVIATION GASOLINE	0.312500000	t/TJ
2021	NMVOC	1A5a	FOREST WOODFUEL	0.010000000	t/TJ
2021	NMVOC	1A5a	HEAVY FUEL OIL (S<1%)	0.005000000	t/TJ
2021	NMVOC	1A5a	KEROSENE (JET FUEL)	0.023222061	t/TJ
2021	NMVOC	1A5a	LANDFILL GAS	0.005000000	t/TJ
2021	NMVOC	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.011369032	t/TJ
2021	NMVOC	1A5a	LIQUID GAS	0.005000000	t/TJ
2021	NMVOC	1A5a	OTHER PETROLEUM PRODUCTS	0.005000000	t/TJ

### SO2 Implied emission factors in Finnish air pollutant inventory for 2021

2021	SO2	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.008435736	t/TJ
2021	SO2	1A1a	ANIMAL-BASED FUELS	0.110760195	t/TJ
2021	SO2	1A1a	ASPHALTENE	0.039436569	t/TJ
2021	SO2	1A1a	BARK	0.007693125	t/TJ
2021	SO2	1A1a	BIO PELLETS (NON-WOOD)	0.208641561	t/TJ
2021	SO2	1A1a	BIO PYROLYSIS OIL	0.043000000	t/TJ
2021	SO2	1A1a	BLAST FURNACE GAS	0.000101533	t/TJ
2021	SO2	1A1a	CHIPS FROM ROUNDWOOD	0.006133764	t/TJ
2021	SO2	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.004192125	t/TJ
2021	SO2	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.004120760	t/TJ
2021	SO2	1A1a	COAL (S=1.0%)	0.069608420	t/TJ
2021	SO2	1A1a	COKE OVEN GAS	0.435142727	t/TJ
2021	SO2	1A1a	CREOSOTED WOOD	0.015325252	t/TJ
2021	SO2	1A1a	CUTTER CHIPS ETC.	0.005566635	t/TJ
2021	SO2	1A1a	DEINKING WASTE	0.007738966	t/TJ
2021	SO2	1A1a	DEMOLITION WOOD	0.013440979	t/TJ
2021	SO2	1A1a	FOREST RESIDUE CHIPS	0.009600452	t/TJ
2021	SO2	1A1a	FOREST RESIDUE CHIPS	0.007925022	t/TJ
2021	SO2	1A1a	GASIFIED WASTE	0.005000000	t/TJ
2021	SO2	1A1a	GASOIL (FOR NON-ROAD USE)	0.034224268	t/TJ
2021	SO2	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.295853274	t/TJ
2021	SO2	1A1a	HEAVY FUEL OIL (S<0,1%)	0.147680261	t/TJ
2021	SO2	1A1a	HEAVY FUEL OIL (S<0,5%)	0.193869660	t/TJ
2021	SO2	1A1a	HEAVY FUEL OIL (S<1%)	0.174560210	t/TJ
2021	SO2	1A1a	HYDROGEN	0.000000205	t/TJ
2021	SO2	1A1a	IMPREGNATED WOOD	0.000448915	t/TJ
2021	SO2	1A1a	INDUSTRIAL BIOGAS	0.007000000	t/TJ
2021	SO2	1A1a	INDUSTRIAL WASTE	0.021660995	t/TJ
2021	SO2	1A1a	LANDFILL GAS	0.017000000	t/TJ
2021	SO2	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.023730244	t/TJ
2021	SO2	1A1a	LIGNIN	0.014023400	t/TJ
2021	SO2	1A1a	LIQUEFIED NATURAL GAS (LNG)	0.000000430	t/TJ
2021	SO2	1A1a	LIQUID GAS	0.000163939	t/TJ
2021	SO2	1A1a	MILLED PEAT	0.054976063	t/TJ
2021	SO2	1A1a	MOTOR GASOLINE (S=0.001%)	0.008558296	t/TJ
2021	SO2	1A1a	MUNICIPAL WASTE - unsorted	0.002501591	t/TJ

2021	SO2	1A1a	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A1a	NATURAL GAS	0.000049011	t/TJ
2021	SO2	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.009570485	t/TJ
2021	SO2	1A1a	OTHER FOSSIL GAS	0.050680729	t/TJ
2021	SO2	1A1a	OTHER FOSSIL SOLID	0.077078154	t/TJ
2021	SO2	1A1a	OTHER NON-FOSSIL GAS	0.011665494	t/TJ
2021	SO2	1A1a	OTHER NON-FOSSIL LIQUID	0.182532640	t/TJ
2021	SO2	1A1a	OTHER NON-FOSSIL SOLID	0.009529776	t/TJ
2021	SO2	1A1a	OTHER NON-FOSSIL SOLID	0.040143464	t/TJ
2021	SO2	1A1a	OTHER WASTE	0.023499780	t/TJ
2021	SO2	1A1a	OTHER WOOD RESIDUE	0.007485233	t/TJ
2021	SO2	1A1a	PAPER	0.006528592	t/TJ
2021	SO2	1A1a	PLASTIC WASTE	0.009113296	t/TJ
2021	SO2	1A1a	PLYWOOD RESIDUE	0.004227654	t/TJ
2021	SO2	1A1a	RECOVERED FUEL (REF 1)	0.034632990	t/TJ
2021	SO2	1A1a	RECOVERED FUEL (REF 2)	0.032098123	t/TJ
2021	SO2	1A1a	RECOVERED FUEL (REF 3)	0.004202276	t/TJ
2021	SO2	1A1a	RECOVERED WOOD	0.035091108	t/TJ
2021	SO2	1A1a	RECYCLED AND WASTE OILS	0.144018521	t/TJ
2021	SO2	1A1a	REFINERY GAS	0.000324750	t/TJ
2021	SO2	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000575186	t/TJ
2021	SO2	1A1a	SAWDUST	0.011600676	t/TJ
2021	SO2	1A1a	SAWDUST AND CUTTER CHIPS	0.007281548	t/TJ
2021	SO2	1A1a	SOD PEAT	0.142136475	t/TJ
2021	SO2	1A1a	SOLID RECOVERED FUEL (SRF)	0.007651872	t/TJ
2021	SO2	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.014024517	t/TJ
2021	SO2	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.004403223	t/TJ
2021	SO2	1A1a	WOOD RESIDUE CHIPS	0.010169836	t/TJ
2021	SO2	1A1a	WOOD STUMP CHIPS	0.008007190	t/TJ
2021	SO2	1A1b	COKE (S=1.0%)	1.533502982	t/TJ
2021	SO2	1A1b	HEAVY FUEL OIL (S<1%)	24.819668979	t/TJ
2021	SO2	1A1b	INDUSTRIAL BIOGAS	0.002195661	t/TJ
2021	SO2	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.009334187	t/TJ
2021	SO2	1A1b	LIQUID GAS	0.000488291	t/TJ
2021	SO2	1A1b	NATURAL GAS	0.012838012	t/TJ
2021	SO2	1A1b	OTHER FOSSIL GAS	0.001160564	t/TJ
2021	SO2	1A1b	OTHER FOSSIL LIQUID	0.144956151	t/TJ
2021	SO2	1A1b	OTHER MEDIUM DISTILLATES	0.012073456	t/TJ
2021	SO2	1A1b	PETROLEUM COKE	0.062928558	t/TJ
2021	SO2	1A1b	REFINERY GAS	0.182802481	t/TJ
2021	SO2	1A2a	BLAST FURNACE GAS	0.000022167	t/TJ
2021	SO2	1A2a	COKE (S=1.0%)	0.251591280	t/TJ
2021	SO2	1A2a	COKE OVEN GAS	0.037778254	t/TJ
2021	SO2	1A2a	DIESEL OIL (S=0.01%)	0.000470000	t/TJ
2021	SO2	1A2a	GASOIL (FOR NON-ROAD USE)	0.207889202	t/TJ
2021	SO2	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.047788939	t/TJ
2021	SO2	1A2a	LIQUID GAS	0.000003070	t/TJ
2021	SO2	1A2a	NATURAL GAS	0.000124959	t/TJ
2021	SO2	1A2a	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A2a	OTHER FOSSIL SOLID	0.019421044	t/TJ
2021	SO2	1A2a	WOOD RESIDUE CHIPS	0.028009939	t/TJ
2021	SO2	1A2b	COAL (S=1.0%)	8.263486051	t/TJ
2021	SO2	1A2b	COKE (S=1.0%)	7.415431665	t/TJ
2021	SO2	1A2b	HEAVY FUEL OIL (S<1%)	2.800261493	t/TJ
2021	SO2	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.099911435	t/TJ
2021	SO2	1A2b	LIQUEFIED NATURAL GAS (LNG)	0.000009000	t/TJ

2021	SO2	1A2b	LIQUID GAS	0.003532769	t/TJ
2021	SO2	1A2b	NATURAL GAS	0.003956907	t/TJ
2021	SO2	1A2b	OTHER HEAVY DISTILLATES	7.502288844	t/TJ
2021	SO2	1A2c	DIESEL OIL (S=001%)	0.000470000	t/TJ
2021	SO2	1A2c	GASIFIED WASTE	0.001753976	t/TJ
2021	SO2	1A2c	GASOIL (FOR NON-ROAD USE)	0.043000000	t/TJ
2021	SO2	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.100833461	t/TJ
2021	SO2	1A2c	HEAVY FUEL OIL (S<0,1%)	0.149633313	t/TJ
2021	SO2	1A2c	HEAVY FUEL OIL (S<1%)	0.370258672	t/TJ
2021	SO2	1A2c	HYDROGEN	0.000000200	t/TJ
2021	SO2	1A2c	INDUSTRIAL BIOGAS	0.007000000	t/TJ
2021	SO2	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.745378461	t/TJ
2021	SO2	1A2c	LIQUEFIED NATURAL GAS (LNG)	0.002738686	t/TJ
2021	SO2	1A2c	LIQUID GAS	0.000003924	t/TJ
2021	SO2	1A2c	NAPHTHA	0.043000000	t/TJ
2021	SO2	1A2c	NATURAL GAS	0.001739436	t/TJ
2021	SO2	1A2c	OTHER FOSSIL GAS	0.003700000	t/TJ
2021	SO2	1A2c	OTHER FOSSIL LIQUID	0.008135480	t/TJ
2021	SO2	1A2c	OTHER NON-FOSSIL GAS	0.010000000	t/TJ
2021	SO2	1A2c	TALL PITCH AND OIL	0.014980485	t/TJ
2021	SO2	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.010000000	t/TJ
2021	SO2	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.013940104	t/TJ
2021	SO2	1A2d	ANIMAL-BASED FUELS	0.013521272	t/TJ
2021	SO2	1A2d	AROMATIC GAS	0.474381216	t/TJ
2021	SO2	1A2d	BARK	0.011606634	t/TJ
2021	SO2	1A2d	BIO PELLETS (NON-WOOD)	0.018028362	t/TJ
2021	SO2	1A2d	BIOGAS FROM WASTEWATER TREATMENT	0.000815147	t/TJ
2021	SO2	1A2d	BIOLOGICAL SLURRY	0.016302934	t/TJ
2021	SO2	1A2d	BLACK LIQUOR	0.001864583	t/TJ
2021	SO2	1A2d	CHIPS FROM ROUNDWOOD	0.003920766	t/TJ
2021	SO2	1A2d	COAL (S=1.0%)	0.092241839	t/TJ
2021	SO2	1A2d	CREOSOTED WOOD	0.002704254	t/TJ
2021	SO2	1A2d	DEMOLITION WOOD	0.018028362	t/TJ
2021	SO2	1A2d	FOREST RESIDUE CHIPS	0.005052200	t/TJ
2021	SO2	1A2d	FOREST RESIDUE CHIPS	0.009558687	t/TJ
2021	SO2	1A2d	GASOIL (FOR NON-ROAD USE)	2.790607609	t/TJ
2021	SO2	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.039837157	t/TJ
2021	SO2	1A2d	HEAVY FUEL OIL (S<0,1%)	0.033682360	t/TJ
2021	SO2	1A2d	HEAVY FUEL OIL (S<0,5%)	0.481927711	t/TJ
2021	SO2	1A2d	HEAVY FUEL OIL (S<1%)	0.047361267	t/TJ
2021	SO2	1A2d	HYDROGEN	0.000000002	t/TJ
2021	SO2	1A2d	INDUSTRIAL BIOGAS	0.007000000	t/TJ
2021	SO2	1A2d	INDUSTRIAL WASTE	0.264204212	t/TJ
2021	SO2	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.160040997	t/TJ
2021	SO2	1A2d	LIQUEFIED NATURAL GAS (LNG)	0.000000980	t/TJ
2021	SO2	1A2d	LIQUID GAS	0.000019234	t/TJ
2021	SO2	1A2d	METHANOL	0.021095250	t/TJ
2021	SO2	1A2d	MILLED PEAT	0.068476102	t/TJ
2021	SO2	1A2d	NATURAL GAS	0.000031481	t/TJ
2021	SO2	1A2d	NATURAL GAS	0.000012201	t/TJ
2021	SO2	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.020000000	t/TJ
2021	SO2	1A2d	OTHER FOSSIL LIQUID	0.014285029	t/TJ
2021	SO2	1A2d	OTHER FUEL	0.000426419	t/TJ
2021	SO2	1A2d	OTHER INDUSTRIAL AROMATIC GAS	0.000106605	t/TJ
2021	SO2	1A2d	OTHER NON-FOSSIL LIQUID	0.504451890	t/TJ
2021	SO2	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.010449458	t/TJ

2021	SO2	1A2d	PAPER	0.002245098	t/TJ
2021	SO2	1A2d	PLASTIC WASTE	0.058120003	t/TJ
2021	SO2	1A2d	RECOVERED FUEL (REF 1)	0.026561482	t/TJ
2021	SO2	1A2d	RECOVERED FUEL (REF 2)	0.018028362	t/TJ
2021	SO2	1A2d	RECOVERED WOOD	0.018438100	t/TJ
2021	SO2	1A2d	RECYCLED AND WASTE OILS	0.018028362	t/TJ
2021	SO2	1A2d	SAWDUST AND CUTTER CHIPS	0.006276383	t/TJ
2021	SO2	1A2d	SULPHITE LIQUOR	0.004850407	t/TJ
2021	SO2	1A2d	TALL PITCH AND OIL	0.006134154	t/TJ
2021	SO2	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.015939728	t/TJ
2021	SO2	1A2d	WOOD RESIDUE CHIPS	0.016255355	t/TJ
2021	SO2	1A2e	ANIMAL-BASED FUELS	0.127069487	t/TJ
2021	SO2	1A2e	BIO-FUEL OIL	0.292793675	t/TJ
2021	SO2	1A2e	CHIPS FROM ROUNDWOOD	0.011357793	t/TJ
2021	SO2	1A2e	COAL (S=1.0%)	0.335542797	t/TJ
2021	SO2	1A2e	COKE (S=1.0%)	0.365405000	t/TJ
2021	SO2	1A2e	FOREST RESIDUE CHIPS	0.011877187	t/TJ
2021	SO2	1A2e	GASOIL (FOR NON-ROAD USE)	0.043389093	t/TJ
2021	SO2	1A2e	HEAVY FUEL OIL (S<1%)	0.111663162	t/TJ
2021	SO2	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.043318561	t/TJ
2021	SO2	1A2e	LIQUEFIED NATURAL GAS (LNG)	0.000009000	t/TJ
2021	SO2	1A2e	LIQUID GAS	0.000603294	t/TJ
2021	SO2	1A2e	MILLED PEAT	0.162291515	t/TJ
2021	SO2	1A2e	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A2e	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A2e	OTHER NON-FOSSIL GAS	0.000701407	t/TJ
2021	SO2	1A2e	OTHER NON-FOSSIL LIQUID	1.997305793	t/TJ
2021	SO2	1A2e	OTHER NON-FOSSIL SOLID	0.150000000	t/TJ
2021	SO2	1A2e	RECOVERED WOOD	0.133458039	t/TJ
2021	SO2	1A2e	SAWDUST	0.023645275	t/TJ
2021	SO2	1A2e	SAWDUST AND CUTTER CHIPS	0.011877187	t/TJ
2021	SO2	1A2e	SOD PEAT	0.095500849	t/TJ
2021	SO2	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.034424254	t/TJ
2021	SO2	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.010000000	t/TJ
2021	SO2	1A2f	CHIPS FROM ROUNDWOOD	0.020338807	t/TJ
2021	SO2	1A2f	COAL (S=1.0%)	0.141075871	t/TJ
2021	SO2	1A2f	COKE (S=1.0%)	0.497667308	t/TJ
2021	SO2	1A2f	COKE OVEN GAS	0.007526415	t/TJ
2021	SO2	1A2f	DIESEL OIL (S=001%)	0.017337042	t/TJ
2021	SO2	1A2f	FOREST RESIDUE CHIPS	0.021153846	t/TJ
2021	SO2	1A2f	GASOIL (FOR NON-ROAD USE)	0.042781974	t/TJ
2021	SO2	1A2f	HEAVY FUEL OIL (S<1%)	0.226446861	t/TJ
2021	SO2	1A2f	INDUSTRIAL BIOGAS	0.007000000	t/TJ
2021	SO2	1A2f	INDUSTRIAL WASTE	0.000700453	t/TJ
2021	SO2	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.074744397	t/TJ
2021	SO2	1A2f	LIQUID GAS	0.042272937	t/TJ
2021	SO2	1A2f	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A2f	NATURAL GAS	0.006968473	t/TJ
2021	SO2	1A2f	OTHER FOSSIL GAS	0.003700000	t/TJ
2021	SO2	1A2f	OTHER FOSSIL LIQUID	0.019775910	t/TJ
2021	SO2	1A2f	OTHER FOSSIL SOLID	0.000522726	t/TJ
2021	SO2	1A2f	OTHER HEAVY DISTILLATES	0.038072968	t/TJ
2021	SO2	1A2f	OTHER NON-FOSSIL GAS	0.010000000	t/TJ
2021	SO2	1A2f	OTHER WASTE	0.003328006	t/TJ
2021	SO2	1A2f	PETROLEUM COKE	0.005803647	t/TJ
2021	SO2	1A2f	PLASTIC WASTE	0.000125454	t/TJ

2021	SO2	1A2f	RECOVERED FUEL (REF 1)	0.003837117	t/TJ
2021	SO2	1A2f	RECYCLED AND WASTE OILS	0.310230792	t/TJ
2021	SO2	1A2f	RUBBER WASTE	0.000951362	t/TJ
2021	SO2	1A2f	SAWDUST AND CUTTER CHIPS	0.013811688	t/TJ
2021	SO2	1A2f	SOLID RECOVERED FUEL (SRF)	0.000135909	t/TJ
2021	SO2	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.007180291	t/TJ
2021	SO2	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.000287268	t/TJ
2021	SO2	1A2gvii	LIQUID GAS	0.000032544	t/TJ
2021	SO2	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.000368664	t/TJ
2021	SO2	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.022083561	t/TJ
2021	SO2	1A2gviii	BARK	0.030927352	t/TJ
2021	SO2	1A2gviii	BIOGAS FROM WASTEWATER TREATMENT	0.040344857	t/TJ
2021	SO2	1A2gviii	CHIPS FROM ROUNDWOOD	0.001725747	t/TJ
2021	SO2	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.015724243	t/TJ
2021	SO2	1A2gviii	CREOSOTED WOOD	0.000618001	t/TJ
2021	SO2	1A2gviii	CUTTER CHIPS ETC.	0.015284331	t/TJ
2021	SO2	1A2gviii	DEMOLITION WOOD	0.000574258	t/TJ
2021	SO2	1A2gviii	DIESEL OIL (S=0.01%)	0.028207426	t/TJ
2021	SO2	1A2gviii	FOREST RESIDUE CHIPS	0.015762381	t/TJ
2021	SO2	1A2gviii	FOREST RESIDUE CHIPS	0.002705736	t/TJ
2021	SO2	1A2gviii	GASIFIED WASTE	0.005000000	t/TJ
2021	SO2	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.041164395	t/TJ
2021	SO2	1A2gviii	HAZARDOUS WASTE	0.004878560	t/TJ
2021	SO2	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.752154933	t/TJ
2021	SO2	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.402512488	t/TJ
2021	SO2	1A2gviii	HEAVY FUEL OIL (S<1%)	0.392605204	t/TJ
2021	SO2	1A2gviii	INDUSTRIAL BIOGAS	0.007000000	t/TJ
2021	SO2	1A2gviii	LANDFILL GAS	0.017000000	t/TJ
2021	SO2	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.033271706	t/TJ
2021	SO2	1A2gviii	LIQUEFIED NATURAL GAS (LNG)	0.000009000	t/TJ
2021	SO2	1A2gviii	LIQUID GAS	0.000171272	t/TJ
2021	SO2	1A2gviii	MILLED PEAT	0.033159125	t/TJ
2021	SO2	1A2gviii	MUNICIPAL WASTE - unsorted	0.002916889	t/TJ
2021	SO2	1A2gviii	NAPHTHA	0.000002791	t/TJ
2021	SO2	1A2gviii	NATURAL GAS	0.009469935	t/TJ
2021	SO2	1A2gviii	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.020000000	t/TJ
2021	SO2	1A2gviii	OTHER HEAVY DISTILLATES	0.048443037	t/TJ
2021	SO2	1A2gviii	OTHER NON-FOSSIL GAS	0.010531028	t/TJ
2021	SO2	1A2gviii	OTHER NON-FOSSIL LIQUID	0.594098296	t/TJ
2021	SO2	1A2gviii	OTHER NON-FOSSIL SOLID	0.049665824	t/TJ
2021	SO2	1A2gviii	OTHER WASTE	0.001412062	t/TJ
2021	SO2	1A2gviii	OTHER WOOD RESIDUE	0.023715149	t/TJ
2021	SO2	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.126768074	t/TJ
2021	SO2	1A2gviii	PLASTIC WASTE	0.002305171	t/TJ
2021	SO2	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.031697383	t/TJ
2021	SO2	1A2gviii	RECOVERED WOOD	0.047931392	t/TJ
2021	SO2	1A2gviii	RECYCLED AND WASTE OILS	0.021313748	t/TJ
2021	SO2	1A2gviii	SAWDUST	0.004602252	t/TJ
2021	SO2	1A2gviii	SAWDUST AND CUTTER CHIPS	0.006249264	t/TJ
2021	SO2	1A2gviii	SOD PEAT	0.140592678	t/TJ
2021	SO2	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.001841898	t/TJ
2021	SO2	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.015552609	t/TJ
2021	SO2	1A2gviii	WASTE PELLETS	0.017437615	t/TJ
2021	SO2	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.007416558	t/TJ
2021	SO2	1A2gviii	WOOD RESIDUE CHIPS	0.015737130	t/TJ

2021	SO2	1A2gviii	WOOD STUMP CHIPS	0.000086229	t/TJ
2021	SO2	1A3ai(i)	KEROSENE (JET FUEL)	0.019400000	t/TJ
2021	SO2	1A3aii(i)	AVIATION GASOLINE	0.000920000	t/TJ
2021	SO2	1A3aii(i)	KEROSENE (JET FUEL)	0.019399538	t/TJ
2021	SO2	1A3bi	DIESEL OIL (S=001%)	0.000290759	t/TJ
2021	SO2	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000366670	t/TJ
2021	SO2	1A3bi	NATURAL GAS	0.000060242	t/TJ
2021	SO2	1A3bii	DIESEL OIL (S=001%)	0.000290759	t/TJ
2021	SO2	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000368664	t/TJ
2021	SO2	1A3bii	NATURAL GAS	0.000060242	t/TJ
2021	SO2	1A3biii	DIESEL OIL (S=001%)	0.000290759	t/TJ
2021	SO2	1A3biii	NATURAL GAS	0.000060242	t/TJ
2021	SO2	1A3biv	DIESEL OIL (S=001%)	0.000281213	t/TJ
2021	SO2	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000368105	t/TJ
2021	SO2	1A3c	GASOIL (FOR NON-ROAD USE)	0.000287268	t/TJ
2021	SO2	1A3dii	DIESEL OIL (S=001%)	0.000290781	t/TJ
2021	SO2	1A3dii	GASOIL (FOR NON-ROAD USE)	0.013187505	t/TJ
2021	SO2	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.043926621	t/TJ
2021	SO2	1A3dii	MOTOR GASOLINE (S=0.001%)	0.000368664	t/TJ
2021	SO2	1A3ei	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A4ai	FOREST WOODFUEL	0.005000000	t/TJ
2021	SO2	1A4ai	GASOIL (FOR NON-ROAD USE)	0.025132111	t/TJ
2021	SO2	1A4ai	HEAVY FUEL OIL (S<1%)	0.438000000	t/TJ
2021	SO2	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.043163415	t/TJ
2021	SO2	1A4ai	MOTOR GASOLINE (S=0.001%)	0.043000000	t/TJ
2021	SO2	1A4ai	NAPHTHA	0.043000000	t/TJ
2021	SO2	1A4ai	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A4ai	SOD PEAT	0.180000000	t/TJ
2021	SO2	1A4aii	GASOIL (FOR NON-ROAD USE)	0.000287268	t/TJ
2021	SO2	1A4aii	MOTOR GASOLINE (S=0.001%)	0.000368664	t/TJ
2021	SO2	1A4bi	FOREST WOODFUEL	0.005000000	t/TJ
2021	SO2	1A4bi	HEAVY FUEL OIL (S<1%)	0.438000000	t/TJ
2021	SO2	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.043000000	t/TJ
2021	SO2	1A4bi	LIQUID GAS	0.000009000	t/TJ
2021	SO2	1A4bi	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A4bi	PARAFFIN	0.009300000	t/TJ
2021	SO2	1A4bi	SOD PEAT	0.180000000	t/TJ
2021	SO2	1A4bii	GASOIL (FOR NON-ROAD USE)	0.000287268	t/TJ
2021	SO2	1A4bii	MOTOR GASOLINE (S=0.001%)	0.000368664	t/TJ
2021	SO2	1A4ci	CHIPS FROM ROUNDWOOD	0.036927619	t/TJ
2021	SO2	1A4ci	COAL (S=1.0%)	0.627000000	t/TJ
2021	SO2	1A4ci	FOREST WOODFUEL	0.005000000	t/TJ
2021	SO2	1A4ci	HEAVY FUEL OIL (S<1%)	0.438000000	t/TJ
2021	SO2	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.043000000	t/TJ
2021	SO2	1A4ci	LIQUID GAS	0.000009000	t/TJ
2021	SO2	1A4ci	NATURAL GAS	0.000040000	t/TJ
2021	SO2	1A4ci	OTHER NON-FOSSIL SOLID	0.000682687	t/TJ
2021	SO2	1A4ci	RECOVERED WOOD	0.378548896	t/TJ
2021	SO2	1A4ci	SOD PEAT	0.178456155	t/TJ
2021	SO2	1A4ci	WOOD RESIDUE CHIPS	0.003344482	t/TJ
2021	SO2	1A4cii	GASOIL (FOR NON-ROAD USE)	0.000287268	t/TJ
2021	SO2	1A4cii	MOTOR GASOLINE (S=0.001%)	0.000368664	t/TJ
2021	SO2	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000287268	t/TJ
2021	SO2	1A5a	FOREST WOODFUEL	0.020000000	t/TJ
2021	SO2	1A5a	HEAVY FUEL OIL (S<1%)	0.438000000	t/TJ
2021	SO2	1A5a	KEROSENE (JET FUEL)	0.018384132	t/TJ

2021	SO2	1A5a	LANDFILL GAS	0.017000000	t/TJ
2021	SO2	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.046890195	t/TJ
2021	SO2	1A5a	LIQUID GAS	0.000009000	t/TJ
2021	SO2	1A5a	OTHER PETROLEUM PRODUCTS	0.100000000	t/TJ

### NH3 Implied emission factors in Finnish air pollutant inventory for 2021

2021	NH3	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.000191512	t/TJ
2021	NH3	1A2gvii	LIQUID GAS	0.000217391	t/TJ
2021	NH3	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.000105063	t/TJ
2021	NH3	1A3bi	DIESEL OIL (S=001%)	0.001138413	t/TJ
2021	NH3	1A3bi	MOTOR GASOLINE (S=0.001%)	0.012129140	t/TJ
2021	NH3	1A3bi	NATURAL GAS	0.024485936	t/TJ
2021	NH3	1A3bii	DIESEL OIL (S=001%)	0.000892698	t/TJ
2021	NH3	1A3bii	MOTOR GASOLINE (S=0.001%)	0.008637440	t/TJ
2021	NH3	1A3bii	NATURAL GAS	0.018313943	t/TJ
2021	NH3	1A3biii	DIESEL OIL (S=001%)	0.000609311	t/TJ
2021	NH3	1A3biii	NATURAL GAS	0.003952047	t/TJ
2021	NH3	1A3biv	DIESEL OIL (S=001%)	0.001016819	t/TJ
2021	NH3	1A3biv	MOTOR GASOLINE (S=0.001%)	0.001350409	t/TJ
2021	NH3	1A3c	GASOIL (FOR NON-ROAD USE)	0.000167573	t/TJ
2021	NH3	1A3dii	DIESEL OIL (S=001%)	0.000236419	t/TJ
2021	NH3	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000185296	t/TJ
2021	NH3	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.000194419	t/TJ
2021	NH3	1A3dii	MOTOR GASOLINE (S=0.001%)	0.000123449	t/TJ
2021	NH3	1A4ai	FOREST WOODFUEL	0.001672269	t/TJ
2021	NH3	1A4aii	GASOIL (FOR NON-ROAD USE)	0.000191512	t/TJ
2021	NH3	1A4aii	MOTOR GASOLINE (S=0.001%)	0.000095034	t/TJ
2021	NH3	1A4bi	FOREST WOODFUEL	0.020882073	t/TJ
2021	NH3	1A4bii	GASOIL (FOR NON-ROAD USE)	0.000191512	t/TJ
2021	NH3	1A4bii	MOTOR GASOLINE (S=0.001%)	0.000096503	t/TJ
2021	NH3	1A4ci	FOREST WOODFUEL	0.001700900	t/TJ
2021	NH3	1A4cii	GASOIL (FOR NON-ROAD USE)	0.000191512	t/TJ
2021	NH3	1A4cii	MOTOR GASOLINE (S=0.001%)	0.000079010	t/TJ
2021	NH3	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000189118	t/TJ
2021	NH3	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000027659	t/TJ

### PM2.5 Implied emission factors in Finnish air pollutant inventory for 2021

2021	PM2.5	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000182672	t/TJ
2021	PM2.5	1A1a	ANIMAL-BASED FUELS	0.001134311	t/TJ
2021	PM2.5	1A1a	ASPHALTENE	0.000047550	t/TJ
2021	PM2.5	1A1a	BARK	0.000777412	t/TJ
2021	PM2.5	1A1a	BIO PELLETS (NON-WOOD)	0.000956948	t/TJ
2021	PM2.5	1A1a	BIO PYROLYSIS OIL	0.000840000	t/TJ
2021	PM2.5	1A1a	CHIPS FROM ROUNDWOOD	0.000656114	t/TJ
2021	PM2.5	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.000058067	t/TJ
2021	PM2.5	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.000165617	t/TJ
2021	PM2.5	1A1a	COAL (S=1.0%)	0.000589606	t/TJ
2021	PM2.5	1A1a	CREOSOTED WOOD	0.000374874	t/TJ
2021	PM2.5	1A1a	CUTTER CHIPS ETC.	0.000125644	t/TJ
2021	PM2.5	1A1a	DEINKING WASTE	0.000015531	t/TJ
2021	PM2.5	1A1a	DEMOLITION WOOD	0.000602277	t/TJ
2021	PM2.5	1A1a	FOREST RESIDUE CHIPS	0.001638591	t/TJ
2021	PM2.5	1A1a	FOREST RESIDUE CHIPS	0.000984335	t/TJ
2021	PM2.5	1A1a	GASOIL (FOR NON-ROAD USE)	0.000893958	t/TJ

2021	PM2.5	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.041726846	t/TJ
2021	PM2.5	1A1a	HEAVY FUEL OIL (S<0,1%)	0.002540856	t/TJ
2021	PM2.5	1A1a	HEAVY FUEL OIL (S<0,5%)	0.002237907	t/TJ
2021	PM2.5	1A1a	HEAVY FUEL OIL (S<1%)	0.005587459	t/TJ
2021	PM2.5	1A1a	IMPREGNATED WOOD	0.000001837	t/TJ
2021	PM2.5	1A1a	INDUSTRIAL WASTE	0.000034449	t/TJ
2021	PM2.5	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.000429343	t/TJ
2021	PM2.5	1A1a	LIGNIN	0.000392970	t/TJ
2021	PM2.5	1A1a	MILLED PEAT	0.000889879	t/TJ
2021	PM2.5	1A1a	MOTOR GASOLINE (S=0.001%)	0.001112018	t/TJ
2021	PM2.5	1A1a	MUNICIPAL WASTE - unsorted	0.000019212	t/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	PM2.5	1A1a	TRY	0.001765499	t/TJ
2021	PM2.5	1A1a	OTHER FOSSIL SOLID	0.000559061	t/TJ
2021	PM2.5	1A1a	OTHER NON-FOSSIL LIQUID	0.003734163	t/TJ
2021	PM2.5	1A1a	OTHER NON-FOSSIL SOLID	0.000080484	t/TJ
2021	PM2.5	1A1a	OTHER NON-FOSSIL SOLID	0.000873949	t/TJ
2021	PM2.5	1A1a	OTHER WASTE	0.000144383	t/TJ
2021	PM2.5	1A1a	OTHER WOOD RESIDUE	0.000376240	t/TJ
2021	PM2.5	1A1a	PAPER	0.000110287	t/TJ
2021	PM2.5	1A1a	PLASTIC WASTE	0.000127538	t/TJ
2021	PM2.5	1A1a	PLYWOOD RESIDUE	0.000415454	t/TJ
2021	PM2.5	1A1a	RECOVERED FUEL (REF 1)	0.000416182	t/TJ
2021	PM2.5	1A1a	RECOVERED FUEL (REF 2)	0.000489607	t/TJ
2021	PM2.5	1A1a	RECOVERED FUEL (REF 3)	0.000034311	t/TJ
2021	PM2.5	1A1a	RECOVERED WOOD	0.000363006	t/TJ
2021	PM2.5	1A1a	RECYCLED AND WASTE OILS	0.000760863	t/TJ
2021	PM2.5	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000100150	t/TJ
2021	PM2.5	1A1a	SAWDUST	0.001650818	t/TJ
2021	PM2.5	1A1a	SAWDUST AND CUTTER CHIPS	0.000609819	t/TJ
2021	PM2.5	1A1a	SOD PEAT	0.009886371	t/TJ
2021	PM2.5	1A1a	SOLID RECOVERED FUEL (SRF)	0.000003963	t/TJ
2021	PM2.5	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001019804	t/TJ
2021	PM2.5	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000447395	t/TJ
2021	PM2.5	1A1a	WOOD RESIDUE CHIPS	0.000671938	t/TJ
2021	PM2.5	1A1a	WOOD STUMP CHIPS	0.000842644	t/TJ
2021	PM2.5	1A1b	COKE (S=1.0%)	0.007500000	t/TJ
2021	PM2.5	1A1b	HEAVY FUEL OIL (S<1%)	0.022400000	t/TJ
2021	PM2.5	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.000206558	t/TJ
2021	PM2.5	1A1b	OTHER FOSSIL LIQUID	0.010259066	t/TJ
2021	PM2.5	1A1b	OTHER MEDIUM DISTILLATES	0.000203741	t/TJ
2021	PM2.5	1A1b	PETROLEUM COKE	0.002727651	t/TJ
2021	PM2.5	1A2a	COKE (S=1.0%)	0.002141351	t/TJ
2021	PM2.5	1A2a	DIESEL OIL (S=001%)	0.000840000	t/TJ
2021	PM2.5	1A2a	GASOIL (FOR NON-ROAD USE)	0.001259643	t/TJ
2021	PM2.5	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.000877498	t/TJ
2021	PM2.5	1A2a	OTHER FOSSIL SOLID	0.001741325	t/TJ
2021	PM2.5	1A2a	WOOD RESIDUE CHIPS	0.000711543	t/TJ
2021	PM2.5	1A2b	COAL (S=1.0%)	0.001757220	t/TJ
2021	PM2.5	1A2b	COKE (S=1.0%)	0.000957300	t/TJ
2021	PM2.5	1A2b	HEAVY FUEL OIL (S<1%)	0.006827805	t/TJ
2021	PM2.5	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.000146234	t/TJ
2021	PM2.5	1A2b	OTHER HEAVY DISTILLATES	0.005360882	t/TJ
2021	PM2.5	1A2c	DIESEL OIL (S=001%)	0.000840000	t/TJ
2021	PM2.5	1A2c	GASOIL (FOR NON-ROAD USE)	0.001589877	t/TJ
2021	PM2.5	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.002266443	t/TJ
2021	PM2.5	1A2c	HEAVY FUEL OIL (S<0,1%)	0.007709136	t/TJ

2021	PM2.5	1A2c	HEAVY FUEL OIL (S<1%)	0.015898649	t/TJ
2021	PM2.5	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.003453247	t/TJ
2021	PM2.5	1A2c	NAPHTHA	0.000840000	t/TJ
2021	PM2.5	1A2c	OTHER FOSSIL LIQUID	0.007011120	t/TJ
2021	PM2.5	1A2c	TALL PITCH AND OIL	0.003537090	t/TJ
2021	PM2.5	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.001343750	t/TJ
2021	PM2.5	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000797105	t/TJ
2021	PM2.5	1A2d	ANIMAL-BASED FUELS	0.002307337	t/TJ
2021	PM2.5	1A2d	BARK	0.001700575	t/TJ
2021	PM2.5	1A2d	BIO PELLETS (NON-WOOD)	0.000601459	t/TJ
2021	PM2.5	1A2d	BIOLOGICAL SLURRY	0.000136934	t/TJ
2021	PM2.5	1A2d	BLACK LIQUOR	0.004571059	t/TJ
2021	PM2.5	1A2d	CHIPS FROM ROUNDWOOD	0.000207448	t/TJ
2021	PM2.5	1A2d	COAL (S=1.0%)	0.000485521	t/TJ
2021	PM2.5	1A2d	CREOSOTED WOOD	0.000769112	t/TJ
2021	PM2.5	1A2d	DEMOLITION WOOD	0.000807568	t/TJ
2021	PM2.5	1A2d	FOREST RESIDUE CHIPS	0.000485786	t/TJ
2021	PM2.5	1A2d	FOREST RESIDUE CHIPS	0.000521479	t/TJ
2021	PM2.5	1A2d	GASOIL (FOR NON-ROAD USE)	0.005808177	t/TJ
2021	PM2.5	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.004040685	t/TJ
2021	PM2.5	1A2d	HEAVY FUEL OIL (S<0,1%)	0.002791899	t/TJ
2021	PM2.5	1A2d	HEAVY FUEL OIL (S<0,5%)	0.094457831	t/TJ
2021	PM2.5	1A2d	HEAVY FUEL OIL (S<1%)	0.013006271	t/TJ
2021	PM2.5	1A2d	INDUSTRIAL WASTE	0.002839508	t/TJ
2021	PM2.5	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.000648887	t/TJ
2021	PM2.5	1A2d	METHANOL	0.000261643	t/TJ
2021	PM2.5	1A2d	MILLED PEAT	0.002028108	t/TJ
2021	PM2.5	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.003010773	t/TJ
2021	PM2.5	1A2d	OTHER FOSSIL LIQUID	0.042000000	t/TJ
2021	PM2.5	1A2d	OTHER FUEL	0.003500000	t/TJ
2021	PM2.5	1A2d	OTHER NON-FOSSIL LIQUID	0.037130599	t/TJ
2021	PM2.5	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000765510	t/TJ
2021	PM2.5	1A2d	PAPER	0.000184277	t/TJ
2021	PM2.5	1A2d	PLASTIC WASTE	0.000649980	t/TJ
2021	PM2.5	1A2d	RECOVERED FUEL (REF 1)	0.000363342	t/TJ
2021	PM2.5	1A2d	RECOVERED FUEL (REF 2)	0.000807568	t/TJ
2021	PM2.5	1A2d	RECOVERED WOOD	0.000524422	t/TJ
2021	PM2.5	1A2d	RECYCLED AND WASTE OILS	0.001548761	t/TJ
2021	PM2.5	1A2d	SAWDUST AND CUTTER CHIPS	0.000972932	t/TJ
2021	PM2.5	1A2d	SULPHITE LIQUOR	0.007924400	t/TJ
2021	PM2.5	1A2d	TALL PITCH AND OIL	0.007274537	t/TJ
2021	PM2.5	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000574559	t/TJ
2021	PM2.5	1A2d	WOOD RESIDUE CHIPS	0.000694377	t/TJ
2021	PM2.5	1A2e	ANIMAL-BASED FUELS	0.004124193	t/TJ
2021	PM2.5	1A2e	BIO-FUEL OIL	0.000716990	t/TJ
2021	PM2.5	1A2e	CHIPS FROM ROUNDWOOD	0.012081028	t/TJ
2021	PM2.5	1A2e	COAL (S=1.0%)	0.000763309	t/TJ
2021	PM2.5	1A2e	COKE (S=1.0%)	0.007500000	t/TJ
2021	PM2.5	1A2e	FOREST RESIDUE CHIPS	0.000107513	t/TJ
2021	PM2.5	1A2e	GASOIL (FOR NON-ROAD USE)	0.000800589	t/TJ
2021	PM2.5	1A2e	HEAVY FUEL OIL (S<1%)	0.012678402	t/TJ
2021	PM2.5	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.000605499	t/TJ
2021	PM2.5	1A2e	MILLED PEAT	0.000259963	t/TJ
2021	PM2.5	1A2e	OTHER NON-FOSSIL LIQUID	0.002755995	t/TJ
2021	PM2.5	1A2e	OTHER NON-FOSSIL SOLID	0.003500000	t/TJ
2021	PM2.5	1A2e	RECOVERED WOOD	0.000451750	t/TJ

2021	PM2.5	1A2e	SAWDUST	0.000192339	t/TJ
2021	PM2.5	1A2e	SAWDUST AND CUTTER CHIPS	0.000107513	t/TJ
2021	PM2.5	1A2e	SOD PEAT	0.056984696	t/TJ
2021	PM2.5	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000751650	t/TJ
2021	PM2.5	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.010000000	t/TJ
2021	PM2.5	1A2f	CHIPS FROM ROUNDWOOD	0.005029207	t/TJ
2021	PM2.5	1A2f	COAL (S=1.0%)	0.000050815	t/TJ
2021	PM2.5	1A2f	COKE (S=1.0%)	0.002488348	t/TJ
2021	PM2.5	1A2f	DIESEL OIL (S=001%)	0.000615211	t/TJ
2021	PM2.5	1A2f	FOREST RESIDUE CHIPS	0.002591346	t/TJ
2021	PM2.5	1A2f	GASOIL (FOR NON-ROAD USE)	0.000828564	t/TJ
2021	PM2.5	1A2f	HEAVY FUEL OIL (S<1%)	0.021344241	t/TJ
2021	PM2.5	1A2f	INDUSTRIAL WASTE	0.000053395	t/TJ
2021	PM2.5	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.015069616	t/TJ
2021	PM2.5	1A2f	OTHER FOSSIL LIQUID	0.001086979	t/TJ
2021	PM2.5	1A2f	OTHER FOSSIL SOLID	0.000038139	t/TJ
2021	PM2.5	1A2f	OTHER HEAVY DISTILLATES	0.010332061	t/TJ
2021	PM2.5	1A2f	OTHER WASTE	0.000054937	t/TJ
2021	PM2.5	1A2f	PETROLEUM COKE	0.000414250	t/TJ
2021	PM2.5	1A2f	PLASTIC WASTE	0.000050852	t/TJ
2021	PM2.5	1A2f	RECOVERED FUEL (REF 1)	0.000090582	t/TJ
2021	PM2.5	1A2f	RECYCLED AND WASTE OILS	0.000206074	t/TJ
2021	PM2.5	1A2f	RUBBER WASTE	0.000541573	t/TJ
2021	PM2.5	1A2f	SAWDUST AND CUTTER CHIPS	0.000174336	t/TJ
2021	PM2.5	1A2f	SOLID RECOVERED FUEL (SRF)	0.000053395	t/TJ
2021	PM2.5	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000108323	t/TJ
2021	PM2.5	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.016799438	t/TJ
2021	PM2.5	1A2gvii	LIQUID GAS	0.004138242	t/TJ
2021	PM2.5	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.004330155	t/TJ
2021	PM2.5	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000225825	t/TJ
2021	PM2.5	1A2gviii	BARK	0.018891256	t/TJ
2021	PM2.5	1A2gviii	CHIPS FROM ROUNDWOOD	0.000154209	t/TJ
2021	PM2.5	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000347772	t/TJ
2021	PM2.5	1A2gviii	CREOSOTED WOOD	0.000319317	t/TJ
2021	PM2.5	1A2gviii	CUTTER CHIPS ETC.	0.002270585	t/TJ
2021	PM2.5	1A2gviii	DEMOLITION WOOD	0.000009659	t/TJ
2021	PM2.5	1A2gviii	DIESEL OIL (S=001%)	0.000608633	t/TJ
2021	PM2.5	1A2gviii	FOREST RESIDUE CHIPS	0.001177538	t/TJ
2021	PM2.5	1A2gviii	FOREST RESIDUE CHIPS	0.000681318	t/TJ
2021	PM2.5	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.000812073	t/TJ
2021	PM2.5	1A2gviii	HAZARDOUS WASTE	0.000085947	t/TJ
2021	PM2.5	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.022066550	t/TJ
2021	PM2.5	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.022420722	t/TJ
2021	PM2.5	1A2gviii	HEAVY FUEL OIL (S<1%)	0.024825098	t/TJ
2021	PM2.5	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.001394157	t/TJ
2021	PM2.5	1A2gviii	MILLED PEAT	0.000337907	t/TJ
2021	PM2.5	1A2gviii	MUNICIPAL WASTE - unsorted	0.000025018	t/TJ
2021	PM2.5	1A2gviii	NAPHTHA	0.001200000	t/TJ
2021	PM2.5	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.024340528	t/TJ
2021	PM2.5	1A2gviii	OTHER HEAVY DISTILLATES	0.020287653	t/TJ
2021	PM2.5	1A2gviii	OTHER NON-FOSSIL LIQUID	0.002017236	t/TJ
2021	PM2.5	1A2gviii	OTHER NON-FOSSIL SOLID	0.000164305	t/TJ
2021	PM2.5	1A2gviii	OTHER WASTE	0.000034001	t/TJ
2021	PM2.5	1A2gviii	OTHER WOOD RESIDUE	0.014454478	t/TJ
2021	PM2.5	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.002185007	t/TJ
2021	PM2.5	1A2gviii	PLASTIC WASTE	0.000290994	t/TJ

2021	PM2.5	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.004900023	t/TJ
2021	PM2.5	1A2gviii	RECOVERED WOOD	0.000466621	t/TJ
2021	PM2.5	1A2gviii	RECYCLED AND WASTE OILS	0.000000095	t/TJ
2021	PM2.5	1A2gviii	SAWDUST	0.000541725	t/TJ
2021	PM2.5	1A2gviii	SAWDUST AND CUTTER CHIPS	0.013009464	t/TJ
2021	PM2.5	1A2gviii	SOD PEAT	0.004246906	t/TJ
2021	PM2.5	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000046332	t/TJ
2021	PM2.5	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.009089623	t/TJ
2021	PM2.5	1A2gviii	WASTE PELLETS	0.000306786	t/TJ
2021	PM2.5	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.006088256	t/TJ
2021	PM2.5	1A2gviii	WOOD RESIDUE CHIPS	0.004885126	t/TJ
2021	PM2.5	1A2gviii	WOOD STUMP CHIPS	0.000007537	t/TJ
2021	PM2.5	1A3ai(i)	KEROSENE (JET FUEL)	0.002871507	t/TJ
2021	PM2.5	1A3aii(i)	AVIATION GASOLINE	0.008100000	t/TJ
2021	PM2.5	1A3aii(i)	KEROSENE (JET FUEL)	0.002898941	t/TJ
2021	PM2.5	1A3bi	DIESEL OIL (S=001%)	0.007647045	t/TJ
2021	PM2.5	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000686597	t/TJ
2021	PM2.5	1A3bi	NATURAL GAS	0.000859124	t/TJ
2021	PM2.5	1A3bii	DIESEL OIL (S=001%)	0.018155843	t/TJ
2021	PM2.5	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000765252	t/TJ
2021	PM2.5	1A3bii	NATURAL GAS	0.000919734	t/TJ
2021	PM2.5	1A3biii	DIESEL OIL (S=001%)	0.002411821	t/TJ
2021	PM2.5	1A3biii	NATURAL GAS	0.000438746	t/TJ
2021	PM2.5	1A3biv	DIESEL OIL (S=001%)	0.125638178	t/TJ
2021	PM2.5	1A3biv	MOTOR GASOLINE (S=0.001%)	0.008932313	t/TJ
2021	PM2.5	1A3c	GASOIL (FOR NON-ROAD USE)	0.030006224	t/TJ
2021	PM2.5	1A3dii	DIESEL OIL (S=001%)	0.109956314	t/TJ
2021	PM2.5	1A3dii	GASOIL (FOR NON-ROAD USE)	0.027394607	t/TJ
2021	PM2.5	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.041107212	t/TJ
2021	PM2.5	1A3dii	MOTOR GASOLINE (S=0.001%)	0.127472543	t/TJ
2021	PM2.5	1A4ai	FOREST WOODFUEL	0.015652933	t/TJ
2021	PM2.5	1A4ai	HEAVY FUEL OIL (S<1%)	0.050400000	t/TJ
2021	PM2.5	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.000841345	t/TJ
2021	PM2.5	1A4ai	MOTOR GASOLINE (S=0.001%)	0.000840000	t/TJ
2021	PM2.5	1A4ai	NAPHTHA	0.000840000	t/TJ
2021	PM2.5	1A4ai	SOD PEAT	0.017765987	t/TJ
2021	PM2.5	1A4aii	GASOIL (FOR NON-ROAD USE)	0.013685301	t/TJ
2021	PM2.5	1A4aii	MOTOR GASOLINE (S=0.001%)	0.048957579	t/TJ
2021	PM2.5	1A4bi	FOREST WOODFUEL	0.148780580	t/TJ
2021	PM2.5	1A4bi	HEAVY FUEL OIL (S<1%)	0.020700000	t/TJ
2021	PM2.5	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.004900000	t/TJ
2021	PM2.5	1A4bi	PARAFFIN	0.004900000	t/TJ
2021	PM2.5	1A4bi	SOD PEAT	0.320000000	t/TJ
2021	PM2.5	1A4bii	GASOIL (FOR NON-ROAD USE)	0.070205765	t/TJ
2021	PM2.5	1A4bii	MOTOR GASOLINE (S=0.001%)	0.049703830	t/TJ
2021	PM2.5	1A4ci	CHIPS FROM ROUNDWOOD	0.035346317	t/TJ
2021	PM2.5	1A4ci	COAL (S=1.0%)	0.003453947	t/TJ
2021	PM2.5	1A4ci	FOREST WOODFUEL	0.015500000	t/TJ
2021	PM2.5	1A4ci	HEAVY FUEL OIL (S<1%)	0.050400000	t/TJ
2021	PM2.5	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.000840000	t/TJ
2021	PM2.5	1A4ci	OTHER NON-FOSSIL SOLID	0.000784753	t/TJ
2021	PM2.5	1A4ci	RECOVERED WOOD	0.048143054	t/TJ
2021	PM2.5	1A4ci	SOD PEAT	0.019842244	t/TJ
2021	PM2.5	1A4ci	WOOD RESIDUE CHIPS	0.015217391	t/TJ
2021	PM2.5	1A4cii	GASOIL (FOR NON-ROAD USE)	0.010970473	t/TJ
2021	PM2.5	1A4cii	MOTOR GASOLINE (S=0.001%)	0.129372175	t/TJ

2021	PM2.5	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.030833485	t/TJ
2021	PM2.5	1A5a	FOREST WOODFUEL	0.010000000	t/TJ
2021	PM2.5	1A5a	HEAVY FUEL OIL (S<1%)	0.050400000	t/TJ
2021	PM2.5	1A5a	KEROSENE (JET FUEL)	0.009917755	t/TJ
2021	PM2.5	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.004089533	t/TJ
2021	PM2.5	1A5a	OTHER PETROLEUM PRODUCTS	0.000840000	t/TJ

#### PM10 Implied emission factors in Finnish air pollutant inventory for 2021

2021	PM10	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000442123	t/TJ
2021	PM10	1A1a	ANIMAL-BASED FUELS	0.000582081	t/TJ
2021	PM10	1A1a	ASPHALTENE	0.000073024	t/TJ
2021	PM10	1A1a	BARK	0.002084859	t/TJ
2021	PM10	1A1a	BIO PELLETS (NON-WOOD)	0.002586392	t/TJ
2021	PM10	1A1a	BIO PYROLYSIS OIL	0.003500000	t/TJ
2021	PM10	1A1a	CHIPS FROM ROUNDWOOD	0.002194861	t/TJ
2021	PM10	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.000862714	t/TJ
2021	PM10	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.002460599	t/TJ
2021	PM10	1A1a	COAL (S=1.0%)	0.001943012	t/TJ
2021	PM10	1A1a	CREOSOTED WOOD	0.000792332	t/TJ
2021	PM10	1A1a	CUTTER CHIPS ETC.	0.000641291	t/TJ
2021	PM10	1A1a	DEINKING WASTE	0.000042485	t/TJ
2021	PM10	1A1a	DEMOLITION WOOD	0.001429346	t/TJ
2021	PM10	1A1a	FOREST RESIDUE CHIPS	0.022864526	t/TJ
2021	PM10	1A1a	FOREST RESIDUE CHIPS	0.003885205	t/TJ
2021	PM10	1A1a	GASOIL (FOR NON-ROAD USE)	0.003727303	t/TJ
2021	PM10	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.036940278	t/TJ
2021	PM10	1A1a	HEAVY FUEL OIL (S<0,1%)	0.001075927	t/TJ
2021	PM10	1A1a	HEAVY FUEL OIL (S<0,5%)	0.003424372	t/TJ
2021	PM10	1A1a	HEAVY FUEL OIL (S<1%)	0.006304680	t/TJ
2021	PM10	1A1a	IMPREGNATED WOOD	0.000004996	t/TJ
2021	PM10	1A1a	INDUSTRIAL WASTE	0.000178729	t/TJ
2021	PM10	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.001812560	t/TJ
2021	PM10	1A1a	LIGNIN	0.000951109	t/TJ
2021	PM10	1A1a	MILLED PEAT	0.002112684	t/TJ
2021	PM10	1A1a	MOTOR GASOLINE (S=0.001%)	0.004633408	t/TJ
2021	PM10	1A1a	MUNICIPAL WASTE - unsorted	0.000107092	t/TJ
2021	PM10	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.004297663	t/TJ
2021	PM10	1A1a	OTHER FOSSIL SOLID	0.001779986	t/TJ
2021	PM10	1A1a	OTHER NON-FOSSIL LIQUID	0.005734608	t/TJ
2021	PM10	1A1a	OTHER NON-FOSSIL SOLID	0.000418515	t/TJ
2021	PM10	1A1a	OTHER NON-FOSSIL SOLID	0.004230449	t/TJ
2021	PM10	1A1a	OTHER WASTE	0.000467073	t/TJ
2021	PM10	1A1a	OTHER WOOD RESIDUE	0.001332400	t/TJ
2021	PM10	1A1a	PAPER	0.000266929	t/TJ
2021	PM10	1A1a	PLASTIC WASTE	0.000196342	t/TJ
2021	PM10	1A1a	PLYWOOD RESIDUE	0.001005527	t/TJ
2021	PM10	1A1a	RECOVERED FUEL (REF 1)	0.002164147	t/TJ
2021	PM10	1A1a	RECOVERED FUEL (REF 2)	0.001264753	t/TJ
2021	PM10	1A1a	RECOVERED FUEL (REF 3)	0.000178418	t/TJ
2021	PM10	1A1a	RECOVERED WOOD	0.000993547	t/TJ
2021	PM10	1A1a	RECYCLED AND WASTE OILS	0.001073636	t/TJ
2021	PM10	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000226340	t/TJ
2021	PM10	1A1a	SAWDUST	0.008584256	t/TJ
2021	PM10	1A1a	SAWDUST AND CUTTER CHIPS	0.002376817	t/TJ
2021	PM10	1A1a	SOD PEAT	0.050348889	t/TJ

2021	PM10	1A1a	SOLID RECOVERED FUEL (SRF)	0.000020605	t/TJ
2021	PM10	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.003315272	t/TJ
2021	PM10	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.002160204	t/TJ
2021	PM10	1A1a	WOOD RESIDUE CHIPS	0.005021596	t/TJ
2021	PM10	1A1a	WOOD STUMP CHIPS	0.006955496	t/TJ
2021	PM10	1A1b	COKE (S=1.0%)	0.039000000	t/TJ
2021	PM10	1A1b	HEAVY FUEL OIL (S<1%)	0.064500000	t/TJ
2021	PM10	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.000860656	t/TJ
2021	PM10	1A1b	OTHER FOSSIL LIQUID	0.000854922	t/TJ
2021	PM10	1A1b	OTHER MEDIUM DISTILLATES	0.000848923	t/TJ
2021	PM10	1A1b	PETROLEUM COKE	0.004749035	t/TJ
2021	PM10	1A2a	COKE (S=1.0%)	0.010743200	t/TJ
2021	PM10	1A2a	DIESEL OIL (S=001%)	0.003500000	t/TJ
2021	PM10	1A2a	GASOIL (FOR NON-ROAD USE)	0.005248512	t/TJ
2021	PM10	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.003358131	t/TJ
2021	PM10	1A2a	OTHER FOSSIL SOLID	0.014297196	t/TJ
2021	PM10	1A2a	WOOD RESIDUE CHIPS	0.010571493	t/TJ
2021	PM10	1A2b	COAL (S=1.0%)	0.027412629	t/TJ
2021	PM10	1A2b	COKE (S=1.0%)	0.004977962	t/TJ
2021	PM10	1A2b	HEAVY FUEL OIL (S<1%)	0.013197655	t/TJ
2021	PM10	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.000590100	t/TJ
2021	PM10	1A2b	OTHER HEAVY DISTILLATES	0.008232783	t/TJ
2021	PM10	1A2c	DIESEL OIL (S=001%)	0.003500000	t/TJ
2021	PM10	1A2c	GASOIL (FOR NON-ROAD USE)	0.006624487	t/TJ
2021	PM10	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.003480609	t/TJ
2021	PM10	1A2c	HEAVY FUEL OIL (S<0,1%)	0.013177543	t/TJ
2021	PM10	1A2c	HEAVY FUEL OIL (S<1%)	0.043724447	t/TJ
2021	PM10	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.014388530	t/TJ
2021	PM10	1A2c	NAPHTHA	0.003500000	t/TJ
2021	PM10	1A2c	OTHER FOSSIL LIQUID	0.010767077	t/TJ
2021	PM10	1A2c	TALL PITCH AND OIL	0.002902252	t/TJ
2021	PM10	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.019964286	t/TJ
2021	PM10	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.001929238	t/TJ
2021	PM10	1A2d	ANIMAL-BASED FUELS	0.001738194	t/TJ
2021	PM10	1A2d	BARK	0.004755445	t/TJ
2021	PM10	1A2d	BIO PELLETS (NON-WOOD)	0.001625595	t/TJ
2021	PM10	1A2d	BIOLOGICAL SLURRY	0.000370099	t/TJ
2021	PM10	1A2d	BLACK LIQUOR	0.008159661	t/TJ
2021	PM10	1A2d	CHIPS FROM ROUNDWOOD	0.006877707	t/TJ
2021	PM10	1A2d	COAL (S=1.0%)	0.001464343	t/TJ
2021	PM10	1A2d	CREOSOTED WOOD	0.001625595	t/TJ
2021	PM10	1A2d	DEMOLITION WOOD	0.001738194	t/TJ
2021	PM10	1A2d	FOREST RESIDUE CHIPS	0.002351503	t/TJ
2021	PM10	1A2d	FOREST RESIDUE CHIPS	0.001495750	t/TJ
2021	PM10	1A2d	GASOIL (FOR NON-ROAD USE)	0.024200738	t/TJ
2021	PM10	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.001972929	t/TJ
2021	PM10	1A2d	HEAVY FUEL OIL (S<0,1%)	0.001551950	t/TJ
2021	PM10	1A2d	HEAVY FUEL OIL (S<0,5%)	0.145060241	t/TJ
2021	PM10	1A2d	HEAVY FUEL OIL (S<1%)	0.006908799	t/TJ
2021	PM10	1A2d	HYDROGEN	0.001396434	t/TJ
2021	PM10	1A2d	INDUSTRIAL WASTE	0.011982947	t/TJ
2021	PM10	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.002704762	t/TJ
2021	PM10	1A2d	LIQUID GAS	0.000000039	t/TJ
2021	PM10	1A2d	METHANOL	0.002918416	t/TJ
2021	PM10	1A2d	MILLED PEAT	0.004384583	t/TJ
2021	PM10	1A2d	NATURAL GAS	0.000386535	t/TJ

2021	PM10	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.007286995	t/TJ
2021	PM10	1A2d	OTHER FOSSIL LIQUID	0.064500000	t/TJ
2021	PM10	1A2d	OTHER FUEL	0.008471074	t/TJ
2021	PM10	1A2d	OTHER NON-FOSSIL LIQUID	0.057021991	t/TJ
2021	PM10	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.001730052	t/TJ
2021	PM10	1A2d	PAPER	0.000446007	t/TJ
2021	PM10	1A2d	PLASTIC WASTE	0.001468954	t/TJ
2021	PM10	1A2d	RECOVERED FUEL (REF 1)	0.001889381	t/TJ
2021	PM10	1A2d	RECOVERED FUEL (REF 2)	0.001738194	t/TJ
2021	PM10	1A2d	RECOVERED WOOD	0.001135778	t/TJ
2021	PM10	1A2d	RECYCLED AND WASTE OILS	0.002141399	t/TJ
2021	PM10	1A2d	SAWDUST AND CUTTER CHIPS	0.019633949	t/TJ
2021	PM10	1A2d	SULPHITE LIQUOR	0.019179480	t/TJ
2021	PM10	1A2d	TALL PITCH AND OIL	0.001045789	t/TJ
2021	PM10	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001390609	t/TJ
2021	PM10	1A2d	WOOD RESIDUE CHIPS	0.001494564	t/TJ
2021	PM10	1A2e	ANIMAL-BASED FUELS	0.021445801	t/TJ
2021	PM10	1A2e	BIO-FUEL OIL	0.031234152	t/TJ
2021	PM10	1A2e	CHIPS FROM ROUNDWOOD	0.062821347	t/TJ
2021	PM10	1A2e	COAL (S=1.0%)	0.003969207	t/TJ
2021	PM10	1A2e	COKE (S=1.0%)	0.039000000	t/TJ
2021	PM10	1A2e	FOREST RESIDUE CHIPS	0.001597338	t/TJ
2021	PM10	1A2e	GASOIL (FOR NON-ROAD USE)	0.003335788	t/TJ
2021	PM10	1A2e	HEAVY FUEL OIL (S<1%)	0.023153304	t/TJ
2021	PM10	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.002522913	t/TJ
2021	PM10	1A2e	MILLED PEAT	0.001582773	t/TJ
2021	PM10	1A2e	OTHER NON-FOSSIL LIQUID	0.004232420	t/TJ
2021	PM10	1A2e	OTHER NON-FOSSIL SOLID	0.016942149	t/TJ
2021	PM10	1A2e	RECOVERED WOOD	0.001093374	t/TJ
2021	PM10	1A2e	SAWDUST	0.001000161	t/TJ
2021	PM10	1A2e	SAWDUST AND CUTTER CHIPS	0.001597338	t/TJ
2021	PM10	1A2e	SOD PEAT	0.296320417	t/TJ
2021	PM10	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001819225	t/TJ
2021	PM10	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.052000000	t/TJ
2021	PM10	1A2f	CHIPS FROM ROUNDWOOD	0.074719644	t/TJ
2021	PM10	1A2f	COAL (S=1.0%)	0.002210218	t/TJ
2021	PM10	1A2f	COKE (S=1.0%)	0.012939407	t/TJ
2021	PM10	1A2f	DIESEL OIL (S=0.01%)	0.002563380	t/TJ
2021	PM10	1A2f	FOREST RESIDUE CHIPS	0.038500000	t/TJ
2021	PM10	1A2f	GASOIL (FOR NON-ROAD USE)	0.003452348	t/TJ
2021	PM10	1A2f	HEAVY FUEL OIL (S<1%)	0.038825179	t/TJ
2021	PM10	1A2f	INDUSTRIAL WASTE	0.000277651	t/TJ
2021	PM10	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.062788414	t/TJ
2021	PM10	1A2f	OTHER FOSSIL LIQUID	0.001669289	t/TJ
2021	PM10	1A2f	OTHER FOSSIL SOLID	0.000594967	t/TJ
2021	PM10	1A2f	OTHER HEAVY DISTILLATES	0.015867093	t/TJ
2021	PM10	1A2f	OTHER WASTE	0.000148482	t/TJ
2021	PM10	1A2f	PETROLEUM COKE	0.001823455	t/TJ
2021	PM10	1A2f	PLASTIC WASTE	0.000114925	t/TJ
2021	PM10	1A2f	RECOVERED FUEL (REF 1)	0.000471024	t/TJ
2021	PM10	1A2f	RECYCLED AND WASTE OILS	0.001139831	t/TJ
2021	PM10	1A2f	RUBBER WASTE	0.000717012	t/TJ
2021	PM10	1A2f	SAWDUST AND CUTTER CHIPS	0.002530382	t/TJ
2021	PM10	1A2f	SOLID RECOVERED FUEL (SRF)	0.000277651	t/TJ
2021	PM10	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.001609365	t/TJ
2021	PM10	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.016799438	t/TJ

2021	PM10	1A2gvii	LIQUID GAS	0.004138242	t/TJ
2021	PM10	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.004330155	t/TJ
2021	PM10	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000546565	t/TJ
2021	PM10	1A2gviii	BARK	0.030176293	t/TJ
2021	PM10	1A2gviii	CHIPS FROM ROUNDWOOD	0.001221973	t/TJ
2021	PM10	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.005166903	t/TJ
2021	PM10	1A2gviii	CREOSOTED WOOD	0.000674909	t/TJ
2021	PM10	1A2gviii	CUTTER CHIPS ETC.	0.043386750	t/TJ
2021	PM10	1A2gviii	DEMOLITION WOOD	0.000025630	t/TJ
2021	PM10	1A2gviii	DIESEL OIL (S=001%)	0.002535972	t/TJ
2021	PM10	1A2gviii	FOREST RESIDUE CHIPS	0.015395932	t/TJ
2021	PM10	1A2gviii	FOREST RESIDUE CHIPS	0.009117025	t/TJ
2021	PM10	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.003478383	t/TJ
2021	PM10	1A2gviii	HAZARDOUS WASTE	0.000209959	t/TJ
2021	PM10	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.033887916	t/TJ
2021	PM10	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.034431822	t/TJ
2021	PM10	1A2gviii	HEAVY FUEL OIL (S<1%)	0.039801527	t/TJ
2021	PM10	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.006184740	t/TJ
2021	PM10	1A2gviii	MILLED PEAT	0.001627012	t/TJ
2021	PM10	1A2gviii	MUNICIPAL WASTE - unsorted	0.000200202	t/TJ
2021	PM10	1A2gviii	NAPHTHA	0.005000000	t/TJ
2021	PM10	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.058911548	t/TJ
2021	PM10	1A2gviii	OTHER HEAVY DISTILLATES	0.019093665	t/TJ
2021	PM10	1A2gviii	OTHER NON-FOSSIL LIQUID	0.003097898	t/TJ
2021	PM10	1A2gviii	OTHER NON-FOSSIL SOLID	0.001348993	t/TJ
2021	PM10	1A2gviii	OTHER WASTE	0.000128560	t/TJ
2021	PM10	1A2gviii	OTHER WOOD RESIDUE	0.075134614	t/TJ
2021	PM10	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.011362036	t/TJ
2021	PM10	1A2gviii	PLASTIC WASTE	0.000741365	t/TJ
2021	PM10	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.007525035	t/TJ
2021	PM10	1A2gviii	RECOVERED WOOD	0.001327306	t/TJ
2021	PM10	1A2gviii	RECYCLED AND WASTE OILS	0.000000131	t/TJ
2021	PM10	1A2gviii	SAWDUST	0.002622280	t/TJ
2021	PM10	1A2gviii	SAWDUST AND CUTTER CHIPS	0.019638579	t/TJ
2021	PM10	1A2gviii	SOD PEAT	0.018591539	t/TJ
2021	PM10	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000240927	t/TJ
2021	PM10	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.026567928	t/TJ
2021	PM10	1A2gviii	WASTE PELLETS	0.000829167	t/TJ
2021	PM10	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.058119807	t/TJ
2021	PM10	1A2gviii	WOOD RESIDUE CHIPS	0.026298304	t/TJ
2021	PM10	1A2gviii	WOOD STUMP CHIPS	0.000111980	t/TJ
2021	PM10	1A3ai(i)	KEROSENE (JET FUEL)	0.002871507	t/TJ
2021	PM10	1A3aii(i)	AVIATION GASOLINE	0.008100000	t/TJ
2021	PM10	1A3aii(i)	KEROSENE (JET FUEL)	0.002898941	t/TJ
2021	PM10	1A3bi	DIESEL OIL (S=001%)	0.007647045	t/TJ
2021	PM10	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000686597	t/TJ
2021	PM10	1A3bi	NATURAL GAS	0.000859124	t/TJ
2021	PM10	1A3bii	DIESEL OIL (S=001%)	0.018155843	t/TJ
2021	PM10	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000765252	t/TJ
2021	PM10	1A3bii	NATURAL GAS	0.000919734	t/TJ
2021	PM10	1A3biii	DIESEL OIL (S=001%)	0.002411821	t/TJ
2021	PM10	1A3biii	NATURAL GAS	0.000438746	t/TJ
2021	PM10	1A3biv	DIESEL OIL (S=001%)	0.125638178	t/TJ
2021	PM10	1A3biv	MOTOR GASOLINE (S=0.001%)	0.008932313	t/TJ
2021	PM10	1A3c	GASOIL (FOR NON-ROAD USE)	0.031539388	t/TJ
2021	PM10	1A3dii	DIESEL OIL (S=001%)	0.109956314	t/TJ

2021	PM10	1A3dii	GASOIL (FOR NON-ROAD USE)	0.029351364	t/TJ
2021	PM10	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.045511556	t/TJ
2021	PM10	1A3dii	MOTOR GASOLINE (S=0.001%)	0.127472543	t/TJ
2021	PM10	1A4ai	FOREST WOODFUEL	0.016157867	t/TJ
2021	PM10	1A4ai	HEAVY FUEL OIL (S<1%)	0.077400000	t/TJ
2021	PM10	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.003521744	t/TJ
2021	PM10	1A4ai	MOTOR GASOLINE (S=0.001%)	0.003500000	t/TJ
2021	PM10	1A4ai	NAPHTHA	0.003500000	t/TJ
2021	PM10	1A4ai	SOD PEAT	0.092383133	t/TJ
2021	PM10	1A4aii	GASOIL (FOR NON-ROAD USE)	0.013685301	t/TJ
2021	PM10	1A4aii	MOTOR GASOLINE (S=0.001%)	0.048957579	t/TJ
2021	PM10	1A4bi	FOREST WOODFUEL	0.153579954	t/TJ
2021	PM10	1A4bi	HEAVY FUEL OIL (S<1%)	0.055800000	t/TJ
2021	PM10	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.006300000	t/TJ
2021	PM10	1A4bi	PARAFFIN	0.006300000	t/TJ
2021	PM10	1A4bi	SOD PEAT	0.360000000	t/TJ
2021	PM10	1A4bii	GASOIL (FOR NON-ROAD USE)	0.070205765	t/TJ
2021	PM10	1A4bii	MOTOR GASOLINE (S=0.001%)	0.049703830	t/TJ
2021	PM10	1A4ci	CHIPS FROM ROUNDWOOD	0.183800849	t/TJ
2021	PM10	1A4ci	COAL (S=1.0%)	0.017960526	t/TJ
2021	PM10	1A4ci	FOREST WOODFUEL	0.016000000	t/TJ
2021	PM10	1A4ci	HEAVY FUEL OIL (S<1%)	0.077400000	t/TJ
2021	PM10	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.003500000	t/TJ
2021	PM10	1A4ci	OTHER NON-FOSSIL SOLID	0.003798688	t/TJ
2021	PM10	1A4ci	RECOVERED WOOD	0.116520968	t/TJ
2021	PM10	1A4ci	SOD PEAT	0.103179670	t/TJ
2021	PM10	1A4ci	WOOD RESIDUE CHIPS	0.226086957	t/TJ
2021	PM10	1A4cii	GASOIL (FOR NON-ROAD USE)	0.010970473	t/TJ
2021	PM10	1A4cii	MOTOR GASOLINE (S=0.001%)	0.129372175	t/TJ
2021	PM10	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.033035876	t/TJ
2021	PM10	1A5a	FOREST WOODFUEL	0.052000000	t/TJ
2021	PM10	1A5a	HEAVY FUEL OIL (S<1%)	0.077400000	t/TJ
2021	PM10	1A5a	KEROSENE (JET FUEL)	0.009917755	t/TJ
2021	PM10	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.006971108	t/TJ
2021	PM10	1A5a	OTHER PETROLEUM PRODUCTS	0.003500000	t/TJ

#### TSP Implied emission factors in Finnish air pollutant inventory for 2021

2021	TSP	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000521921	t/TJ
2021	TSP	1A1a	ANIMAL-BASED FUELS	0.001134311	t/TJ
2021	TSP	1A1a	ASPHALTENE	0.000084911	t/TJ
2021	TSP	1A1a	BARK	0.002673508	t/TJ
2021	TSP	1A1a	BIO PELLETS (NON-WOOD)	0.003671073	t/TJ
2021	TSP	1A1a	BIO PYROLYSIS OIL	0.007000000	t/TJ
2021	TSP	1A1a	CHIPS FROM ROUNDWOOD	0.002383710	t/TJ
2021	TSP	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.003318129	t/TJ
2021	TSP	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.009463841	t/TJ
2021	TSP	1A1a	COAL (S=1.0%)	0.002374828	t/TJ
2021	TSP	1A1a	CREOSOTED WOOD	0.001124621	t/TJ
2021	TSP	1A1a	CUTTER CHIPS ETC.	0.002033622	t/TJ
2021	TSP	1A1a	DEINKING WASTE	0.000074567	t/TJ
2021	TSP	1A1a	DEMOLITION WOOD	0.001720791	t/TJ
2021	TSP	1A1a	FOREST RESIDUE CHIPS	0.086419536	t/TJ
2021	TSP	1A1a	FOREST RESIDUE CHIPS	0.011838074	t/TJ
2021	TSP	1A1a	GASOIL (FOR NON-ROAD USE)	0.007454606	t/TJ
2021	TSP	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.042550284	t/TJ

2021	TSP	1A1a	HEAVY FUEL OIL (S<0,1%)	0.001134311	t/TJ
2021	TSP	1A1a	HEAVY FUEL OIL (S<0,5%)	0.003981436	t/TJ
2021	TSP	1A1a	HEAVY FUEL OIL (S<1%)	0.007254332	t/TJ
2021	TSP	1A1a	IMPREGNATED WOOD	0.000005249	t/TJ
2021	TSP	1A1a	INDUSTRIAL WASTE	0.000686480	t/TJ
2021	TSP	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.003625119	t/TJ
2021	TSP	1A1a	LIGNIN	0.001122773	t/TJ
2021	TSP	1A1a	MILLED PEAT	0.002760225	t/TJ
2021	TSP	1A1a	MOTOR GASOLINE (S=0.001%)	0.009266816	t/TJ
2021	TSP	1A1a	MUNICIPAL WASTE - unsorted	0.000223831	t/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	TSP	1A1a	TRY	0.005072760	t/TJ
2021	TSP	1A1a	OTHER FOSSIL SOLID	0.002236245	t/TJ
2021	TSP	1A1a	OTHER NON-FOSSIL LIQUID	0.006668148	t/TJ
2021	TSP	1A1a	OTHER NON-FOSSIL SOLID	0.004993993	t/TJ
2021	TSP	1A1a	OTHER NON-FOSSIL SOLID	0.001609674	t/TJ
2021	TSP	1A1a	OTHER WASTE	0.000553887	t/TJ
2021	TSP	1A1a	OTHER WOOD RESIDUE	0.001077850	t/TJ
2021	TSP	1A1a	PAPER	0.000315107	t/TJ
2021	TSP	1A1a	PLASTIC WASTE	0.000382615	t/TJ
2021	TSP	1A1a	PLYWOOD RESIDUE	0.001187012	t/TJ
2021	TSP	1A1a	RECOVERED FUEL (REF 1)	0.008323642	t/TJ
2021	TSP	1A1a	RECOVERED FUEL (REF 2)	0.002596162	t/TJ
2021	TSP	1A1a	RECOVERED FUEL (REF 3)	0.000686225	t/TJ
2021	TSP	1A1a	RECOVERED WOOD	0.001377760	t/TJ
2021	TSP	1A1a	RECYCLED AND WASTE OILS	0.001133531	t/TJ
2021	TSP	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000300451	t/TJ
2021	TSP	1A1a	SAWDUST	0.005939740	t/TJ
2021	TSP	1A1a	SAWDUST AND CUTTER CHIPS	0.002687831	t/TJ
2021	TSP	1A1a	SOD PEAT	0.193226064	t/TJ
2021	TSP	1A1a	SOLID RECOVERED FUEL (SRF)	0.000079250	t/TJ
2021	TSP	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.004518514	t/TJ
2021	TSP	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.005666945	t/TJ
2021	TSP	1A1a	WOOD RESIDUE CHIPS	0.015184139	t/TJ
2021	TSP	1A1a	WOOD STUMP CHIPS	0.023003804	t/TJ
2021	TSP	1A1b	COKE (S=1.0%)	0.150000000	t/TJ
2021	TSP	1A1b	HEAVY FUEL OIL (S<1%)	0.075000000	t/TJ
2021	TSP	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.001721313	t/TJ
2021	TSP	1A1b	OTHER FOSSIL LIQUID	0.001709844	t/TJ
2021	TSP	1A1b	OTHER MEDIUM DISTILLATES	0.001697846	t/TJ
2021	TSP	1A1b	PETROLEUM COKE	0.018265518	t/TJ
2021	TSP	1A2a	COKE (S=1.0%)	0.027681451	t/TJ
2021	TSP	1A2a	DIESEL OIL (S=001%)	0.007000000	t/TJ
2021	TSP	1A2a	GASOIL (FOR NON-ROAD USE)	0.010497025	t/TJ
2021	TSP	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.006437530	t/TJ
2021	TSP	1A2a	OTHER FOSSIL SOLID	0.027861203	t/TJ
2021	TSP	1A2a	WOOD RESIDUE CHIPS	0.040659589	t/TJ
2021	TSP	1A2b	COAL (S=1.0%)	0.105433188	t/TJ
2021	TSP	1A2b	COKE (S=1.0%)	0.019146006	t/TJ
2021	TSP	1A2b	HEAVY FUEL OIL (S<1%)	0.015346111	t/TJ
2021	TSP	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.001180200	t/TJ
2021	TSP	1A2b	OTHER HEAVY DISTILLATES	0.009573003	t/TJ
2021	TSP	1A2c	DIESEL OIL (S=001%)	0.007000000	t/TJ
2021	TSP	1A2c	GASOIL (FOR NON-ROAD USE)	0.013248974	t/TJ
2021	TSP	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.004047220	t/TJ
2021	TSP	1A2c	HEAVY FUEL OIL (S<0,1%)	0.013766314	t/TJ
2021	TSP	1A2c	HEAVY FUEL OIL (S<1%)	0.050842381	t/TJ

2021	TSP	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.028777059	t/TJ
2021	TSP	1A2c	NAPHTHA	0.007000000	t/TJ
2021	TSP	1A2c	OTHER FOSSIL LIQUID	0.012519857	t/TJ
2021	TSP	1A2c	TALL PITCH AND OIL	0.003374712	t/TJ
2021	TSP	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.076785714	t/TJ
2021	TSP	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.002277442	t/TJ
2021	TSP	1A2d	ANIMAL-BASED FUELS	0.002307337	t/TJ
2021	TSP	1A2d	BARK	0.006474021	t/TJ
2021	TSP	1A2d	BIO PELLETS (NON-WOOD)	0.002307337	t/TJ
2021	TSP	1A2d	BIOLOGICAL SLURRY	0.000525311	t/TJ
2021	TSP	1A2d	BLACK LIQUOR	0.008992409	t/TJ
2021	TSP	1A2d	CHIPS FROM ROUNDWOOD	0.007655714	t/TJ
2021	TSP	1A2d	COAL (S=1.0%)	0.001942084	t/TJ
2021	TSP	1A2d	CREOSOTED WOOD	0.002307337	t/TJ
2021	TSP	1A2d	DEMOLITION WOOD	0.002307337	t/TJ
2021	TSP	1A2d	FOREST RESIDUE CHIPS	0.002775920	t/TJ
2021	TSP	1A2d	FOREST RESIDUE CHIPS	0.003351394	t/TJ
2021	TSP	1A2d	GASOIL (FOR NON-ROAD USE)	0.048401476	t/TJ
2021	TSP	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.002318634	t/TJ
2021	TSP	1A2d	HEAVY FUEL OIL (S<0,1%)	0.001718378	t/TJ
2021	TSP	1A2d	HEAVY FUEL OIL (S<0,5%)	0.168674699	t/TJ
2021	TSP	1A2d	HEAVY FUEL OIL (S<1%)	0.012973977	t/TJ
2021	TSP	1A2d	HYDROGEN	0.007349651	t/TJ
2021	TSP	1A2d	INDUSTRIAL WASTE	0.031995586	t/TJ
2021	TSP	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.005411770	t/TJ
2021	TSP	1A2d	LIQUID GAS	0.000000123	t/TJ
2021	TSP	1A2d	METHANOL	0.003975467	t/TJ
2021	TSP	1A2d	MILLED PEAT	0.005794594	t/TJ
2021	TSP	1A2d	NATURAL GAS	0.000450936	t/TJ
2021	TSP	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.008602209	t/TJ
2021	TSP	1A2d	OTHER FOSSIL LIQUID	0.075000000	t/TJ
2021	TSP	1A2d	OTHER FUEL	0.010000000	t/TJ
2021	TSP	1A2d	OTHER NON-FOSSIL LIQUID	0.066304641	t/TJ
2021	TSP	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.002296530	t/TJ
2021	TSP	1A2d	PAPER	0.000526506	t/TJ
2021	TSP	1A2d	PLASTIC WASTE	0.001949940	t/TJ
2021	TSP	1A2d	RECOVERED FUEL (REF 1)	0.007266848	t/TJ
2021	TSP	1A2d	RECOVERED FUEL (REF 2)	0.002307337	t/TJ
2021	TSP	1A2d	RECOVERED WOOD	0.001498350	t/TJ
2021	TSP	1A2d	RECYCLED AND WASTE OILS	0.002307337	t/TJ
2021	TSP	1A2d	SAWDUST AND CUTTER CHIPS	0.022407350	t/TJ
2021	TSP	1A2d	SULPHITE LIQUOR	0.022641143	t/TJ
2021	TSP	1A2d	TALL PITCH AND OIL	0.003565695	t/TJ
2021	TSP	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001641597	t/TJ
2021	TSP	1A2d	WOOD RESIDUE CHIPS	0.001983934	t/TJ
2021	TSP	1A2e	ANIMAL-BASED FUELS	0.082480117	t/TJ
2021	TSP	1A2e	BIO-FUEL OIL	0.036318782	t/TJ
2021	TSP	1A2e	CHIPS FROM ROUNDWOOD	0.034517224	t/TJ
2021	TSP	1A2e	COAL (S=1.0%)	0.006106472	t/TJ
2021	TSP	1A2e	COKE (S=1.0%)	0.150000000	t/TJ
2021	TSP	1A2e	FOREST RESIDUE CHIPS	0.006143607	t/TJ
2021	TSP	1A2e	GASOIL (FOR NON-ROAD USE)	0.006671576	t/TJ
2021	TSP	1A2e	HEAVY FUEL OIL (S<1%)	0.026922446	t/TJ
2021	TSP	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.005045826	t/TJ
2021	TSP	1A2e	MILLED PEAT	0.005257320	t/TJ
2021	TSP	1A2e	OTHER NON-FOSSIL LIQUID	0.004921419	t/TJ

2021	TSP	1A2e	OTHER NON-FOSSIL SOLID	0.020000000	t/TJ
2021	TSP	1A2e	RECOVERED WOOD	0.001290715	t/TJ
2021	TSP	1A2e	SAWDUST	0.000549539	t/TJ
2021	TSP	1A2e	SAWDUST AND CUTTER CHIPS	0.006143607	t/TJ
2021	TSP	1A2e	SOD PEAT	1.139693911	t/TJ
2021	TSP	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002147573	t/TJ
2021	TSP	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.200000000	t/TJ
2021	TSP	1A2f	CHIPS FROM ROUNDWOOD	0.287383247	t/TJ
2021	TSP	1A2f	COAL (S=1.0%)	0.004925141	t/TJ
2021	TSP	1A2f	COKE (S=1.0%)	0.049766950	t/TJ
2021	TSP	1A2f	DIESEL OIL (S=001%)	0.005126761	t/TJ
2021	TSP	1A2f	FOREST RESIDUE CHIPS	0.148076923	t/TJ
2021	TSP	1A2f	GASOIL (FOR NON-ROAD USE)	0.006904697	t/TJ
2021	TSP	1A2f	HEAVY FUEL OIL (S<1%)	0.045132222	t/TJ
2021	TSP	1A2f	INDUSTRIAL WASTE	0.001067890	t/TJ
2021	TSP	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.125580131	t/TJ
2021	TSP	1A2f	OTHER FOSSIL LIQUID	0.001941034	t/TJ
2021	TSP	1A2f	OTHER FOSSIL SOLID	0.000152556	t/TJ
2021	TSP	1A2f	OTHER HEAVY DISTILLATES	0.018450108	t/TJ
2021	TSP	1A2f	OTHER WASTE	0.000210752	t/TJ
2021	TSP	1A2f	PETROLEUM COKE	0.003684951	t/TJ
2021	TSP	1A2f	PLASTIC WASTE	0.000152556	t/TJ
2021	TSP	1A2f	RECOVERED FUEL (REF 1)	0.001811631	t/TJ
2021	TSP	1A2f	RECYCLED AND WASTE OILS	0.001228033	t/TJ
2021	TSP	1A2f	RUBBER WASTE	0.000762779	t/TJ
2021	TSP	1A2f	SAWDUST AND CUTTER CHIPS	0.006740716	t/TJ
2021	TSP	1A2f	SOLID RECOVERED FUEL (SRF)	0.001067890	t/TJ
2021	TSP	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.006189865	t/TJ
2021	TSP	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.016799438	t/TJ
2021	TSP	1A2gvii	LIQUID GAS	0.004138242	t/TJ
2021	TSP	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.004330155	t/TJ
2021	TSP	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000645214	t/TJ
2021	TSP	1A2gviii	BARK	0.041728452	t/TJ
2021	TSP	1A2gviii	CHIPS FROM ROUNDWOOD	0.002607042	t/TJ
2021	TSP	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.019872704	t/TJ
2021	TSP	1A2gviii	CREOSOTED WOOD	0.000957952	t/TJ
2021	TSP	1A2gviii	CUTTER CHIPS ETC.	0.044588382	t/TJ
2021	TSP	1A2gviii	DEMOLITION WOOD	0.000027656	t/TJ
2021	TSP	1A2gviii	DIESEL OIL (S=001%)	0.005071944	t/TJ
2021	TSP	1A2gviii	FOREST RESIDUE CHIPS	0.055072223	t/TJ
2021	TSP	1A2gviii	FOREST RESIDUE CHIPS	0.033770297	t/TJ
2021	TSP	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.006956766	t/TJ
2021	TSP	1A2gviii	HAZARDOUS WASTE	0.000256447	t/TJ
2021	TSP	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.039404553	t/TJ
2021	TSP	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.040037003	t/TJ
2021	TSP	1A2gviii	HEAVY FUEL OIL (S<1%)	0.046409629	t/TJ
2021	TSP	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.012369479	t/TJ
2021	TSP	1A2gviii	MILLED PEAT	0.001924115	t/TJ
2021	TSP	1A2gviii	MUNICIPAL WASTE - unsorted	0.000269028	t/TJ
2021	TSP	1A2gviii	NAPHTHA	0.010000000	t/TJ
2021	TSP	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.069544365	t/TJ
2021	TSP	1A2gviii	OTHER HEAVY DISTILLATES	0.022200865	t/TJ
2021	TSP	1A2gviii	OTHER NON-FOSSIL LIQUID	0.003602208	t/TJ
2021	TSP	1A2gviii	OTHER NON-FOSSIL SOLID	0.001654541	t/TJ
2021	TSP	1A2gviii	OTHER WASTE	0.000231255	t/TJ
2021	TSP	1A2gviii	OTHER WOOD RESIDUE	0.057789381	t/TJ

2021	TSP	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.028092945	t/TJ
2021	TSP	1A2gviii	PLASTIC WASTE	0.000883334	t/TJ
2021	TSP	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.008750041	t/TJ
2021	TSP	1A2gviii	RECOVERED WOOD	0.001945561	t/TJ
2021	TSP	1A2gviii	RECYCLED AND WASTE OILS	0.000000141	t/TJ
2021	TSP	1A2gviii	SAWDUST	0.003095570	t/TJ
2021	TSP	1A2gviii	SAWDUST AND CUTTER CHIPS	0.028158435	t/TJ
2021	TSP	1A2gviii	SOD PEAT	0.059406364	t/TJ
2021	TSP	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000926641	t/TJ
2021	TSP	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.038163608	t/TJ
2021	TSP	1A2gviii	WASTE PELLETS	0.001176903	t/TJ
2021	TSP	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.223537719	t/TJ
2021	TSP	1A2gviii	WOOD RESIDUE CHIPS	0.075299873	t/TJ
2021	TSP	1A2gviii	WOOD STUMP CHIPS	0.000430692	t/TJ
2021	TSP	1A3ai(i)	KEROSENE (JET FUEL)	0.002871507	t/TJ
2021	TSP	1A3aii(i)	AVIATION GASOLINE	0.008100000	t/TJ
2021	TSP	1A3aii(i)	KEROSENE (JET FUEL)	0.002898941	t/TJ
2021	TSP	1A3bi	DIESEL OIL (S=001%)	0.007647045	t/TJ
2021	TSP	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000686597	t/TJ
2021	TSP	1A3bi	NATURAL GAS	0.000859124	t/TJ
2021	TSP	1A3bii	DIESEL OIL (S=001%)	0.018155843	t/TJ
2021	TSP	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000765252	t/TJ
2021	TSP	1A3bii	NATURAL GAS	0.000919734	t/TJ
2021	TSP	1A3biii	DIESEL OIL (S=001%)	0.002411821	t/TJ
2021	TSP	1A3biii	NATURAL GAS	0.000438746	t/TJ
2021	TSP	1A3biv	DIESEL OIL (S=001%)	0.125638178	t/TJ
2021	TSP	1A3biv	MOTOR GASOLINE (S=0.001%)	0.008932313	t/TJ
2021	TSP	1A3c	GASOIL (FOR NON-ROAD USE)	0.033291577	t/TJ
2021	TSP	1A3dii	DIESEL OIL (S=001%)	0.109956314	t/TJ
2021	TSP	1A3dii	GASOIL (FOR NON-ROAD USE)	0.029351364	t/TJ
2021	TSP	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.045511556	t/TJ
2021	TSP	1A3dii	MOTOR GASOLINE (S=0.001%)	0.127472543	t/TJ
2021	TSP	1A4ai	FOREST WOODFUEL	0.016831111	t/TJ
2021	TSP	1A4ai	HEAVY FUEL OIL (S<1%)	0.090000000	t/TJ
2021	TSP	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.007043488	t/TJ
2021	TSP	1A4ai	MOTOR GASOLINE (S=0.001%)	0.007000000	t/TJ
2021	TSP	1A4ai	NAPHTHA	0.007000000	t/TJ
2021	TSP	1A4ai	SOD PEAT	0.355319743	t/TJ
2021	TSP	1A4aii	GASOIL (FOR NON-ROAD USE)	0.013685301	t/TJ
2021	TSP	1A4aii	MOTOR GASOLINE (S=0.001%)	0.048957579	t/TJ
2021	TSP	1A4bi	FOREST WOODFUEL	0.159979118	t/TJ
2021	TSP	1A4bi	HEAVY FUEL OIL (S<1%)	0.090000000	t/TJ
2021	TSP	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.007000000	t/TJ
2021	TSP	1A4bi	PARAFFIN	0.007000000	t/TJ
2021	TSP	1A4bi	SOD PEAT	0.400000000	t/TJ
2021	TSP	1A4bii	GASOIL (FOR NON-ROAD USE)	0.070205765	t/TJ
2021	TSP	1A4bii	MOTOR GASOLINE (S=0.001%)	0.049703830	t/TJ
2021	TSP	1A4ci	CHIPS FROM ROUNDWOOD	0.100989478	t/TJ
2021	TSP	1A4ci	COAL (S=1.0%)	0.035000000	t/TJ
2021	TSP	1A4ci	FOREST WOODFUEL	0.016666667	t/TJ
2021	TSP	1A4ci	HEAVY FUEL OIL (S<1%)	0.090000000	t/TJ
2021	TSP	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.007000000	t/TJ
2021	TSP	1A4ci	OTHER NON-FOSSIL SOLID	0.004484305	t/TJ
2021	TSP	1A4ci	RECOVERED WOOD	0.137551582	t/TJ
2021	TSP	1A4ci	SOD PEAT	0.396844885	t/TJ
2021	TSP	1A4ci	WOOD RESIDUE CHIPS	0.869565217	t/TJ

2021	TSP	1A4cii	GASOIL (FOR NON-ROAD USE)	0.010970473	t/TJ
2021	TSP	1A4cii	MOTOR GASOLINE (S=0.001%)	0.129372175	t/TJ
2021	TSP	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.033035876	t/TJ
2021	TSP	1A5a	FOREST WOODFUEL	0.200000000	t/TJ
2021	TSP	1A5a	HEAVY FUEL OIL (S<1%)	0.090000000	t/TJ
2021	TSP	1A5a	KEROSENE (JET FUEL)	0.009917755	t/TJ
2021	TSP	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.010471108	t/TJ
2021	TSP	1A5a	OTHER PETROLEUM PRODUCTS	0.007000000	t/TJ

#### BC Implied emission factors in Finnish air pollutant inventory for 2021

2021	BC	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000006028	t/TJ
2021	BC	1A1a	ANIMAL-BASED FUELS	0.000816704	t/TJ
2021	BC	1A1a	ASPHALTENE	0.000015929	t/TJ
2021	BC	1A1a	BARK	0.000025655	t/TJ
2021	BC	1A1a	BIO PELLETS (NON-WOOD)	0.000031579	t/TJ
2021	BC	1A1a	BIO PYROLYSIS OIL	0.000027720	t/TJ
2021	BC	1A1a	CHIPS FROM ROUNDWOOD	0.000021652	t/TJ
2021	BC	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.000001916	t/TJ
2021	BC	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.000005465	t/TJ
2021	BC	1A1a	COAL (S=1.0%)	0.000012971	t/TJ
2021	BC	1A1a	CREOSOTED WOOD	0.000012371	t/TJ
2021	BC	1A1a	CUTTER CHIPS ETC.	0.000004146	t/TJ
2021	BC	1A1a	DEMOLITION WOOD	0.000019875	t/TJ
2021	BC	1A1a	FOREST RESIDUE CHIPS	0.000054074	t/TJ
2021	BC	1A1a	FOREST RESIDUE CHIPS	0.000032483	t/TJ
2021	BC	1A1a	GASOIL (FOR NON-ROAD USE)	0.000306092	t/TJ
2021	BC	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.009590763	t/TJ
2021	BC	1A1a	HEAVY FUEL OIL (S<0,1%)	0.000317607	t/TJ
2021	BC	1A1a	HEAVY FUEL OIL (S<0,5%)	0.000669435	t/TJ
2021	BC	1A1a	HEAVY FUEL OIL (S<1%)	0.001150279	t/TJ
2021	BC	1A1a	IMPREGNATED WOOD	0.000000061	t/TJ
2021	BC	1A1a	INDUSTRIAL WASTE	0.000004134	t/TJ
2021	BC	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.000149201	t/TJ
2021	BC	1A1a	LIGNIN	0.000012968	t/TJ
2021	BC	1A1a	MILLED PEAT	0.000029366	t/TJ
2021	BC	1A1a	MOTOR GASOLINE (S=0.001%)	0.000036697	t/TJ
2021	BC	1A1a	MUNICIPAL WASTE - unsorted	0.000000173	t/TJ
2021	BC	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.000058261	t/TJ
2021	BC	1A1a	OTHER FOSSIL SOLID	0.000012299	t/TJ
2021	BC	1A1a	OTHER NON-FOSSIL LIQUID	0.001243476	t/TJ
2021	BC	1A1a	OTHER NON-FOSSIL SOLID	0.000028840	t/TJ
2021	BC	1A1a	OTHER NON-FOSSIL SOLID	0.000002656	t/TJ
2021	BC	1A1a	OTHER WASTE	0.000048368	t/TJ
2021	BC	1A1a	OTHER WOOD RESIDUE	0.000012416	t/TJ
2021	BC	1A1a	PAPER	0.000003639	t/TJ
2021	BC	1A1a	PLASTIC WASTE	0.000091828	t/TJ
2021	BC	1A1a	PLYWOOD RESIDUE	0.000013710	t/TJ
2021	BC	1A1a	RECOVERED FUEL (REF 1)	0.000023306	t/TJ
2021	BC	1A1a	RECOVERED FUEL (REF 2)	0.000025482	t/TJ
2021	BC	1A1a	RECOVERED FUEL (REF 3)	0.000000686	t/TJ
2021	BC	1A1a	RECOVERED WOOD	0.000012092	t/TJ
2021	BC	1A1a	RECYCLED AND WASTE OILS	0.000254889	t/TJ
2021	BC	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000002003	t/TJ
2021	BC	1A1a	SAWDUST	0.000054477	t/TJ
2021	BC	1A1a	SAWDUST AND CUTTER CHIPS	0.000020124	t/TJ

2021	BC	1A1a	SOD PEAT	0.000326250	t/TJ
2021	BC	1A1a	SOLID RECOVERED FUEL (SRF)	0.000000079	t/TJ
2021	BC	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000033654	t/TJ
2021	BC	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000014764	t/TJ
2021	BC	1A1a	WOOD RESIDUE CHIPS	0.000022174	t/TJ
2021	BC	1A1a	WOOD STUMP CHIPS	0.000027807	t/TJ
2021	BC	1A1b	COKE (S=1.0%)	0.000150000	t/TJ
2021	BC	1A1b	HEAVY FUEL OIL (S<1%)	0.006720000	t/TJ
2021	BC	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.000069197	t/TJ
2021	BC	1A1b	OTHER FOSSIL LIQUID	0.000574508	t/TJ
2021	BC	1A1b	OTHER MEDIUM DISTILLATES	0.000061122	t/TJ
2021	BC	1A1b	PETROLEUM COKE	0.000054553	t/TJ
2021	BC	1A2a	COKE (S=1.0%)	0.000042827	t/TJ
2021	BC	1A2a	DIESEL OIL (S=001%)	0.000281400	t/TJ
2021	BC	1A2a	GASOIL (FOR NON-ROAD USE)	0.000421980	t/TJ
2021	BC	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.000293962	t/TJ
2021	BC	1A2a	OTHER FOSSIL SOLID	0.000097514	t/TJ
2021	BC	1A2a	WOOD RESIDUE CHIPS	0.000023481	t/TJ
2021	BC	1A2b	COAL (S=1.0%)	0.000038659	t/TJ
2021	BC	1A2b	COKE (S=1.0%)	0.000019146	t/TJ
2021	BC	1A2b	HEAVY FUEL OIL (S<1%)	0.001984100	t/TJ
2021	BC	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.000048988	t/TJ
2021	BC	1A2b	OTHER HEAVY DISTILLATES	0.000300209	t/TJ
2021	BC	1A2c	DIESEL OIL (S=001%)	0.000281400	t/TJ
2021	BC	1A2c	GASOIL (FOR NON-ROAD USE)	0.000532609	t/TJ
2021	BC	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.000679933	t/TJ
2021	BC	1A2c	HEAVY FUEL OIL (S<0,1%)	0.002312741	t/TJ
2021	BC	1A2c	HEAVY FUEL OIL (S<1%)	0.004769595	t/TJ
2021	BC	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.001156838	t/TJ
2021	BC	1A2c	NAPHTHA	0.000027720	t/TJ
2021	BC	1A2c	OTHER FOSSIL LIQUID	0.000392623	t/TJ
2021	BC	1A2c	TALL PITCH AND OIL	0.000198077	t/TJ
2021	BC	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000044344	t/TJ
2021	BC	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000026304	t/TJ
2021	BC	1A2d	ANIMAL-BASED FUELS	0.001661283	t/TJ
2021	BC	1A2d	BARK	0.000056119	t/TJ
2021	BC	1A2d	BIO PELLETS (NON-WOOD)	0.000019848	t/TJ
2021	BC	1A2d	BIOLOGICAL SLURRY	0.000004519	t/TJ
2021	BC	1A2d	CHIPS FROM ROUNDWOOD	0.000006846	t/TJ
2021	BC	1A2d	COAL (S=1.0%)	0.000010681	t/TJ
2021	BC	1A2d	CREOSOTED WOOD	0.000025381	t/TJ
2021	BC	1A2d	DEMOLITION WOOD	0.000026650	t/TJ
2021	BC	1A2d	FOREST RESIDUE CHIPS	0.000016031	t/TJ
2021	BC	1A2d	FOREST RESIDUE CHIPS	0.000017209	t/TJ
2021	BC	1A2d	GASOIL (FOR NON-ROAD USE)	0.001945739	t/TJ
2021	BC	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.000632293	t/TJ
2021	BC	1A2d	HEAVY FUEL OIL (S<0,1%)	0.000348987	t/TJ
2021	BC	1A2d	HEAVY FUEL OIL (S<0,5%)	0.028337349	t/TJ
2021	BC	1A2d	HEAVY FUEL OIL (S<1%)	0.001203545	t/TJ
2021	BC	1A2d	INDUSTRIAL WASTE	0.000340741	t/TJ
2021	BC	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.000217377	t/TJ
2021	BC	1A2d	METHANOL	0.000006541	t/TJ
2021	BC	1A2d	MILLED PEAT	0.000066928	t/TJ
2021	BC	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.000099356	t/TJ
2021	BC	1A2d	OTHER FOSSIL LIQUID	0.014070000	t/TJ
2021	BC	1A2d	OTHER FUEL	0.000115500	t/TJ

2021	BC	1A2d	OTHER NON-FOSSIL LIQUID	0.001225310	t/TJ
2021	BC	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000042869	t/TJ
2021	BC	1A2d	PAPER	0.000006081	t/TJ
2021	BC	1A2d	PLASTIC WASTE	0.000467986	t/TJ
2021	BC	1A2d	RECOVERED FUEL (REF 1)	0.000007267	t/TJ
2021	BC	1A2d	RECOVERED FUEL (REF 2)	0.000016151	t/TJ
2021	BC	1A2d	RECOVERED WOOD	0.000017306	t/TJ
2021	BC	1A2d	RECYCLED AND WASTE OILS	0.000518835	t/TJ
2021	BC	1A2d	SAWDUST AND CUTTER CHIPS	0.000032107	t/TJ
2021	BC	1A2d	TALL PITCH AND OIL	0.002091556	t/TJ
2021	BC	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000018960	t/TJ
2021	BC	1A2d	WOOD RESIDUE CHIPS	0.000022914	t/TJ
2021	BC	1A2e	ANIMAL-BASED FUELS	0.002969419	t/TJ
2021	BC	1A2e	BIO-FUEL OIL	0.000023661	t/TJ
2021	BC	1A2e	CHIPS FROM ROUNDWOOD	0.000398674	t/TJ
2021	BC	1A2e	COAL (S=1.0%)	0.000016793	t/TJ
2021	BC	1A2e	COKE (S=1.0%)	0.000150000	t/TJ
2021	BC	1A2e	FOREST RESIDUE CHIPS	0.000003548	t/TJ
2021	BC	1A2e	GASOIL (FOR NON-ROAD USE)	0.000268197	t/TJ
2021	BC	1A2e	HEAVY FUEL OIL (S<1%)	0.003803521	t/TJ
2021	BC	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.000202842	t/TJ
2021	BC	1A2e	MILLED PEAT	0.000008579	t/TJ
2021	BC	1A2e	OTHER NON-FOSSIL LIQUID	0.000090948	t/TJ
2021	BC	1A2e	OTHER NON-FOSSIL SOLID	0.000115500	t/TJ
2021	BC	1A2e	RECOVERED WOOD	0.000014908	t/TJ
2021	BC	1A2e	SAWDUST	0.000006347	t/TJ
2021	BC	1A2e	SAWDUST AND CUTTER CHIPS	0.000003548	t/TJ
2021	BC	1A2e	SOD PEAT	0.001880495	t/TJ
2021	BC	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000024804	t/TJ
2021	BC	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000330000	t/TJ
2021	BC	1A2f	CHIPS FROM ROUNDWOOD	0.000165964	t/TJ
2021	BC	1A2f	COAL (S=1.0%)	0.000001118	t/TJ
2021	BC	1A2f	COKE (S=1.0%)	0.000049767	t/TJ
2021	BC	1A2f	DIESEL OIL (S=0.01%)	0.000206096	t/TJ
2021	BC	1A2f	FOREST RESIDUE CHIPS	0.000085514	t/TJ
2021	BC	1A2f	GASOIL (FOR NON-ROAD USE)	0.000277569	t/TJ
2021	BC	1A2f	HEAVY FUEL OIL (S<1%)	0.006403272	t/TJ
2021	BC	1A2f	INDUSTRIAL WASTE	0.000006407	t/TJ
2021	BC	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.005048321	t/TJ
2021	BC	1A2f	OTHER FOSSIL LIQUID	0.000364138	t/TJ
2021	BC	1A2f	OTHER FOSSIL SOLID	0.000000839	t/TJ
2021	BC	1A2f	OTHER HEAVY DISTILLATES	0.000578595	t/TJ
2021	BC	1A2f	OTHER WASTE	0.000018404	t/TJ
2021	BC	1A2f	PETROLEUM COKE	0.000008285	t/TJ
2021	BC	1A2f	PLASTIC WASTE	0.000036613	t/TJ
2021	BC	1A2f	RECOVERED FUEL (REF 1)	0.000001812	t/TJ
2021	BC	1A2f	RECYCLED AND WASTE OILS	0.000069035	t/TJ
2021	BC	1A2f	RUBBER WASTE	0.000181427	t/TJ
2021	BC	1A2f	SAWDUST AND CUTTER CHIPS	0.000005753	t/TJ
2021	BC	1A2f	SOLID RECOVERED FUEL (SRF)	0.000001068	t/TJ
2021	BC	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000003575	t/TJ
2021	BC	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.010260244	t/TJ
2021	BC	1A2gvii	LIQUID GAS	0.000206912	t/TJ
2021	BC	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.000216508	t/TJ
2021	BC	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000007452	t/TJ
2021	BC	1A2gviii	BARK	0.000623411	t/TJ

2021	BC	1A2gviii	CHIPS FROM ROUNDWOOD	0.000005089	t/TJ
2021	BC	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000011476	t/TJ
2021	BC	1A2gviii	CREOSOTED WOOD	0.000010537	t/TJ
2021	BC	1A2gviii	CUTTER CHIPS ETC.	0.000074929	t/TJ
2021	BC	1A2gviii	DEMOLITION WOOD	0.000000319	t/TJ
2021	BC	1A2gviii	DIESEL OIL (S=001%)	0.000203892	t/TJ
2021	BC	1A2gviii	FOREST RESIDUE CHIPS	0.000022483	t/TJ
2021	BC	1A2gviii	FOREST RESIDUE CHIPS	0.000038859	t/TJ
2021	BC	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.000277944	t/TJ
2021	BC	1A2gviii	HAZARDOUS WASTE	0.000028792	t/TJ
2021	BC	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.001235727	t/TJ
2021	BC	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.006726216	t/TJ
2021	BC	1A2gviii	HEAVY FUEL OIL (S<1%)	0.007447529	t/TJ
2021	BC	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.000467043	t/TJ
2021	BC	1A2gviii	MILLED PEAT	0.000011151	t/TJ
2021	BC	1A2gviii	MUNICIPAL WASTE - unsorted	0.000000225	t/TJ
2021	BC	1A2gviii	NAPHTHA	0.000039600	t/TJ
2021	BC	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.000803237	t/TJ
2021	BC	1A2gviii	OTHER HEAVY DISTILLATES	0.001136109	t/TJ
2021	BC	1A2gviii	OTHER NON-FOSSIL LIQUID	0.000066569	t/TJ
2021	BC	1A2gviii	OTHER NON-FOSSIL SOLID	0.000005422	t/TJ
2021	BC	1A2gviii	OTHER WASTE	0.000011390	t/TJ
2021	BC	1A2gviii	OTHER WOOD RESIDUE	0.000476998	t/TJ
2021	BC	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.000072105	t/TJ
2021	BC	1A2gviii	PLASTIC WASTE	0.000209516	t/TJ
2021	BC	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.000274401	t/TJ
2021	BC	1A2gviii	RECOVERED WOOD	0.000015399	t/TJ
2021	BC	1A2gviii	RECYCLED AND WASTE OILS	0.000000032	t/TJ
2021	BC	1A2gviii	SAWDUST	0.000017877	t/TJ
2021	BC	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000429312	t/TJ
2021	BC	1A2gviii	SOD PEAT	0.000140148	t/TJ
2021	BC	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000000927	t/TJ
2021	BC	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000299958	t/TJ
2021	BC	1A2gviii	WASTE PELLETS	0.000010124	t/TJ
2021	BC	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000340937	t/TJ
2021	BC	1A2gviii	WOOD RESIDUE CHIPS	0.000161209	t/TJ
2021	BC	1A2gviii	WOOD STUMP CHIPS	0.000000249	t/TJ
2021	BC	1A3ai(i)	KEROSENE (JET FUEL)	0.001435753	t/TJ
2021	BC	1A3aii(i)	AVIATION GASOLINE	0.004050000	t/TJ
2021	BC	1A3aii(i)	KEROSENE (JET FUEL)	0.001449470	t/TJ
2021	BC	1A3bi	DIESEL OIL (S=001%)	0.004358816	t/TJ
2021	BC	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000082392	t/TJ
2021	BC	1A3bii	DIESEL OIL (S=001%)	0.009985713	t/TJ
2021	BC	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000038263	t/TJ
2021	BC	1A3biii	DIESEL OIL (S=001%)	0.001278265	t/TJ
2021	BC	1A3biv	DIESEL OIL (S=001%)	0.071613761	t/TJ
2021	BC	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000982554	t/TJ
2021	BC	1A3c	GASOIL (FOR NON-ROAD USE)	0.019504045	t/TJ
2021	BC	1A3dii	DIESEL OIL (S=001%)	0.060475973	t/TJ
2021	BC	1A3dii	GASOIL (FOR NON-ROAD USE)	0.009098923	t/TJ
2021	BC	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.005461387	t/TJ
2021	BC	1A3dii	MOTOR GASOLINE (S=0.001%)	0.006373627	t/TJ
2021	BC	1A4ai	FOREST WOODFUEL	0.000503700	t/TJ
2021	BC	1A4ai	HEAVY FUEL OIL (S<1%)	0.015120000	t/TJ
2021	BC	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.000281851	t/TJ
2021	BC	1A4ai	MOTOR GASOLINE (S=0.001%)	0.000027720	t/TJ

2021	BC	1A4ai	NAPHTHA	0.000027720	t/TJ
2021	BC	1A4ai	SOD PEAT	0.000586278	t/TJ
2021	BC	1A4aii	GASOIL (FOR NON-ROAD USE)	0.005610973	t/TJ
2021	BC	1A4aii	MOTOR GASOLINE (S=0.001%)	0.002447879	t/TJ
2021	BC	1A4bi	FOREST WOODFUEL	0.042977472	t/TJ
2021	BC	1A4bi	HEAVY FUEL OIL (S<1%)	0.006210000	t/TJ
2021	BC	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.001641500	t/TJ
2021	BC	1A4bi	PARAFFIN	0.003528000	t/TJ
2021	BC	1A4bi	SOD PEAT	0.010560000	t/TJ
2021	BC	1A4bii	GASOIL (FOR NON-ROAD USE)	0.028784364	t/TJ
2021	BC	1A4bii	MOTOR GASOLINE (S=0.001%)	0.002485191	t/TJ
2021	BC	1A4ci	CHIPS FROM ROUNDWOOD	0.001166428	t/TJ
2021	BC	1A4ci	COAL (S=1.0%)	0.000075987	t/TJ
2021	BC	1A4ci	FOREST WOODFUEL	0.000500000	t/TJ
2021	BC	1A4ci	HEAVY FUEL OIL (S<1%)	0.015120000	t/TJ
2021	BC	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.000281400	t/TJ
2021	BC	1A4ci	OTHER NON-FOSSIL SOLID	0.000025897	t/TJ
2021	BC	1A4ci	RECOVERED WOOD	0.001588721	t/TJ
2021	BC	1A4ci	SOD PEAT	0.000654794	t/TJ
2021	BC	1A4ci	WOOD RESIDUE CHIPS	0.000502174	t/TJ
2021	BC	1A4cii	GASOIL (FOR NON-ROAD USE)	0.006307468	t/TJ
2021	BC	1A4cii	MOTOR GASOLINE (S=0.001%)	0.006468609	t/TJ
2021	BC	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.010241122	t/TJ
2021	BC	1A5a	FOREST WOODFUEL	0.002800000	t/TJ
2021	BC	1A5a	HEAVY FUEL OIL (S<1%)	0.015120000	t/TJ
2021	BC	1A5a	KEROSENE (JET FUEL)	0.004760522	t/TJ
2021	BC	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.001372191	t/TJ
2021	BC	1A5a	OTHER PETROLEUM PRODUCTS	0.000047040	t/TJ

#### CO Implied emission factors in Finnish air pollutant inventory for 2021

2021	CO	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.123552671	t/TJ
2021	CO	1A1a	ANIMAL-BASED FUELS	0.013614666	t/TJ
2021	CO	1A1a	ASPHALTENE	0.020000000	t/TJ
2021	CO	1A1a	BARK	0.076063184	t/TJ
2021	CO	1A1a	BIO PELLETS (NON-WOOD)	0.150000000	t/TJ
2021	CO	1A1a	BIO PYROLYSIS OIL	0.020000000	t/TJ
2021	CO	1A1a	BLAST FURNACE GAS	0.020000000	t/TJ
2021	CO	1A1a	CHIPS FROM ROUNDWOOD	0.159133648	t/TJ
2021	CO	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.500000000	t/TJ
2021	CO	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.500000000	t/TJ
2021	CO	1A1a	COAL (S=1.0%)	0.033194160	t/TJ
2021	CO	1A1a	COKE OVEN GAS	0.020000000	t/TJ
2021	CO	1A1a	CREOSOTED WOOD	0.008792543	t/TJ
2021	CO	1A1a	CUTTER CHIPS ETC.	0.100280780	t/TJ
2021	CO	1A1a	DEINKING WASTE	0.023123062	t/TJ
2021	CO	1A1a	DEMOLITION WOOD	0.021333159	t/TJ
2021	CO	1A1a	FOREST RESIDUE CHIPS	0.144210220	t/TJ
2021	CO	1A1a	FOREST RESIDUE CHIPS	0.437964782	t/TJ
2021	CO	1A1a	GASIFIED WASTE	0.046000000	t/TJ
2021	CO	1A1a	GASOIL (FOR NON-ROAD USE)	0.030761025	t/TJ
2021	CO	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.012386361	t/TJ
2021	CO	1A1a	HEAVY FUEL OIL (S<0,1%)	0.013614666	t/TJ
2021	CO	1A1a	HEAVY FUEL OIL (S<0,5%)	0.020747250	t/TJ
2021	CO	1A1a	HEAVY FUEL OIL (S<1%)	0.030273215	t/TJ
2021	CO	1A1a	HYDROGEN	0.020000190	t/TJ

2021	CO	1A1a	IMPREGNATED WOOD	0.002336256	t/TJ
2021	CO	1A1a	INDUSTRIAL BIOGAS	0.382627130	t/TJ
2021	CO	1A1a	INDUSTRIAL WASTE	0.005268565	t/TJ
2021	CO	1A1a	LANDFILL GAS	0.020000000	t/TJ
2021	CO	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.023546911	t/TJ
2021	CO	1A1a	LIGNIN	0.003674055	t/TJ
2021	CO	1A1a	LIQUEFIED NATURAL GAS (LNG)	0.000241596	t/TJ
2021	CO	1A1a	LIQUID GAS	0.031531951	t/TJ
2021	CO	1A1a	MILLED PEAT	0.043326505	t/TJ
2021	CO	1A1a	MOTOR GASOLINE (S=0.001%)	0.020000000	t/TJ
2021	CO	1A1a	MUNICIPAL WASTE - unsorted	0.003588263	t/TJ
2021	CO	1A1a	NATURAL GAS	0.015363659	t/TJ
2021	CO	1A1a	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.149824676	t/TJ
2021	CO	1A1a	OTHER FOSSIL GAS	0.821883691	t/TJ
2021	CO	1A1a	OTHER FOSSIL SOLID	0.020243216	t/TJ
2021	CO	1A1a	OTHER NON-FOSSIL GAS	0.018171665	t/TJ
2021	CO	1A1a	OTHER NON-FOSSIL LIQUID	0.105326785	t/TJ
2021	CO	1A1a	OTHER NON-FOSSIL SOLID	0.100000000	t/TJ
2021	CO	1A1a	OTHER NON-FOSSIL SOLID	0.148801118	t/TJ
2021	CO	1A1a	OTHER WASTE	0.022479343	t/TJ
2021	CO	1A1a	OTHER WOOD RESIDUE	0.134008487	t/TJ
2021	CO	1A1a	PAPER	0.394037152	t/TJ
2021	CO	1A1a	PLASTIC WASTE	0.036392425	t/TJ
2021	CO	1A1a	PLYWOOD RESIDUE	0.107574360	t/TJ
2021	CO	1A1a	RECOVERED FUEL (REF 1)	0.014672751	t/TJ
2021	CO	1A1a	RECOVERED FUEL (REF 2)	0.008488419	t/TJ
2021	CO	1A1a	RECOVERED FUEL (REF 3)	0.005264632	t/TJ
2021	CO	1A1a	RECOVERED WOOD	0.038148203	t/TJ
2021	CO	1A1a	RECYCLED AND WASTE OILS	0.012942968	t/TJ
2021	CO	1A1a	REFINERY GAS	0.176470588	t/TJ
2021	CO	1A1a	REFUSE-DERIVED FUEL (RDF)	0.004857550	t/TJ
2021	CO	1A1a	SAWDUST	0.292963973	t/TJ
2021	CO	1A1a	SAWDUST AND CUTTER CHIPS	0.076468129	t/TJ
2021	CO	1A1a	SOD PEAT	0.116396138	t/TJ
2021	CO	1A1a	SOLID RECOVERED FUEL (SRF)	0.250000000	t/TJ
2021	CO	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.216486311	t/TJ
2021	CO	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.172599592	t/TJ
2021	CO	1A1a	WOOD RESIDUE CHIPS	0.207139324	t/TJ
2021	CO	1A1a	WOOD STUMP CHIPS	0.196388133	t/TJ
2021	CO	1A1b	COKE (S=1.0%)	1.408062052	t/TJ
2021	CO	1A1b	HEAVY FUEL OIL (S<1%)	0.058826686	t/TJ
2021	CO	1A1b	INDUSTRIAL BIOGAS	0.020000000	t/TJ
2021	CO	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.020000000	t/TJ
2021	CO	1A1b	LIQUID GAS	0.058826686	t/TJ
2021	CO	1A1b	NATURAL GAS	0.020741418	t/TJ
2021	CO	1A1b	OTHER FOSSIL GAS	0.020000000	t/TJ
2021	CO	1A1b	OTHER FOSSIL LIQUID	0.020000000	t/TJ
2021	CO	1A1b	OTHER MEDIUM DISTILLATES	0.020000000	t/TJ
2021	CO	1A1b	PETROLEUM COKE	0.030000000	t/TJ
2021	CO	1A1b	REFINERY GAS	0.024086291	t/TJ
2021	CO	1A2a	BLAST FURNACE GAS	0.020000000	t/TJ
2021	CO	1A2a	COKE (S=1.0%)	0.639652821	t/TJ
2021	CO	1A2a	COKE OVEN GAS	0.020000000	t/TJ
2021	CO	1A2a	DIESEL OIL (S=0.01%)	0.020000000	t/TJ
2021	CO	1A2a	GASOIL (FOR NON-ROAD USE)	0.025774337	t/TJ

2021	CO	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.018296513	t/TJ
2021	CO	1A2a	LIQUID GAS	0.023064744	t/TJ
2021	CO	1A2a	NATURAL GAS	0.019827717	t/TJ
2021	CO	1A2a	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A2a	OTHER FOSSIL SOLID	1.500000000	t/TJ
2021	CO	1A2a	WOOD RESIDUE CHIPS	0.009939011	t/TJ
2021	CO	1A2b	COAL (S=1.0%)	0.030000000	t/TJ
2021	CO	1A2b	COKE (S=1.0%)	0.020000000	t/TJ
2021	CO	1A2b	HEAVY FUEL OIL (S<1%)	0.020000000	t/TJ
2021	CO	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.020668972	t/TJ
2021	CO	1A2b	LIQUEFIED NATURAL GAS (LNG)	0.020000000	t/TJ
2021	CO	1A2b	LIQUID GAS	0.295176003	t/TJ
2021	CO	1A2b	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A2b	OTHER HEAVY DISTILLATES	0.020000000	t/TJ
2021	CO	1A2c	DIESEL OIL (S=001%)	128.484848485	t/TJ
2021	CO	1A2c	GASIFIED WASTE	0.000068256	t/TJ
2021	CO	1A2c	GASOIL (FOR NON-ROAD USE)	0.020000000	t/TJ
2021	CO	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.008901237	t/TJ
2021	CO	1A2c	HEAVY FUEL OIL (S<0,1%)	0.020000000	t/TJ
2021	CO	1A2c	HEAVY FUEL OIL (S<1%)	0.019792365	t/TJ
2021	CO	1A2c	HYDROGEN	0.020000000	t/TJ
2021	CO	1A2c	INDUSTRIAL BIOGAS	0.020000000	t/TJ
2021	CO	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.019494905	t/TJ
2021	CO	1A2c	LIQUEFIED NATURAL GAS (LNG)	0.020000000	t/TJ
2021	CO	1A2c	LIQUID GAS	0.019961748	t/TJ
2021	CO	1A2c	NAPHTHA	0.020000000	t/TJ
2021	CO	1A2c	NATURAL GAS	0.015130597	t/TJ
2021	CO	1A2c	OTHER FOSSIL GAS	0.020000000	t/TJ
2021	CO	1A2c	OTHER FOSSIL LIQUID	0.019975908	t/TJ
2021	CO	1A2c	OTHER NON-FOSSIL GAS	0.020000000	t/TJ
2021	CO	1A2c	REFINERY GAS	0.020000000	t/TJ
2021	CO	1A2c	TALL PITCH AND OIL	0.019964424	t/TJ
2021	CO	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.160714286	t/TJ
2021	CO	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.216333012	t/TJ
2021	CO	1A2d	ANIMAL-BASED FUELS	0.015223247	t/TJ
2021	CO	1A2d	AROMATIC GAS	0.016466566	t/TJ
2021	CO	1A2d	BARK	0.065341067	t/TJ
2021	CO	1A2d	BIO PELLETS (NON-WOOD)	0.015223247	t/TJ
2021	CO	1A2d	BIOGAS FROM WASTEWATER TREATMENT	0.015304569	t/TJ
2021	CO	1A2d	BIOLOGICAL SLURRY	0.114784267	t/TJ
2021	CO	1A2d	BLACK LIQUOR	0.078395288	t/TJ
2021	CO	1A2d	CHIPS FROM ROUNDWOOD	0.225743294	t/TJ
2021	CO	1A2d	COAL (S=1.0%)	0.010060084	t/TJ
2021	CO	1A2d	CREOSOTED WOOD	0.015223247	t/TJ
2021	CO	1A2d	DEMOLITION WOOD	0.015223247	t/TJ
2021	CO	1A2d	FOREST RESIDUE CHIPS	0.150000000	t/TJ
2021	CO	1A2d	FOREST RESIDUE CHIPS	0.059287937	t/TJ
2021	CO	1A2d	GASOIL (FOR NON-ROAD USE)	0.020000000	t/TJ
2021	CO	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.058571192	t/TJ
2021	CO	1A2d	HEAVY FUEL OIL (S<0,1%)	0.017745397	t/TJ
2021	CO	1A2d	HEAVY FUEL OIL (S<0,5%)	0.020000000	t/TJ
2021	CO	1A2d	HEAVY FUEL OIL (S<1%)	0.065558161	t/TJ
2021	CO	1A2d	HYDROGEN	0.020000000	t/TJ
2021	CO	1A2d	INDUSTRIAL BIOGAS	0.020000000	t/TJ
2021	CO	1A2d	INDUSTRIAL WASTE	0.009550656	t/TJ
2021	CO	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.022976119	t/TJ

2021	CO	1A2d	LIQUEFIED NATURAL GAS (LNG)	0.020000000	t/TJ
2021	CO	1A2d	LIQUID GAS	0.020000801	t/TJ
2021	CO	1A2d	METHANOL	0.069724885	t/TJ
2021	CO	1A2d	MILLED PEAT	0.053171532	t/TJ
2021	CO	1A2d	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A2d	NATURAL GAS	0.035693010	t/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	CO	1A2d	TRY	0.150000000	t/TJ
2021	CO	1A2d	OTHER FOSSIL LIQUID	0.020000000	t/TJ
2021	CO	1A2d	OTHER FUEL	0.150000000	t/TJ
2021	CO	1A2d	OTHER INDUSTRIAL AROMATIC GAS	0.046000000	t/TJ
2021	CO	1A2d	OTHER NON-FOSSIL LIQUID	0.088171052	t/TJ
2021	CO	1A2d	OTHER WOOD RESIDUE	0.500000000	t/TJ
2021	CO	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000010561	t/TJ
2021	CO	1A2d	PAPER	0.408619608	t/TJ
2021	CO	1A2d	PLASTIC WASTE	0.009074905	t/TJ
2021	CO	1A2d	RECOVERED FUEL (REF 1)	0.250000000	t/TJ
2021	CO	1A2d	RECOVERED FUEL (REF 2)	0.015223247	t/TJ
2021	CO	1A2d	RECOVERED WOOD	0.068960323	t/TJ
2021	CO	1A2d	RECYCLED AND WASTE OILS	0.015223247	t/TJ
2021	CO	1A2d	SAWDUST AND CUTTER CHIPS	0.155218547	t/TJ
2021	CO	1A2d	SULPHITE LIQUOR	0.150000000	t/TJ
2021	CO	1A2d	TALL PITCH AND OIL	0.032586388	t/TJ
2021	CO	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.242639198	t/TJ
2021	CO	1A2d	WOOD RESIDUE CHIPS	0.013820583	t/TJ
2021	CO	1A2e	ANIMAL-BASED FUELS	0.310968351	t/TJ
2021	CO	1A2e	BIO-FUEL OIL	0.020000000	t/TJ
2021	CO	1A2e	CHIPS FROM ROUNDWOOD	0.500000000	t/TJ
2021	CO	1A2e	COAL (S=1.0%)	0.030000000	t/TJ
2021	CO	1A2e	COKE (S=1.0%)	0.050000000	t/TJ
2021	CO	1A2e	FOREST RESIDUE CHIPS	0.500000000	t/TJ
2021	CO	1A2e	GASOIL (FOR NON-ROAD USE)	0.020000000	t/TJ
2021	CO	1A2e	HEAVY FUEL OIL (S<1%)	0.019710571	t/TJ
2021	CO	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.020305894	t/TJ
2021	CO	1A2e	LIQUEFIED NATURAL GAS (LNG)	0.001138354	t/TJ
2021	CO	1A2e	LIQUID GAS	0.012534489	t/TJ
2021	CO	1A2e	MILLED PEAT	0.093326392	t/TJ
2021	CO	1A2e	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A2e	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A2e	OTHER NON-FOSSIL GAS	0.020000000	t/TJ
2021	CO	1A2e	OTHER NON-FOSSIL LIQUID	0.250000000	t/TJ
2021	CO	1A2e	OTHER NON-FOSSIL SOLID	0.150000000	t/TJ
2021	CO	1A2e	RECOVERED WOOD	0.150000000	t/TJ
2021	CO	1A2e	SAWDUST	0.500000000	t/TJ
2021	CO	1A2e	SAWDUST AND CUTTER CHIPS	0.070000000	t/TJ
2021	CO	1A2e	SOD PEAT	0.500000000	t/TJ
2021	CO	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.500000000	t/TJ
2021	CO	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.400000000	t/TJ
2021	CO	1A2f	CHIPS FROM ROUNDWOOD	0.400000000	t/TJ
2021	CO	1A2f	COAL (S=1.0%)	0.883685478	t/TJ
2021	CO	1A2f	COKE (S=1.0%)	0.003143977	t/TJ
2021	CO	1A2f	COKE OVEN GAS	0.020000000	t/TJ
2021	CO	1A2f	DIESEL OIL (S=001%)	0.020000000	t/TJ
2021	CO	1A2f	FOREST RESIDUE CHIPS	0.400000000	t/TJ
2021	CO	1A2f	GASOIL (FOR NON-ROAD USE)	0.020220092	t/TJ
2021	CO	1A2f	HEAVY FUEL OIL (S<1%)	0.113828858	t/TJ
2021	CO	1A2f	INDUSTRIAL BIOGAS	0.020000000	t/TJ

2021	CO	1A2f	INDUSTRIAL WASTE	0.150000000	t/TJ
2021	CO	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.179189388	t/TJ
2021	CO	1A2f	LIQUID GAS	0.017995297	t/TJ
2021	CO	1A2f	NATURAL GAS	0.104690591	t/TJ
2021	CO	1A2f	NATURAL GAS	0.023091847	t/TJ
2021	CO	1A2f	OTHER FOSSIL GAS	0.020000000	t/TJ
2021	CO	1A2f	OTHER FOSSIL LIQUID	0.020000000	t/TJ
2021	CO	1A2f	OTHER FOSSIL SOLID	0.020000000	t/TJ
2021	CO	1A2f	OTHER HEAVY DISTILLATES	0.020000000	t/TJ
2021	CO	1A2f	OTHER NON-FOSSIL GAS	0.020000000	t/TJ
2021	CO	1A2f	OTHER WASTE	0.150000000	t/TJ
2021	CO	1A2f	PETROLEUM COKE	1.049000488	t/TJ
2021	CO	1A2f	PLASTIC WASTE	0.150000000	t/TJ
2021	CO	1A2f	RECOVERED FUEL (REF 1)	0.250000000	t/TJ
2021	CO	1A2f	RECYCLED AND WASTE OILS	0.473490581	t/TJ
2021	CO	1A2f	RUBBER WASTE	1.500000000	t/TJ
2021	CO	1A2f	SAWDUST AND CUTTER CHIPS	0.430942206	t/TJ
2021	CO	1A2f	SOLID RECOVERED FUEL (SRF)	0.250000000	t/TJ
2021	CO	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	9.139496684	t/TJ
2021	CO	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.312618213	t/TJ
2021	CO	1A2gvii	LIQUID GAS	0.951071747	t/TJ
2021	CO	1A2gvii	MOTOR GASOLINE (S=0.001%)	24.151349137	t/TJ
2021	CO	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.127067713	t/TJ
2021	CO	1A2gviii	BARK	0.295752971	t/TJ
2021	CO	1A2gviii	BIOGAS FROM WASTEWATER TREATMENT	0.242633896	t/TJ
2021	CO	1A2gviii	CHIPS FROM ROUNDWOOD	0.050903092	t/TJ
2021	CO	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.500000000	t/TJ
2021	CO	1A2gviii	CREOSOTED WOOD	0.002845346	t/TJ
2021	CO	1A2gviii	CUTTER CHIPS ETC.	0.389508025	t/TJ
2021	CO	1A2gviii	DEMOLITION WOOD	0.000441174	t/TJ
2021	CO	1A2gviii	DIESEL OIL (S=0.001%)	0.577589498	t/TJ
2021	CO	1A2gviii	FOREST RESIDUE CHIPS	0.453678140	t/TJ
2021	CO	1A2gviii	FOREST RESIDUE CHIPS	0.165813021	t/TJ
2021	CO	1A2gviii	GASIFIED WASTE	0.046000000	t/TJ
2021	CO	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.019834864	t/TJ
2021	CO	1A2gviii	HAZARDOUS WASTE	0.003345245	t/TJ
2021	CO	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.018479255	t/TJ
2021	CO	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.020000000	t/TJ
2021	CO	1A2gviii	HEAVY FUEL OIL (S<1%)	0.022888882	t/TJ
2021	CO	1A2gviii	INDUSTRIAL BIOGAS	0.020000000	t/TJ
2021	CO	1A2gviii	LANDFILL GAS	0.227366202	t/TJ
2021	CO	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.029226226	t/TJ
2021	CO	1A2gviii	LIQUEFIED NATURAL GAS (LNG)	0.020000000	t/TJ
2021	CO	1A2gviii	LIQUID GAS	0.022399159	t/TJ
2021	CO	1A2gviii	MILLED PEAT	0.029277693	t/TJ
2021	CO	1A2gviii	MUNICIPAL WASTE - unsorted	0.003783561	t/TJ
2021	CO	1A2gviii	NAPHTHA	0.020000000	t/TJ
2021	CO	1A2gviii	NATURAL GAS	0.088355919	t/TJ
2021	CO	1A2gviii	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.575539568	t/TJ
2021	CO	1A2gviii	OTHER HEAVY DISTILLATES	0.020000000	t/TJ
2021	CO	1A2gviii	OTHER NON-FOSSIL GAS	0.020023168	t/TJ
2021	CO	1A2gviii	OTHER NON-FOSSIL LIQUID	0.250000000	t/TJ
2021	CO	1A2gviii	OTHER NON-FOSSIL SOLID	0.077138423	t/TJ
2021	CO	1A2gviii	OTHER WASTE	0.000359663	t/TJ
2021	CO	1A2gviii	OTHER WOOD RESIDUE	0.620884545	t/TJ

2021	CO	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.100000000	t/TJ
2021	CO	1A2gviii	PLASTIC WASTE	0.002590114	t/TJ
2021	CO	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.031234906	t/TJ
2021	CO	1A2gviii	RECOVERED WOOD	0.041322880	t/TJ
2021	CO	1A2gviii	RECYCLED AND WASTE OILS	0.000260642	t/TJ
2021	CO	1A2gviii	SAWDUST	0.250000000	t/TJ
2021	CO	1A2gviii	SAWDUST AND CUTTER CHIPS	0.154474961	t/TJ
2021	CO	1A2gviii	SOD PEAT	0.500000000	t/TJ
2021	CO	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.005284294	t/TJ
2021	CO	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.381607321	t/TJ
2021	CO	1A2gviii	WASTE PELLETS	0.150000000	t/TJ
2021	CO	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	4.464702849	t/TJ
2021	CO	1A2gviii	WOOD RESIDUE CHIPS	0.465959387	t/TJ
2021	CO	1A2gviii	WOOD STUMP CHIPS	0.001419059	t/TJ
2021	CO	1A3ai(i)	KEROSENE (JET FUEL)	0.280618716	t/TJ
2021	CO	1A3aii(i)	AVIATION GASOLINE	26.879449456	t/TJ
2021	CO	1A3aii(i)	KEROSENE (JET FUEL)	0.341800004	t/TJ
2021	CO	1A3bi	DIESEL OIL (S=001%)	0.034244815	t/TJ
2021	CO	1A3bi	MOTOR GASOLINE (S=0.001%)	0.388988130	t/TJ
2021	CO	1A3bi	NATURAL GAS	0.257767477	t/TJ
2021	CO	1A3bii	DIESEL OIL (S=001%)	0.112101090	t/TJ
2021	CO	1A3bii	MOTOR GASOLINE (S=0.001%)	2.360958681	t/TJ
2021	CO	1A3bii	NATURAL GAS	0.276064657	t/TJ
2021	CO	1A3biii	DIESEL OIL (S=001%)	0.042517267	t/TJ
2021	CO	1A3biii	NATURAL GAS	0.080455418	t/TJ
2021	CO	1A3biv	DIESEL OIL (S=001%)	0.950725933	t/TJ
2021	CO	1A3biv	MOTOR GASOLINE (S=0.001%)	2.456713859	t/TJ
2021	CO	1A3c	GASOIL (FOR NON-ROAD USE)	0.224027628	t/TJ
2021	CO	1A3dii	DIESEL OIL (S=001%)	0.501974477	t/TJ
2021	CO	1A3dii	GASOIL (FOR NON-ROAD USE)	0.185509129	t/TJ
2021	CO	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.195886754	t/TJ
2021	CO	1A3dii	MOTOR GASOLINE (S=0.001%)	14.265195347	t/TJ
2021	CO	1A3ei	NATURAL GAS	0.020000000	t/TJ
2021	CO	1A4ai	FOREST WOODFUEL	0.229078000	t/TJ
2021	CO	1A4ai	GASOIL (FOR NON-ROAD USE)	0.020000000	t/TJ
2021	CO	1A4ai	HEAVY FUEL OIL (S<1%)	0.020000000	t/TJ
2021	CO	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.020704824	t/TJ
2021	CO	1A4ai	MOTOR GASOLINE (S=0.001%)	0.020000000	t/TJ
2021	CO	1A4ai	NAPHTHA	0.020000000	t/TJ
2021	CO	1A4ai	NATURAL GAS	0.048382631	t/TJ
2021	CO	1A4ai	SOD PEAT	0.177659872	t/TJ
2021	CO	1A4aii	GASOIL (FOR NON-ROAD USE)	0.287812464	t/TJ
2021	CO	1A4aii	MOTOR GASOLINE (S=0.001%)	22.534554320	t/TJ
2021	CO	1A4bi	FOREST WOODFUEL	2.860557993	t/TJ
2021	CO	1A4bi	HEAVY FUEL OIL (S<1%)	0.020000000	t/TJ
2021	CO	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.020000000	t/TJ
2021	CO	1A4bi	LIQUID GAS	0.050000000	t/TJ
2021	CO	1A4bi	NATURAL GAS	0.050000000	t/TJ
2021	CO	1A4bi	PARAFFIN	0.020000000	t/TJ
2021	CO	1A4bi	SOD PEAT	0.200000000	t/TJ
2021	CO	1A4bii	GASOIL (FOR NON-ROAD USE)	0.411499028	t/TJ
2021	CO	1A4bii	MOTOR GASOLINE (S=0.001%)	22.556101704	t/TJ
2021	CO	1A4ci	CHIPS FROM ROUNDWOOD	0.500000000	t/TJ
2021	CO	1A4ci	COAL (S=1.0%)	0.050000000	t/TJ
2021	CO	1A4ci	FOREST WOODFUEL	0.233000000	t/TJ
2021	CO	1A4ci	HEAVY FUEL OIL (S<1%)	0.020000000	t/TJ

2021	CO	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.020000000	t/TJ
2021	CO	1A4ci	LIQUID GAS	0.050000000	t/TJ
2021	CO	1A4ci	NATURAL GAS	0.050000000	t/TJ
2021	CO	1A4ci	OTHER NON-FOSSIL SOLID	0.150000000	t/TJ
2021	CO	1A4ci	RECOVERED WOOD	0.150000000	t/TJ
2021	CO	1A4ci	SOD PEAT	0.202630505	t/TJ
2021	CO	1A4ci	WOOD RESIDUE CHIPS	0.500000000	t/TJ
2021	CO	1A4cii	GASOIL (FOR NON-ROAD USE)	0.242251117	t/TJ
2021	CO	1A4cii	MOTOR GASOLINE (S=0.001%)	19.022174781	t/TJ
2021	CO	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.198215259	t/TJ
2021	CO	1A5a	AVIATION GASOLINE	23.437500000	t/TJ
2021	CO	1A5a	FOREST WOODFUEL	0.500000000	t/TJ
2021	CO	1A5a	HEAVY FUEL OIL (S<1%)	0.020000000	t/TJ
2021	CO	1A5a	KEROSENE (JET FUEL)	0.241896468	t/TJ
2021	CO	1A5a	LANDFILL GAS	0.050000000	t/TJ
2021	CO	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.046700574	t/TJ
2021	CO	1A5a	LIQUID GAS	0.050000000	t/TJ
2021	CO	1A5a	OTHER PETROLEUM PRODUCTS	0.020000000	t/TJ

#### Pb Implied emission factors in Finnish air pollutant inventory for 2021

2021	Pb	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.002597165	kg/TJ
2021	Pb	1A1a	ANIMAL-BASED FUELS	0.001698230	kg/TJ
2021	Pb	1A1a	ASPHALTENE	0.000073312	kg/TJ
2021	Pb	1A1a	BARK	0.004253191	kg/TJ
2021	Pb	1A1a	BIO PELLETS (NON-WOOD)	0.003400000	kg/TJ
2021	Pb	1A1a	CHIPS FROM ROUNDWOOD	0.003041074	kg/TJ
2021	Pb	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.027261062	kg/TJ
2021	Pb	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.028629402	kg/TJ
2021	Pb	1A1a	COAL (S=1.0%)	0.001233521	kg/TJ
2021	Pb	1A1a	CREOSOTED WOOD	0.003127451	kg/TJ
2021	Pb	1A1a	CUTTER CHIPS ETC.	0.029253995	kg/TJ
2021	Pb	1A1a	DEINKING WASTE	0.018787163	kg/TJ
2021	Pb	1A1a	DEMOLITION WOOD	0.001213645	kg/TJ
2021	Pb	1A1a	FOREST RESIDUE CHIPS	0.037098948	kg/TJ
2021	Pb	1A1a	FOREST RESIDUE CHIPS	0.009393158	kg/TJ
2021	Pb	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.014393581	kg/TJ
2021	Pb	1A1a	HEAVY FUEL OIL (S<0,1%)	0.001947970	kg/TJ
2021	Pb	1A1a	HEAVY FUEL OIL (S<0,5%)	0.023211945	kg/TJ
2021	Pb	1A1a	HEAVY FUEL OIL (S<1%)	0.015675636	kg/TJ
2021	Pb	1A1a	IMPREGNATED WOOD	0.003400000	kg/TJ
2021	Pb	1A1a	INDUSTRIAL WASTE	0.001029372	kg/TJ
2021	Pb	1A1a	LIGNIN	0.003400000	kg/TJ
2021	Pb	1A1a	MILLED PEAT	0.008573130	kg/TJ
2021	Pb	1A1a	MUNICIPAL WASTE - unsorted	0.013900160	kg/TJ
2021	Pb	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.003397443	kg/TJ
2021	Pb	1A1a	OTHER FOSSIL SOLID	0.002968662	kg/TJ
2021	Pb	1A1a	OTHER NON-FOSSIL SOLID	0.003416846	kg/TJ
2021	Pb	1A1a	OTHER NON-FOSSIL SOLID	0.045000000	kg/TJ
2021	Pb	1A1a	OTHER WASTE	0.000520943	kg/TJ
2021	Pb	1A1a	OTHER WOOD RESIDUE	0.011142065	kg/TJ
2021	Pb	1A1a	PAPER	0.001112241	kg/TJ
2021	Pb	1A1a	PLASTIC WASTE	0.000116506	kg/TJ
2021	Pb	1A1a	PLYWOOD RESIDUE	0.001814526	kg/TJ
2021	Pb	1A1a	RECOVERED FUEL (REF 1)	0.045000000	kg/TJ
2021	Pb	1A1a	RECOVERED FUEL (REF 2)	0.001954724	kg/TJ

2021	Pb	1A1a	RECOVERED FUEL (REF 3)	0.001029337	kg/TJ
2021	Pb	1A1a	RECOVERED WOOD	0.002360444	kg/TJ
2021	Pb	1A1a	RECYCLED AND WASTE OILS	0.002079871	kg/TJ
2021	Pb	1A1a	REFUSE-DERIVED FUEL (RDF)	0.001046154	kg/TJ
2021	Pb	1A1a	SAWDUST	0.023429532	kg/TJ
2021	Pb	1A1a	SAWDUST AND CUTTER CHIPS	0.004143519	kg/TJ
2021	Pb	1A1a	SOD PEAT	0.169668946	kg/TJ
2021	Pb	1A1a	SOLID RECOVERED FUEL (SRF)	0.000131962	kg/TJ
2021	Pb	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.007386347	kg/TJ
2021	Pb	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.006064314	kg/TJ
2021	Pb	1A1a	WOOD RESIDUE CHIPS	0.016388417	kg/TJ
2021	Pb	1A1a	WOOD STUMP CHIPS	0.046277246	kg/TJ
2021	Pb	1A1b	COKE (S=1.0%)	0.790000000	kg/TJ
2021	Pb	1A1b	HEAVY FUEL OIL (S<1%)	0.025000000	kg/TJ
2021	Pb	1A1b	PETROLEUM COKE	0.790000000	kg/TJ
2021	Pb	1A2a	WOOD RESIDUE CHIPS	0.045000000	kg/TJ
2021	Pb	1A2b	HEAVY FUEL OIL (S<1%)	0.002862797	kg/TJ
2021	Pb	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.025000000	kg/TJ
2021	Pb	1A2c	HEAVY FUEL OIL (S<0,1%)	0.020152268	kg/TJ
2021	Pb	1A2c	HEAVY FUEL OIL (S<1%)	0.025000000	kg/TJ
2021	Pb	1A2c	OTHER FOSSIL LIQUID	0.025000000	kg/TJ
2021	Pb	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.045000000	kg/TJ
2021	Pb	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.022956669	kg/TJ
2021	Pb	1A2d	ANIMAL-BASED FUELS	0.000290480	kg/TJ
2021	Pb	1A2d	BARK	0.004794585	kg/TJ
2021	Pb	1A2d	BIO PELLETS (NON-WOOD)	0.000944060	kg/TJ
2021	Pb	1A2d	BIOLOGICAL SLURRY	0.001615825	kg/TJ
2021	Pb	1A2d	BLACK LIQUOR	0.016130832	kg/TJ
2021	Pb	1A2d	CHIPS FROM ROUNDWOOD	0.002882831	kg/TJ
2021	Pb	1A2d	COAL (S=1.0%)	0.000235252	kg/TJ
2021	Pb	1A2d	CREOSOTED WOOD	0.000944060	kg/TJ
2021	Pb	1A2d	DEMOLITION WOOD	0.000290480	kg/TJ
2021	Pb	1A2d	FOREST RESIDUE CHIPS	0.008587288	kg/TJ
2021	Pb	1A2d	FOREST RESIDUE CHIPS	0.003400000	kg/TJ
2021	Pb	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.001546429	kg/TJ
2021	Pb	1A2d	HEAVY FUEL OIL (S<0,1%)	0.005437318	kg/TJ
2021	Pb	1A2d	HEAVY FUEL OIL (S<0,5%)	0.010000000	kg/TJ
2021	Pb	1A2d	HEAVY FUEL OIL (S<1%)	0.008099971	kg/TJ
2021	Pb	1A2d	INDUSTRIAL WASTE	0.004052773	kg/TJ
2021	Pb	1A2d	METHANOL	0.000089613	kg/TJ
2021	Pb	1A2d	MILLED PEAT	0.001671598	kg/TJ
2021	Pb	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.002835750	kg/TJ
2021	Pb	1A2d	OTHER FOSSIL LIQUID	0.025000000	kg/TJ
2021	Pb	1A2d	OTHER FUEL	0.003400000	kg/TJ
2021	Pb	1A2d	OTHER WOOD RESIDUE	0.006000000	kg/TJ
2021	Pb	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.022630428	kg/TJ
2021	Pb	1A2d	PAPER	0.000675327	kg/TJ
2021	Pb	1A2d	PLASTIC WASTE	0.000152123	kg/TJ
2021	Pb	1A2d	RECOVERED FUEL (REF 1)	0.035173370	kg/TJ
2021	Pb	1A2d	RECOVERED FUEL (REF 2)	0.000290480	kg/TJ
2021	Pb	1A2d	RECOVERED WOOD	0.007129514	kg/TJ
2021	Pb	1A2d	RECYCLED AND WASTE OILS	0.000333198	kg/TJ
2021	Pb	1A2d	SAWDUST AND CUTTER CHIPS	0.014213752	kg/TJ
2021	Pb	1A2d	SULPHITE LIQUOR	0.000835814	kg/TJ
2021	Pb	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002033505	kg/TJ
2021	Pb	1A2d	WOOD RESIDUE CHIPS	0.000167891	kg/TJ

2021	Pb	1A2e	ANIMAL-BASED FUELS	0.045000000	kg/TJ
2021	Pb	1A2e	BIO-FUEL OIL	0.025000000	kg/TJ
2021	Pb	1A2e	CHIPS FROM ROUNDWOOD	0.003400000	kg/TJ
2021	Pb	1A2e	COAL (S=1.0%)	0.004175365	kg/TJ
2021	Pb	1A2e	COKE (S=1.0%)	0.790000000	kg/TJ
2021	Pb	1A2e	FOREST RESIDUE CHIPS	0.045000000	kg/TJ
2021	Pb	1A2e	HEAVY FUEL OIL (S<1%)	0.024989334	kg/TJ
2021	Pb	1A2e	MILLED PEAT	0.143865288	kg/TJ
2021	Pb	1A2e	OTHER NON-FOSSIL SOLID	0.003400000	kg/TJ
2021	Pb	1A2e	RECOVERED WOOD	0.003400000	kg/TJ
2021	Pb	1A2e	SAWDUST	0.003400000	kg/TJ
2021	Pb	1A2e	SAWDUST AND CUTTER CHIPS	0.045000000	kg/TJ
2021	Pb	1A2e	SOD PEAT	0.170000000	kg/TJ
2021	Pb	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.003400000	kg/TJ
2021	Pb	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.045000000	kg/TJ
2021	Pb	1A2f	CHIPS FROM ROUNDWOOD	0.045000000	kg/TJ
2021	Pb	1A2f	COAL (S=1.0%)	0.451719602	kg/TJ
2021	Pb	1A2f	COKE (S=1.0%)	0.790000000	kg/TJ
2021	Pb	1A2f	FOREST RESIDUE CHIPS	0.045000000	kg/TJ
2021	Pb	1A2f	HEAVY FUEL OIL (S<1%)	0.026907203	kg/TJ
2021	Pb	1A2f	INDUSTRIAL WASTE	0.002949972	kg/TJ
2021	Pb	1A2f	OTHER FOSSIL LIQUID	0.000024970	kg/TJ
2021	Pb	1A2f	OTHER FOSSIL SOLID	0.000255664	kg/TJ
2021	Pb	1A2f	OTHER HEAVY DISTILLATES	0.025000000	kg/TJ
2021	Pb	1A2f	OTHER WASTE	0.000102663	kg/TJ
2021	Pb	1A2f	PETROLEUM COKE	0.000418201	kg/TJ
2021	Pb	1A2f	PLASTIC WASTE	0.000068581	kg/TJ
2021	Pb	1A2f	RECOVERED FUEL (REF 1)	0.000044946	kg/TJ
2021	Pb	1A2f	RECYCLED AND WASTE OILS	0.034044109	kg/TJ
2021	Pb	1A2f	RUBBER WASTE	0.000222887	kg/TJ
2021	Pb	1A2f	SAWDUST AND CUTTER CHIPS	0.031037894	kg/TJ
2021	Pb	1A2f	SOLID RECOVERED FUEL (SRF)	0.002949972	kg/TJ
2021	Pb	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.399089301	kg/TJ
2021	Pb	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.003400000	kg/TJ
2021	Pb	1A2gviii	BARK	0.012616563	kg/TJ
2021	Pb	1A2gviii	CHIPS FROM ROUNDWOOD	0.001498230	kg/TJ
2021	Pb	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.045000000	kg/TJ
2021	Pb	1A2gviii	CREOSOTED WOOD	0.000572514	kg/TJ
2021	Pb	1A2gviii	CUTTER CHIPS ETC.	0.007784332	kg/TJ
2021	Pb	1A2gviii	DEMOLITION WOOD	0.000197178	kg/TJ
2021	Pb	1A2gviii	FOREST RESIDUE CHIPS	0.006377540	kg/TJ
2021	Pb	1A2gviii	FOREST RESIDUE CHIPS	0.037292042	kg/TJ
2021	Pb	1A2gviii	HAZARDOUS WASTE	0.000275604	kg/TJ
2021	Pb	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.025000000	kg/TJ
2021	Pb	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.025000000	kg/TJ
2021	Pb	1A2gviii	HEAVY FUEL OIL (S<1%)	0.023006283	kg/TJ
2021	Pb	1A2gviii	MILLED PEAT	0.000411854	kg/TJ
2021	Pb	1A2gviii	MUNICIPAL WASTE - unsorted	0.000415284	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	Pb	1A2gviii	TRY	0.003400000	kg/TJ
2021	Pb	1A2gviii	OTHER HEAVY DISTILLATES	0.008686187	kg/TJ
2021	Pb	1A2gviii	OTHER NON-FOSSIL SOLID	0.003603717	kg/TJ
2021	Pb	1A2gviii	OTHER WASTE	0.000193267	kg/TJ
2021	Pb	1A2gviii	OTHER WOOD RESIDUE	0.014840565	kg/TJ
2021	Pb	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.001000000	kg/TJ
2021	Pb	1A2gviii	PLASTIC WASTE	0.000533573	kg/TJ
2021	Pb	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.001152036	kg/TJ

2021	Pb	1A2gviii	RECOVERED WOOD	0.004479839	kg/TJ
2021	Pb	1A2gviii	RECYCLED AND WASTE OILS	0.000015486	kg/TJ
2021	Pb	1A2gviii	SAWDUST	0.003400000	kg/TJ
2021	Pb	1A2gviii	SAWDUST AND CUTTER CHIPS	0.008175431	kg/TJ
2021	Pb	1A2gviii	SOD PEAT	0.094737659	kg/TJ
2021	Pb	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.015171738	kg/TJ
2021	Pb	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.004363615	kg/TJ
2021	Pb	1A2gviii	WASTE PELLETS	0.003400000	kg/TJ
2021	Pb	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.043889230	kg/TJ
2021	Pb	1A2gviii	WOOD RESIDUE CHIPS	0.029390050	kg/TJ
2021	Pb	1A2gviii	WOOD STUMP CHIPS	0.002577696	kg/TJ
2021	Pb	1A3aii(i)	AVIATION GASOLINE	13.443935927	kg/TJ
2021	Pb	1A3bi	DIESEL OIL (S=001%)	0.000014963	kg/TJ
2021	Pb	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000042117	kg/TJ
2021	Pb	1A3bii	DIESEL OIL (S=001%)	0.000014963	kg/TJ
2021	Pb	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000042025	kg/TJ
2021	Pb	1A3biii	DIESEL OIL (S=001%)	0.000014963	kg/TJ
2021	Pb	1A3biv	DIESEL OIL (S=001%)	0.000014486	kg/TJ
2021	Pb	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000042072	kg/TJ
2021	Pb	1A3dii	GASOIL (FOR NON-ROAD USE)	0.003049172	kg/TJ
2021	Pb	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.004429799	kg/TJ
2021	Pb	1A4ai	FOREST WOODFUEL	0.010000000	kg/TJ
2021	Pb	1A4ai	HEAVY FUEL OIL (S<1%)	0.025000000	kg/TJ
2021	Pb	1A4ai	SOD PEAT	0.170000000	kg/TJ
2021	Pb	1A4bi	FOREST WOODFUEL	0.010000000	kg/TJ
2021	Pb	1A4bi	HEAVY FUEL OIL (S<1%)	0.025000000	kg/TJ
2021	Pb	1A4bi	SOD PEAT	0.170000000	kg/TJ
2021	Pb	1A4ci	CHIPS FROM ROUNDWOOD	0.003400000	kg/TJ
2021	Pb	1A4ci	COAL (S=1.0%)	0.003900000	kg/TJ
2021	Pb	1A4ci	FOREST WOODFUEL	0.010000000	kg/TJ
2021	Pb	1A4ci	HEAVY FUEL OIL (S<1%)	0.025000000	kg/TJ
2021	Pb	1A4ci	OTHER NON-FOSSIL SOLID	0.003400000	kg/TJ
2021	Pb	1A4ci	RECOVERED WOOD	0.003400000	kg/TJ
2021	Pb	1A4ci	SOD PEAT	0.170000000	kg/TJ
2021	Pb	1A4ci	WOOD RESIDUE CHIPS	0.045000000	kg/TJ
2021	Pb	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.003112075	kg/TJ
2021	Pb	1A5a	FOREST WOODFUEL	0.045000000	kg/TJ
2021	Pb	1A5a	HEAVY FUEL OIL (S<1%)	0.025000000	kg/TJ
2021	Pb	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000401330	kg/TJ
2021	Pb	1A5a	OTHER PETROLEUM PRODUCTS	0.025000000	kg/TJ

#### **Cd Implied emission factors in Finnish air pollutant inventory for 2021**

2021	Cd	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000320839	kg/TJ
2021	Cd	1A1a	ANIMAL-BASED FUELS	0.000033077	kg/TJ
2021	Cd	1A1a	ASPHALTENE	0.000002956	kg/TJ
2021	Cd	1A1a	BARK	0.000510428	kg/TJ
2021	Cd	1A1a	BIO PELLETS (NON-WOOD)	0.000500000	kg/TJ
2021	Cd	1A1a	CHIPS FROM ROUNDWOOD	0.000575949	kg/TJ
2021	Cd	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.003130306	kg/TJ
2021	Cd	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.003274530	kg/TJ
2021	Cd	1A1a	COAL (S=1.0%)	0.000082274	kg/TJ
2021	Cd	1A1a	CREOSOTED WOOD	0.000425219	kg/TJ
2021	Cd	1A1a	CUTTER CHIPS ETC.	0.003296706	kg/TJ
2021	Cd	1A1a	DEINKING WASTE	0.002052358	kg/TJ
2021	Cd	1A1a	DEMOLITION WOOD	0.000029359	kg/TJ

2021	Cd	1A1a	FOREST RESIDUE CHIPS	0.004117555	kg/TJ
2021	Cd	1A1a	FOREST RESIDUE CHIPS	0.001280536	kg/TJ
2021	Cd	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.000195237	kg/TJ
2021	Cd	1A1a	HEAVY FUEL OIL (S<0,1%)	0.000013231	kg/TJ
2021	Cd	1A1a	HEAVY FUEL OIL (S<0,5%)	0.000278921	kg/TJ
2021	Cd	1A1a	HEAVY FUEL OIL (S<1%)	0.000219925	kg/TJ
2021	Cd	1A1a	IMPREGNATED WOOD	0.000500000	kg/TJ
2021	Cd	1A1a	INDUSTRIAL WASTE	0.000225121	kg/TJ
2021	Cd	1A1a	LIGNIN	0.000500000	kg/TJ
2021	Cd	1A1a	MILLED PEAT	0.000222588	kg/TJ
2021	Cd	1A1a	MUNICIPAL WASTE - unsorted	0.001633412	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	Cd	1A1a	TRY	0.000499624	kg/TJ
2021	Cd	1A1a	OTHER FOSSIL SOLID	0.000105442	kg/TJ
2021	Cd	1A1a	OTHER NON-FOSSIL SOLID	0.000499213	kg/TJ
2021	Cd	1A1a	OTHER NON-FOSSIL SOLID	0.005000000	kg/TJ
2021	Cd	1A1a	OTHER WASTE	0.000016617	kg/TJ
2021	Cd	1A1a	OTHER WOOD RESIDUE	0.000877006	kg/TJ
2021	Cd	1A1a	PAPER	0.000042053	kg/TJ
2021	Cd	1A1a	PLASTIC WASTE	0.000047742	kg/TJ
2021	Cd	1A1a	PLYWOOD RESIDUE	0.000500000	kg/TJ
2021	Cd	1A1a	RECOVERED FUEL (REF 1)	0.005000000	kg/TJ
2021	Cd	1A1a	RECOVERED FUEL (REF 2)	0.000092367	kg/TJ
2021	Cd	1A1a	RECOVERED FUEL (REF 3)	0.000225168	kg/TJ
2021	Cd	1A1a	RECOVERED WOOD	0.000260752	kg/TJ
2021	Cd	1A1a	RECYCLED AND WASTE OILS	0.000025851	kg/TJ
2021	Cd	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000225000	kg/TJ
2021	Cd	1A1a	SAWDUST	0.002666656	kg/TJ
2021	Cd	1A1a	SAWDUST AND CUTTER CHIPS	0.000668573	kg/TJ
2021	Cd	1A1a	SOD PEAT	0.002794482	kg/TJ
2021	Cd	1A1a	SOLID RECOVERED FUEL (SRF)	0.000049271	kg/TJ
2021	Cd	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000970042	kg/TJ
2021	Cd	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000674047	kg/TJ
2021	Cd	1A1a	WOOD RESIDUE CHIPS	0.001910685	kg/TJ
2021	Cd	1A1a	WOOD STUMP CHIPS	0.002303185	kg/TJ
2021	Cd	1A1b	COKE (S=1.0%)	0.018000000	kg/TJ
2021	Cd	1A1b	HEAVY FUEL OIL (S<1%)	0.000300000	kg/TJ
2021	Cd	1A1b	PETROLEUM COKE	0.018000000	kg/TJ
2021	Cd	1A2a	WOOD RESIDUE CHIPS	0.005000000	kg/TJ
2021	Cd	1A2b	HEAVY FUEL OIL (S<1%)	0.000034354	kg/TJ
2021	Cd	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.000300000	kg/TJ
2021	Cd	1A2c	HEAVY FUEL OIL (S<0,1%)	0.000267682	kg/TJ
2021	Cd	1A2c	HEAVY FUEL OIL (S<1%)	0.000300000	kg/TJ
2021	Cd	1A2c	OTHER FOSSIL LIQUID	0.000300000	kg/TJ
2021	Cd	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.005000000	kg/TJ
2021	Cd	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000630660	kg/TJ
2021	Cd	1A2d	ANIMAL-BASED FUELS	0.000087785	kg/TJ
2021	Cd	1A2d	BARK	0.000286149	kg/TJ
2021	Cd	1A2d	BIO PELLETS (NON-WOOD)	0.000195079	kg/TJ
2021	Cd	1A2d	BIOLOGICAL SLURRY	0.000019847	kg/TJ
2021	Cd	1A2d	BLACK LIQUOR	0.001017999	kg/TJ
2021	Cd	1A2d	CHIPS FROM ROUNDWOOD	0.000304331	kg/TJ
2021	Cd	1A2d	COAL (S=1.0%)	0.000025958	kg/TJ
2021	Cd	1A2d	CREOSOTED WOOD	0.000195079	kg/TJ
2021	Cd	1A2d	DEMOLITION WOOD	0.000087785	kg/TJ
2021	Cd	1A2d	FOREST RESIDUE CHIPS	0.000500000	kg/TJ
2021	Cd	1A2d	FOREST RESIDUE CHIPS	0.000354631	kg/TJ

2021	Cd	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.000074080	kg/TJ
2021	Cd	1A2d	HEAVY FUEL OIL (S<0,1%)	0.000122175	kg/TJ
2021	Cd	1A2d	HEAVY FUEL OIL (S<0,5%)	0.000200000	kg/TJ
2021	Cd	1A2d	HEAVY FUEL OIL (S<1%)	0.000179492	kg/TJ
2021	Cd	1A2d	INDUSTRIAL WASTE	0.000483410	kg/TJ
2021	Cd	1A2d	METHANOL	0.000010324	kg/TJ
2021	Cd	1A2d	MILLED PEAT	0.000012357	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY		
2021	Cd	1A2d		0.000425716	kg/TJ
2021	Cd	1A2d	OTHER FOSSIL LIQUID	0.000300000	kg/TJ
2021	Cd	1A2d	OTHER FUEL	0.000500000	kg/TJ
2021	Cd	1A2d	OTHER WOOD RESIDUE	0.000650000	kg/TJ
2021	Cd	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000503218	kg/TJ
2021	Cd	1A2d	PAPER	0.000099686	kg/TJ
2021	Cd	1A2d	PLASTIC WASTE	0.000063574	kg/TJ
2021	Cd	1A2d	RECOVERED FUEL (REF 1)	0.003871224	kg/TJ
2021	Cd	1A2d	RECOVERED FUEL (REF 2)	0.000087785	kg/TJ
2021	Cd	1A2d	RECOVERED WOOD	0.000217057	kg/TJ
2021	Cd	1A2d	RECYCLED AND WASTE OILS	0.000035114	kg/TJ
2021	Cd	1A2d	SAWDUST AND CUTTER CHIPS	0.001577282	kg/TJ
2021	Cd	1A2d	SULPHITE LIQUOR	0.000151955	kg/TJ
2021	Cd	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000273153	kg/TJ
2021	Cd	1A2d	WOOD RESIDUE CHIPS	0.000066338	kg/TJ
2021	Cd	1A2e	ANIMAL-BASED FUELS	0.005000000	kg/TJ
2021	Cd	1A2e	BIO-FUEL OIL	0.000300000	kg/TJ
2021	Cd	1A2e	CHIPS FROM ROUNDWOOD	0.000500000	kg/TJ
2021	Cd	1A2e	COAL (S=1.0%)	0.000208768	kg/TJ
2021	Cd	1A2e	COKE (S=1.0%)	0.018000000	kg/TJ
2021	Cd	1A2e	FOREST RESIDUE CHIPS	0.005000000	kg/TJ
2021	Cd	1A2e	HEAVY FUEL OIL (S<1%)	0.000277474	kg/TJ
2021	Cd	1A2e	MILLED PEAT	0.002370092	kg/TJ
2021	Cd	1A2e	OTHER NON-FOSSIL SOLID	0.000500000	kg/TJ
2021	Cd	1A2e	RECOVERED WOOD	0.000500000	kg/TJ
2021	Cd	1A2e	SAWDUST	0.000500000	kg/TJ
2021	Cd	1A2e	SAWDUST AND CUTTER CHIPS	0.005000000	kg/TJ
2021	Cd	1A2e	SOD PEAT	0.002800000	kg/TJ
2021	Cd	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000500000	kg/TJ
2021	Cd	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.005000000	kg/TJ
2021	Cd	1A2f	CHIPS FROM ROUNDWOOD	0.005000000	kg/TJ
2021	Cd	1A2f	COAL (S=1.0%)	0.010211861	kg/TJ
2021	Cd	1A2f	COKE (S=1.0%)	0.018000000	kg/TJ
2021	Cd	1A2f	FOREST RESIDUE CHIPS	0.005000000	kg/TJ
2021	Cd	1A2f	HEAVY FUEL OIL (S<1%)	0.000246125	kg/TJ
2021	Cd	1A2f	INDUSTRIAL WASTE	0.000528730	kg/TJ
2021	Cd	1A2f	OTHER FOSSIL LIQUID	0.000007128	kg/TJ
2021	Cd	1A2f	OTHER FOSSIL SOLID	0.000021149	kg/TJ
2021	Cd	1A2f	OTHER HEAVY DISTILLATES	0.000300000	kg/TJ
2021	Cd	1A2f	OTHER WASTE	0.000030420	kg/TJ
2021	Cd	1A2f	PETROLEUM COKE	0.000145035	kg/TJ
2021	Cd	1A2f	PLASTIC WASTE	0.000023793	kg/TJ
2021	Cd	1A2f	RECOVERED FUEL (REF 1)	0.000118803	kg/TJ
2021	Cd	1A2f	RECYCLED AND WASTE OILS	0.000029039	kg/TJ
2021	Cd	1A2f	RUBBER WASTE	0.000052873	kg/TJ
2021	Cd	1A2f	SAWDUST AND CUTTER CHIPS	0.000366445	kg/TJ
2021	Cd	1A2f	SOLID RECOVERED FUEL (SRF)	0.000528730	kg/TJ
2021	Cd	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000729156	kg/TJ
2021	Cd	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ

2021	Cd	1A2gvii	LIQUID GAS	0.000217391	kg/TJ
2021	Cd	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Cd	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000500000	kg/TJ
2021	Cd	1A2gviii	BARK	0.001534732	kg/TJ
2021	Cd	1A2gviii	CHIPS FROM ROUNDWOOD	0.000188352	kg/TJ
2021	Cd	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.005000000	kg/TJ
2021	Cd	1A2gviii	CREOSOTED WOOD	0.000053481	kg/TJ
2021	Cd	1A2gviii	CUTTER CHIPS ETC.	0.001302838	kg/TJ
2021	Cd	1A2gviii	DEMOLITION WOOD	0.000023881	kg/TJ
2021	Cd	1A2gviii	FOREST RESIDUE CHIPS	0.004166207	kg/TJ
2021	Cd	1A2gviii	FOREST RESIDUE CHIPS	0.000726080	kg/TJ
2021	Cd	1A2gviii	HAZARDOUS WASTE	0.000039706	kg/TJ
2021	Cd	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.000300000	kg/TJ
2021	Cd	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.000300000	kg/TJ
2021	Cd	1A2gviii	HEAVY FUEL OIL (S<1%)	0.000282318	kg/TJ
2021	Cd	1A2gviii	MILLED PEAT	0.000008076	kg/TJ
2021	Cd	1A2gviii	MUNICIPAL WASTE - unsorted	0.000079517	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	Cd	1A2gviii	TRY	0.000500000	kg/TJ
2021	Cd	1A2gviii	OTHER HEAVY DISTILLATES	0.000215808	kg/TJ
2021	Cd	1A2gviii	OTHER NON-FOSSIL SOLID	0.000534408	kg/TJ
2021	Cd	1A2gviii	OTHER WASTE	0.000037003	kg/TJ
2021	Cd	1A2gviii	OTHER WOOD RESIDUE	0.001737561	kg/TJ
2021	Cd	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.000020000	kg/TJ
2021	Cd	1A2gviii	PLASTIC WASTE	0.000051789	kg/TJ
2021	Cd	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.000308291	kg/TJ
2021	Cd	1A2gviii	RECOVERED WOOD	0.000544107	kg/TJ
2021	Cd	1A2gviii	RECYCLED AND WASTE OILS	0.000001401	kg/TJ
2021	Cd	1A2gviii	SAWDUST	0.000500000	kg/TJ
2021	Cd	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000943885	kg/TJ
2021	Cd	1A2gviii	SOD PEAT	0.001555688	kg/TJ
2021	Cd	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.001650884	kg/TJ
2021	Cd	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000698272	kg/TJ
2021	Cd	1A2gviii	WASTE PELLETS	0.000500000	kg/TJ
2021	Cd	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.004875283	kg/TJ
2021	Cd	1A2gviii	WOOD RESIDUE CHIPS	0.003318389	kg/TJ
2021	Cd	1A2gviii	WOOD STUMP CHIPS	0.000236826	kg/TJ
2021	Cd	1A3bi	DIESEL OIL (S=001%)	0.000001496	kg/TJ
2021	Cd	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000005265	kg/TJ
2021	Cd	1A3bii	DIESEL OIL (S=001%)	0.000001496	kg/TJ
2021	Cd	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000005253	kg/TJ
2021	Cd	1A3biii	DIESEL OIL (S=001%)	0.000001496	kg/TJ
2021	Cd	1A3biv	DIESEL OIL (S=001%)	0.000001449	kg/TJ
2021	Cd	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000005259	kg/TJ
2021	Cd	1A3c	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Cd	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000234552	kg/TJ
2021	Cd	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.000492200	kg/TJ
2021	Cd	1A4ai	FOREST WOODFUEL	0.003000000	kg/TJ
2021	Cd	1A4ai	HEAVY FUEL OIL (S<1%)	0.000300000	kg/TJ
2021	Cd	1A4ai	SOD PEAT	0.002800000	kg/TJ
2021	Cd	1A4aii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Cd	1A4aii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Cd	1A4bi	FOREST WOODFUEL	0.003000000	kg/TJ
2021	Cd	1A4bi	HEAVY FUEL OIL (S<1%)	0.000300000	kg/TJ
2021	Cd	1A4bi	SOD PEAT	0.002800000	kg/TJ
2021	Cd	1A4bii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Cd	1A4bii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ

2021	Cd	1A4ci	CHIPS FROM ROUNDWOOD	0.000500000	kg/TJ
2021	Cd	1A4ci	COAL (S=1.0%)	0.000200000	kg/TJ
2021	Cd	1A4ci	FOREST WOODFUEL	0.003000000	kg/TJ
2021	Cd	1A4ci	HEAVY FUEL OIL (S<1%)	0.000300000	kg/TJ
2021	Cd	1A4ci	OTHER NON-FOSSIL SOLID	0.000500000	kg/TJ
2021	Cd	1A4ci	RECOVERED WOOD	0.000500000	kg/TJ
2021	Cd	1A4ci	SOD PEAT	0.002800000	kg/TJ
2021	Cd	1A4ci	WOOD RESIDUE CHIPS	0.005000000	kg/TJ
2021	Cd	1A4cii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Cd	1A4cii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Cd	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Cd	1A5a	FOREST WOODFUEL	0.005000000	kg/TJ
2021	Cd	1A5a	HEAVY FUEL OIL (S<1%)	0.000300000	kg/TJ
2021	Cd	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000034960	kg/TJ
2021	Cd	1A5a	OTHER PETROLEUM PRODUCTS	0.000300000	kg/TJ

### Hg Implied emission factors in Finnish air pollutant inventory for 2021

2021	Hg	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000459919	kg/TJ
2021	Hg	1A1a	ANIMAL-BASED FUELS	0.000166297	kg/TJ
2021	Hg	1A1a	ASPHALTENE	0.000002277	kg/TJ
2021	Hg	1A1a	BARK	0.000640083	kg/TJ
2021	Hg	1A1a	BIO PELLETS (NON-WOOD)	0.000500000	kg/TJ
2021	Hg	1A1a	CHIPS FROM ROUNDWOOD	0.000404743	kg/TJ
2021	Hg	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.004038542	kg/TJ
2021	Hg	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.003765587	kg/TJ
2021	Hg	1A1a	COAL (S=1.0%)	0.000795673	kg/TJ
2021	Hg	1A1a	CREOSOTED WOOD	0.000446555	kg/TJ
2021	Hg	1A1a	CUTTER CHIPS ETC.	0.000500000	kg/TJ
2021	Hg	1A1a	DEINKING WASTE	0.000635497	kg/TJ
2021	Hg	1A1a	DEMOLITION WOOD	0.000121477	kg/TJ
2021	Hg	1A1a	FOREST RESIDUE CHIPS	0.000486282	kg/TJ
2021	Hg	1A1a	FOREST RESIDUE CHIPS	0.000402636	kg/TJ
2021	Hg	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.000018136	kg/TJ
2021	Hg	1A1a	HEAVY FUEL OIL (S<0,1%)	0.000009978	kg/TJ
2021	Hg	1A1a	HEAVY FUEL OIL (S<0,5%)	0.000031021	kg/TJ
2021	Hg	1A1a	HEAVY FUEL OIL (S<1%)	0.000029407	kg/TJ
2021	Hg	1A1a	IMPREGNATED WOOD	0.000500000	kg/TJ
2021	Hg	1A1a	INDUSTRIAL WASTE	0.000332340	kg/TJ
2021	Hg	1A1a	LIGNIN	0.000500000	kg/TJ
2021	Hg	1A1a	MILLED PEAT	0.001631629	kg/TJ
2021	Hg	1A1a	MUNICIPAL WASTE - unsorted	0.000194342	kg/TJ
2021	Hg	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.000499624	kg/TJ
2021	Hg	1A1a	OTHER FOSSIL SOLID	0.000837581	kg/TJ
2021	Hg	1A1a	OTHER NON-FOSSIL SOLID	0.000507379	kg/TJ
2021	Hg	1A1a	OTHER NON-FOSSIL SOLID	0.000500000	kg/TJ
2021	Hg	1A1a	OTHER WASTE	0.000172254	kg/TJ
2021	Hg	1A1a	OTHER WOOD RESIDUE	0.000613901	kg/TJ
2021	Hg	1A1a	PAPER	0.000596910	kg/TJ
2021	Hg	1A1a	PLASTIC WASTE	0.000201838	kg/TJ
2021	Hg	1A1a	PLYWOOD RESIDUE	0.000374399	kg/TJ
2021	Hg	1A1a	RECOVERED FUEL (REF 1)	0.000500000	kg/TJ
2021	Hg	1A1a	RECOVERED FUEL (REF 2)	0.000526130	kg/TJ
2021	Hg	1A1a	RECOVERED FUEL (REF 3)	0.000332390	kg/TJ
2021	Hg	1A1a	RECOVERED WOOD	0.000408587	kg/TJ
2021	Hg	1A1a	RECYCLED AND WASTE OILS	0.000011331	kg/TJ

2021	Hg	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000339286	kg/TJ
2021	Hg	1A1a	SAWDUST	0.000500000	kg/TJ
2021	Hg	1A1a	SAWDUST AND CUTTER CHIPS	0.000394988	kg/TJ
2021	Hg	1A1a	SOD PEAT	0.002600000	kg/TJ
2021	Hg	1A1a	SOLID RECOVERED FUEL (SRF)	0.000037953	kg/TJ
2021	Hg	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001149063	kg/TJ
2021	Hg	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000372313	kg/TJ
2021	Hg	1A1a	WOOD RESIDUE CHIPS	0.000513874	kg/TJ
2021	Hg	1A1a	WOOD STUMP CHIPS	0.001130630	kg/TJ
2021	Hg	1A1b	COKE (S=1.0%)	0.003700000	kg/TJ
2021	Hg	1A1b	HEAVY FUEL OIL (S<1%)	0.000030000	kg/TJ
2021	Hg	1A1b	PETROLEUM COKE	0.003700000	kg/TJ
2021	Hg	1A2a	COKE (S=1.0%)	0.000097575	kg/TJ
2021	Hg	1A2a	OTHER FOSSIL SOLID	0.001400000	kg/TJ
2021	Hg	1A2a	WOOD RESIDUE CHIPS	0.000500000	kg/TJ
2021	Hg	1A2b	HEAVY FUEL OIL (S<1%)	0.000011585	kg/TJ
2021	Hg	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.000030000	kg/TJ
2021	Hg	1A2c	HEAVY FUEL OIL (S<0,1%)	0.000030000	kg/TJ
2021	Hg	1A2c	HEAVY FUEL OIL (S<1%)	0.000030000	kg/TJ
2021	Hg	1A2c	OTHER FOSSIL LIQUID	0.000030000	kg/TJ
2021	Hg	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000500000	kg/TJ
2021	Hg	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000592885	kg/TJ
2021	Hg	1A2d	ANIMAL-BASED FUELS	0.000320057	kg/TJ
2021	Hg	1A2d	BARK	0.000377448	kg/TJ
2021	Hg	1A2d	BIO PELLETS (NON-WOOD)	0.000471663	kg/TJ
2021	Hg	1A2d	BIOLOGICAL SLURRY	0.000066933	kg/TJ
2021	Hg	1A2d	BLACK LIQUOR	0.000504476	kg/TJ
2021	Hg	1A2d	CHIPS FROM ROUNDWOOD	0.000169462	kg/TJ
2021	Hg	1A2d	COAL (S=1.0%)	0.000252357	kg/TJ
2021	Hg	1A2d	CREOSOTED WOOD	0.000471663	kg/TJ
2021	Hg	1A2d	DEMOLITION WOOD	0.000320057	kg/TJ
2021	Hg	1A2d	FOREST RESIDUE CHIPS	0.000377688	kg/TJ
2021	Hg	1A2d	FOREST RESIDUE CHIPS	0.000500000	kg/TJ
2021	Hg	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.000023914	kg/TJ
2021	Hg	1A2d	HEAVY FUEL OIL (S<0,1%)	0.000024904	kg/TJ
2021	Hg	1A2d	HEAVY FUEL OIL (S<0,5%)	0.000030000	kg/TJ
2021	Hg	1A2d	HEAVY FUEL OIL (S<1%)	0.000040885	kg/TJ
2021	Hg	1A2d	INDUSTRIAL WASTE	0.000449825	kg/TJ
2021	Hg	1A2d	METHANOL	0.000044529	kg/TJ
2021	Hg	1A2d	MILLED PEAT	0.000879937	kg/TJ
2021	Hg	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.000596842	kg/TJ
2021	Hg	1A2d	OTHER FOSSIL LIQUID	0.000030000	kg/TJ
2021	Hg	1A2d	OTHER FUEL	0.000500000	kg/TJ
2021	Hg	1A2d	OTHER WOOD RESIDUE	0.000450000	kg/TJ
2021	Hg	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000610554	kg/TJ
2021	Hg	1A2d	PAPER	0.000215224	kg/TJ
2021	Hg	1A2d	PLASTIC WASTE	0.000063748	kg/TJ
2021	Hg	1A2d	RECOVERED FUEL (REF 1)	0.000406902	kg/TJ
2021	Hg	1A2d	RECOVERED FUEL (REF 2)	0.000320057	kg/TJ
2021	Hg	1A2d	RECOVERED WOOD	0.000349654	kg/TJ
2021	Hg	1A2d	RECYCLED AND WASTE OILS	0.000019203	kg/TJ
2021	Hg	1A2d	SAWDUST AND CUTTER CHIPS	0.000387702	kg/TJ
2021	Hg	1A2d	SULPHITE LIQUOR	0.000003101	kg/TJ
2021	Hg	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001313659	kg/TJ
2021	Hg	1A2d	WOOD RESIDUE CHIPS	0.000093042	kg/TJ
2021	Hg	1A2e	ANIMAL-BASED FUELS	0.000500000	kg/TJ

2021	Hg	1A2e	BIO-FUEL OIL	0.000030000	kg/TJ
2021	Hg	1A2e	CHIPS FROM ROUNDWOOD	0.000500000	kg/TJ
2021	Hg	1A2e	COAL (S=1.0%)	0.001409186	kg/TJ
2021	Hg	1A2e	COKE (S=1.0%)	0.003700000	kg/TJ
2021	Hg	1A2e	FOREST RESIDUE CHIPS	0.000500000	kg/TJ
2021	Hg	1A2e	HEAVY FUEL OIL (S<1%)	0.000029703	kg/TJ
2021	Hg	1A2e	MILLED PEAT	0.002398964	kg/TJ
2021	Hg	1A2e	OTHER NON-FOSSIL SOLID	0.000500000	kg/TJ
2021	Hg	1A2e	RECOVERED WOOD	0.000500000	kg/TJ
2021	Hg	1A2e	SAWDUST	0.000500000	kg/TJ
2021	Hg	1A2e	SAWDUST AND CUTTER CHIPS	0.000500000	kg/TJ
2021	Hg	1A2e	SOD PEAT	0.002600000	kg/TJ
2021	Hg	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000500000	kg/TJ
2021	Hg	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000500000	kg/TJ
2021	Hg	1A2f	CHIPS FROM ROUNDWOOD	0.000500000	kg/TJ
2021	Hg	1A2f	COAL (S=1.0%)	0.003490343	kg/TJ
2021	Hg	1A2f	COKE (S=1.0%)	0.003700000	kg/TJ
2021	Hg	1A2f	FOREST RESIDUE CHIPS	0.000500000	kg/TJ
2021	Hg	1A2f	HEAVY FUEL OIL (S<1%)	0.000031545	kg/TJ
2021	Hg	1A2f	INDUSTRIAL WASTE	0.000632697	kg/TJ
2021	Hg	1A2f	OTHER FOSSIL LIQUID	0.000088782	kg/TJ
2021	Hg	1A2f	OTHER FOSSIL SOLID	0.001771551	kg/TJ
2021	Hg	1A2f	OTHER HEAVY DISTILLATES	0.000030000	kg/TJ
2021	Hg	1A2f	OTHER WASTE	0.001096632	kg/TJ
2021	Hg	1A2f	PETROLEUM COKE	0.004568422	kg/TJ
2021	Hg	1A2f	PLASTIC WASTE	0.000429330	kg/TJ
2021	Hg	1A2f	RECOVERED FUEL (REF 1)	0.001479698	kg/TJ
2021	Hg	1A2f	RECYCLED AND WASTE OILS	0.000037770	kg/TJ
2021	Hg	1A2f	RUBBER WASTE	0.000632697	kg/TJ
2021	Hg	1A2f	SAWDUST AND CUTTER CHIPS	0.000621737	kg/TJ
2021	Hg	1A2f	SOLID RECOVERED FUEL (SRF)	0.000632697	kg/TJ
2021	Hg	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000629449	kg/TJ
2021	Hg	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.001113292	kg/TJ
2021	Hg	1A2gviii	BARK	0.000448572	kg/TJ
2021	Hg	1A2gviii	CHIPS FROM ROUNDWOOD	0.000092956	kg/TJ
2021	Hg	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000500000	kg/TJ
2021	Hg	1A2gviii	CREOSOTED WOOD	0.000280558	kg/TJ
2021	Hg	1A2gviii	CUTTER CHIPS ETC.	0.000374624	kg/TJ
2021	Hg	1A2gviii	DEMOLITION WOOD	0.000042093	kg/TJ
2021	Hg	1A2gviii	FOREST RESIDUE CHIPS	0.000500000	kg/TJ
2021	Hg	1A2gviii	FOREST RESIDUE CHIPS	0.000164749	kg/TJ
2021	Hg	1A2gviii	HAZARDOUS WASTE	0.000509791	kg/TJ
2021	Hg	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.000030000	kg/TJ
2021	Hg	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.000030000	kg/TJ
2021	Hg	1A2gviii	HEAVY FUEL OIL (S<1%)	0.000030171	kg/TJ
2021	Hg	1A2gviii	MILLED PEAT	0.000706561	kg/TJ
2021	Hg	1A2gviii	MUNICIPAL WASTE - unsorted	0.000269265	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	Hg	1A2gviii	TRY	0.000500000	kg/TJ
2021	Hg	1A2gviii	OTHER HEAVY DISTILLATES	0.000029920	kg/TJ
2021	Hg	1A2gviii	OTHER NON-FOSSIL SOLID	0.000500000	kg/TJ
2021	Hg	1A2gviii	OTHER WASTE	0.000715656	kg/TJ
2021	Hg	1A2gviii	OTHER WOOD RESIDUE	0.000500000	kg/TJ
2021	Hg	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.001300000	kg/TJ
2021	Hg	1A2gviii	PLASTIC WASTE	0.000325235	kg/TJ
2021	Hg	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.003034237	kg/TJ
2021	Hg	1A2gviii	RECOVERED WOOD	0.000330696	kg/TJ

2021	Hg	1A2gviii	RECYCLED AND WASTE OILS	0.000033742	kg/TJ
2021	Hg	1A2gviii	SAWDUST	0.000500000	kg/TJ
2021	Hg	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000273102	kg/TJ
2021	Hg	1A2gviii	SOD PEAT	0.002244373	kg/TJ
2021	Hg	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000176668	kg/TJ
2021	Hg	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000468990	kg/TJ
2021	Hg	1A2gviii	WASTE PELLETS	0.000500000	kg/TJ
2021	Hg	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000487960	kg/TJ
2021	Hg	1A2gviii	WOOD RESIDUE CHIPS	0.000487877	kg/TJ
2021	Hg	1A2gviii	WOOD STUMP CHIPS	0.000040152	kg/TJ
2021	Hg	1A3bi	DIESEL OIL (S=001%)	0.000158610	kg/TJ
2021	Hg	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000229010	kg/TJ
2021	Hg	1A3bii	DIESEL OIL (S=001%)	0.000158610	kg/TJ
2021	Hg	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000228512	kg/TJ
2021	Hg	1A3biii	DIESEL OIL (S=001%)	0.000158610	kg/TJ
2021	Hg	1A3biv	DIESEL OIL (S=001%)	0.000153551	kg/TJ
2021	Hg	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000228766	kg/TJ
2021	Hg	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000703655	kg/TJ
2021	Hg	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.000492200	kg/TJ
2021	Hg	1A4ai	FOREST WOODFUEL	0.000500000	kg/TJ
2021	Hg	1A4ai	HEAVY FUEL OIL (S<1%)	0.000030000	kg/TJ
2021	Hg	1A4ai	SOD PEAT	0.002600000	kg/TJ
2021	Hg	1A4bi	FOREST WOODFUEL	0.000500000	kg/TJ
2021	Hg	1A4bi	HEAVY FUEL OIL (S<1%)	0.000030000	kg/TJ
2021	Hg	1A4bi	SOD PEAT	0.002600000	kg/TJ
2021	Hg	1A4ci	CHIPS FROM ROUNDWOOD	0.000500000	kg/TJ
2021	Hg	1A4ci	COAL (S=1.0%)	0.001400000	kg/TJ
2021	Hg	1A4ci	FOREST WOODFUEL	0.000500000	kg/TJ
2021	Hg	1A4ci	HEAVY FUEL OIL (S<1%)	0.000030000	kg/TJ
2021	Hg	1A4ci	OTHER NON-FOSSIL SOLID	0.000500000	kg/TJ
2021	Hg	1A4ci	RECOVERED WOOD	0.000500000	kg/TJ
2021	Hg	1A4ci	SOD PEAT	0.002600000	kg/TJ
2021	Hg	1A4ci	WOOD RESIDUE CHIPS	0.000500000	kg/TJ
2021	Hg	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000718171	kg/TJ
2021	Hg	1A5a	FOREST WOODFUEL	0.000500000	kg/TJ
2021	Hg	1A5a	HEAVY FUEL OIL (S<1%)	0.000030000	kg/TJ
2021	Hg	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000092615	kg/TJ
2021	Hg	1A5a	OTHER PETROLEUM PRODUCTS	0.000030000	kg/TJ

#### As Implied emission factors in Finnish air pollutant inventory for 2021

2021	As	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000124402	kg/TJ
2021	As	1A1a	ANIMAL-BASED FUELS	0.000192432	kg/TJ
2021	As	1A1a	ASPHALTENE	0.000007441	kg/TJ
2021	As	1A1a	BARK	0.000132891	kg/TJ
2021	As	1A1a	BIO PELLETS (NON-WOOD)	0.000100000	kg/TJ
2021	As	1A1a	CHIPS FROM ROUNDWOOD	0.000097448	kg/TJ
2021	As	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.000884156	kg/TJ
2021	As	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.000893092	kg/TJ
2021	As	1A1a	COAL (S=1.0%)	0.001107523	kg/TJ
2021	As	1A1a	CREOSOTED WOOD	0.000114804	kg/TJ
2021	As	1A1a	CUTTER CHIPS ETC.	0.000659341	kg/TJ
2021	As	1A1a	DEINKING WASTE	0.000443972	kg/TJ
2021	As	1A1a	DEMOLITION WOOD	0.000274092	kg/TJ
2021	As	1A1a	FOREST RESIDUE CHIPS	0.000916521	kg/TJ
2021	As	1A1a	FOREST RESIDUE CHIPS	0.000254719	kg/TJ

2021	As	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.001400154	kg/TJ
2021	As	1A1a	HEAVY FUEL OIL (S<0,1%)	0.001924319	kg/TJ
2021	As	1A1a	HEAVY FUEL OIL (S<0,5%)	0.001899325	kg/TJ
2021	As	1A1a	HEAVY FUEL OIL (S<1%)	0.001357189	kg/TJ
2021	As	1A1a	IMPREGNATED WOOD	0.000100000	kg/TJ
2021	As	1A1a	INDUSTRIAL WASTE	0.000010786	kg/TJ
2021	As	1A1a	LIGNIN	0.000100000	kg/TJ
2021	As	1A1a	MILLED PEAT	0.006977930	kg/TJ
2021	As	1A1a	MUNICIPAL WASTE - unsorted	0.000299522	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	As	1A1a	TRY	0.000099925	kg/TJ
2021	As	1A1a	OTHER FOSSIL SOLID	0.013615666	kg/TJ
2021	As	1A1a	OTHER NON-FOSSIL SOLID	0.001000000	kg/TJ
2021	As	1A1a	OTHER NON-FOSSIL SOLID	0.000101974	kg/TJ
2021	As	1A1a	OTHER WASTE	0.000098326	kg/TJ
2021	As	1A1a	OTHER WOOD RESIDUE	0.000997766	kg/TJ
2021	As	1A1a	PAPER	0.000094911	kg/TJ
2021	As	1A1a	PLASTIC WASTE	0.000136187	kg/TJ
2021	As	1A1a	PLYWOOD RESIDUE	0.000225942	kg/TJ
2021	As	1A1a	RECOVERED FUEL (REF 1)	0.001000000	kg/TJ
2021	As	1A1a	RECOVERED FUEL (REF 2)	0.000144252	kg/TJ
2021	As	1A1a	RECOVERED FUEL (REF 3)	0.000010722	kg/TJ
2021	As	1A1a	RECOVERED WOOD	0.000131960	kg/TJ
2021	As	1A1a	RECYCLED AND WASTE OILS	0.001861862	kg/TJ
2021	As	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000012821	kg/TJ
2021	As	1A1a	SAWDUST	0.000533331	kg/TJ
2021	As	1A1a	SAWDUST AND CUTTER CHIPS	0.000145793	kg/TJ
2021	As	1A1a	SOD PEAT	0.080844210	kg/TJ
2021	As	1A1a	SOLID RECOVERED FUEL (SRF)	0.000003720	kg/TJ
2021	As	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000236844	kg/TJ
2021	As	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000536681	kg/TJ
2021	As	1A1a	WOOD RESIDUE CHIPS	0.000537371	kg/TJ
2021	As	1A1a	WOOD STUMP CHIPS	0.002330985	kg/TJ
2021	As	1A1b	COKE (S=1.0%)	0.130000000	kg/TJ
2021	As	1A1b	HEAVY FUEL OIL (S<1%)	0.002000000	kg/TJ
2021	As	1A1b	PETROLEUM COKE	0.130000000	kg/TJ
2021	As	1A2a	WOOD RESIDUE CHIPS	0.001000000	kg/TJ
2021	As	1A2b	HEAVY FUEL OIL (S<1%)	0.000229024	kg/TJ
2021	As	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.002000000	kg/TJ
2021	As	1A2c	HEAVY FUEL OIL (S<0,1%)	0.001676818	kg/TJ
2021	As	1A2c	HEAVY FUEL OIL (S<1%)	0.002000000	kg/TJ
2021	As	1A2c	OTHER FOSSIL LIQUID	0.002000000	kg/TJ
2021	As	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.001000000	kg/TJ
2021	As	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000567375	kg/TJ
2021	As	1A2d	ANIMAL-BASED FUELS	0.000167912	kg/TJ
2021	As	1A2d	BARK	0.000097797	kg/TJ
2021	As	1A2d	BIO PELLETS (NON-WOOD)	0.001309715	kg/TJ
2021	As	1A2d	BIOLOGICAL SLURRY	0.000100000	kg/TJ
2021	As	1A2d	BLACK LIQUOR	0.000870681	kg/TJ
2021	As	1A2d	CHIPS FROM ROUNDWOOD	0.000110063	kg/TJ
2021	As	1A2d	COAL (S=1.0%)	0.002998966	kg/TJ
2021	As	1A2d	CREOSOTED WOOD	0.001309715	kg/TJ
2021	As	1A2d	DEMOLITION WOOD	0.000167912	kg/TJ
2021	As	1A2d	FOREST RESIDUE CHIPS	0.000100000	kg/TJ
2021	As	1A2d	FOREST RESIDUE CHIPS	0.000182311	kg/TJ
2021	As	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.000760702	kg/TJ
2021	As	1A2d	HEAVY FUEL OIL (S<0,1%)	0.001320542	kg/TJ

2021	As	1A2d	HEAVY FUEL OIL (S<0,5%)	0.001000000	kg/TJ
2021	As	1A2d	HEAVY FUEL OIL (S<1%)	0.001067852	kg/TJ
2021	As	1A2d	INDUSTRIAL WASTE	0.000155636	kg/TJ
2021	As	1A2d	METHANOL	0.000008878	kg/TJ
2021	As	1A2d	MILLED PEAT	0.000408555	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	As	1A2d	TRY	0.000330943	kg/TJ
2021	As	1A2d	OTHER FOSSIL LIQUID	0.002000000	kg/TJ
2021	As	1A2d	OTHER FUEL	0.000100000	kg/TJ
2021	As	1A2d	OTHER WOOD RESIDUE	0.000130000	kg/TJ
2021	As	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000170904	kg/TJ
2021	As	1A2d	PAPER	0.000313757	kg/TJ
2021	As	1A2d	PLASTIC WASTE	0.000021351	kg/TJ
2021	As	1A2d	RECOVERED FUEL (REF 1)	0.000892211	kg/TJ
2021	As	1A2d	RECOVERED FUEL (REF 2)	0.000167912	kg/TJ
2021	As	1A2d	RECOVERED WOOD	0.000121024	kg/TJ
2021	As	1A2d	RECYCLED AND WASTE OILS	0.001679122	kg/TJ
2021	As	1A2d	SAWDUST AND CUTTER CHIPS	0.000488760	kg/TJ
2021	As	1A2d	SULPHITE LIQUOR	0.000483878	kg/TJ
2021	As	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000074807	kg/TJ
2021	As	1A2d	WOOD RESIDUE CHIPS	0.000038077	kg/TJ
2021	As	1A2e	ANIMAL-BASED FUELS	0.001000000	kg/TJ
2021	As	1A2e	BIO-FUEL OIL	0.002000000	kg/TJ
2021	As	1A2e	CHIPS FROM ROUNDWOOD	0.000100000	kg/TJ
2021	As	1A2e	COAL (S=1.0%)	0.007828810	kg/TJ
2021	As	1A2e	COKE (S=1.0%)	0.130000000	kg/TJ
2021	As	1A2e	FOREST RESIDUE CHIPS	0.001000000	kg/TJ
2021	As	1A2e	HEAVY FUEL OIL (S<1%)	0.001958861	kg/TJ
2021	As	1A2e	MILLED PEAT	0.068551217	kg/TJ
2021	As	1A2e	OTHER NON-FOSSIL SOLID	0.000100000	kg/TJ
2021	As	1A2e	RECOVERED WOOD	0.000100000	kg/TJ
2021	As	1A2e	SAWDUST	0.000100000	kg/TJ
2021	As	1A2e	SAWDUST AND CUTTER CHIPS	0.001000000	kg/TJ
2021	As	1A2e	SOD PEAT	0.081000000	kg/TJ
2021	As	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000100000	kg/TJ
2021	As	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.001000000	kg/TJ
2021	As	1A2f	CHIPS FROM ROUNDWOOD	0.001000000	kg/TJ
2021	As	1A2f	COAL (S=1.0%)	0.073631624	kg/TJ
2021	As	1A2f	COKE (S=1.0%)	0.130000000	kg/TJ
2021	As	1A2f	FOREST RESIDUE CHIPS	0.001000000	kg/TJ
2021	As	1A2f	HEAVY FUEL OIL (S<1%)	0.000979918	kg/TJ
2021	As	1A2f	INDUSTRIAL WASTE	0.000029010	kg/TJ
2021	As	1A2f	OTHER FOSSIL LIQUID	0.000010690	kg/TJ
2021	As	1A2f	OTHER FOSSIL SOLID	0.000226279	kg/TJ
2021	As	1A2f	OTHER HEAVY DISTILLATES	0.002000000	kg/TJ
2021	As	1A2f	OTHER WASTE	0.000001605	kg/TJ
2021	As	1A2f	PETROLEUM COKE	0.000369066	kg/TJ
2021	As	1A2f	PLASTIC WASTE	0.000000372	kg/TJ
2021	As	1A2f	RECOVERED FUEL (REF 1)	0.000005345	kg/TJ
2021	As	1A2f	RECYCLED AND WASTE OILS	0.000050634	kg/TJ
2021	As	1A2f	RUBBER WASTE	0.000002901	kg/TJ
2021	As	1A2f	SAWDUST AND CUTTER CHIPS	0.000064369	kg/TJ
2021	As	1A2f	SOLID RECOVERED FUEL (SRF)	0.000029010	kg/TJ
2021	As	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000050982	kg/TJ
2021	As	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000100000	kg/TJ
2021	As	1A2gviii	BARK	0.000297262	kg/TJ
2021	As	1A2gviii	CHIPS FROM ROUNDWOOD	0.000063705	kg/TJ

2021	As	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.001000000	kg/TJ
2021	As	1A2gviii	CREOSOTED WOOD	0.000334917	kg/TJ
2021	As	1A2gviii	CUTTER CHIPS ETC.	0.000191662	kg/TJ
2021	As	1A2gviii	DEMOLITION WOOD	0.000002711	kg/TJ
2021	As	1A2gviii	FOREST RESIDUE CHIPS	0.000833241	kg/TJ
2021	As	1A2gviii	FOREST RESIDUE CHIPS	0.000105708	kg/TJ
2021	As	1A2gviii	HAZARDOUS WASTE	0.000335273	kg/TJ
2021	As	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.002000000	kg/TJ
2021	As	1A2gviii	HEAVY FUEL OIL (S<1%)	0.001898432	kg/TJ
2021	As	1A2gviii	MILLED PEAT	0.000371953	kg/TJ
2021	As	1A2gviii	MUNICIPAL WASTE - unsorted	0.000216983	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	As	1A2gviii	TRY	0.000100000	kg/TJ
2021	As	1A2gviii	OTHER HEAVY DISTILLATES	0.001159974	kg/TJ
2021	As	1A2gviii	OTHER NON-FOSSIL SOLID	0.000104710	kg/TJ
2021	As	1A2gviii	OTHER WASTE	0.000353241	kg/TJ
2021	As	1A2gviii	OTHER WOOD RESIDUE	0.000347512	kg/TJ
2021	As	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.000500000	kg/TJ
2021	As	1A2gviii	PLASTIC WASTE	0.000336798	kg/TJ
2021	As	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.000356969	kg/TJ
2021	As	1A2gviii	RECOVERED WOOD	0.000106366	kg/TJ
2021	As	1A2gviii	RECYCLED AND WASTE OILS	0.000332596	kg/TJ
2021	As	1A2gviii	SAWDUST	0.000100000	kg/TJ
2021	As	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000184263	kg/TJ
2021	As	1A2gviii	SOD PEAT	0.045316145	kg/TJ
2021	As	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000299398	kg/TJ
2021	As	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000115183	kg/TJ
2021	As	1A2gviii	WASTE PELLETS	0.000100000	kg/TJ
2021	As	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000973910	kg/TJ
2021	As	1A2gviii	WOOD RESIDUE CHIPS	0.000660444	kg/TJ
2021	As	1A2gviii	WOOD STUMP CHIPS	0.000003591	kg/TJ
2021	As	1A3bi	DIESEL OIL (S=001%)	0.000002993	kg/TJ
2021	As	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000007897	kg/TJ
2021	As	1A3bii	DIESEL OIL (S=001%)	0.000002993	kg/TJ
2021	As	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000007880	kg/TJ
2021	As	1A3biii	DIESEL OIL (S=001%)	0.000002993	kg/TJ
2021	As	1A3biv	DIESEL OIL (S=001%)	0.000002897	kg/TJ
2021	As	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000007888	kg/TJ
2021	As	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000938207	kg/TJ
2021	As	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.001230500	kg/TJ
2021	As	1A4ai	FOREST WOODFUEL	0.001000000	kg/TJ
2021	As	1A4ai	HEAVY FUEL OIL (S<1%)	0.002000000	kg/TJ
2021	As	1A4ai	SOD PEAT	0.081000000	kg/TJ
2021	As	1A4bi	FOREST WOODFUEL	0.001000000	kg/TJ
2021	As	1A4bi	HEAVY FUEL OIL (S<1%)	0.002000000	kg/TJ
2021	As	1A4bi	SOD PEAT	0.081000000	kg/TJ
2021	As	1A4ci	CHIPS FROM ROUNDWOOD	0.000100000	kg/TJ
2021	As	1A4ci	COAL (S=1.0%)	0.007800000	kg/TJ
2021	As	1A4ci	FOREST WOODFUEL	0.001000000	kg/TJ
2021	As	1A4ci	HEAVY FUEL OIL (S<1%)	0.002000000	kg/TJ
2021	As	1A4ci	OTHER NON-FOSSIL SOLID	0.000100000	kg/TJ
2021	As	1A4ci	RECOVERED WOOD	0.000100000	kg/TJ
2021	As	1A4ci	SOD PEAT	0.081000000	kg/TJ
2021	As	1A4ci	WOOD RESIDUE CHIPS	0.001000000	kg/TJ
2021	As	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000957562	kg/TJ
2021	As	1A5a	FOREST WOODFUEL	0.001000000	kg/TJ
2021	As	1A5a	HEAVY FUEL OIL (S<1%)	0.002000000	kg/TJ

2021	As	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000123486	kg/TJ
2021	As	1A5a	OTHER PETROLEUM PRODUCTS	0.002000000	kg/TJ

#### Cr Implied emission factors in Finnish air pollutant inventory for 2021

2021	Cr	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.002334077	kg/TJ
2021	Cr	1A1a	ANIMAL-BASED FUELS	0.003753877	kg/TJ
2021	Cr	1A1a	ASPHALTENE	0.000003840	kg/TJ
2021	Cr	1A1a	BARK	0.002722311	kg/TJ
2021	Cr	1A1a	BIO PELLETS (NON-WOOD)	0.002000000	kg/TJ
2021	Cr	1A1a	CHIPS FROM ROUNDWOOD	0.002395300	kg/TJ
2021	Cr	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.008833108	kg/TJ
2021	Cr	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.010851560	kg/TJ
2021	Cr	1A1a	COAL (S=1.0%)	0.001717803	kg/TJ
2021	Cr	1A1a	CREOSOTED WOOD	0.002280894	kg/TJ
2021	Cr	1A1a	CUTTER CHIPS ETC.	0.022509178	kg/TJ
2021	Cr	1A1a	DEINKING WASTE	0.014275635	kg/TJ
2021	Cr	1A1a	DEMOLITION WOOD	0.001239835	kg/TJ
2021	Cr	1A1a	FOREST RESIDUE CHIPS	0.007237393	kg/TJ
2021	Cr	1A1a	FOREST RESIDUE CHIPS	0.028833930	kg/TJ
2021	Cr	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.000615105	kg/TJ
2021	Cr	1A1a	HEAVY FUEL OIL (S<0,1%)	0.000938469	kg/TJ
2021	Cr	1A1a	HEAVY FUEL OIL (S<0,5%)	0.000928277	kg/TJ
2021	Cr	1A1a	HEAVY FUEL OIL (S<1%)	0.000681707	kg/TJ
2021	Cr	1A1a	IMPREGNATED WOOD	0.002000000	kg/TJ
2021	Cr	1A1a	INDUSTRIAL WASTE	0.000589830	kg/TJ
2021	Cr	1A1a	LIGNIN	0.002000000	kg/TJ
2021	Cr	1A1a	MILLED PEAT	0.006984162	kg/TJ
2021	Cr	1A1a	MUNICIPAL WASTE - unsorted	0.010648993	kg/TJ
2021	Cr	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.001998496	kg/TJ
2021	Cr	1A1a	OTHER FOSSIL SOLID	0.004138479	kg/TJ
2021	Cr	1A1a	OTHER NON-FOSSIL SOLID	0.035000000	kg/TJ
2021	Cr	1A1a	OTHER NON-FOSSIL SOLID	0.002007669	kg/TJ
2021	Cr	1A1a	OTHER WASTE	0.000329314	kg/TJ
2021	Cr	1A1a	OTHER WOOD RESIDUE	0.027284025	kg/TJ
2021	Cr	1A1a	PAPER	0.000998204	kg/TJ
2021	Cr	1A1a	PLASTIC WASTE	0.000299714	kg/TJ
2021	Cr	1A1a	PLYWOOD RESIDUE	0.001008896	kg/TJ
2021	Cr	1A1a	RECOVERED FUEL (REF 1)	0.035000000	kg/TJ
2021	Cr	1A1a	RECOVERED FUEL (REF 2)	0.001214187	kg/TJ
2021	Cr	1A1a	RECOVERED FUEL (REF 3)	0.000589725	kg/TJ
2021	Cr	1A1a	RECOVERED WOOD	0.001300075	kg/TJ
2021	Cr	1A1a	RECYCLED AND WASTE OILS	0.000908841	kg/TJ
2021	Cr	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000600000	kg/TJ
2021	Cr	1A1a	SAWDUST	0.017888811	kg/TJ
2021	Cr	1A1a	SAWDUST AND CUTTER CHIPS	0.003215310	kg/TJ
2021	Cr	1A1a	SOD PEAT	0.139727367	kg/TJ
2021	Cr	1A1a	SOLID RECOVERED FUEL (SRF)	0.000134403	kg/TJ
2021	Cr	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002988423	kg/TJ
2021	Cr	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.003764177	kg/TJ
2021	Cr	1A1a	WOOD RESIDUE CHIPS	0.012517114	kg/TJ
2021	Cr	1A1a	WOOD STUMP CHIPS	0.032312948	kg/TJ
2021	Cr	1A1b	COKE (S=1.0%)	1.000000000	kg/TJ
2021	Cr	1A1b	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A1b	PETROLEUM COKE	1.000000000	kg/TJ
2021	Cr	1A2a	WOOD RESIDUE CHIPS	0.035000000	kg/TJ

2021	Cr	1A2b	COAL (S=1.0%)	1.000000000	kg/TJ
2021	Cr	1A2b	COKE (S=1.0%)	1.000000000	kg/TJ
2021	Cr	1A2b	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A2b	OTHER HEAVY DISTILLATES	0.001000000	kg/TJ
2021	Cr	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.001000000	kg/TJ
2021	Cr	1A2c	HEAVY FUEL OIL (S<0,1%)	0.000838409	kg/TJ
2021	Cr	1A2c	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A2c	OTHER FOSSIL LIQUID	0.001000000	kg/TJ
2021	Cr	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.035000000	kg/TJ
2021	Cr	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.003331362	kg/TJ
2021	Cr	1A2d	ANIMAL-BASED FUELS	0.001668399	kg/TJ
2021	Cr	1A2d	BARK	0.002624498	kg/TJ
2021	Cr	1A2d	BIO PELLETS (NON-WOOD)	0.005561331	kg/TJ
2021	Cr	1A2d	BIOLOGICAL SLURRY	0.000323567	kg/TJ
2021	Cr	1A2d	BLACK LIQUOR	0.000535610	kg/TJ
2021	Cr	1A2d	CHIPS FROM ROUNDWOOD	0.001900583	kg/TJ
2021	Cr	1A2d	COAL (S=1.0%)	0.004341202	kg/TJ
2021	Cr	1A2d	CREOSOTED WOOD	0.005561331	kg/TJ
2021	Cr	1A2d	DEMOLITION WOOD	0.001668399	kg/TJ
2021	Cr	1A2d	FOREST RESIDUE CHIPS	0.002000000	kg/TJ
2021	Cr	1A2d	FOREST RESIDUE CHIPS	0.001388209	kg/TJ
2021	Cr	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.000346040	kg/TJ
2021	Cr	1A2d	HEAVY FUEL OIL (S<0,1%)	0.000460872	kg/TJ
2021	Cr	1A2d	HEAVY FUEL OIL (S<0,5%)	0.000500000	kg/TJ
2021	Cr	1A2d	HEAVY FUEL OIL (S<1%)	0.000620047	kg/TJ
2021	Cr	1A2d	INDUSTRIAL WASTE	0.003351896	kg/TJ
2021	Cr	1A2d	METHANOL	0.000178356	kg/TJ
2021	Cr	1A2d	MILLED PEAT	0.000428583	kg/TJ
2021	Cr	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.001687306	kg/TJ
2021	Cr	1A2d	OTHER FOSSIL LIQUID	0.001000000	kg/TJ
2021	Cr	1A2d	OTHER FUEL	0.002000000	kg/TJ
2021	Cr	1A2d	OTHER WOOD RESIDUE	0.004500000	kg/TJ
2021	Cr	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000468580	kg/TJ
2021	Cr	1A2d	PAPER	0.001352325	kg/TJ
2021	Cr	1A2d	PLASTIC WASTE	0.001787077	kg/TJ
2021	Cr	1A2d	RECOVERED FUEL (REF 1)	0.026988224	kg/TJ
2021	Cr	1A2d	RECOVERED FUEL (REF 2)	0.001668399	kg/TJ
2021	Cr	1A2d	RECOVERED WOOD	0.000838754	kg/TJ
2021	Cr	1A2d	RECYCLED AND WASTE OILS	0.000417100	kg/TJ
2021	Cr	1A2d	SAWDUST AND CUTTER CHIPS	0.012131476	kg/TJ
2021	Cr	1A2d	SULPHITE LIQUOR	0.002017642	kg/TJ
2021	Cr	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.001254436	kg/TJ
2021	Cr	1A2d	WOOD RESIDUE CHIPS	0.001773913	kg/TJ
2021	Cr	1A2e	ANIMAL-BASED FUELS	0.035000000	kg/TJ
2021	Cr	1A2e	BIO-FUEL OIL	0.001000000	kg/TJ
2021	Cr	1A2e	CHIPS FROM ROUNDWOOD	0.002000000	kg/TJ
2021	Cr	1A2e	COAL (S=1.0%)	0.005010438	kg/TJ
2021	Cr	1A2e	COKE (S=1.0%)	1.000000000	kg/TJ
2021	Cr	1A2e	FOREST RESIDUE CHIPS	0.035000000	kg/TJ
2021	Cr	1A2e	HEAVY FUEL OIL (S<1%)	0.001012748	kg/TJ
2021	Cr	1A2e	MILLED PEAT	0.118473658	kg/TJ
2021	Cr	1A2e	OTHER NON-FOSSIL SOLID	0.002000000	kg/TJ
2021	Cr	1A2e	RECOVERED WOOD	0.002000000	kg/TJ
2021	Cr	1A2e	SAWDUST	0.002000000	kg/TJ
2021	Cr	1A2e	SAWDUST AND CUTTER CHIPS	0.035000000	kg/TJ
2021	Cr	1A2e	SOD PEAT	0.140000000	kg/TJ

2021	Cr	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002000000	kg/TJ
2021	Cr	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.035000000	kg/TJ
2021	Cr	1A2f	CHIPS FROM ROUNDWOOD	0.035000000	kg/TJ
2021	Cr	1A2f	COAL (S=1.0%)	0.574498030	kg/TJ
2021	Cr	1A2f	COKE (S=1.0%)	1.000000000	kg/TJ
2021	Cr	1A2f	FOREST RESIDUE CHIPS	0.035000000	kg/TJ
2021	Cr	1A2f	HEAVY FUEL OIL (S<1%)	0.002013100	kg/TJ
2021	Cr	1A2f	INDUSTRIAL WASTE	0.007862868	kg/TJ
2021	Cr	1A2f	OTHER FOSSIL LIQUID	0.000000946	kg/TJ
2021	Cr	1A2f	OTHER FOSSIL SOLID	0.001123267	kg/TJ
2021	Cr	1A2f	OTHER HEAVY DISTILLATES	0.001000000	kg/TJ
2021	Cr	1A2f	OTHER WASTE	0.000204240	kg/TJ
2021	Cr	1A2f	PETROLEUM COKE	0.001069228	kg/TJ
2021	Cr	1A2f	PLASTIC WASTE	0.000134792	kg/TJ
2021	Cr	1A2f	RECOVERED FUEL (REF 1)	0.000033108	kg/TJ
2021	Cr	1A2f	RECYCLED AND WASTE OILS	0.005998276	kg/TJ
2021	Cr	1A2f	RUBBER WASTE	0.000449307	kg/TJ
2021	Cr	1A2f	SAWDUST AND CUTTER CHIPS	0.025005071	kg/TJ
2021	Cr	1A2f	SOLID RECOVERED FUEL (SRF)	0.007862868	kg/TJ
2021	Cr	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.426508345	kg/TJ
2021	Cr	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.001196952	kg/TJ
2021	Cr	1A2gvii	LIQUID GAS	0.001086957	kg/TJ
2021	Cr	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.001313290	kg/TJ
2021	Cr	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.002000000	kg/TJ
2021	Cr	1A2gviii	BARK	0.009418019	kg/TJ
2021	Cr	1A2gviii	CHIPS FROM ROUNDWOOD	0.001382053	kg/TJ
2021	Cr	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.035000000	kg/TJ
2021	Cr	1A2gviii	CREOSOTED WOOD	0.000244612	kg/TJ
2021	Cr	1A2gviii	CUTTER CHIPS ETC.	0.005836451	kg/TJ
2021	Cr	1A2gviii	DEMOLITION WOOD	0.000259558	kg/TJ
2021	Cr	1A2gviii	FOREST RESIDUE CHIPS	0.006555360	kg/TJ
2021	Cr	1A2gviii	FOREST RESIDUE CHIPS	0.028885514	kg/TJ
2021	Cr	1A2gviii	HAZARDOUS WASTE	0.000330697	kg/TJ
2021	Cr	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.001000000	kg/TJ
2021	Cr	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.001000000	kg/TJ
2021	Cr	1A2gviii	HEAVY FUEL OIL (S<1%)	0.000934464	kg/TJ
2021	Cr	1A2gviii	MILLED PEAT	0.000366463	kg/TJ
2021	Cr	1A2gviii	MUNICIPAL WASTE - unsorted	0.000357224	kg/TJ
2021	Cr	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.002000000	kg/TJ
2021	Cr	1A2gviii	OTHER HEAVY DISTILLATES	0.000580699	kg/TJ
2021	Cr	1A2gviii	OTHER NON-FOSSIL SOLID	0.002165465	kg/TJ
2021	Cr	1A2gviii	OTHER WASTE	0.000350449	kg/TJ
2021	Cr	1A2gviii	OTHER WOOD RESIDUE	0.011075448	kg/TJ
2021	Cr	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.000800000	kg/TJ
2021	Cr	1A2gviii	PLASTIC WASTE	0.000255479	kg/TJ
2021	Cr	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.001882200	kg/TJ
2021	Cr	1A2gviii	RECOVERED WOOD	0.003306638	kg/TJ
2021	Cr	1A2gviii	RECYCLED AND WASTE OILS	0.000005135	kg/TJ
2021	Cr	1A2gviii	SAWDUST	0.002000000	kg/TJ
2021	Cr	1A2gviii	SAWDUST AND CUTTER CHIPS	0.006302105	kg/TJ
2021	Cr	1A2gviii	SOD PEAT	0.078012996	kg/TJ
2021	Cr	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.013584860	kg/TJ
2021	Cr	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002899277	kg/TJ
2021	Cr	1A2gviii	WASTE PELLETS	0.002000000	kg/TJ
2021	Cr	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.034202525	kg/TJ
2021	Cr	1A2gviii	WOOD RESIDUE CHIPS	0.022705251	kg/TJ

2021	Cr	1A2gviii	WOOD STUMP CHIPS	0.004542993	kg/TJ
2021	Cr	1A3bi	DIESEL OIL (S=001%)	0.000254375	kg/TJ
2021	Cr	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000165835	kg/TJ
2021	Cr	1A3bii	DIESEL OIL (S=001%)	0.000254375	kg/TJ
2021	Cr	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000165475	kg/TJ
2021	Cr	1A3biii	DIESEL OIL (S=001%)	0.000254375	kg/TJ
2021	Cr	1A3biv	DIESEL OIL (S=001%)	0.000246261	kg/TJ
2021	Cr	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000165658	kg/TJ
2021	Cr	1A3c	GASOIL (FOR NON-ROAD USE)	0.001196952	kg/TJ
2021	Cr	1A3dii	GASOIL (FOR NON-ROAD USE)	0.001172758	kg/TJ
2021	Cr	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.017719195	kg/TJ
2021	Cr	1A4ai	FOREST WOODFUEL	0.035000000	kg/TJ
2021	Cr	1A4ai	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A4ai	SOD PEAT	0.140000000	kg/TJ
2021	Cr	1A4aii	GASOIL (FOR NON-ROAD USE)	0.001196952	kg/TJ
2021	Cr	1A4aii	MOTOR GASOLINE (S=0.001%)	0.001313290	kg/TJ
2021	Cr	1A4bi	FOREST WOODFUEL	0.035000000	kg/TJ
2021	Cr	1A4bi	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A4bi	SOD PEAT	0.140000000	kg/TJ
2021	Cr	1A4bii	GASOIL (FOR NON-ROAD USE)	0.001196952	kg/TJ
2021	Cr	1A4bii	MOTOR GASOLINE (S=0.001%)	0.001313290	kg/TJ
2021	Cr	1A4ci	CHIPS FROM ROUNDWOOD	0.002000000	kg/TJ
2021	Cr	1A4ci	COAL (S=1.0%)	0.005000000	kg/TJ
2021	Cr	1A4ci	FOREST WOODFUEL	0.035000000	kg/TJ
2021	Cr	1A4ci	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A4ci	OTHER NON-FOSSIL SOLID	0.002000000	kg/TJ
2021	Cr	1A4ci	RECOVERED WOOD	0.002000000	kg/TJ
2021	Cr	1A4ci	SOD PEAT	0.140000000	kg/TJ
2021	Cr	1A4ci	WOOD RESIDUE CHIPS	0.035000000	kg/TJ
2021	Cr	1A4cii	GASOIL (FOR NON-ROAD USE)	0.001196952	kg/TJ
2021	Cr	1A4cii	MOTOR GASOLINE (S=0.001%)	0.001313290	kg/TJ
2021	Cr	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.001196952	kg/TJ
2021	Cr	1A5a	FOREST WOODFUEL	0.035000000	kg/TJ
2021	Cr	1A5a	HEAVY FUEL OIL (S<1%)	0.001000000	kg/TJ
2021	Cr	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000174801	kg/TJ
2021	Cr	1A5a	OTHER PETROLEUM PRODUCTS	0.001000000	kg/TJ

#### **Cu Implied emission factors in Finnish air pollutant inventory for 2021**

2021	Cu	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.003345334	kg/TJ
2021	Cu	1A1a	ANIMAL-BASED FUELS	0.000345864	kg/TJ
2021	Cu	1A1a	ASPHALTENE	0.000011654	kg/TJ
2021	Cu	1A1a	BARK	0.005779758	kg/TJ
2021	Cu	1A1a	BIO PELLETS (NON-WOOD)	0.005000000	kg/TJ
2021	Cu	1A1a	CHIPS FROM ROUNDWOOD	0.004202828	kg/TJ
2021	Cu	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.051000000	kg/TJ
2021	Cu	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.051000000	kg/TJ
2021	Cu	1A1a	COAL (S=1.0%)	0.001845146	kg/TJ
2021	Cu	1A1a	CREOSOTED WOOD	0.004254611	kg/TJ
2021	Cu	1A1a	CUTTER CHIPS ETC.	0.033588552	kg/TJ
2021	Cu	1A1a	DEINKING WASTE	0.020752092	kg/TJ
2021	Cu	1A1a	DEMOLITION WOOD	0.001138217	kg/TJ
2021	Cu	1A1a	FOREST RESIDUE CHIPS	0.042359380	kg/TJ
2021	Cu	1A1a	FOREST RESIDUE CHIPS	0.010937547	kg/TJ
2021	Cu	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.001394636	kg/TJ
2021	Cu	1A1a	HEAVY FUEL OIL (S<0,1%)	0.000069173	kg/TJ

2021	Cu	1A1a	HEAVY FUEL OIL (S<0,5%)	0.002315442	kg/TJ
2021	Cu	1A1a	HEAVY FUEL OIL (S<1%)	0.001914299	kg/TJ
2021	Cu	1A1a	IMPREGNATED WOOD	0.005000000	kg/TJ
2021	Cu	1A1a	INDUSTRIAL WASTE	0.002208550	kg/TJ
2021	Cu	1A1a	LIGNIN	0.005000000	kg/TJ
2021	Cu	1A1a	MILLED PEAT	0.011497563	kg/TJ
2021	Cu	1A1a	MUNICIPAL WASTE - unsorted	0.016503698	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	Cu	1A1a	TRY	0.004996240	kg/TJ
2021	Cu	1A1a	OTHER FOSSIL SOLID	0.002884737	kg/TJ
2021	Cu	1A1a	OTHER NON-FOSSIL SOLID	0.051000000	kg/TJ
2021	Cu	1A1a	OTHER NON-FOSSIL SOLID	0.005042621	kg/TJ
2021	Cu	1A1a	OTHER WASTE	0.000380232	kg/TJ
2021	Cu	1A1a	OTHER WOOD RESIDUE	0.021307983	kg/TJ
2021	Cu	1A1a	PAPER	0.000196322	kg/TJ
2021	Cu	1A1a	PLASTIC WASTE	0.000253033	kg/TJ
2021	Cu	1A1a	PLYWOOD RESIDUE	0.003294744	kg/TJ
2021	Cu	1A1a	RECOVERED FUEL (REF 1)	0.051000000	kg/TJ
2021	Cu	1A1a	RECOVERED FUEL (REF 2)	0.002451055	kg/TJ
2021	Cu	1A1a	RECOVERED FUEL (REF 3)	0.002208787	kg/TJ
2021	Cu	1A1a	RECOVERED WOOD	0.002760922	kg/TJ
2021	Cu	1A1a	RECYCLED AND WASTE OILS	0.000132070	kg/TJ
2021	Cu	1A1a	REFUSE-DERIVED FUEL (RDF)	0.002250000	kg/TJ
2021	Cu	1A1a	SAWDUST	0.027148040	kg/TJ
2021	Cu	1A1a	SAWDUST AND CUTTER CHIPS	0.005450096	kg/TJ
2021	Cu	1A1a	SOD PEAT	0.219574823	kg/TJ
2021	Cu	1A1a	SOLID RECOVERED FUEL (SRF)	0.000237741	kg/TJ
2021	Cu	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.012917788	kg/TJ
2021	Cu	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.009525846	kg/TJ
2021	Cu	1A1a	WOOD RESIDUE CHIPS	0.019629837	kg/TJ
2021	Cu	1A1a	WOOD STUMP CHIPS	0.068882618	kg/TJ
2021	Cu	1A1b	COKE (S=1.0%)	0.350000000	kg/TJ
2021	Cu	1A1b	HEAVY FUEL OIL (S<1%)	0.002500000	kg/TJ
2021	Cu	1A1b	PETROLEUM COKE	0.350000000	kg/TJ
2021	Cu	1A2a	WOOD RESIDUE CHIPS	0.051000000	kg/TJ
2021	Cu	1A2b	HEAVY FUEL OIL (S<1%)	0.000965428	kg/TJ
2021	Cu	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.002500000	kg/TJ
2021	Cu	1A2c	HEAVY FUEL OIL (S<0,1%)	0.002015227	kg/TJ
2021	Cu	1A2c	HEAVY FUEL OIL (S<1%)	0.002500000	kg/TJ
2021	Cu	1A2c	OTHER FOSSIL LIQUID	0.002500000	kg/TJ
2021	Cu	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.051000000	kg/TJ
2021	Cu	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.025008325	kg/TJ
2021	Cu	1A2d	ANIMAL-BASED FUELS	0.000888556	kg/TJ
2021	Cu	1A2d	BARK	0.005927261	kg/TJ
2021	Cu	1A2d	BIO PELLETS (NON-WOOD)	0.001974570	kg/TJ
2021	Cu	1A2d	BIOLOGICAL SLURRY	0.010411986	kg/TJ
2021	Cu	1A2d	CHIPS FROM ROUNDWOOD	0.004470014	kg/TJ
2021	Cu	1A2d	COAL (S=1.0%)	0.000994221	kg/TJ
2021	Cu	1A2d	CREOSOTED WOOD	0.001974570	kg/TJ
2021	Cu	1A2d	DEMOLITION WOOD	0.000888556	kg/TJ
2021	Cu	1A2d	FOREST RESIDUE CHIPS	0.005000000	kg/TJ
2021	Cu	1A2d	FOREST RESIDUE CHIPS	0.009257673	kg/TJ
2021	Cu	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.007484013	kg/TJ
2021	Cu	1A2d	HEAVY FUEL OIL (S<0,1%)	0.000611884	kg/TJ
2021	Cu	1A2d	HEAVY FUEL OIL (S<0,5%)	0.001000000	kg/TJ
2021	Cu	1A2d	HEAVY FUEL OIL (S<1%)	0.027106290	kg/TJ
2021	Cu	1A2d	INDUSTRIAL WASTE	0.004806802	kg/TJ

2021	Cu	1A2d	METHANOL	0.004233899	kg/TJ
2021	Cu	1A2d	MILLED PEAT	0.001118865	kg/TJ
2021	Cu	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.006559583	kg/TJ
2021	Cu	1A2d	OTHER FOSSIL LIQUID	0.002500000	kg/TJ
2021	Cu	1A2d	OTHER FUEL	0.005000000	kg/TJ
2021	Cu	1A2d	OTHER WOOD RESIDUE	0.012750000	kg/TJ
2021	Cu	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.048184079	kg/TJ
2021	Cu	1A2d	PAPER	0.000526329	kg/TJ
2021	Cu	1A2d	PLASTIC WASTE	0.001005484	kg/TJ
2021	Cu	1A2d	RECOVERED FUEL (REF 1)	0.037868597	kg/TJ
2021	Cu	1A2d	RECOVERED FUEL (REF 2)	0.000888556	kg/TJ
2021	Cu	1A2d	RECOVERED WOOD	0.014798066	kg/TJ
2021	Cu	1A2d	RECYCLED AND WASTE OILS	0.000177711	kg/TJ
2021	Cu	1A2d	SAWDUST AND CUTTER CHIPS	0.070703757	kg/TJ
2021	Cu	1A2d	SULPHITE LIQUOR	0.003536413	kg/TJ
2021	Cu	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.017119963	kg/TJ
2021	Cu	1A2d	WOOD RESIDUE CHIPS	0.000991936	kg/TJ
2021	Cu	1A2e	ANIMAL-BASED FUELS	0.051000000	kg/TJ
2021	Cu	1A2e	BIO-FUEL OIL	0.002500000	kg/TJ
2021	Cu	1A2e	CHIPS FROM ROUNDWOOD	0.005000000	kg/TJ
2021	Cu	1A2e	COAL (S=1.0%)	0.004175365	kg/TJ
2021	Cu	1A2e	COKE (S=1.0%)	0.350000000	kg/TJ
2021	Cu	1A2e	FOREST RESIDUE CHIPS	0.051000000	kg/TJ
2021	Cu	1A2e	HEAVY FUEL OIL (S<1%)	0.002532830	kg/TJ
2021	Cu	1A2e	MILLED PEAT	0.186179518	kg/TJ
2021	Cu	1A2e	OTHER NON-FOSSIL SOLID	0.005000000	kg/TJ
2021	Cu	1A2e	RECOVERED WOOD	0.005000000	kg/TJ
2021	Cu	1A2e	SAWDUST	0.005000000	kg/TJ
2021	Cu	1A2e	SAWDUST AND CUTTER CHIPS	0.051000000	kg/TJ
2021	Cu	1A2e	SOD PEAT	0.220000000	kg/TJ
2021	Cu	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.005000000	kg/TJ
2021	Cu	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.051000000	kg/TJ
2021	Cu	1A2f	CHIPS FROM ROUNDWOOD	0.051000000	kg/TJ
2021	Cu	1A2f	COAL (S=1.0%)	0.198373988	kg/TJ
2021	Cu	1A2f	COKE (S=1.0%)	0.350000000	kg/TJ
2021	Cu	1A2f	FOREST RESIDUE CHIPS	0.051000000	kg/TJ
2021	Cu	1A2f	HEAVY FUEL OIL (S<1%)	0.002133444	kg/TJ
2021	Cu	1A2f	INDUSTRIAL WASTE	0.005374458	kg/TJ
2021	Cu	1A2f	OTHER FOSSIL LIQUID	0.000007755	kg/TJ
2021	Cu	1A2f	OTHER FOSSIL SOLID	0.000421526	kg/TJ
2021	Cu	1A2f	OTHER HEAVY DISTILLATES	0.002500000	kg/TJ
2021	Cu	1A2f	OTHER WASTE	0.000246795	kg/TJ
2021	Cu	1A2f	PETROLEUM COKE	0.000623919	kg/TJ
2021	Cu	1A2f	PLASTIC WASTE	0.000237108	kg/TJ
2021	Cu	1A2f	RECOVERED FUEL (REF 1)	0.000158202	kg/TJ
2021	Cu	1A2f	RECYCLED AND WASTE OILS	0.000648542	kg/TJ
2021	Cu	1A2f	RUBBER WASTE	0.000526908	kg/TJ
2021	Cu	1A2f	SAWDUST AND CUTTER CHIPS	0.006128925	kg/TJ
2021	Cu	1A2f	SOLID RECOVERED FUEL (SRF)	0.005374458	kg/TJ
2021	Cu	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.033521312	kg/TJ
2021	Cu	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.040696370	kg/TJ
2021	Cu	1A2gvii	LIQUID GAS	0.036956522	kg/TJ
2021	Cu	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.044651860	kg/TJ
2021	Cu	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.005000000	kg/TJ
2021	Cu	1A2gviii	BARK	0.014910953	kg/TJ
2021	Cu	1A2gviii	CHIPS FROM ROUNDWOOD	0.001937667	kg/TJ

2021	Cu	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.051000000	kg/TJ
2021	Cu	1A2gviii	CREOSOTED WOOD	0.000220940	kg/TJ
2021	Cu	1A2gviii	CUTTER CHIPS ETC.	0.008480513	kg/TJ
2021	Cu	1A2gviii	DEMOLITION WOOD	0.000401751	kg/TJ
2021	Cu	1A2gviii	FOREST RESIDUE CHIPS	0.008203949	kg/TJ
2021	Cu	1A2gviii	FOREST RESIDUE CHIPS	0.042476778	kg/TJ
2021	Cu	1A2gviii	HAZARDOUS WASTE	0.000164916	kg/TJ
2021	Cu	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.002500000	kg/TJ
2021	Cu	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.002500000	kg/TJ
2021	Cu	1A2gviii	HEAVY FUEL OIL (S<1%)	0.002325080	kg/TJ
2021	Cu	1A2gviii	MILLED PEAT	0.000554679	kg/TJ
2021	Cu	1A2gviii	MUNICIPAL WASTE - unsorted	0.000852234	kg/TJ
			OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS-		
2021	Cu	1A2gviii	TRY	0.005000000	kg/TJ
2021	Cu	1A2gviii	OTHER HEAVY DISTILLATES	0.001246243	kg/TJ
2021	Cu	1A2gviii	OTHER NON-FOSSIL SOLID	0.005187056	kg/TJ
2021	Cu	1A2gviii	OTHER WASTE	0.000478152	kg/TJ
2021	Cu	1A2gviii	OTHER WOOD RESIDUE	0.017650624	kg/TJ
2021	Cu	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.001300000	kg/TJ
2021	Cu	1A2gviii	PLASTIC WASTE	0.000247351	kg/TJ
2021	Cu	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.003342528	kg/TJ
2021	Cu	1A2gviii	RECOVERED WOOD	0.005603404	kg/TJ
2021	Cu	1A2gviii	RECYCLED AND WASTE OILS	0.000001867	kg/TJ
2021	Cu	1A2gviii	SAWDUST	0.005000000	kg/TJ
2021	Cu	1A2gviii	SAWDUST AND CUTTER CHIPS	0.009579704	kg/TJ
2021	Cu	1A2gviii	SOD PEAT	0.122887760	kg/TJ
2021	Cu	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.018029880	kg/TJ
2021	Cu	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.005728287	kg/TJ
2021	Cu	1A2gviii	WASTE PELLETS	0.005000000	kg/TJ
2021	Cu	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.049772231	kg/TJ
2021	Cu	1A2gviii	WOOD RESIDUE CHIPS	0.033704492	kg/TJ
2021	Cu	1A2gviii	WOOD STUMP CHIPS	0.004109287	kg/TJ
2021	Cu	1A3bi	DIESEL OIL (S=001%)	0.000170581	kg/TJ
2021	Cu	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000118454	kg/TJ
2021	Cu	1A3bii	DIESEL OIL (S=001%)	0.000170581	kg/TJ
2021	Cu	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000118196	kg/TJ
2021	Cu	1A3biii	DIESEL OIL (S=001%)	0.000170581	kg/TJ
2021	Cu	1A3biv	DIESEL OIL (S=001%)	0.000165140	kg/TJ
2021	Cu	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000118327	kg/TJ
2021	Cu	1A3c	GASOIL (FOR NON-ROAD USE)	0.040696370	kg/TJ
2021	Cu	1A3dii	GASOIL (FOR NON-ROAD USE)	0.004691034	kg/TJ
2021	Cu	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.004921999	kg/TJ
2021	Cu	1A4ai	FOREST WOODFUEL	0.006000000	kg/TJ
2021	Cu	1A4ai	HEAVY FUEL OIL (S<1%)	0.002500000	kg/TJ
2021	Cu	1A4ai	SOD PEAT	0.220000000	kg/TJ
2021	Cu	1A4aii	GASOIL (FOR NON-ROAD USE)	0.040696370	kg/TJ
2021	Cu	1A4aii	MOTOR GASOLINE (S=0.001%)	0.044651860	kg/TJ
2021	Cu	1A4bi	FOREST WOODFUEL	0.006000000	kg/TJ
2021	Cu	1A4bi	HEAVY FUEL OIL (S<1%)	0.002500000	kg/TJ
2021	Cu	1A4bi	SOD PEAT	0.220000000	kg/TJ
2021	Cu	1A4bii	GASOIL (FOR NON-ROAD USE)	0.040696370	kg/TJ
2021	Cu	1A4bii	MOTOR GASOLINE (S=0.001%)	0.044651860	kg/TJ
2021	Cu	1A4ci	CHIPS FROM ROUNDWOOD	0.005000000	kg/TJ
2021	Cu	1A4ci	COAL (S=1.0%)	0.004000000	kg/TJ
2021	Cu	1A4ci	FOREST WOODFUEL	0.006000000	kg/TJ
2021	Cu	1A4ci	HEAVY FUEL OIL (S<1%)	0.002500000	kg/TJ
2021	Cu	1A4ci	OTHER NON-FOSSIL SOLID	0.005000000	kg/TJ

2021	Cu	1A4ci	RECOVERED WOOD	0.005000000	kg/TJ
2021	Cu	1A4ci	SOD PEAT	0.220000000	kg/TJ
2021	Cu	1A4ci	WOOD RESIDUE CHIPS	0.051000000	kg/TJ
2021	Cu	1A4cii	GASOIL (FOR NON-ROAD USE)	0.040696370	kg/TJ
2021	Cu	1A4cii	MOTOR GASOLINE (S=0.001%)	0.044651860	kg/TJ
2021	Cu	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.004787808	kg/TJ
2021	Cu	1A5a	FOREST WOODFUEL	0.051000000	kg/TJ
2021	Cu	1A5a	HEAVY FUEL OIL (S<1%)	0.002500000	kg/TJ
2021	Cu	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.001312504	kg/TJ
2021	Cu	1A5a	OTHER PETROLEUM PRODUCTS	0.002500000	kg/TJ

#### Ni Implied emission factors in Finnish air pollutant inventory for 2021

2021	Ni	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.001738447	kg/TJ
2021	Ni	1A1a	ANIMAL-BASED FUELS	0.002000000	kg/TJ
2021	Ni	1A1a	ASPHALTENE	0.001313055	kg/TJ
2021	Ni	1A1a	BARK	0.002387068	kg/TJ
2021	Ni	1A1a	BIO PELLETS (NON-WOOD)	0.002000000	kg/TJ
2021	Ni	1A1a	CHIPS FROM ROUNDWOOD	0.001920504	kg/TJ
2021	Ni	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.008613865	kg/TJ
2021	Ni	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.010263541	kg/TJ
2021	Ni	1A1a	COAL (S=1.0%)	0.002890417	kg/TJ
2021	Ni	1A1a	CREOSOTED WOOD	0.002000000	kg/TJ
2021	Ni	1A1a	CUTTER CHIPS ETC.	0.019401727	kg/TJ
2021	Ni	1A1a	DEINKING WASTE	0.012267377	kg/TJ
2021	Ni	1A1a	DEMOLITION WOOD	0.001651156	kg/TJ
2021	Ni	1A1a	FOREST RESIDUE CHIPS	0.006247130	kg/TJ
2021	Ni	1A1a	FOREST RESIDUE CHIPS	0.024720148	kg/TJ
2021	Ni	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.186049030	kg/TJ
2021	Ni	1A1a	HEAVY FUEL OIL (S<0,1%)	0.004000000	kg/TJ
2021	Ni	1A1a	HEAVY FUEL OIL (S<0,5%)	0.277610917	kg/TJ
2021	Ni	1A1a	HEAVY FUEL OIL (S<1%)	0.190895020	kg/TJ
2021	Ni	1A1a	IMPREGNATED WOOD	0.002000000	kg/TJ
2021	Ni	1A1a	INDUSTRIAL WASTE	0.000493490	kg/TJ
2021	Ni	1A1a	LIGNIN	0.002000000	kg/TJ
2021	Ni	1A1a	MILLED PEAT	0.006946321	kg/TJ
2021	Ni	1A1a	MUNICIPAL WASTE - unsorted	0.009117782	kg/TJ
2021	Ni	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.001998496	kg/TJ
2021	Ni	1A1a	OTHER FOSSIL SOLID	0.003789622	kg/TJ
2021	Ni	1A1a	OTHER NON-FOSSIL SOLID	0.030000000	kg/TJ
2021	Ni	1A1a	OTHER NON-FOSSIL SOLID	0.002009072	kg/TJ
2021	Ni	1A1a	OTHER WASTE	0.001695133	kg/TJ
2021	Ni	1A1a	OTHER WOOD RESIDUE	0.006898299	kg/TJ
2021	Ni	1A1a	PAPER	0.000611922	kg/TJ
2021	Ni	1A1a	PLASTIC WASTE	0.000633028	kg/TJ
2021	Ni	1A1a	PLYWOOD RESIDUE	0.001959816	kg/TJ
2021	Ni	1A1a	RECOVERED FUEL (REF 1)	0.030000000	kg/TJ
2021	Ni	1A1a	RECOVERED FUEL (REF 2)	0.014518113	kg/TJ
2021	Ni	1A1a	RECOVERED FUEL (REF 3)	0.000493224	kg/TJ
2021	Ni	1A1a	RECOVERED WOOD	0.009590174	kg/TJ
2021	Ni	1A1a	RECYCLED AND WASTE OILS	0.004000000	kg/TJ
2021	Ni	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000500000	kg/TJ
2021	Ni	1A1a	SAWDUST	0.015481416	kg/TJ
2021	Ni	1A1a	SAWDUST AND CUTTER CHIPS	0.002699691	kg/TJ
2021	Ni	1A1a	SOD PEAT	0.139733858	kg/TJ
2021	Ni	1A1a	SOLID RECOVERED FUEL (SRF)	0.000131306	kg/TJ

2021	Ni	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002891404	kg/TJ
2021	Ni	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.005528903	kg/TJ
2021	Ni	1A1a	WOOD RESIDUE CHIPS	0.011027276	kg/TJ
2021	Ni	1A1a	WOOD STUMP CHIPS	0.029645947	kg/TJ
2021	Ni	1A1b	COKE (S=1.0%)	0.800000000	kg/TJ
2021	Ni	1A1b	HEAVY FUEL OIL (S<1%)	0.300000000	kg/TJ
2021	Ni	1A1b	PETROLEUM COKE	0.000831601	kg/TJ
2021	Ni	1A2a	WOOD RESIDUE CHIPS	0.030000000	kg/TJ
2021	Ni	1A2b	COAL (S=1.0%)	0.800000000	kg/TJ
2021	Ni	1A2b	HEAVY FUEL OIL (S<1%)	0.115851312	kg/TJ
2021	Ni	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.300000000	kg/TJ
2021	Ni	1A2c	HEAVY FUEL OIL (S<0,1%)	0.251522685	kg/TJ
2021	Ni	1A2c	HEAVY FUEL OIL (S<1%)	0.300000000	kg/TJ
2021	Ni	1A2c	OTHER FOSSIL LIQUID	0.300000000	kg/TJ
2021	Ni	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.030000000	kg/TJ
2021	Ni	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.002458329	kg/TJ
2021	Ni	1A2d	ANIMAL-BASED FUELS	0.000500000	kg/TJ
2021	Ni	1A2d	BARK	0.004401442	kg/TJ
2021	Ni	1A2d	BIO PELLETS (NON-WOOD)	0.002000000	kg/TJ
2021	Ni	1A2d	BIOLOGICAL SLURRY	0.058141418	kg/TJ
2021	Ni	1A2d	BLACK LIQUOR	0.000480714	kg/TJ
2021	Ni	1A2d	CHIPS FROM ROUNDWOOD	0.011858701	kg/TJ
2021	Ni	1A2d	COAL (S=1.0%)	0.003494800	kg/TJ
2021	Ni	1A2d	CREOSOTED WOOD	0.002000000	kg/TJ
2021	Ni	1A2d	DEMOLITION WOOD	0.000500000	kg/TJ
2021	Ni	1A2d	FOREST RESIDUE CHIPS	0.002000000	kg/TJ
2021	Ni	1A2d	FOREST RESIDUE CHIPS	0.003547277	kg/TJ
2021	Ni	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.002131750	kg/TJ
2021	Ni	1A2d	HEAVY FUEL OIL (S<0,1%)	0.079672750	kg/TJ
2021	Ni	1A2d	HEAVY FUEL OIL (S<0,5%)	0.150000000	kg/TJ
2021	Ni	1A2d	HEAVY FUEL OIL (S<1%)	0.077231739	kg/TJ
2021	Ni	1A2d	INDUSTRIAL WASTE	0.002809725	kg/TJ
2021	Ni	1A2d	METHANOL	0.000161781	kg/TJ
2021	Ni	1A2d	MILLED PEAT	0.004566992	kg/TJ
2021	Ni	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.001702862	kg/TJ
2021	Ni	1A2d	OTHER FOSSIL LIQUID	0.300000000	kg/TJ
2021	Ni	1A2d	OTHER FUEL	0.002000000	kg/TJ
2021	Ni	1A2d	OTHER WOOD RESIDUE	0.003900000	kg/TJ
2021	Ni	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000402438	kg/TJ
2021	Ni	1A2d	PAPER	0.000521078	kg/TJ
2021	Ni	1A2d	PLASTIC WASTE	0.000177088	kg/TJ
2021	Ni	1A2d	RECOVERED FUEL (REF 1)	0.022597931	kg/TJ
2021	Ni	1A2d	RECOVERED FUEL (REF 2)	0.000500000	kg/TJ
2021	Ni	1A2d	RECOVERED WOOD	0.000388721	kg/TJ
2021	Ni	1A2d	RECYCLED AND WASTE OILS	0.001000000	kg/TJ
2021	Ni	1A2d	SAWDUST AND CUTTER CHIPS	0.009884816	kg/TJ
2021	Ni	1A2d	SULPHITE LIQUOR	0.001474531	kg/TJ
2021	Ni	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002466015	kg/TJ
2021	Ni	1A2d	WOOD RESIDUE CHIPS	0.000213905	kg/TJ
2021	Ni	1A2e	ANIMAL-BASED FUELS	0.030000000	kg/TJ
2021	Ni	1A2e	BIO-FUEL OIL	0.300000000	kg/TJ
2021	Ni	1A2e	CHIPS FROM ROUNDWOOD	0.002000000	kg/TJ
2021	Ni	1A2e	COAL (S=1.0%)	0.004175365	kg/TJ
2021	Ni	1A2e	COKE (S=1.0%)	0.800000000	kg/TJ
2021	Ni	1A2e	FOREST RESIDUE CHIPS	0.030000000	kg/TJ
2021	Ni	1A2e	HEAVY FUEL OIL (S<1%)	0.299963264	kg/TJ

2021	Ni	1A2e	MILLED PEAT	0.118473658	kg/TJ
2021	Ni	1A2e	OTHER NON-FOSSIL SOLID	0.002000000	kg/TJ
2021	Ni	1A2e	RECOVERED WOOD	0.002000000	kg/TJ
2021	Ni	1A2e	SAWDUST	0.002000000	kg/TJ
2021	Ni	1A2e	SAWDUST AND CUTTER CHIPS	0.030000000	kg/TJ
2021	Ni	1A2e	SOD PEAT	0.140000000	kg/TJ
2021	Ni	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002000000	kg/TJ
2021	Ni	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.030000000	kg/TJ
2021	Ni	1A2f	CHIPS FROM ROUNDWOOD	0.030000000	kg/TJ
2021	Ni	1A2f	COAL (S=1.0%)	0.456160527	kg/TJ
2021	Ni	1A2f	COKE (S=1.0%)	0.800000000	kg/TJ
2021	Ni	1A2f	FOREST RESIDUE CHIPS	0.030000000	kg/TJ
2021	Ni	1A2f	HEAVY FUEL OIL (S<1%)	0.245359711	kg/TJ
2021	Ni	1A2f	INDUSTRIAL WASTE	0.007334646	kg/TJ
2021	Ni	1A2f	OTHER FOSSIL LIQUID	0.000289553	kg/TJ
2021	Ni	1A2f	OTHER FOSSIL SOLID	0.000977953	kg/TJ
2021	Ni	1A2f	OTHER HEAVY DISTILLATES	0.300000000	kg/TJ
2021	Ni	1A2f	OTHER WASTE	0.000222202	kg/TJ
2021	Ni	1A2f	PETROLEUM COKE	0.000915236	kg/TJ
2021	Ni	1A2f	PLASTIC WASTE	0.000122244	kg/TJ
2021	Ni	1A2f	RECOVERED FUEL (REF 1)	0.000028955	kg/TJ
2021	Ni	1A2f	RECYCLED AND WASTE OILS	0.024931297	kg/TJ
2021	Ni	1A2f	RUBBER WASTE	0.000488976	kg/TJ
2021	Ni	1A2f	SAWDUST AND CUTTER CHIPS	0.013691467	kg/TJ
2021	Ni	1A2f	SOLID RECOVERED FUEL (SRF)	0.007334646	kg/TJ
2021	Ni	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.189875156	kg/TJ
2021	Ni	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.001675733	kg/TJ
2021	Ni	1A2gvii	LIQUID GAS	0.001521739	kg/TJ
2021	Ni	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.001838606	kg/TJ
2021	Ni	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.002000000	kg/TJ
2021	Ni	1A2gviii	BARK	0.008352593	kg/TJ
2021	Ni	1A2gviii	CHIPS FROM ROUNDWOOD	0.001453236	kg/TJ
2021	Ni	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.030000000	kg/TJ
2021	Ni	1A2gviii	CREOSOTED WOOD	0.000257763	kg/TJ
2021	Ni	1A2gviii	CUTTER CHIPS ETC.	0.005577848	kg/TJ
2021	Ni	1A2gviii	DEMOLITION WOOD	0.000583077	kg/TJ
2021	Ni	1A2gviii	FOREST RESIDUE CHIPS	0.024811952	kg/TJ
2021	Ni	1A2gviii	FOREST RESIDUE CHIPS	0.008832027	kg/TJ
2021	Ni	1A2gviii	HAZARDOUS WASTE	0.000245613	kg/TJ
2021	Ni	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.300000000	kg/TJ
2021	Ni	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.300000000	kg/TJ
2021	Ni	1A2gviii	HEAVY FUEL OIL (S<1%)	0.274391203	kg/TJ
2021	Ni	1A2gviii	MILLED PEAT	0.000449291	kg/TJ
2021	Ni	1A2gviii	MUNICIPAL WASTE - unsorted	0.000337816	kg/TJ
2021	Ni	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.002000000	kg/TJ
2021	Ni	1A2gviii	OTHER HEAVY DISTILLATES	0.084117603	kg/TJ
2021	Ni	1A2gviii	OTHER NON-FOSSIL SOLID	0.002152568	kg/TJ
2021	Ni	1A2gviii	OTHER WASTE	0.000350856	kg/TJ
2021	Ni	1A2gviii	OTHER WOOD RESIDUE	0.009700380	kg/TJ
2021	Ni	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.000800000	kg/TJ
2021	Ni	1A2gviii	PLASTIC WASTE	0.000267322	kg/TJ
2021	Ni	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.003699497	kg/TJ
2021	Ni	1A2gviii	RECOVERED WOOD	0.003143454	kg/TJ
2021	Ni	1A2gviii	RECYCLED AND WASTE OILS	0.000029955	kg/TJ
2021	Ni	1A2gviii	SAWDUST	0.002000000	kg/TJ
2021	Ni	1A2gviii	SAWDUST AND CUTTER CHIPS	0.005699441	kg/TJ

2021	Ni	1A2gviii	SOD PEAT	0.078581699	kg/TJ
2021	Ni	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.015079443	kg/TJ
2021	Ni	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.002790486	kg/TJ
2021	Ni	1A2gviii	WASTE PELLETS	0.002000000	kg/TJ
2021	Ni	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.029444376	kg/TJ
2021	Ni	1A2gviii	WOOD RESIDUE CHIPS	0.019701413	kg/TJ
2021	Ni	1A2gviii	WOOD STUMP CHIPS	0.008779708	kg/TJ
2021	Ni	1A3bi	DIESEL OIL (S=001%)	0.000005985	kg/TJ
2021	Ni	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000060543	kg/TJ
2021	Ni	1A3bii	DIESEL OIL (S=001%)	0.000005985	kg/TJ
2021	Ni	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000060411	kg/TJ
2021	Ni	1A3biii	DIESEL OIL (S=001%)	0.000005985	kg/TJ
2021	Ni	1A3biv	DIESEL OIL (S=001%)	0.000005794	kg/TJ
2021	Ni	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000060478	kg/TJ
2021	Ni	1A3c	GASOIL (FOR NON-ROAD USE)	0.001675733	kg/TJ
2021	Ni	1A3dii	GASOIL (FOR NON-ROAD USE)	0.023455169	kg/TJ
2021	Ni	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.787519798	kg/TJ
2021	Ni	1A4ai	FOREST WOODFUEL	0.030000000	kg/TJ
2021	Ni	1A4ai	HEAVY FUEL OIL (S<1%)	0.300000000	kg/TJ
2021	Ni	1A4ai	SOD PEAT	0.140000000	kg/TJ
2021	Ni	1A4aii	GASOIL (FOR NON-ROAD USE)	0.001675733	kg/TJ
2021	Ni	1A4aii	MOTOR GASOLINE (S=0.001%)	0.001838606	kg/TJ
2021	Ni	1A4bi	FOREST WOODFUEL	0.030000000	kg/TJ
2021	Ni	1A4bi	HEAVY FUEL OIL (S<1%)	0.300000000	kg/TJ
2021	Ni	1A4bi	SOD PEAT	0.140000000	kg/TJ
2021	Ni	1A4bii	GASOIL (FOR NON-ROAD USE)	0.001675733	kg/TJ
2021	Ni	1A4bii	MOTOR GASOLINE (S=0.001%)	0.001838606	kg/TJ
2021	Ni	1A4ci	CHIPS FROM ROUNDWOOD	0.002000000	kg/TJ
2021	Ni	1A4ci	COAL (S=1.0%)	0.004000000	kg/TJ
2021	Ni	1A4ci	FOREST WOODFUEL	0.030000000	kg/TJ
2021	Ni	1A4ci	HEAVY FUEL OIL (S<1%)	0.300000000	kg/TJ
2021	Ni	1A4ci	OTHER NON-FOSSIL SOLID	0.002000000	kg/TJ
2021	Ni	1A4ci	RECOVERED WOOD	0.002000000	kg/TJ
2021	Ni	1A4ci	SOD PEAT	0.140000000	kg/TJ
2021	Ni	1A4ci	WOOD RESIDUE CHIPS	0.030000000	kg/TJ
2021	Ni	1A4cii	GASOIL (FOR NON-ROAD USE)	0.001675733	kg/TJ
2021	Ni	1A4cii	MOTOR GASOLINE (S=0.001%)	0.001838606	kg/TJ
2021	Ni	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.023939041	kg/TJ
2021	Ni	1A5a	FOREST WOODFUEL	0.030000000	kg/TJ
2021	Ni	1A5a	HEAVY FUEL OIL (S<1%)	0.300000000	kg/TJ
2021	Ni	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.003115773	kg/TJ
2021	Ni	1A5a	OTHER PETROLEUM PRODUCTS	0.300000000	kg/TJ

#### Se Implied emission factors in Finnish air pollutant inventory for 2021

2021	Se	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Se	1A2gvii	LIQUID GAS	0.000217391	kg/TJ
2021	Se	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Se	1A3bi	DIESEL OIL (S=001%)	0.000002993	kg/TJ
2021	Se	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000005265	kg/TJ
2021	Se	1A3bii	DIESEL OIL (S=001%)	0.000002993	kg/TJ
2021	Se	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000005253	kg/TJ
2021	Se	1A3biii	DIESEL OIL (S=001%)	0.000002993	kg/TJ
2021	Se	1A3biv	DIESEL OIL (S=001%)	0.000002897	kg/TJ
2021	Se	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000005259	kg/TJ
2021	Se	1A3c	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ

2021	Se	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000234552	kg/TJ
2021	Se	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.000984400	kg/TJ
2021	Se	1A4ai	FOREST WOODFUEL	0.005000000	kg/TJ
2021	Se	1A4aii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Se	1A4aii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Se	1A4bi	FOREST WOODFUEL	0.005000000	kg/TJ
2021	Se	1A4bii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Se	1A4bii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Se	1A4ci	FOREST WOODFUEL	0.005000000	kg/TJ
2021	Se	1A4cii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Se	1A4cii	MOTOR GASOLINE (S=0.001%)	0.000262658	kg/TJ
2021	Se	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000239390	kg/TJ
2021	Se	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000034960	kg/TJ

#### Zn Implied emission factors in Finnish air pollutant inventory for 2021

2021	Zn	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.046577101	kg/TJ
2021	Zn	1A1a	ANIMAL-BASED FUELS	0.054000000	kg/TJ
2021	Zn	1A1a	ASPHALTENE	0.000002350	kg/TJ
2021	Zn	1A1a	BARK	0.055155134	kg/TJ
2021	Zn	1A1a	BIO PELLETS (NON-WOOD)	0.054000000	kg/TJ
2021	Zn	1A1a	CHIPS FROM ROUNDWOOD	0.043636647	kg/TJ
2021	Zn	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.700000000	kg/TJ
2021	Zn	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.700000000	kg/TJ
2021	Zn	1A1a	COAL (S=1.0%)	0.013494093	kg/TJ
2021	Zn	1A1a	CREOSOTED WOOD	0.054000000	kg/TJ
2021	Zn	1A1a	CUTTER CHIPS ETC.	0.455482703	kg/TJ
2021	Zn	1A1a	DEINKING WASTE	0.283770823	kg/TJ
2021	Zn	1A1a	DEMOLITION WOOD	0.054000000	kg/TJ
2021	Zn	1A1a	FOREST RESIDUE CHIPS	0.152211029	kg/TJ
2021	Zn	1A1a	FOREST RESIDUE CHIPS	0.577579072	kg/TJ
2021	Zn	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.005248174	kg/TJ
2021	Zn	1A1a	HEAVY FUEL OIL (S<0,1%)	0.006000000	kg/TJ
2021	Zn	1A1a	HEAVY FUEL OIL (S<0,5%)	0.011105674	kg/TJ
2021	Zn	1A1a	HEAVY FUEL OIL (S<1%)	0.009011489	kg/TJ
2021	Zn	1A1a	IMPREGNATED WOOD	0.054000000	kg/TJ
2021	Zn	1A1a	INDUSTRIAL WASTE	0.007602297	kg/TJ
2021	Zn	1A1a	LIGNIN	0.054000000	kg/TJ
2021	Zn	1A1a	MILLED PEAT	0.024469917	kg/TJ
2021	Zn	1A1a	MUNICIPAL WASTE - unsorted	0.210100622	kg/TJ
2021	Zn	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.053959392	kg/TJ
2021	Zn	1A1a	OTHER FOSSIL SOLID	0.087748489	kg/TJ
2021	Zn	1A1a	OTHER NON-FOSSIL SOLID	0.054198088	kg/TJ
2021	Zn	1A1a	OTHER NON-FOSSIL SOLID	0.700000000	kg/TJ
2021	Zn	1A1a	OTHER WASTE	0.048318894	kg/TJ
2021	Zn	1A1a	OTHER WOOD RESIDUE	0.156439695	kg/TJ
2021	Zn	1A1a	PAPER	0.012805596	kg/TJ
2021	Zn	1A1a	PLASTIC WASTE	0.025552816	kg/TJ
2021	Zn	1A1a	PLYWOOD RESIDUE	0.027947151	kg/TJ
2021	Zn	1A1a	RECOVERED FUEL (REF 1)	0.700000000	kg/TJ
2021	Zn	1A1a	RECOVERED FUEL (REF 2)	0.412204198	kg/TJ
2021	Zn	1A1a	RECOVERED FUEL (REF 3)	0.007591364	kg/TJ
2021	Zn	1A1a	RECOVERED WOOD	0.231171829	kg/TJ
2021	Zn	1A1a	RECYCLED AND WASTE OILS	0.006000000	kg/TJ
2021	Zn	1A1a	REFUSE-DERIVED FUEL (RDF)	0.007714286	kg/TJ
2021	Zn	1A1a	SAWDUST	0.365035520	kg/TJ

2021	Zn	1A1a	SAWDUST AND CUTTER CHIPS	0.122466099	kg/TJ
2021	Zn	1A1a	SOD PEAT	0.329350874	kg/TJ
2021	Zn	1A1a	SOLID RECOVERED FUEL (SRF)	0.000137105	kg/TJ
2021	Zn	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.166441047	kg/TJ
2021	Zn	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.095645480	kg/TJ
2021	Zn	1A1a	WOOD RESIDUE CHIPS	0.323591410	kg/TJ
2021	Zn	1A1a	WOOD STUMP CHIPS	0.640258435	kg/TJ
2021	Zn	1A1b	COKE (S=1.0%)	1.500000000	kg/TJ
2021	Zn	1A1b	HEAVY FUEL OIL (S<1%)	0.012000000	kg/TJ
2021	Zn	1A1b	PETROLEUM COKE	1.500000000	kg/TJ
2021	Zn	1A2a	WOOD RESIDUE CHIPS	0.700000000	kg/TJ
2021	Zn	1A2b	HEAVY FUEL OIL (S<1%)	0.001374143	kg/TJ
2021	Zn	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.012000000	kg/TJ
2021	Zn	1A2c	HEAVY FUEL OIL (S<0,1%)	0.010060907	kg/TJ
2021	Zn	1A2c	HEAVY FUEL OIL (S<1%)	0.012000000	kg/TJ
2021	Zn	1A2c	OTHER FOSSIL LIQUID	0.012000000	kg/TJ
2021	Zn	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.700000000	kg/TJ
2021	Zn	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.056921903	kg/TJ
2021	Zn	1A2d	ANIMAL-BASED FUELS	0.007714286	kg/TJ
2021	Zn	1A2d	BARK	0.029129240	kg/TJ
2021	Zn	1A2d	BIO PELLETS (NON-WOOD)	0.054000000	kg/TJ
2021	Zn	1A2d	BIOLOGICAL SLURRY	0.012505572	kg/TJ
2021	Zn	1A2d	CHIPS FROM ROUNDWOOD	0.074923091	kg/TJ
2021	Zn	1A2d	COAL (S=1.0%)	0.012197664	kg/TJ
2021	Zn	1A2d	CREOSOTED WOOD	0.054000000	kg/TJ
2021	Zn	1A2d	DEMOLITION WOOD	0.007714286	kg/TJ
2021	Zn	1A2d	FOREST RESIDUE CHIPS	0.054000000	kg/TJ
2021	Zn	1A2d	FOREST RESIDUE CHIPS	0.043093721	kg/TJ
2021	Zn	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.017332858	kg/TJ
2021	Zn	1A2d	HEAVY FUEL OIL (S<0,1%)	0.003572597	kg/TJ
2021	Zn	1A2d	HEAVY FUEL OIL (S<0,5%)	0.006000000	kg/TJ
2021	Zn	1A2d	HEAVY FUEL OIL (S<1%)	0.065738927	kg/TJ
2021	Zn	1A2d	INDUSTRIAL WASTE	0.110596164	kg/TJ
2021	Zn	1A2d	METHANOL	0.001423200	kg/TJ
2021	Zn	1A2d	MILLED PEAT	0.002994496	kg/TJ
2021	Zn	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.044359365	kg/TJ
2021	Zn	1A2d	OTHER FOSSIL LIQUID	0.012000000	kg/TJ
2021	Zn	1A2d	OTHER FUEL	0.054000000	kg/TJ
2021	Zn	1A2d	OTHER WOOD RESIDUE	0.175000000	kg/TJ
2021	Zn	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.007714286	kg/TJ
2021	Zn	1A2d	PAPER	0.054000000	kg/TJ
2021	Zn	1A2d	PLASTIC WASTE	0.007713604	kg/TJ
2021	Zn	1A2d	RECOVERED FUEL (REF 1)	0.700000000	kg/TJ
2021	Zn	1A2d	RECOVERED FUEL (REF 2)	0.007714286	kg/TJ
2021	Zn	1A2d	RECOVERED WOOD	0.024212698	kg/TJ
2021	Zn	1A2d	RECYCLED AND WASTE OILS	0.000857143	kg/TJ
2021	Zn	1A2d	SAWDUST AND CUTTER CHIPS	0.228826318	kg/TJ
2021	Zn	1A2d	SULPHITE LIQUOR	0.041173486	kg/TJ
2021	Zn	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.009707504	kg/TJ
2021	Zn	1A2d	WOOD RESIDUE CHIPS	0.007714286	kg/TJ
2021	Zn	1A2e	ANIMAL-BASED FUELS	0.700000000	kg/TJ
2021	Zn	1A2e	BIO-FUEL OIL	0.012000000	kg/TJ
2021	Zn	1A2e	CHIPS FROM ROUNDWOOD	0.054000000	kg/TJ
2021	Zn	1A2e	COAL (S=1.0%)	0.084551148	kg/TJ
2021	Zn	1A2e	COKE (S=1.0%)	1.500000000	kg/TJ
2021	Zn	1A2e	FOREST RESIDUE CHIPS	0.700000000	kg/TJ

2021	Zn	1A2e	HEAVY FUEL OIL (S<1%)	0.012018087	kg/TJ
2021	Zn	1A2e	MILLED PEAT	0.280204869	kg/TJ
2021	Zn	1A2e	OTHER NON-FOSSIL SOLID	0.054000000	kg/TJ
2021	Zn	1A2e	RECOVERED WOOD	0.054000000	kg/TJ
2021	Zn	1A2e	SAWDUST	0.054000000	kg/TJ
2021	Zn	1A2e	SAWDUST AND CUTTER CHIPS	0.700000000	kg/TJ
2021	Zn	1A2e	SOD PEAT	0.330000000	kg/TJ
2021	Zn	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.054000000	kg/TJ
2021	Zn	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.700000000	kg/TJ
2021	Zn	1A2f	CHIPS FROM ROUNDWOOD	0.700000000	kg/TJ
2021	Zn	1A2f	COAL (S=1.0%)	0.981543549	kg/TJ
2021	Zn	1A2f	COKE (S=1.0%)	1.500000000	kg/TJ
2021	Zn	1A2f	FOREST RESIDUE CHIPS	0.700000000	kg/TJ
2021	Zn	1A2f	HEAVY FUEL OIL (S<1%)	0.010806474	kg/TJ
2021	Zn	1A2f	INDUSTRIAL WASTE	0.700000000	kg/TJ
2021	Zn	1A2f	OTHER FOSSIL LIQUID	0.012000000	kg/TJ
2021	Zn	1A2f	OTHER FOSSIL SOLID	0.084000000	kg/TJ
2021	Zn	1A2f	OTHER HEAVY DISTILLATES	0.012000000	kg/TJ
2021	Zn	1A2f	OTHER WASTE	0.054000000	kg/TJ
2021	Zn	1A2f	PETROLEUM COKE	0.515496831	kg/TJ
2021	Zn	1A2f	PLASTIC WASTE	0.007714286	kg/TJ
2021	Zn	1A2f	RECOVERED FUEL (REF 1)	0.700000000	kg/TJ
2021	Zn	1A2f	RECYCLED AND WASTE OILS	0.006000000	kg/TJ
2021	Zn	1A2f	RUBBER WASTE	0.054000000	kg/TJ
2021	Zn	1A2f	SAWDUST AND CUTTER CHIPS	0.092485232	kg/TJ
2021	Zn	1A2f	SOLID RECOVERED FUEL (SRF)	0.700000000	kg/TJ
2021	Zn	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.700000000	kg/TJ
2021	Zn	1A2gvii	GASOIL (FOR NON-ROAD USE)	0.023939041	kg/TJ
2021	Zn	1A2gvii	LIQUID GAS	0.021739130	kg/TJ
2021	Zn	1A2gvii	MOTOR GASOLINE (S=0.001%)	0.026265800	kg/TJ
2021	Zn	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.054000000	kg/TJ
2021	Zn	1A2gviii	BARK	0.201581560	kg/TJ
2021	Zn	1A2gviii	CHIPS FROM ROUNDWOOD	0.068472832	kg/TJ
2021	Zn	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.700000000	kg/TJ
2021	Zn	1A2gviii	CREOSOTED WOOD	0.054000000	kg/TJ
2021	Zn	1A2gviii	CUTTER CHIPS ETC.	0.123757871	kg/TJ
2021	Zn	1A2gviii	DEMOLITION WOOD	0.054000000	kg/TJ
2021	Zn	1A2gviii	FOREST RESIDUE CHIPS	0.527172536	kg/TJ
2021	Zn	1A2gviii	FOREST RESIDUE CHIPS	0.580304313	kg/TJ
2021	Zn	1A2gviii	HAZARDOUS WASTE	0.477290248	kg/TJ
2021	Zn	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.012000000	kg/TJ
2021	Zn	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.012000000	kg/TJ
2021	Zn	1A2gviii	HEAVY FUEL OIL (S<1%)	0.011757127	kg/TJ
2021	Zn	1A2gviii	MILLED PEAT	0.008016744	kg/TJ
2021	Zn	1A2gviii	MUNICIPAL WASTE - unsorted	0.023606951	kg/TJ
2021	Zn	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	0.054000000	kg/TJ
2021	Zn	1A2gviii	OTHER HEAVY DISTILLATES	0.006960572	kg/TJ
2021	Zn	1A2gviii	OTHER NON-FOSSIL SOLID	0.056891021	kg/TJ
2021	Zn	1A2gviii	OTHER WASTE	0.054000000	kg/TJ
2021	Zn	1A2gviii	OTHER WOOD RESIDUE	0.231658769	kg/TJ
2021	Zn	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.008000000	kg/TJ
2021	Zn	1A2gviii	PLASTIC WASTE	0.054000000	kg/TJ
2021	Zn	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.012000000	kg/TJ
2021	Zn	1A2gviii	RECOVERED WOOD	0.098691104	kg/TJ
2021	Zn	1A2gviii	RECYCLED AND WASTE OILS	0.006000000	kg/TJ
2021	Zn	1A2gviii	SAWDUST	0.054000000	kg/TJ

2021	Zn	1A2gviii	SAWDUST AND CUTTER CHIPS	0.159634880	kg/TJ
2021	Zn	1A2gviii	SOD PEAT	0.184992365	kg/TJ
2021	Zn	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.700000000	kg/TJ
2021	Zn	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.064624302	kg/TJ
2021	Zn	1A2gviii	WASTE PELLETS	0.054000000	kg/TJ
2021	Zn	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.700000000	kg/TJ
2021	Zn	1A2gviii	WOOD RESIDUE CHIPS	0.474751265	kg/TJ
2021	Zn	1A2gviii	WOOD STUMP CHIPS	0.700000000	kg/TJ
2021	Zn	1A3bi	DIESEL OIL (S=001%)	0.000538675	kg/TJ
2021	Zn	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000868659	kg/TJ
2021	Zn	1A3bii	DIESEL OIL (S=001%)	0.000538675	kg/TJ
2021	Zn	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000866771	kg/TJ
2021	Zn	1A3biii	DIESEL OIL (S=001%)	0.000538675	kg/TJ
2021	Zn	1A3biv	DIESEL OIL (S=001%)	0.000521494	kg/TJ
2021	Zn	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000867734	kg/TJ
2021	Zn	1A3c	GASOIL (FOR NON-ROAD USE)	0.023939041	kg/TJ
2021	Zn	1A3dii	GASOIL (FOR NON-ROAD USE)	0.028146203	kg/TJ
2021	Zn	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.029531992	kg/TJ
2021	Zn	1A4ai	FOREST WOODFUEL	0.700000000	kg/TJ
2021	Zn	1A4ai	HEAVY FUEL OIL (S<1%)	0.012000000	kg/TJ
2021	Zn	1A4ai	SOD PEAT	0.330000000	kg/TJ
2021	Zn	1A4aii	GASOIL (FOR NON-ROAD USE)	0.023939041	kg/TJ
2021	Zn	1A4aii	MOTOR GASOLINE (S=0.001%)	0.026265800	kg/TJ
2021	Zn	1A4bi	FOREST WOODFUEL	0.700000000	kg/TJ
2021	Zn	1A4bi	HEAVY FUEL OIL (S<1%)	0.012000000	kg/TJ
2021	Zn	1A4bi	SOD PEAT	0.330000000	kg/TJ
2021	Zn	1A4bii	GASOIL (FOR NON-ROAD USE)	0.023939041	kg/TJ
2021	Zn	1A4bii	MOTOR GASOLINE (S=0.001%)	0.026265800	kg/TJ
2021	Zn	1A4ci	CHIPS FROM ROUNDWOOD	0.054000000	kg/TJ
2021	Zn	1A4ci	COAL (S=1.0%)	0.084000000	kg/TJ
2021	Zn	1A4ci	FOREST WOODFUEL	0.700000000	kg/TJ
2021	Zn	1A4ci	HEAVY FUEL OIL (S<1%)	0.012000000	kg/TJ
2021	Zn	1A4ci	OTHER NON-FOSSIL SOLID	0.054000000	kg/TJ
2021	Zn	1A4ci	RECOVERED WOOD	0.054000000	kg/TJ
2021	Zn	1A4ci	SOD PEAT	0.330000000	kg/TJ
2021	Zn	1A4ci	WOOD RESIDUE CHIPS	0.700000000	kg/TJ
2021	Zn	1A4cii	GASOIL (FOR NON-ROAD USE)	0.023939041	kg/TJ
2021	Zn	1A4cii	MOTOR GASOLINE (S=0.001%)	0.026265800	kg/TJ
2021	Zn	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.028726849	kg/TJ
2021	Zn	1A5a	FOREST WOODFUEL	0.700000000	kg/TJ
2021	Zn	1A5a	HEAVY FUEL OIL (S<1%)	0.012000000	kg/TJ
2021	Zn	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.004113450	kg/TJ
2021	Zn	1A5a	OTHER PETROLEUM PRODUCTS	0.012000000	kg/TJ

#### PCDD/F Implied emission factors in Finnish air pollutant inventory for 2021

2021	PCDD/F	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000015263	g/TJ
2021	PCDD/F	1A1a	ANIMAL-BASED FUELS	0.000000936	g/TJ
2021	PCDD/F	1A1a	ASPHALTENE	0.000000400	g/TJ
2021	PCDD/F	1A1a	BARK	0.000017822	g/TJ
2021	PCDD/F	1A1a	BIO PELLETS (NON-WOOD)	0.000041250	g/TJ
2021	PCDD/F	1A1a	BIO PYROLYSIS OIL	0.000000500	g/TJ
2021	PCDD/F	1A1a	BLAST FURNACE GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	CHIPS FROM ROUNDWOOD	0.000019277	g/TJ
2021	PCDD/F	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.000021000	g/TJ
2021	PCDD/F	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.000021000	g/TJ

2021	PCDD/F	1A1a	COAL (S=1.0%)	0.000003878	g/TJ
2021	PCDD/F	1A1a	COKE OVEN GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	CREOSOTED WOOD	0.000034938	g/TJ
2021	PCDD/F	1A1a	CUTTER CHIPS ETC.	0.000021000	g/TJ
2021	PCDD/F	1A1a	DEINKING WASTE	0.000041250	g/TJ
2021	PCDD/F	1A1a	DEMOLITION WOOD	0.000005246	g/TJ
2021	PCDD/F	1A1a	FOREST RESIDUE CHIPS	0.000017564	g/TJ
2021	PCDD/F	1A1a	FOREST RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A1a	GASIFIED WASTE	0.000000500	g/TJ
2021	PCDD/F	1A1a	GASOIL (FOR NON-ROAD USE)	0.000001065	g/TJ
2021	PCDD/F	1A1a	HEAVY FUEL OIL (normal, S>1%)	0.000000396	g/TJ
2021	PCDD/F	1A1a	HEAVY FUEL OIL (S<0,1%)	0.000000018	g/TJ
2021	PCDD/F	1A1a	HEAVY FUEL OIL (S<0,5%)	0.000000400	g/TJ
2021	PCDD/F	1A1a	HEAVY FUEL OIL (S<1%)	0.000000390	g/TJ
2021	PCDD/F	1A1a	HYDROGEN	0.000000500	g/TJ
2021	PCDD/F	1A1a	IMPREGNATED WOOD	0.000041250	g/TJ
2021	PCDD/F	1A1a	INDUSTRIAL BIOGAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	INDUSTRIAL WASTE	0.000042880	g/TJ
2021	PCDD/F	1A1a	LANDFILL GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	LIGHT FUEL OIL (S=0.0915%)	0.000000497	g/TJ
2021	PCDD/F	1A1a	LIGNIN	0.000021000	g/TJ
2021	PCDD/F	1A1a	LIQUEFIED NATURAL GAS (LNG)	0.000000500	g/TJ
2021	PCDD/F	1A1a	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	MILLED PEAT	0.000013610	g/TJ
2021	PCDD/F	1A1a	MOTOR GASOLINE (S=0.001%)	0.000000500	g/TJ
2021	PCDD/F	1A1a	MUNICIPAL WASTE - unsorted	0.000129582	g/TJ
2021	PCDD/F	1A1a	NATURAL GAS	0.000000502	g/TJ
2021	PCDD/F	1A1a	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.000021000	g/TJ
2021	PCDD/F	1A1a	OTHER FOSSIL GAS	0.000124528	g/TJ
2021	PCDD/F	1A1a	OTHER FOSSIL SOLID	0.000002204	g/TJ
2021	PCDD/F	1A1a	OTHER NON-FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	OTHER NON-FOSSIL LIQUID	0.000000400	g/TJ
2021	PCDD/F	1A1a	OTHER NON-FOSSIL SOLID	0.000021000	g/TJ
2021	PCDD/F	1A1a	OTHER NON-FOSSIL SOLID	0.000020948	g/TJ
2021	PCDD/F	1A1a	OTHER WASTE	0.000030501	g/TJ
2021	PCDD/F	1A1a	OTHER WOOD RESIDUE	0.000014852	g/TJ
2021	PCDD/F	1A1a	PAPER	0.000016323	g/TJ
2021	PCDD/F	1A1a	PLASTIC WASTE	0.000000099	g/TJ
2021	PCDD/F	1A1a	PLYWOOD RESIDUE	0.000021000	g/TJ
2021	PCDD/F	1A1a	RECOVERED FUEL (REF 1)	0.000041250	g/TJ
2021	PCDD/F	1A1a	RECOVERED FUEL (REF 2)	0.000022744	g/TJ
2021	PCDD/F	1A1a	RECOVERED FUEL (REF 3)	0.000042889	g/TJ
2021	PCDD/F	1A1a	RECOVERED WOOD	0.000017302	g/TJ
2021	PCDD/F	1A1a	RECYCLED AND WASTE OILS	0.000000044	g/TJ
2021	PCDD/F	1A1a	REFINERY GAS	0.000000500	g/TJ
2021	PCDD/F	1A1a	REFUSE-DERIVED FUEL (RDF)	0.000185000	g/TJ
2021	PCDD/F	1A1a	SAWDUST	0.000021000	g/TJ
2021	PCDD/F	1A1a	SAWDUST AND CUTTER CHIPS	0.000018218	g/TJ
2021	PCDD/F	1A1a	SOD PEAT	0.000017500	g/TJ
2021	PCDD/F	1A1a	SOLID RECOVERED FUEL (SRF)	0.000041250	g/TJ
2021	PCDD/F	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000020773	g/TJ
2021	PCDD/F	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000020984	g/TJ
2021	PCDD/F	1A1a	WOOD RESIDUE CHIPS	0.000020437	g/TJ
2021	PCDD/F	1A1a	WOOD STUMP CHIPS	0.000016676	g/TJ
2021	PCDD/F	1A1b	COKE (S=1.0%)	0.000004000	g/TJ

2021	PCDD/F	1A1b	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A1b	INDUSTRIAL BIOGAS	0.000000500	g/TJ
2021	PCDD/F	1A1b	LIGHT FUEL OIL (S=0.0915%)	0.000000500	g/TJ
2021	PCDD/F	1A1b	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A1b	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A1b	OTHER FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A1b	OTHER FOSSIL LIQUID	0.000000400	g/TJ
2021	PCDD/F	1A1b	OTHER MEDIUM DISTILLATES	0.000000500	g/TJ
2021	PCDD/F	1A1b	PETROLEUM COKE	0.000004000	g/TJ
2021	PCDD/F	1A1b	REFINERY GAS	0.000000500	g/TJ
2021	PCDD/F	1A2a	BLAST FURNACE GAS	0.000000194	g/TJ
2021	PCDD/F	1A2a	CO GAS	0.000007861	g/TJ
2021	PCDD/F	1A2a	COKE OVEN GAS	0.000000259	g/TJ
2021	PCDD/F	1A2a	DIESEL OIL (S=001%)	0.000000500	g/TJ
2021	PCDD/F	1A2a	GASOIL (FOR NON-ROAD USE)	0.000000448	g/TJ
2021	PCDD/F	1A2a	LIGHT FUEL OIL (S=0.0915%)	0.000000500	g/TJ
2021	PCDD/F	1A2a	LIQUID GAS	0.000000091	g/TJ
2021	PCDD/F	1A2a	NATURAL GAS	0.000000464	g/TJ
2021	PCDD/F	1A2a	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2a	WOOD RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A2b	COKE (S=1.0%)	0.000004000	g/TJ
2021	PCDD/F	1A2b	HEAVY FUEL OIL (S<1%)	0.000000291	g/TJ
2021	PCDD/F	1A2b	LIGHT FUEL OIL (S=0.0915%)	0.000000417	g/TJ
2021	PCDD/F	1A2b	LIQUEFIED NATURAL GAS (LNG)	0.000000500	g/TJ
2021	PCDD/F	1A2b	LIQUID GAS	0.000000494	g/TJ
2021	PCDD/F	1A2b	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2b	OTHER HEAVY DISTILLATES	0.000000400	g/TJ
2021	PCDD/F	1A2c	DIESEL OIL (S=001%)	0.000000500	g/TJ
2021	PCDD/F	1A2c	GASIFIED WASTE	0.000000500	g/TJ
2021	PCDD/F	1A2c	GASOIL (FOR NON-ROAD USE)	0.000000500	g/TJ
2021	PCDD/F	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.000000400	g/TJ
2021	PCDD/F	1A2c	HEAVY FUEL OIL (S<0,1%)	0.000000400	g/TJ
2021	PCDD/F	1A2c	HEAVY FUEL OIL (S<1%)	0.000000210	g/TJ
2021	PCDD/F	1A2c	HYDROGEN	0.000000500	g/TJ
2021	PCDD/F	1A2c	INDUSTRIAL BIOGAS	0.000000500	g/TJ
2021	PCDD/F	1A2c	LIGHT FUEL OIL (S=0.0915%)	0.000000495	g/TJ
2021	PCDD/F	1A2c	LIQUEFIED NATURAL GAS (LNG)	0.000000451	g/TJ
2021	PCDD/F	1A2c	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A2c	NAPHTHA	0.000000500	g/TJ
2021	PCDD/F	1A2c	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2c	OTHER FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2c	OTHER FOSSIL LIQUID	0.000000400	g/TJ
2021	PCDD/F	1A2c	OTHER NON-FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2c	REFINERY GAS	0.000000500	g/TJ
2021	PCDD/F	1A2c	TALL PITCH AND OIL	0.000000400	g/TJ
2021	PCDD/F	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000021000	g/TJ
2021	PCDD/F	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000017269	g/TJ
2021	PCDD/F	1A2d	ANIMAL-BASED FUELS	0.000005644	g/TJ
2021	PCDD/F	1A2d	AROMATIC GAS	0.000007336	g/TJ
2021	PCDD/F	1A2d	BARK	0.000016113	g/TJ
2021	PCDD/F	1A2d	BIO PELLETS (NON-WOOD)	0.000011086	g/TJ
2021	PCDD/F	1A2d	BIOGAS FROM WASTEWATER TREATMENT	0.000000500	g/TJ
2021	PCDD/F	1A2d	BIOLOGICAL SLURRY	0.000041250	g/TJ
2021	PCDD/F	1A2d	CHIPS FROM ROUNDWOOD	0.000005800	g/TJ
2021	PCDD/F	1A2d	COAL (S=1.0%)	0.000003700	g/TJ
2021	PCDD/F	1A2d	CREOSOTED WOOD	0.000011086	g/TJ

2021	PCDD/F	1A2d	DEMOLITION WOOD	0.000011086	g/TJ
2021	PCDD/F	1A2d	FOREST RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A2d	FOREST RESIDUE CHIPS	0.000011717	g/TJ
2021	PCDD/F	1A2d	GASOIL (FOR NON-ROAD USE)	0.000000500	g/TJ
2021	PCDD/F	1A2d	HEAVY FUEL OIL (normal, S>1%)	0.000003239	g/TJ
2021	PCDD/F	1A2d	HEAVY FUEL OIL (S<0,1%)	0.000000262	g/TJ
2021	PCDD/F	1A2d	HEAVY FUEL OIL (S<0,5%)	0.000000400	g/TJ
2021	PCDD/F	1A2d	HEAVY FUEL OIL (S<1%)	0.000000397	g/TJ
2021	PCDD/F	1A2d	HYDROGEN	0.000000500	g/TJ
2021	PCDD/F	1A2d	INDUSTRIAL BIOGAS	0.000000500	g/TJ
2021	PCDD/F	1A2d	INDUSTRIAL WASTE	0.000041250	g/TJ
2021	PCDD/F	1A2d	LIGHT FUEL OIL (S=0.0915%)	0.000000496	g/TJ
2021	PCDD/F	1A2d	LIQUEFIED NATURAL GAS (LNG)	0.000000500	g/TJ
2021	PCDD/F	1A2d	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A2d	METHANOL	0.000018270	g/TJ
2021	PCDD/F	1A2d	MILLED PEAT	0.000014961	g/TJ
2021	PCDD/F	1A2d	NATURAL GAS	0.000001789	g/TJ
2021	PCDD/F	1A2d	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.000021000	g/TJ
2021	PCDD/F	1A2d	OTHER FOSSIL LIQUID	0.000000400	g/TJ
2021	PCDD/F	1A2d	OTHER FUEL	0.000021000	g/TJ
2021	PCDD/F	1A2d	OTHER INDUSTRIAL AROMATIC GAS	0.000000500	g/TJ
2021	PCDD/F	1A2d	OTHER NON-FOSSIL LIQUID	0.000024539	g/TJ
2021	PCDD/F	1A2d	OTHER WOOD RESIDUE	0.000021000	g/TJ
2021	PCDD/F	1A2d	PACKAGING-DERIVED FUEL (PDF)	0.000157201	g/TJ
2021	PCDD/F	1A2d	PAPER	0.000001152	g/TJ
2021	PCDD/F	1A2d	PLASTIC WASTE	0.000041250	g/TJ
2021	PCDD/F	1A2d	RECOVERED FUEL (REF 1)	0.000030288	g/TJ
2021	PCDD/F	1A2d	RECOVERED FUEL (REF 2)	0.000011086	g/TJ
2021	PCDD/F	1A2d	RECOVERED WOOD	0.000008639	g/TJ
2021	PCDD/F	1A2d	RECYCLED AND WASTE OILS	0.000000108	g/TJ
2021	PCDD/F	1A2d	SAWDUST AND CUTTER CHIPS	0.000017815	g/TJ
2021	PCDD/F	1A2d	SULPHITE LIQUOR	0.000021000	g/TJ
2021	PCDD/F	1A2d	TALL PITCH AND OIL	0.000005414	g/TJ
2021	PCDD/F	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000002794	g/TJ
2021	PCDD/F	1A2d	WOOD RESIDUE CHIPS	0.000019246	g/TJ
2021	PCDD/F	1A2e	ANIMAL-BASED FUELS	0.000021000	g/TJ
2021	PCDD/F	1A2e	BIO-FUEL OIL	0.000000400	g/TJ
2021	PCDD/F	1A2e	CHIPS FROM ROUNDWOOD	0.000021000	g/TJ
2021	PCDD/F	1A2e	COAL (S=1.0%)	0.000004000	g/TJ
2021	PCDD/F	1A2e	COKE (S=1.0%)	0.000004000	g/TJ
2021	PCDD/F	1A2e	FOREST RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A2e	GASOIL (FOR NON-ROAD USE)	0.000000500	g/TJ
2021	PCDD/F	1A2e	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A2e	LIGHT FUEL OIL (S=0.0915%)	0.000000500	g/TJ
2021	PCDD/F	1A2e	LIQUEFIED NATURAL GAS (LNG)	0.000000500	g/TJ
2021	PCDD/F	1A2e	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A2e	MILLED PEAT	0.000017500	g/TJ
2021	PCDD/F	1A2e	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2e	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2e	OTHER NON-FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2e	OTHER NON-FOSSIL LIQUID	0.000000400	g/TJ
2021	PCDD/F	1A2e	OTHER NON-FOSSIL SOLID	0.000021000	g/TJ
2021	PCDD/F	1A2e	RECOVERED WOOD	0.000021000	g/TJ
2021	PCDD/F	1A2e	SAWDUST	0.000021000	g/TJ
2021	PCDD/F	1A2e	SAWDUST AND CUTTER CHIPS	0.000021000	g/TJ

2021	PCDD/F	1A2e	SOD PEAT	0.000017500	g/TJ
2021	PCDD/F	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000021000	g/TJ
2021	PCDD/F	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000021000	g/TJ
2021	PCDD/F	1A2f	CHIPS FROM ROUNDWOOD	0.000021000	g/TJ
2021	PCDD/F	1A2f	COAL (S=1.0%)	0.000002892	g/TJ
2021	PCDD/F	1A2f	COKE (S=1.0%)	0.000004000	g/TJ
2021	PCDD/F	1A2f	COKE OVEN GAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	DIESEL OIL (S=001%)	0.000000500	g/TJ
2021	PCDD/F	1A2f	FOREST RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A2f	GASOIL (FOR NON-ROAD USE)	0.000000500	g/TJ
2021	PCDD/F	1A2f	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A2f	INDUSTRIAL BIOGAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	INDUSTRIAL WASTE	0.000001943	g/TJ
2021	PCDD/F	1A2f	LIGHT FUEL OIL (S=0.0915%)	0.000000471	g/TJ
2021	PCDD/F	1A2f	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	OTHER FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	OTHER FOSSIL SOLID	0.000000188	g/TJ
2021	PCDD/F	1A2f	OTHER HEAVY DISTILLATES	0.000000400	g/TJ
2021	PCDD/F	1A2f	OTHER NON-FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2f	OTHER WASTE	0.000000879	g/TJ
2021	PCDD/F	1A2f	PETROLEUM COKE	0.000000131	g/TJ
2021	PCDD/F	1A2f	PLASTIC WASTE	0.000001943	g/TJ
2021	PCDD/F	1A2f	RECYCLED AND WASTE OILS	0.000000394	g/TJ
2021	PCDD/F	1A2f	RUBBER WASTE	0.000001943	g/TJ
2021	PCDD/F	1A2f	SAWDUST AND CUTTER CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A2f	SOLID RECOVERED FUEL (SRF)	0.000001943	g/TJ
2021	PCDD/F	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000002528	g/TJ
2021	PCDD/F	1A2gviii	BARK	0.000018645	g/TJ
2021	PCDD/F	1A2gviii	BIOGAS FROM WASTEWATER TREATMENT	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	CHIPS FROM ROUNDWOOD	0.000002487	g/TJ
2021	PCDD/F	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	CREOSOTED WOOD	0.000001468	g/TJ
2021	PCDD/F	1A2gviii	CUTTER CHIPS ETC.	0.000016397	g/TJ
2021	PCDD/F	1A2gviii	DEMOLITION WOOD	0.000000457	g/TJ
2021	PCDD/F	1A2gviii	DIESEL OIL (S=001%)	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	FOREST RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	FOREST RESIDUE CHIPS	0.000007456	g/TJ
2021	PCDD/F	1A2gviii	GASIFIED WASTE	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	GASOIL (FOR NON-ROAD USE)	0.000000490	g/TJ
2021	PCDD/F	1A2gviii	HAZARDOUS WASTE	0.000002503	g/TJ
2021	PCDD/F	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	0.000000400	g/TJ
2021	PCDD/F	1A2gviii	HEAVY FUEL OIL (S<0,1%)	0.000000400	g/TJ
2021	PCDD/F	1A2gviii	HEAVY FUEL OIL (S<1%)	0.000000383	g/TJ
2021	PCDD/F	1A2gviii	INDUSTRIAL BIOGAS	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	LANDFILL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	0.000000465	g/TJ
2021	PCDD/F	1A2gviii	LIQUEFIED NATURAL GAS (LNG)	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	LIQUID GAS	0.000017862	g/TJ
2021	PCDD/F	1A2gviii	MILLED PEAT	0.000004950	g/TJ
2021	PCDD/F	1A2gviii	MUNICIPAL WASTE - unsorted	0.000090576	g/TJ
2021	PCDD/F	1A2gviii	NAPHTHA	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	NATURAL GAS	0.000000500	g/TJ

2021	PCDD/F	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	OTHER HEAVY DISTILLATES	0.000000400	g/TJ
2021	PCDD/F	1A2gviii	OTHER NON-FOSSIL GAS	0.000000500	g/TJ
2021	PCDD/F	1A2gviii	OTHER NON-FOSSIL LIQUID	0.000000400	g/TJ
2021	PCDD/F	1A2gviii	OTHER NON-FOSSIL SOLID	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	OTHER WASTE	0.000000289	g/TJ
2021	PCDD/F	1A2gviii	OTHER WOOD RESIDUE	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	PEAT PELLETS AND BRIQUETTES	0.000017500	g/TJ
2021	PCDD/F	1A2gviii	PLASTIC WASTE	0.000001347	g/TJ
2021	PCDD/F	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	0.000000400	g/TJ
2021	PCDD/F	1A2gviii	RECOVERED WOOD	0.000006678	g/TJ
2021	PCDD/F	1A2gviii	RECYCLED AND WASTE OILS	0.000000031	g/TJ
2021	PCDD/F	1A2gviii	SAWDUST	0.000021000	g/TJ
2021	PCDD/F	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000005788	g/TJ
2021	PCDD/F	1A2gviii	SOD PEAT	0.000017500	g/TJ
2021	PCDD/F	1A2gviii	SOLID RECOVERED FUEL (SRF)	0.000012563	g/TJ
2021	PCDD/F	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000020856	g/TJ
2021	PCDD/F	1A2gviii	WASTE PELLETS	0.000041250	g/TJ
2021	PCDD/F	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000020456	g/TJ
2021	PCDD/F	1A2gviii	WOOD RESIDUE CHIPS	0.000020451	g/TJ
2021	PCDD/F	1A2gviii	WOOD STUMP CHIPS	0.000000230	g/TJ
2021	PCDD/F	1A3bi	DIESEL OIL (S=001%)	0.000012126	g/TJ
2021	PCDD/F	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000004069	g/TJ
2021	PCDD/F	1A3bii	DIESEL OIL (S=001%)	0.000014892	g/TJ
2021	PCDD/F	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000004749	g/TJ
2021	PCDD/F	1A3biii	DIESEL OIL (S=001%)	0.000001279	g/TJ
2021	PCDD/F	1A3biv	DIESEL OIL (S=001%)	0.000058350	g/TJ
2021	PCDD/F	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000010336	g/TJ
2021	PCDD/F	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000003049	g/TJ
2021	PCDD/F	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.000011567	g/TJ
2021	PCDD/F	1A3ei	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A4ai	FOREST WOODFUEL	0.000021000	g/TJ
2021	PCDD/F	1A4ai	GASOIL (FOR NON-ROAD USE)	0.000000500	g/TJ
2021	PCDD/F	1A4ai	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.000000500	g/TJ
2021	PCDD/F	1A4ai	MOTOR GASOLINE (S=0.001%)	0.000000500	g/TJ
2021	PCDD/F	1A4ai	NAPHTHA	0.000000500	g/TJ
2021	PCDD/F	1A4ai	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A4ai	SOD PEAT	0.000017500	g/TJ
2021	PCDD/F	1A4bi	FOREST WOODFUEL	0.000021000	g/TJ
2021	PCDD/F	1A4bi	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.000000500	g/TJ
2021	PCDD/F	1A4bi	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A4bi	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A4bi	PARAFFIN	0.000000500	g/TJ
2021	PCDD/F	1A4bi	SOD PEAT	0.000017500	g/TJ
2021	PCDD/F	1A4ci	CHIPS FROM ROUNDWOOD	0.000021000	g/TJ
2021	PCDD/F	1A4ci	COAL (S=1.0%)	0.000004000	g/TJ
2021	PCDD/F	1A4ci	FOREST WOODFUEL	0.000021000	g/TJ
2021	PCDD/F	1A4ci	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.000000500	g/TJ
2021	PCDD/F	1A4ci	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A4ci	NATURAL GAS	0.000000500	g/TJ
2021	PCDD/F	1A4ci	OTHER NON-FOSSIL SOLID	0.000021000	g/TJ
2021	PCDD/F	1A4ci	RECOVERED WOOD	0.000021000	g/TJ
2021	PCDD/F	1A4ci	SOD PEAT	0.000017500	g/TJ

2021	PCDD/F	1A4ci	WOOD RESIDUE CHIPS	0.000021000	g/TJ
2021	PCDD/F	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000003112	g/TJ
2021	PCDD/F	1A5a	FOREST WOODFUEL	0.000021000	g/TJ
2021	PCDD/F	1A5a	HEAVY FUEL OIL (S<1%)	0.000000400	g/TJ
2021	PCDD/F	1A5a	LANDFILL GAS	0.000000500	g/TJ
2021	PCDD/F	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000000901	g/TJ
2021	PCDD/F	1A5a	LIQUID GAS	0.000000500	g/TJ
2021	PCDD/F	1A5a	OTHER PETROLEUM PRODUCTS	0.000000400	g/TJ

#### PAH-4 Implied emission factors in Finnish air pollutant inventory for 2021

2021	PAH-4	1A1a	0-FIBRE/BIOLOGICAL SLURRY	2.700000000	g/TJ
2021	PAH-4	1A1a	ANIMAL-BASED FUELS	2.700000000	g/TJ
2021	PAH-4	1A1a	ASPHALTENE	2.800000000	g/TJ
2021	PAH-4	1A1a	BARK	2.655118257	g/TJ
2021	PAH-4	1A1a	BIO PELLETS (NON-WOOD)	2.500000000	g/TJ
2021	PAH-4	1A1a	BIO PYROLYSIS OIL	2.800000000	g/TJ
2021	PAH-4	1A1a	CHIPS FROM ROUNDWOOD	2.503228026	g/TJ
2021	PAH-4	1A1a	CHIPS FROM ROUNDWOOD, LARGE	2.700000000	g/TJ
2021	PAH-4	1A1a	CHIPS FROM ROUNDWOOD, SMALL	2.700000000	g/TJ
2021	PAH-4	1A1a	COAL (S=1.0%)	0.008777777	g/TJ
2021	PAH-4	1A1a	CREOSOTED WOOD	2.500000000	g/TJ
2021	PAH-4	1A1a	CUTTER CHIPS ETC.	2.700000000	g/TJ
2021	PAH-4	1A1a	DEINKING WASTE	2.500000000	g/TJ
2021	PAH-4	1A1a	DEMOLITION WOOD	2.406354014	g/TJ
2021	PAH-4	1A1a	FOREST RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A1a	FOREST RESIDUE CHIPS	2.409083122	g/TJ
2021	PAH-4	1A1a	GASOIL (FOR NON-ROAD USE)	39.377701673	g/TJ
2021	PAH-4	1A1a	HEAVY FUEL OIL (normal, S>1%)	2.780739471	g/TJ
2021	PAH-4	1A1a	HEAVY FUEL OIL (S<0,1%)	2.800000000	g/TJ
2021	PAH-4	1A1a	HEAVY FUEL OIL (S<0,5%)	2.762444219	g/TJ
2021	PAH-4	1A1a	HEAVY FUEL OIL (S<1%)	2.585111451	g/TJ
2021	PAH-4	1A1a	IMPREGNATED WOOD	2.500000000	g/TJ
2021	PAH-4	1A1a	INDUSTRIAL WASTE	2.455385389	g/TJ
2021	PAH-4	1A1a	LIGHT FUEL OIL (S=0.0915%)	2.794632207	g/TJ
2021	PAH-4	1A1a	LIGNIN	2.700000000	g/TJ
2021	PAH-4	1A1a	MILLED PEAT	0.926633825	g/TJ
2021	PAH-4	1A1a	MOTOR GASOLINE (S=0.001%)	2.800000000	g/TJ
2021	PAH-4	1A1a	MUNICIPAL WASTE - unsorted	28.361954279	g/TJ
2021	PAH-4	1A1a	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	2.700000000	g/TJ
2021	PAH-4	1A1a	OTHER FOSSIL SOLID	0.012130589	g/TJ
2021	PAH-4	1A1a	OTHER NON-FOSSIL LIQUID	2.800000000	g/TJ
2021	PAH-4	1A1a	OTHER NON-FOSSIL SOLID	2.700000000	g/TJ
2021	PAH-4	1A1a	OTHER NON-FOSSIL SOLID	2.698777738	g/TJ
2021	PAH-4	1A1a	OTHER WASTE	2.469548059	g/TJ
2021	PAH-4	1A1a	OTHER WOOD RESIDUE	2.701736685	g/TJ
2021	PAH-4	1A1a	PAPER	2.700000000	g/TJ
2021	PAH-4	1A1a	PLASTIC WASTE	2.051864385	g/TJ
2021	PAH-4	1A1a	PLYWOOD RESIDUE	2.700000000	g/TJ
2021	PAH-4	1A1a	RECOVERED FUEL (REF 1)	2.500000000	g/TJ
2021	PAH-4	1A1a	RECOVERED FUEL (REF 2)	2.492698343	g/TJ
2021	PAH-4	1A1a	RECOVERED FUEL (REF 3)	2.455398728	g/TJ
2021	PAH-4	1A1a	RECOVERED WOOD	2.380523803	g/TJ
2021	PAH-4	1A1a	RECYCLED AND WASTE OILS	2.800000000	g/TJ
2021	PAH-4	1A1a	REFUSE-DERIVED FUEL (RDF)	34.000000000	g/TJ
2021	PAH-4	1A1a	SAWDUST	2.700000000	g/TJ

2021	PAH-4	1A1a	SAWDUST AND CUTTER CHIPS	2.616238040	g/TJ
2021	PAH-4	1A1a	SOD PEAT	1.000000000	g/TJ
2021	PAH-4	1A1a	SOLID RECOVERED FUEL (SRF)	2.500000000	g/TJ
2021	PAH-4	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	2.676979253	g/TJ
2021	PAH-4	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	2.672552979	g/TJ
2021	PAH-4	1A1a	WOOD RESIDUE CHIPS	2.599349862	g/TJ
2021	PAH-4	1A1a	WOOD STUMP CHIPS	2.606130474	g/TJ
2021	PAH-4	1A1b	COKE (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A1b	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A1b	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A1b	OTHER FOSSIL LIQUID	2.800000000	g/TJ
2021	PAH-4	1A1b	OTHER MEDIUM DISTILLATES	2.800000000	g/TJ
2021	PAH-4	1A1b	PETROLEUM COKE	0.012000000	g/TJ
2021	PAH-4	1A2a	COKE (S=1.0%)	0.000836354	g/TJ
2021	PAH-4	1A2a	DIESEL OIL (S=001%)	2.800000000	g/TJ
2021	PAH-4	1A2a	GASOIL (FOR NON-ROAD USE)	2.800000000	g/TJ
2021	PAH-4	1A2a	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A2a	OTHER FOSSIL SOLID	0.012000000	g/TJ
2021	PAH-4	1A2a	WOOD RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2b	COAL (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2b	COKE (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2b	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A2b	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A2b	OTHER HEAVY DISTILLATES	2.800000000	g/TJ
2021	PAH-4	1A2c	DIESEL OIL (S=001%)	2.800000000	g/TJ
2021	PAH-4	1A2c	GASOIL (FOR NON-ROAD USE)	2.800000000	g/TJ
2021	PAH-4	1A2c	HEAVY FUEL OIL (normal, S>1%)	0.191661755	g/TJ
2021	PAH-4	1A2c	HEAVY FUEL OIL (S<0,1%)	2.800000000	g/TJ
2021	PAH-4	1A2c	HEAVY FUEL OIL (S<1%)	2.751203295	g/TJ
2021	PAH-4	1A2c	LIGHT FUEL OIL (S=0.0915%)	2.681296736	g/TJ
2021	PAH-4	1A2c	NAPHTHA	2.800000000	g/TJ
2021	PAH-4	1A2c	OTHER FOSSIL LIQUID	2.794337988	g/TJ
2021	PAH-4	1A2c	TALL PITCH AND OIL	2.791639288	g/TJ
2021	PAH-4	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	2.700000000	g/TJ
2021	PAH-4	1A2d	0-FIBRE/BIOLOGICAL SLURRY	2.591166740	g/TJ
2021	PAH-4	1A2d	ANIMAL-BASED FUELS	2.700000000	g/TJ
2021	PAH-4	1A2d	BARK	1.944440117	g/TJ
2021	PAH-4	1A2d	BIO PELLETS (NON-WOOD)	2.500000000	g/TJ
2021	PAH-4	1A2d	BIOLOGICAL SLURRY	2.500000000	g/TJ
2021	PAH-4	1A2d	CHIPS FROM ROUNDWOOD	2.700000000	g/TJ
2021	PAH-4	1A2d	COAL (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2d	CREOSOTED WOOD	2.500000000	g/TJ
2021	PAH-4	1A2d	DEMOLITION WOOD	2.500000000	g/TJ
2021	PAH-4	1A2d	FOREST RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2d	FOREST RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2d	GASOIL (FOR NON-ROAD USE)	2.800000000	g/TJ
2021	PAH-4	1A2d	HEAVY FUEL OIL (normal, S>1%)	4.844868023	g/TJ
2021	PAH-4	1A2d	HEAVY FUEL OIL (S<0,1%)	2.800000000	g/TJ
2021	PAH-4	1A2d	HEAVY FUEL OIL (S<0,5%)	2.800000000	g/TJ
2021	PAH-4	1A2d	HEAVY FUEL OIL (S<1%)	2.933447714	g/TJ
2021	PAH-4	1A2d	INDUSTRIAL WASTE	2.500000000	g/TJ
2021	PAH-4	1A2d	LIGHT FUEL OIL (S=0.0915%)	2.855088480	g/TJ
2021	PAH-4	1A2d	METHANOL	13.496348411	g/TJ
2021	PAH-4	1A2d	MILLED PEAT	0.910314534	g/TJ
2021	PAH-4	1A2d	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUS- TRY	2.700000000	g/TJ
2021	PAH-4	1A2d	OTHER FOSSIL LIQUID	2.800000000	g/TJ

2021	PAH-4	1A2d	OTHER FUEL	2.700000000	g/TJ
2021	PAH-4	1A2d	OTHER NON-FOSSIL LIQUID	2.800000000	g/TJ
2021	PAH-4	1A2d	OTHER WOOD RESIDUE	2.700000000	g/TJ
2021	PAH-4	1A2d	PACKAGING-DERIVED FUEL (PDF)	34.000000000	g/TJ
2021	PAH-4	1A2d	PAPER	2.700000000	g/TJ
2021	PAH-4	1A2d	PLASTIC WASTE	2.500000000	g/TJ
2021	PAH-4	1A2d	RECOVERED FUEL (REF 1)	2.500000000	g/TJ
2021	PAH-4	1A2d	RECOVERED FUEL (REF 2)	2.500000000	g/TJ
2021	PAH-4	1A2d	RECOVERED WOOD	2.700000000	g/TJ
2021	PAH-4	1A2d	RECYCLED AND WASTE OILS	2.800000000	g/TJ
2021	PAH-4	1A2d	SAWDUST AND CUTTER CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2d	SULPHITE LIQUOR	2.700000000	g/TJ
2021	PAH-4	1A2d	TALL PITCH AND OIL	2.395669482	g/TJ
2021	PAH-4	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	21.790712307	g/TJ
2021	PAH-4	1A2d	WOOD RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2e	ANIMAL-BASED FUELS	2.700000000	g/TJ
2021	PAH-4	1A2e	BIO-FUEL OIL	2.800000000	g/TJ
2021	PAH-4	1A2e	CHIPS FROM ROUNDWOOD	2.700000000	g/TJ
2021	PAH-4	1A2e	COAL (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2e	COKE (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2e	FOREST RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2e	GASOIL (FOR NON-ROAD USE)	2.800000000	g/TJ
2021	PAH-4	1A2e	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A2e	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A2e	MILLED PEAT	1.000000000	g/TJ
2021	PAH-4	1A2e	OTHER NON-FOSSIL LIQUID	2.800000000	g/TJ
2021	PAH-4	1A2e	OTHER NON-FOSSIL SOLID	2.700000000	g/TJ
2021	PAH-4	1A2e	RECOVERED WOOD	2.700000000	g/TJ
2021	PAH-4	1A2e	SAWDUST	2.700000000	g/TJ
2021	PAH-4	1A2e	SAWDUST AND CUTTER CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2e	SOD PEAT	1.000000000	g/TJ
2021	PAH-4	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	2.700000000	g/TJ
2021	PAH-4	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	2.700000000	g/TJ
2021	PAH-4	1A2f	CHIPS FROM ROUNDWOOD	2.700000000	g/TJ
2021	PAH-4	1A2f	COAL (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2f	COKE (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A2f	DIESEL OIL (S=0.01%)	2.800000000	g/TJ
2021	PAH-4	1A2f	FOREST RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2f	GASOIL (FOR NON-ROAD USE)	2.800000000	g/TJ
2021	PAH-4	1A2f	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A2f	INDUSTRIAL WASTE	2.499999999	g/TJ
2021	PAH-4	1A2f	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A2f	OTHER FOSSIL LIQUID	2.800000000	g/TJ
2021	PAH-4	1A2f	OTHER FOSSIL SOLID	0.012000000	g/TJ
2021	PAH-4	1A2f	OTHER HEAVY DISTILLATES	2.800000000	g/TJ
2021	PAH-4	1A2f	OTHER WASTE	2.500000000	g/TJ
2021	PAH-4	1A2f	PETROLEUM COKE	0.012000000	g/TJ
2021	PAH-4	1A2f	PLASTIC WASTE	2.500000000	g/TJ
2021	PAH-4	1A2f	RECOVERED FUEL (REF 1)	2.500000000	g/TJ
2021	PAH-4	1A2f	RECYCLED AND WASTE OILS	2.800000000	g/TJ
2021	PAH-4	1A2f	RUBBER WASTE	2.500000000	g/TJ
2021	PAH-4	1A2f	SAWDUST AND CUTTER CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2f	SOLID RECOVERED FUEL (SRF)	2.500000000	g/TJ
2021	PAH-4	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	2.700000000	g/TJ
2021	PAH-4	1A2gvii	GASOIL (FOR NON-ROAD USE)	1.915123275	g/TJ
2021	PAH-4	1A2gvii	LIQUID GAS	1.739130435	g/TJ

2021	PAH-4	1A2gvii	MOTOR GASOLINE (S=0.001%)	2.101264015	g/TJ
2021	PAH-4	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	2.700000000	g/TJ
2021	PAH-4	1A2gviii	BARK	2.700649420	g/TJ
2021	PAH-4	1A2gviii	CHIPS FROM ROUNDWOOD	2.705123953	g/TJ
2021	PAH-4	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	2.700000000	g/TJ
2021	PAH-4	1A2gviii	CREOSOTED WOOD	2.500000000	g/TJ
2021	PAH-4	1A2gviii	CUTTER CHIPS ETC.	2.701276392	g/TJ
2021	PAH-4	1A2gviii	DEMOLITION WOOD	2.505295604	g/TJ
2021	PAH-4	1A2gviii	DIESEL OIL (S=001%)	2.800000000	g/TJ
2021	PAH-4	1A2gviii	FOREST RESIDUE CHIPS	2.703755644	g/TJ
2021	PAH-4	1A2gviii	FOREST RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A2gviii	GASOIL (FOR NON-ROAD USE)	2.800022604	g/TJ
2021	PAH-4	1A2gviii	HAZARDOUS WASTE	2.500000000	g/TJ
2021	PAH-4	1A2gviii	HEAVY FUEL OIL (normal, S>1%)	2.800000000	g/TJ
2021	PAH-4	1A2gviii	HEAVY FUEL OIL (S<0,1%)	2.800000000	g/TJ
2021	PAH-4	1A2gviii	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A2gviii	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A2gviii	MILLED PEAT	1.001351656	g/TJ
2021	PAH-4	1A2gviii	MUNICIPAL WASTE - unsorted	34.000000000	g/TJ
2021	PAH-4	1A2gviii	NAPHTHA	2.800000000	g/TJ
2021	PAH-4	1A2gviii	OTHER BY-PRODUCTS FROM WOOD PROCESSING INDUSTRY	2.700000000	g/TJ
2021	PAH-4	1A2gviii	OTHER HEAVY DISTILLATES	2.800000000	g/TJ
2021	PAH-4	1A2gviii	OTHER NON-FOSSIL LIQUID	2.800000000	g/TJ
2021	PAH-4	1A2gviii	OTHER NON-FOSSIL SOLID	2.700000000	g/TJ
2021	PAH-4	1A2gviii	OTHER WASTE	2.500000000	g/TJ
2021	PAH-4	1A2gviii	OTHER WOOD RESIDUE	2.700000000	g/TJ
2021	PAH-4	1A2gviii	PEAT PELLETS AND BRIQUETTES	1.000000000	g/TJ
2021	PAH-4	1A2gviii	PLASTIC WASTE	2.500000000	g/TJ
2021	PAH-4	1A2gviii	PURIFIED RECYCLED AND WASTE OILS	2.800000000	g/TJ
2021	PAH-4	1A2gviii	RECOVERED WOOD	2.703231043	g/TJ
2021	PAH-4	1A2gviii	RECYCLED AND WASTE OILS	2.800000000	g/TJ
2021	PAH-4	1A2gviii	SAWDUST	2.700000000	g/TJ
2021	PAH-4	1A2gviii	SAWDUST AND CUTTER CHIPS	2.703667536	g/TJ
2021	PAH-4	1A2gviii	SOD PEAT	1.000000000	g/TJ
2021	PAH-4	1A2gviii	SOLID RECOVERED FUEL (SRF)	2.503749721	g/TJ
2021	PAH-4	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	2.700000000	g/TJ
2021	PAH-4	1A2gviii	WASTE PELLETS	2.500000000	g/TJ
2021	PAH-4	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	2.700150806	g/TJ
2021	PAH-4	1A2gviii	WOOD RESIDUE CHIPS	2.700152170	g/TJ
2021	PAH-4	1A2gviii	WOOD STUMP CHIPS	2.705759557	g/TJ
2021	PAH-4	1A3bi	DIESEL OIL (S=001%)	2.298348578	g/TJ
2021	PAH-4	1A3bi	MOTOR GASOLINE (S=0.001%)	0.689662909	g/TJ
2021	PAH-4	1A3bii	DIESEL OIL (S=001%)	1.702812944	g/TJ
2021	PAH-4	1A3bii	MOTOR GASOLINE (S=0.001%)	0.530569164	g/TJ
2021	PAH-4	1A3biii	DIESEL OIL (S=001%)	2.340245557	g/TJ
2021	PAH-4	1A3biv	DIESEL OIL (S=001%)	2.225041385	g/TJ
2021	PAH-4	1A3biv	MOTOR GASOLINE (S=0.001%)	0.915065071	g/TJ
2021	PAH-4	1A3c	GASOIL (FOR NON-ROAD USE)	1.915123275	g/TJ
2021	PAH-4	1A3dii	DIESEL OIL (S=001%)	0.688307517	g/TJ
2021	PAH-4	1A3dii	GASOIL (FOR NON-ROAD USE)	0.539468894	g/TJ
2021	PAH-4	1A3dii	HEAVY FUEL OIL (normal, S>1%)	1.575039595	g/TJ
2021	PAH-4	1A4ai	FOREST WOODFUEL	0.500000000	g/TJ
2021	PAH-4	1A4ai	GASOIL (FOR NON-ROAD USE)	2.800000000	g/TJ
2021	PAH-4	1A4ai	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A4ai	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A4ai	MOTOR GASOLINE (S=0.001%)	2.800000000	g/TJ

2021	PAH-4	1A4ai	NAPHTHA	2.800000000	g/TJ
2021	PAH-4	1A4ai	SOD PEAT	1.000000000	g/TJ
2021	PAH-4	1A4aii	GASOIL (FOR NON-ROAD USE)	1.915123275	g/TJ
2021	PAH-4	1A4aii	MOTOR GASOLINE (S=0.001%)	2.101264015	g/TJ
2021	PAH-4	1A4bi	FOREST WOODFUEL	349.707458633	g/TJ
2021	PAH-4	1A4bi	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A4bi	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A4bi	PARAFFIN	2.800000000	g/TJ
2021	PAH-4	1A4bi	SOD PEAT	1.000000000	g/TJ
2021	PAH-4	1A4bii	GASOIL (FOR NON-ROAD USE)	1.915123275	g/TJ
2021	PAH-4	1A4bii	MOTOR GASOLINE (S=0.001%)	2.101264015	g/TJ
2021	PAH-4	1A4ci	CHIPS FROM ROUNDWOOD	2.700000000	g/TJ
2021	PAH-4	1A4ci	COAL (S=1.0%)	0.012000000	g/TJ
2021	PAH-4	1A4ci	FOREST WOODFUEL	0.500000000	g/TJ
2021	PAH-4	1A4ci	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A4ci	LIGHT FUEL OIL (S=0.0915%)	2.800000000	g/TJ
2021	PAH-4	1A4ci	OTHER NON-FOSSIL SOLID	2.700000000	g/TJ
2021	PAH-4	1A4ci	RECOVERED WOOD	2.700000000	g/TJ
2021	PAH-4	1A4ci	SOD PEAT	1.000000000	g/TJ
2021	PAH-4	1A4ci	WOOD RESIDUE CHIPS	2.700000000	g/TJ
2021	PAH-4	1A4cii	GASOIL (FOR NON-ROAD USE)	1.915123275	g/TJ
2021	PAH-4	1A4cii	MOTOR GASOLINE (S=0.001%)	2.101264015	g/TJ
2021	PAH-4	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.550597942	g/TJ
2021	PAH-4	1A5a	FOREST WOODFUEL	2.700000000	g/TJ
2021	PAH-4	1A5a	HEAVY FUEL OIL (S<1%)	2.800000000	g/TJ
2021	PAH-4	1A5a	LIGHT FUEL OIL (S=0.0915%)	2.903713851	g/TJ
2021	PAH-4	1A5a	OTHER PETROLEUM PRODUCTS	2.800000000	g/TJ

#### HCB Implied emission factors in Finnish air pollutant inventory for 2021

2021	HCB	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.000005000	kg/TJ
2021	HCB	1A1a	BARK	0.000005000	kg/TJ
2021	HCB	1A1a	CHIPS FROM ROUNDWOOD	0.000005000	kg/TJ
2021	HCB	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.000005000	kg/TJ
2021	HCB	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.000005000	kg/TJ
2021	HCB	1A1a	COAL (S=1.0%)	0.000000007	kg/TJ
2021	HCB	1A1a	CUTTER CHIPS ETC.	0.000005000	kg/TJ
2021	HCB	1A1a	DEMOLITION WOOD	0.000005000	kg/TJ
2021	HCB	1A1a	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A1a	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A1a	OTHER NON-FOSSIL SOLID	0.000005000	kg/TJ
2021	HCB	1A1a	OTHER NON-FOSSIL SOLID	0.000005000	kg/TJ
2021	HCB	1A1a	OTHER WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A1a	PAPER	0.000005000	kg/TJ
2021	HCB	1A1a	PLYWOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A1a	RECOVERED WOOD	0.000005000	kg/TJ
2021	HCB	1A1a	SAWDUST	0.000005000	kg/TJ
2021	HCB	1A1a	SAWDUST AND CUTTER CHIPS	0.000005000	kg/TJ
2021	HCB	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000005000	kg/TJ
2021	HCB	1A1a	WOOD RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A1a	WOOD STUMP CHIPS	0.000005000	kg/TJ
2021	HCB	1A2a	COKE (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2a	OTHER FOSSIL SOLID	0.000000620	kg/TJ
2021	HCB	1A2a	WOOD RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2b	COAL (S=1.0%)	0.000000620	kg/TJ

2021	HCB	1A2b	COKE (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000005000	kg/TJ
2021	HCB	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000005000	kg/TJ
2021	HCB	1A2d	BARK	0.000005000	kg/TJ
2021	HCB	1A2d	BIOLOGICAL SLURRY	0.000005000	kg/TJ
2021	HCB	1A2d	CHIPS FROM ROUNDWOOD	0.000005000	kg/TJ
2021	HCB	1A2d	COAL (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2d	DEMOLITION WOOD	0.000005000	kg/TJ
2021	HCB	1A2d	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2d	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2d	OTHER WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A2d	PAPER	0.000005000	kg/TJ
2021	HCB	1A2d	RECOVERED WOOD	0.000005000	kg/TJ
2021	HCB	1A2d	SAWDUST AND CUTTER CHIPS	0.000005000	kg/TJ
2021	HCB	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A2d	WOOD RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2e	CHIPS FROM ROUNDWOOD	0.000005000	kg/TJ
2021	HCB	1A2e	COAL (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2e	COKE (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2e	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2e	OTHER NON-FOSSIL SOLID	0.000005000	kg/TJ
2021	HCB	1A2e	RECOVERED WOOD	0.000005000	kg/TJ
2021	HCB	1A2e	SAWDUST	0.000005000	kg/TJ
2021	HCB	1A2e	SAWDUST AND CUTTER CHIPS	0.000005000	kg/TJ
2021	HCB	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000005000	kg/TJ
2021	HCB	1A2f	CHIPS FROM ROUNDWOOD	0.000005000	kg/TJ
2021	HCB	1A2f	COAL (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2f	COKE (S=1.0%)	0.000000620	kg/TJ
2021	HCB	1A2f	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2f	OTHER FOSSIL SOLID	0.000000620	kg/TJ
2021	HCB	1A2f	SAWDUST AND CUTTER CHIPS	0.000005000	kg/TJ
2021	HCB	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000005000	kg/TJ
2021	HCB	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000005000	kg/TJ
2021	HCB	1A2gviii	BARK	0.000004445	kg/TJ
2021	HCB	1A2gviii	CHIPS FROM ROUNDWOOD	0.000005000	kg/TJ
2021	HCB	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000005000	kg/TJ
2021	HCB	1A2gviii	CUTTER CHIPS ETC.	0.000005000	kg/TJ
2021	HCB	1A2gviii	DEMOLITION WOOD	0.000005000	kg/TJ
2021	HCB	1A2gviii	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2gviii	FOREST RESIDUE CHIPS	0.000005000	kg/TJ
2021	HCB	1A2gviii	OTHER NON-FOSSIL SOLID	0.000005000	kg/TJ
2021	HCB	1A2gviii	OTHER WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A2gviii	RECOVERED WOOD	0.000005000	kg/TJ
2021	HCB	1A2gviii	SAWDUST	0.000005000	kg/TJ
2021	HCB	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000004598	kg/TJ
2021	HCB	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000005000	kg/TJ
2021	HCB	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000005000	kg/TJ
2021	HCB	1A2gviii	WOOD RESIDUE CHIPS	0.000005371	kg/TJ
2021	HCB	1A2gviii	WOOD STUMP CHIPS	0.000005000	kg/TJ
2021	HCB	1A3bi	DIESEL OIL (S=0.01%)	0.000001796	kg/TJ
2021	HCB	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000001579	kg/TJ
2021	HCB	1A3bi	NATURAL GAS	0.000002414	kg/TJ
2021	HCB	1A3bii	DIESEL OIL (S=0.01%)	0.000001796	kg/TJ
2021	HCB	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000001576	kg/TJ
2021	HCB	1A3bii	NATURAL GAS	0.000002414	kg/TJ

2021	HCB	1A3biii	DIESEL OIL (S=001%)	0.000001796	kg/TJ
2021	HCB	1A3biii	NATURAL GAS	0.000002414	kg/TJ
2021	HCB	1A3biv	DIESEL OIL (S=001%)	0.000001738	kg/TJ
2021	HCB	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000001578	kg/TJ
2021	HCB	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000001876	kg/TJ
2021	HCB	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.000003445	kg/TJ
2021	HCB	1A4ai	FOREST WOODFUEL	0.000005000	kg/TJ
2021	HCB	1A4bi	FOREST WOODFUEL	0.000005000	kg/TJ
2021	HCB	1A4ci	COAL (S=1.0%)	0.000019608	kg/TJ
2021	HCB	1A4ci	FOREST WOODFUEL	0.000005000	kg/TJ
2021	HCB	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000001915	kg/TJ
2021	HCB	1A5a	FOREST WOODFUEL	0.000001000	kg/TJ
2021	HCB	1A5a	LIGHT FUEL OIL (S=0.0915%)	0.000000247	kg/TJ

#### PCB Implied emission factors in Finnish air pollutant inventory for 2021

2021	PCB	1A1a	0-FIBRE/BIOLOGICAL SLURRY	0.003500000	g/TJ
2021	PCB	1A1a	BARK	0.003500000	g/TJ
2021	PCB	1A1a	CHIPS FROM ROUNDWOOD	0.003500000	g/TJ
2021	PCB	1A1a	CHIPS FROM ROUNDWOOD, LARGE	0.003500000	g/TJ
2021	PCB	1A1a	CHIPS FROM ROUNDWOOD, SMALL	0.003500000	g/TJ
2021	PCB	1A1a	COAL (S=1.0%)	0.000003300	g/TJ
2021	PCB	1A1a	CUTTER CHIPS ETC.	0.003500000	g/TJ
2021	PCB	1A1a	DEMOLITION WOOD	0.003500000	g/TJ
2021	PCB	1A1a	FOREST RESIDUE CHIPS	0.003500000	g/TJ
2021	PCB	1A1a	FOREST RESIDUE CHIPS	0.003500000	g/TJ
2021	PCB	1A1a	OTHER NON-FOSSIL SOLID	0.003500000	g/TJ
2021	PCB	1A1a	OTHER NON-FOSSIL SOLID	0.003500000	g/TJ
2021	PCB	1A1a	OTHER WOOD RESIDUE	0.003500000	g/TJ
2021	PCB	1A1a	PAPER	0.003500000	g/TJ
2021	PCB	1A1a	PLYWOOD RESIDUE	0.003500000	g/TJ
2021	PCB	1A1a	RECOVERED WOOD	0.003500000	g/TJ
2021	PCB	1A1a	SAWDUST	0.003500000	g/TJ
2021	PCB	1A1a	SAWDUST AND CUTTER CHIPS	0.003500000	g/TJ
2021	PCB	1A1a	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.003500000	g/TJ
2021	PCB	1A1a	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.003500000	g/TJ
2021	PCB	1A1a	WOOD RESIDUE CHIPS	0.003500000	g/TJ
2021	PCB	1A1a	WOOD STUMP CHIPS	0.003500000	g/TJ
2021	PCB	1A2a	COKE (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2a	OTHER FOSSIL SOLID	0.170000000	g/TJ
2021	PCB	1A2a	WOOD RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2b	COAL (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2b	COKE (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2c	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000060000	g/TJ
2021	PCB	1A2d	0-FIBRE/BIOLOGICAL SLURRY	0.000060000	g/TJ
2021	PCB	1A2d	BARK	0.000060000	g/TJ
2021	PCB	1A2d	BIOLOGICAL SLURRY	0.000060000	g/TJ
2021	PCB	1A2d	CHIPS FROM ROUNDWOOD	0.000060000	g/TJ
2021	PCB	1A2d	COAL (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2d	DEMOLITION WOOD	0.000060000	g/TJ
2021	PCB	1A2d	FOREST RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2d	FOREST RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2d	OTHER WOOD RESIDUE	0.000060000	g/TJ
2021	PCB	1A2d	PAPER	0.000060000	g/TJ
2021	PCB	1A2d	RECOVERED WOOD	0.000060000	g/TJ
2021	PCB	1A2d	SAWDUST AND CUTTER CHIPS	0.000060000	g/TJ

2021	PCB	1A2d	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000060000	g/TJ
2021	PCB	1A2d	WOOD RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2e	CHIPS FROM ROUNDWOOD	0.000060000	g/TJ
2021	PCB	1A2e	COAL (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2e	COKE (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2e	FOREST RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2e	OTHER NON-FOSSIL SOLID	0.000060000	g/TJ
2021	PCB	1A2e	RECOVERED WOOD	0.000060000	g/TJ
2021	PCB	1A2e	SAWDUST	0.000060000	g/TJ
2021	PCB	1A2e	SAWDUST AND CUTTER CHIPS	0.000060000	g/TJ
2021	PCB	1A2e	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000060000	g/TJ
2021	PCB	1A2e	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000060000	g/TJ
2021	PCB	1A2f	CHIPS FROM ROUNDWOOD	0.000060000	g/TJ
2021	PCB	1A2f	COAL (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2f	COKE (S=1.0%)	0.170000000	g/TJ
2021	PCB	1A2f	FOREST RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2f	OTHER FOSSIL SOLID	0.170000000	g/TJ
2021	PCB	1A2f	SAWDUST AND CUTTER CHIPS	0.000060000	g/TJ
2021	PCB	1A2f	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000060000	g/TJ
2021	PCB	1A2gviii	0-FIBRE/BIOLOGICAL SLURRY	0.000060000	g/TJ
2021	PCB	1A2gviii	BARK	0.000053341	g/TJ
2021	PCB	1A2gviii	CHIPS FROM ROUNDWOOD	0.000060000	g/TJ
2021	PCB	1A2gviii	CHIPS FROM ROUNDWOOD, SMALL	0.000060000	g/TJ
2021	PCB	1A2gviii	CUTTER CHIPS ETC.	0.000060000	g/TJ
2021	PCB	1A2gviii	DEMOLITION WOOD	0.000060000	g/TJ
2021	PCB	1A2gviii	FOREST RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2gviii	FOREST RESIDUE CHIPS	0.000060000	g/TJ
2021	PCB	1A2gviii	OTHER NON-FOSSIL SOLID	0.000060000	g/TJ
2021	PCB	1A2gviii	OTHER WOOD RESIDUE	0.000060000	g/TJ
2021	PCB	1A2gviii	RECOVERED WOOD	0.000060000	g/TJ
2021	PCB	1A2gviii	SAWDUST	0.000060000	g/TJ
2021	PCB	1A2gviii	SAWDUST AND CUTTER CHIPS	0.000055180	g/TJ
2021	PCB	1A2gviii	UNSPECIFIED INDUSTRIAL WOOD RESIDUE	0.000060000	g/TJ
2021	PCB	1A2gviii	WOOD PELLETS AND BRIQUETTES (REFINED WOOD FUELS)	0.000060000	g/TJ
2021	PCB	1A2gviii	WOOD RESIDUE CHIPS	0.000064452	g/TJ
2021	PCB	1A2gviii	WOOD STUMP CHIPS	0.000060000	g/TJ
2021	PCB	1A3bi	DIESEL OIL (S=001%)	0.000002428	g/TJ
2021	PCB	1A3bi	MOTOR GASOLINE (S=0.001%)	0.000000814	g/TJ
2021	PCB	1A3bii	DIESEL OIL (S=001%)	0.000002985	g/TJ
2021	PCB	1A3bii	MOTOR GASOLINE (S=0.001%)	0.000002342	g/TJ
2021	PCB	1A3biii	DIESEL OIL (S=001%)	0.000000256	g/TJ
2021	PCB	1A3biv	DIESEL OIL (S=001%)	0.000011670	g/TJ
2021	PCB	1A3biv	MOTOR GASOLINE (S=0.001%)	0.000002386	g/TJ
2021	PCB	1A3dii	GASOIL (FOR NON-ROAD USE)	0.000891296	g/TJ
2021	PCB	1A3dii	HEAVY FUEL OIL (normal, S>1%)	0.014027696	g/TJ
2021	PCB	1A4ai	FOREST WOODFUEL	0.060000000	g/TJ
2021	PCB	1A4ai	HEAVY FUEL OIL (S<1%)	0.000087591	g/TJ
2021	PCB	1A4ai	LIGHT FUEL OIL (S=0.0915%)	0.000083772	g/TJ
2021	PCB	1A4ai	SOD PEAT	0.000056824	g/TJ
2021	PCB	1A4bi	FOREST WOODFUEL	0.060000000	g/TJ
2021	PCB	1A4bi	HEAVY FUEL OIL (S<1%)	0.000087591	g/TJ
2021	PCB	1A4bi	LIGHT FUEL OIL (S=0.0915%)	0.000084309	g/TJ
2021	PCB	1A4bi	SOD PEAT	0.000073171	g/TJ
2021	PCB	1A4ci	COAL (S=1.0%)	0.000176471	g/TJ
2021	PCB	1A4ci	FOREST WOODFUEL	0.060000000	g/TJ
2021	PCB	1A4ci	HEAVY FUEL OIL (S<1%)	0.000087591	g/TJ

2021	PCB	1A4ci	LIGHT FUEL OIL (S=0.0915%)	0.000016613	g/TJ
2021	PCB	1A4ci	SOD PEAT	0.000072529	g/TJ
2021	PCB	1A4ciii	GASOIL (FOR NON-ROAD USE)	0.000909684	g/TJ

## **Annex 2**

### **Emission factor tables for point sources**

## Nitrogen oxides, NO<sub>x</sub>

### Point source emission factors for > 50 MW facilities

Updated September 2006

Source: Päästötietojen tuottamismenetelmät - Energiantuotanto (10.6.2004) (www.ymparisto.fi > Yritykset ja yhteisöt > Päästöt > Päästökisterit > Päästötiedon tuottaminen > Aineistoa päästöjen määrittämiseen > Energiantuotanto). in Finnish

NO <sub>x</sub> -emission factors	15-50 MW		
	Fuel	Combustion technology	Emission factor mg/MJ
Coal >50%	All	170	1
Peat >50%	Grate	200	1
	BFB	160	1
	CFB	120	1
	Gasification	220	1
Wood >50%	Grate	140	1
	BFB	120	1
	CFB	100	1
	Gasification	170	1
Mixed burning. no fuel more than 50 %	Grate	200	1
	BFB	160	1
	CFB	120	1
	Gasification	220	1
Natural gas	Burner	70	1
Heavy fuel oil	Burner	180	1
Light fuel oil	Burner	100	1
Gas turbines. natural gas		150	1
Gas motor (SG)/ double fuel (DF)		160	1
Gas diesel motor (GD), Gas		1500	1
Oil diesel motor (CI)		2000	1

Source:

1. Jalovaara, J.; Aho J.; Hietamäki E.; Hyytiä V.; Paras käytettävissä oleva tekniikka (BAT) 5-50 MW:n polttolaitoksissa Suomessa, Suomen Ympäristö 649, Suomen ympäristökeskus, Helsinki 2003 (In Finnish)

- Tables pp. 16-19. Tyypilliset ominaispäästökertoimet pienissä polttolaitoksissa

## NMVOC, non-methane volatile organic compounds

### Point source emission factors for > 50 MW facilities

Updated September 2006

Source: Päästötietojen tuottamismenetelmät – Energiantuotanto (10.6.2004)  
(www.ymparisto.fi > Yritykset ja yhteisöt > Päästöt > Päästörekisterit)  
> Päästötiedon tuottaminen > Aineistoa päästöjen määrittämiseen > Energiantuotanto). in Finnish

<b>Fuel</b>	<b>Emission factor mg/MJ</b>	<b>Source</b>
Coal	1	1
Natural gas	1	1
Heavy fuel oil	1	1
Light fuel oil	1	1
Peat	2	1
Wood	2	1
Peat fluidized bed	3	1
Wood. fluidized bed	3	1

Source:

1. Expert estimation based on national measurement data

## Carbon monoxide, CO

### Point source emission factors for > 50 MW facilities

Updated September 2006

Source: Päästötietojen tuottamismenetelmät - Energiantuotanto (10.6.2004)

(www.ymparisto.fi > Yritykset ja yhteisöt > Päästöt > Päästörekkisterit > Päästötiedon tuottaminen

> Aineistoa päästöjen määrittäminen > Energiantuotanto). in Finnish

Fuel	Combustion technology	Capacity			
		15-50 MW	50-150 MW	150-300 MW	>300 MW
		Emission factor			
		mg/MJ	mg/MJ	mg/MJ	mg/MJ
Coal >80%	Burning			5	5
	Grate	30	30	5	5
	Fluidized bed	30	30	5	5
Coal mixed burning 50-80%	All	30	30	10	10
Peat >80%	Grate	100	30	10	10
	Fluidized bed	100	30	10	10
	Other	30	10	10	10
Peat mixed burning 50-80%	Grate	100	30	10	10
	Fluidized bed	100	30	10	10
	Other	70	30	10	10
Wood >80%	Grate	250	250	150	150
	Fluidized bed	150	150	150	150
	Other	250	250	150	150
Wood mixed burning 50-80%	Grate	250	250	70	70
	Fluidized bed	150	150	70	70
	Other	150	150	70	70
Mixed burning no fuel more than 50 %	Grate	100	50	30	30
	Fluidized bed	100	50	30	30
	Other	100	50	30	30
Natural gas	Burning	20	20	20	20
Oil	Burning	20	20	20	20
Gas turbines. natural gas		20	20	20	20

## Polychlorinated dioxins and furans, PCDD/F

### Point source emission factors for > 50 MW facilities

Updated September 2006

Source: Päästötietojen tuottamismenetelmät - Energiantuotanto (10.6.2004) (www.ymparisto.fi > Yritykset ja yhteisöt > Päästöt > Päästörekisterit > Päästötiedon tuottaminen > Aineistoa päästöjen määrittämiseen > Energiantuotanto). in Finnish

Fuel	PCDD/F-emission factors	
	mg I-TEQ/TJ	Source
Coal	0.004	1*
Heavy fuel oil	0.0004	1*
Light fuel oil	0.0005	1*
Wood	0.021	2*
Peat	0.0175	3
Natural gas	0.0005	4

Sources:

1. Expert estimate based on UNEP (1999). Dioxin and furan inventories. National and regional emissions of PCDD/PCDF. May 1999 (Germany: Investigation of emissions)

2. Expert estimate based on USEPA (1997) Locating and Estimating Air Emissions from Sources of Dioxins and Furans. USEPA. May 1997. Office of Air Quality Planning And Standards

3. Ruuskanen (2000). Mittaukset; Dioksiineja vähentävät ympäristönsuojelukeinot 1990-luvulla ja uudet mahdollisuudet. Juhani Ruuskanen. Ympäristö- ja terveystieteitä 3:2000. In Finnish

4. UNEP (2003). UNEP/POPS/INC.7/INF/14: Standardized Toolkit for Identification and quantification of Dioxin and Furan Releases. 1st edition. May 2003.

[www.pops.int](http://www.pops.int);

(based on measurements in Belgium, Germany and Switzerland)

**Polyaromatic hydrocarbons , PAH-4  
expressed as the sum of benzo(a)pyrene. benzo(b)fluoranthene,  
benzo(k).fluoranthene and indeno(1.2.3.-cd)pyrene**

**Point source emission factors for > 50 MW facilities**

Updated September 2006

Source: Päästötietojen tuottamismenetelmät - Energiantuotanto (10.6.2004)  
(www.ymparisto.fi > Yritykset ja yhteisöt > Päästöt > Päästörekitterit > Päästötiedon  
tuottaminen > Aineistoa päästöjen määrittämiseen > Energiantuotanto). in Finnish

<b>PAH-4 expressed as the sum of benzo(a)pyrene. benzo(b)fluoranthene. benzo(k)fluoranthene and indeno(1.2.3.-cd)pyrene</b>	<b>Emission factor</b>		
	<b>g/t</b>	<b>g/TJ</b>	<b>Source</b>
<b>Fuel</b>			
Coal	0.0003	0.012	1
Heavy fuel oil	0.12	2.8	2
Light fuel oi	0.12	2.8	2
Wood	0.03	2.7	3
Peat		1	4

Sources:

1. Expert estimate based on EEA(2003) Emission Inventory Guidebook
2. Expert estimate based on UBA (1998). Investigation of emissions and abatement measures for persistent organic pollutants in the FRG. Research Report 295 44 365. UBA-\*FB 98-115/e. 75/98
3. Expert estimate based on TNO (1995). Technical paper to the OSPARCOM-HELCOM-UNECE emission Inventory of Heavy Metals and POP. TNO-Report TNO-MEP - 95/247:
4. Expert estimate based on KTM (1988). Energiatuotannon kokonaispäästöt Suomessa, KTM. Energiaosasto. D:162.1988. In Finnish

## Heavy metals

Arsenic (As), Mercury (Hg), Cadmium (Cd), Chrome (Cr), Copper (Cu), Nickel (Ni), Lead (Pb) and Zinc (Zn)

### Point source emission factors for > 50 MW facilities

Updated September 2006

Source: Päästö tietojen tuottamismenetelmät - Energiantuotanto (10.6.2004) (www.ymparisto.fi > Yritykset ja yhteisöt > Päästöt > Päästörekisterit > Päästö tiedon tuottaminen > Aineistoa päästöjen määrittämiseen > Energiantuotanto). in Finnish

Fuel	Emission factors [ $\mu\text{g}/\text{MJ}$ ]				
	no abatement	cyclone	washer	electric filter	electric filter + desulphuration
<b>Arsenic (As)</b>					
Heavy fuel oil	2	1	-	-	
Peat	81	33	11	0.5	
Coal	130	26	17	7.8	1.0
Wood	1	0.3	0.13	0.1	
<b>Mercury (Hg)</b>					
Heavy fuel oil	0.03	0.03	-	-	
Peat	2.6	2.6	2.3	1.3	
Coal	3.7	3.7	3.3	1.4	0.95
Wood	0.5	0.5	0.45	0.5	
<b>Cadmium (Cd)</b>					
Heavy fuel oil	0.3	0.2	-	-	
Peat	2.8	1.1	0.4	0.02	
Coal	18	3.6	2.3	0.2	0.09
Wood	5	2	0.65	0.5	
<b>Chrome (Cr)</b>					
Heavy fuel oil	1	0.5	-	-	
Peat	140	56	18	0.8	
Coal	1000	200	130	5	1.5
Wood	35	9	4.5	2	
<b>Copper (Cu)</b>					
Heavy fuel oil	2.5	1	-	-	
Peat	220	89	29	1.3	
Coal	350	70	45	4	1.8
Wood	51	12.75	12.75	5	

Fuel	Emission factors [ $\mu\text{g}/\text{MJ}$ ]				
	no abatement	cyclone	washer	electric filter	electric filter + desulphuration

#### Nickel (Ni)

Fuel	Emission factors [ $\mu\text{g}/\text{MJ}$ ]				
	Heavy fuel oil	300	150	-	-
Peat	140	58	19	0.8	
Coal	800	160	100	4	1
Wood	30	8.5	3.9	2	

#### Lead (Pb)

Fuel	Emission factors [ $\mu\text{g}/\text{MJ}$ ]				
	Heavy fuel oil	25	10	-	-
Peat	170	68	22	1	
Coal	790	160	100	3.9	1.2
Wood	45	12	6	3.4	

#### Zinc (Zn)

Fuel	Emission factors [ $\mu\text{g}/\text{MJ}$ ]				
	Heavy fuel oil	12	6	-	-
Peat	330	130	43	8	
Coal <sup>(1)</sup>	1500	300	195	84	12
Wood	700	175	175	54	

(1 large variation between facilities although factors are based on measurements)

#### Vanadium (V)

Fuel	Emission factors [ $\mu\text{g}/\text{MJ}$ ]				
	Heavy fuel oil	1000	450	-	-
Peat	180	74	24	1.1	
Coal	1400	270	180	6.9	3.1
Wood	100	25	13	9	

Sources:

- "NOT ABATED" emission factors are based on expert estimation on the measured heavy metal concentrations in fuels and on a coarse division between the bottom and fly ash .

- Hupa M. et al. (1988). Total emissions from energy production in Finland Hki 1988. Ins.tsto Prosesikemia Ky. Ministry of Trade and Industry. Energy Department. Research Reports D:162. In Finnish.

- Melanen et al. (1999). Raskasmetallien päästöt ilmaan Suomessa 1990-luvulla Suomen ympäristö 329. Suomen ympäristökeskus 1999. p. 86 //Kivihiili: Taulukko 3. Liite 5. (s. 69).Turve: Taulukko 4. Liite 6. (s. 72) . In Finnish
- Kouvo Petri (2003). Formation and control of trace metal emissions in co-firing of biomass, peat and wastes in fluidized bed combustors. Lappeenrannan teknillinen yliopisto. Academic Dissertation. 148. 2003.
- Harju. t. and Munthe. J. (2000). Optimal utilisation of coal in modern power plants with respect to mass flows and emissions of VOC/PAHs and mercury. OMPAC. VTT 31.12.2000. p. 238. Workpackage PIV.1 Field measurement campaign in Helsinki Energy (T. Harju/VTT. J. Munthe/IVL)
- Helsingin Energia/Fortum (2003). Kivihiilen kertoimet sähkösuotimen ja rikinpoiston jälkeen perustuvat suomalaisilta laitoksilta saatuihin mittaus-/ominaispäästötietoihin. In Finnish

## **Annex 3**

### **Basis of Estimation of Emissions from Transport**

Table F4: Basis for estimating emissions from mobile sources.

NFR09 code	Description	Fuel sold	Fuel used	Comment
1 A 3 a i (i)	International aviation (LTO)	x		
1 A 3 a i (ii)	International aviation (Cruise)	x		
1 A 3 a ii (i)	1 A 3 a ii Civil aviation (Domestic, LTO)	x		
1 A 3 a ii (ii)	1 A 3 a ii Civil Aviation (Domestic, Cruise)	x		
<b>1A3b</b>	<b>Road transport</b>			
1A3c	Railways	x		
1A3di (i)	International maritime navigation	x		
1A3di (ii)	International inland waterways	x		
1A3dii	National navigation	x		
1A4ci	Agriculture	x		
1A4cii	Off-road vehicles and other machinery	x		
1A4ciii	National fishing	x		
1 A 5 b	Other mobile (Including military)	x		

## **Annex 4**

### **Net caloric values and sulphur contents of fuels**

## Net caloric values by fuel

Fuels	NCV	Unit	Source of emission factor
<b>Liquid fuels</b>			
Town gas	16.9	GJ/1000 m3	Neste 1993
Refinery gas (+ other gases)	49 (45-55)	GJ/t	Plant-specific
LPG (liquefied petroleum gas)	46.2	GJ/t	Neste/ET2004
Naphta	44.3	GJ/t	EE
Motor gasoline	43	GJ/t	VTT/Liisa Model/Neste
Aviation gasoline	43.7	GJ/t	EE/Neste
Jet fuel	43.3	GJ/t	EE /Fortum 2002
Other kerosenes (vaporising oil, lamp kerosene)	43.1	GJ/t	EE/IPCC1996
Diesel oil	42.8	GJ/t	VTT/Liisa Model/Neste
Gasoil (light fuel oil, heating fuel oil)	42.7	GJ/t	Neste/EE
Gasoil (for non-road use)	42.8	GJ/t	EE (same as diesel oil)
Residual fuel oil (heavy fuel oil), low sulphur	41.1	GJ/t	Neste/EE
Residual fuel oil (heavy fuel oil), normal	40.5	GJ/t	Neste/EE
Other residual fuel oil (heavy bottom oil)	40.2	GJ/t	Neste/EE
Petroleum coke	33.5 (20-36)	GJ/t	Plant-specific
Recycled waste oil	41	GJ/t	EE (=RFO)
Other petroleum products	35 (30-47)	GJ/t	EE (=RFO)
<b>Solid fuels</b>			
Anthracite	33.5	GJ/t	IPCC1996
Hard coal (bituminous)	25.5 (21-32)	GJ/t	StatFi 2005
Coal briquettes	30	GJ/t	EE
Coal tar	36.5	GJ/t	Plant-specific
Coke	29.3 (25-35)	GJ/t	IPCC1996
Coke oven gas	16.7	GJ/1000 m3	Plant-specific
Blast furnace gas	11.2-11.5 3.6	GJ/1000 m3	Plant-specific
<b>Gaseous fuels</b>			
Natural gas	36	GJ/1000 m3	Gasum 2005
Gasified solid waste*	13.3 (7-30)	GJ/1000 m3	EE
<b>Biomass fuels</b>			
Wood fuels (solid, includes e.g. firewood, bark, chips, sawdust and other industrial wood residues, recycled wood, pellets and briquettes)	7.8–16	GJ/t	IPCC1996
Black and sulphite liquors	7.3–15	GJ/t	IPCC1996
Other by-products from wood processing industry (includes e.g. pine oil and tar, methanol, fibrous sludge, waste paper, stink gas, etc.)	3–37 20	GJ/t GJ/1000 m3	IPCC1996, VTT2045, EE
Plant and animal residues	10-35	GJ/t	EE (=wood)
Biogas (landfill gas, biogas from wastewater treatment, industrial biogas and other biogas)	15–20.5	GJ/1000 m3	EE
Hydrogen	10.8	GJ/1000 m3	
<b>Other fuels, peat</b>			
Peat (milled)	10.1	GJ/t	VTT 2003
Peat (sod peat)	12.3	GJ/t	VTT 2003
Peat (pellets and briquettes)	20.9	GJ/t	VTT 2003
<b>Other fuels, wastes etc.</b>			
Mixed fuels* (REF, RDF, PDF, MSW)	10–21	GJ/t	StatFi 2004

Demolition wood*	8-15	GJ/t	StatFi 2004
Impregnated wood*	12	GJ/t	StatFi 2004
De-inking sludge*	4	GJ/t	EE
Other residues and by-products	30	GJ/t	EE
Plastics waste	33 (25-40)	GJ/t	EE
Rubber waste	33	GJ/t	StatFi 2004
Hazardous waste	15 (10-15)	GJ/t	Ekokem 2004
Other non-specified waste (industrial waste, etc.)	15-30	GJ/t	EE

\* Mixed fuels: contains fossil and non-fossil carbon; the CO<sub>2</sub> emission factor refers only to the fossil fraction of total energy content.

Sources:

EE: expert estimation Kari Grönfors, Statistics Finland

Neste 1993: Composition and properties of natural gas and liquefied petroleum gas (in Finnish)

Neste: product data sheets, personal communications

VTT/Liisa Model: Calculation system of road traffic emissions

StatFi 2004: Mixed fuels in Finland's greenhouse gas inventory and on compilation of the energy statistics (Masters Thesis of Minna Jokinen)

StatFi 2005: Research of Teemu Oinonen (not published, see Annex 3)

Ekokem 2004: Environmental report 2004

Gasum 2005: personal communication

VTT2045: Properties of fuels used in Finland, VTT 2000

Fortum 2002: Composition of kerosenes

VTT 2003: Vesterinen 2003

The default NCVs are practically constant over time. There are some exceptions concerning plant specific fuels like refinery gases, BFG and certain waste-derived fuels. The operators should report to VAHTI system both fuel quantities as well as energy contents of the fuels used. Thus in bottom-up data there are some variations in the NCVs. The annual average values of reported data are compared to the default NCVs. Also plant level NCVs are compared to default NCVs.

Peat is one of the main fuels in Finland. It is the fourth largest fuel (after wood, hard coal and natural gas), representing over 6% of Total primary energy supply (TPES) and over 8% of combustible fuels. Its share is higher than for example the share of any liquid fuel. The share of peat is generally around half of the share of hard coal, but varies considerable, like the share of hard coal, too.

## Fuel specific sulphur contents

Fuel	Fuel	Default S%
11000	Petroleum products	0.21
11108	town gas	0.00001
11109	Other fossile gas	0.004
11110	Refinery gas	0.01
11120	Light distillates	0.00002
11210	Naphtha	0.005
11220	Motor gasoline (S=0.001%)	0.001
11230	Aviation gasoline	0.002
11310	Kerosene (jet fuel)	0.04
11320	Other kerosenes	0.07
11321	motor kerosene	0.07
11322	paraffin oil	0.02
11330	Diesel oil (S=0.001%)	0.001
11340	LFO (S=0.0915%)	0.0915
11350	Gasoil (for non-road use)	0.001
11390	Other medium distillates	0.12
11410	HFO (S<1%)	0.9
11420	HFO (normal, S>1%)	1.4
11430	Other heavy distillates	2.7
11500	Petroleum coke	1
11600	Recycled and waste oils	0.9
11601	Refined recycled and waste oils	0.9
11900	Other petroleum products	1
12110	Anthracite	1.5
12120	Hard coal, bituminous	0.8
12210	Semi-bituminous coal, brown coal, lignite	0.8
12220	Coal briquettes	2
12280	Coal tar	0.25
12290	Other non-specified coal	1
12300	Coke (S=1.0%)	1
12400	Coke oven gas	0.05
12500	Blast furnace gas	0.000001
12600	Converter gas	0.000001
13100	Natural gas	0.0001
21100	Milled peat	0.1
21200	Sod peat	0.11
21300	Peat pellets and briquettes	0.16
31100	Forest fuelwood	0.01
31110	Firewood (stems and split firewood)	0.015
31120	Chips from roundwood	0.01
31130	Forest residue chips	0.01
31210	Bark	0.0165
31220	Sawdust, cutter shavings etc.	0.0075
31230	Wood residue chips	0.008

31231	Plywood residues	0.018
31280	Unspecified industrial wood residue	0.012
31290	Other industrial wood residue	0.012
31301	Black liquor and other concentrated liquors	5
31302	sulphite waste liquor	5
31400	Other by-products from wood processing industry	0.018
31401	tall-oil pitch	0.5
31402	Metanol	1
31403	0-fibre/bio sludge	0.6
31404	Paper	0.038
31406	Odorous gases	15
31409	Other non-fossile liquid	2.5
31500	Recovered wood	0.15
31600	Wood pellets and briquettes	0.009
31700	Vegetable-based fuels	0.075
31800	Animal-based fuels	0.075
32110	Landfill gas	0.01
32120	Biogas from wastewater treatment	0.01
32130	Industrial biogas	0.01
32190	Other biogas (other non-fossile gas)	0.01
32200	Liquid biofuels	0.002
32311	Recovered fuels REF 1-waste sorted according to origin	0.14
32312	Recovered fuels REF 2-waste sorted according to origin	0.12
32313	Recovered fuels REF 3-waste sorted according to origin	0.1
32314	PDF-packaging waste	0.14
32315	RDF-municipal waste, mechanically sorted	0.22
32316	Municipal waste - unsorted	0.25
32320	Demolition wood	0.1
32331	Salt impregnated wood	0.02
32332	Creosote impregnated wood	0.07
32390	Other mixed fuels (other waste)	0.25
32391	Deinking waste	0.08
32400	Gasified waste	0.003
49110	Plastic waste	0.2
49120	Rubber waste	1.5
49130	Hazardous waste	0.1
49190	Other by-products and waste products (industrial waste)	1
49195	Suphur concentrate	10
49200	Exothermic heat from industry (other liquid)	0
49300	Secondary heat from industry	0
49800	Hydrogen	0.000001

# **Annex 5**

## **QA/QC Tools**

Updated March 2022 (JM)

## QA/QC Tools for the Finnish Air Pollutant Emissions Inventory

This Annex of the IIR describes the components of the QA/QC toolset specifically designed for the inventory process.

The developed toolset consists of a tool for analysing and compiling NFR tables and several more specified investigation tools for investigating data content of air emission database IPTJ. The tools were mostly developed with Microsoft Excel and SQL Server Management Studio. Methods described in this chapter do not replace or remove any previously existing QA/QC routines, which include procedures described in the EMEP/EEA Guidebooks.

### 1.1 NFR Compilation tool

The NFR compilation tool provides means to compile, analyse and correct NFR table files. It is designed to be used in sync with the latest reporting sheets but is also suitable for performing the same procedures on previously submitted files or submission files of other nations. It also provides means for notation key management.

#### 2.1.1 Time series from reporting sheets

The user is able to retrieve time series for all pollutants and NFR categories as well as their contributing rows from IPTJ. The emission intensity is visualized with conditional formatting and the following automatic check-ups are made:

- Strongly deviating values
- Gaps in series
- Inconsistency in notation keys
- Sudden drops or increases in emissions.
- Linear estimates for missing values (feature not used in inventory)

The following diagram explains the compilation of time series from the NFR reporting sheet. User selects a cell and with a quick key the time series for the corresponding pollutant and category is collected. The following examples are for demonstration purposes only and cover only the years 1980-1996. Some artificial errors are also included in order to present examples of the check-ups.

1A1a	NOx	Notes
1980	129.228	The value deviates over 100 % from the series median.
1981	109.120	
1982	104.120	
1983	93.436	
1984	88.553	
1985		Gap in series. Linear estimation: 96,5075
1986	104.462	
1987	112.601	
1988	113.043	
1989	116.964	
1990	59.539	A drop of 49,1 % in emission levels. Check continuity.
1991	58.921	
1992	47.001	
1993	51.560	
1994	51.819	
1995	39.101	Possibly erroneous value in set.
1996	46.389	
...	...	

The expert can also loop the procedure over all pollutants and create a compilation table of all pollutants for the selected category (NFR category or national totals).. Relative standard deviation is calculated and an index value is calculated to estimate the reliability of the series. Any changes in values or notation keys can be immediately exported back to the reporting sheet.

Table 1 – Example of a time series compilation table after looping through all pollutants. Pollutants expand horizontally and years vertically.

NA-TIONAL TOTAL	NOx (as NO2)	NMVOC	SOx (as SO2)	NH3	PM2.5	PM10	TSP	BC	CO	...
1980	303.825	NE	583.828	34.272	NE	NE	NE	NE	NE	...
1981	283.975	NE	533.830	34.759	NE	NE	NE	NE	NE	...
1982	279.406	NE	483.828	35.334	NE	NE	NE	NE	NE	...
1983	270.513	NE	371.831	35.522	NE	NE	NE	NE	NE	...
1984	266.352	NE	367.830	35.619	NE	NE	IE	NE	NE	...
1985	284.028	NE	381.832	35.636	NE	NE	NE	NE	NE	...
1986	285.889	NE	330.831	35.348	NE	NE	NE	NE	NE	...
1987	297.204	229.852	327.834	34.630	NE	NE	NE	NE	NE	...
1988	302.181	264.123	301.838	33.998	NE	NE	NE	NE	NE	...
1989	310.009	258.209	243.844	12.022	NE	NE	NE	NE	NE	...
1990	305.629	233.472	248.544	33.630	48.366	72.694	98.952	10.212	720.735	...
1991	NA	219.563	205.275	31.641	43.445	65.150	85.630	9.708	688.077	...
1992	275.374	214.625	155.967	30.767	39.899	59.213	77.930	9.441	667.862	...
1993	277.728	207.533	137.396	31.167	37.033	55.526	72.983	9.225	654.655	...
1994	277.596	205.741	122.529	32.106	36.375	54.637	72.888	9.105	636.460	...
1995	258.139	200.357	104.442	32.417	34.726	51.327	68.062	8.859	629.857	...
1996	262.178	193.999	108.994	33.432	33.842	49.945	65.863	8.577	620.323	...
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	...
RSD (%)	22.2 %	31.4 %	86.4 %	4.8 %	24.3 %	21.5 %	19.3 %	23.4 %	24.2 %	...

\* RSD, Relative Standard Deviation

### 2.1.2 Notation key management

The compilation table is especially suitable for notation key management, as all data can be imported and exported to and from the NFR submission file. The tool allows notation key management in many different ways:

- Directly in the NFR sheet
  - The notation key of the selected cell can be multiplied for all years or a prompted range of years with dedicated quick keys.
- In the compilation table
  - The compilation table makes it easy to spot and correct inconsistencies in notation keys over the time series. It also enables mass editing of NK's for example when changes in categorization occurs.
- In the time series analyzer

VBA-assisted lookup functions deliver the modified data in their corresponding places in the NFR sheet.

### 2.1.3 Compiling sheets for new inventory year

The tool also allows instant delivery of emission values from IPTJ to the reporting sheet. The expert selects the current inventory year, and emission values are retrieved from the database using an SQL-assisted PowerPivot query. Notation keys are retrieved from the corresponding year of the previously selected NFR reference file.

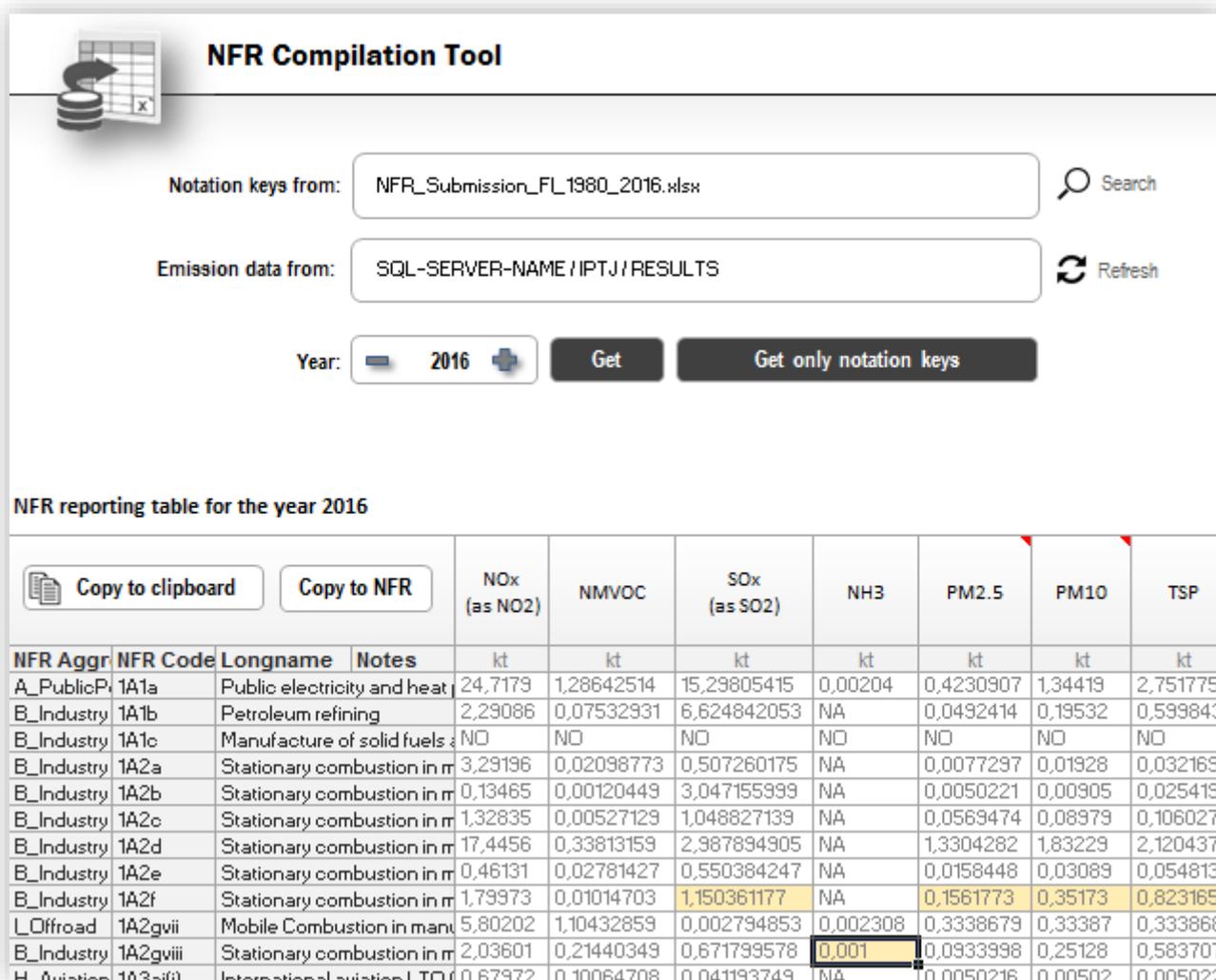


Figure 1 - A screenshot of the NFR compilation tool

The compilation tool performs checks and compares data and labels the cell with individual colors when:

- Emission value is **x** % higher than in previous year\*
- Emission value is **x** % less than in previous year\*
- If BC > PM2.5 > PM10 > TSP
- Sum of PAH's doesn't equal to Total 1-4,
- Emission value is 10 times higher, or a value is missing where previously reported
- Zero values
- Values where IPTJ content is newer than in the reporting sheet

\* **x** is user adjustable.

The data collected by the compilation tool can be exported to the reporting sheet with a one click solution. It is also possible to roll through all years in order to keep IPTJ content always in unison with reporting sheets.

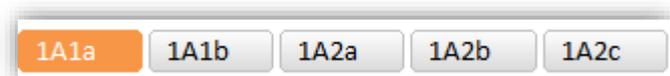
## 1.2 Tools for data analysis, compilation and management

To expand the scope of investigation limited by the main tool, several more specified tools were constructed by using the same technologies and disciplines to reveal issues of more specific types and levels of detail. These tools include:

- Time series analysis at six different levels of detail:
  - Point level (a facility can have multiple points)
  - Facility level (a SNAP category typically consists of multiple facilities)

- SNAP categorization (SNAP category is usually a subset of an NFR category)
- NFR categorization
- By fuel types
- Total emissions
- Tool to sort all point sources with highest contribution to overall emissions
- Tool to investigate key sources per pollutant
- A query to calculate implied emission factors
- A query to investigate the consistency of categories between different sources
- NULL-finder to reveal rows with missing essential information, such as emission values or categorizations.
- A query to find duplicate rows
- A query to manually back-up the main results table before major changes
- A routine to reveal point level gaps in time series and to estimate the combined effect of them.

**The tools above connect to IPTJ and are able to utilize the latest inventory data.** They connect to IPTJ via an ODBC connection and they utilize a combination techniques native to Microsoft Excel, PowerPivot and SQL. In some cases the tools are enhanced with VBA. By using PowerPivot for data retrieval, the upper limit of rows rarely becomes an issue in data management. A typical control element is a PivotTable slicer.



#### 2.1.4 Time series analysis for individual boilers or processes

The tool compiles a table by dimensions of *year x pollutant* after selecting a source. The tool alerts on years that are completely missing and when the maximum emission value deviates over ten times from the series median for any pollutant. The results are enhanced with conditional formatting to highlight the relative differences in emission values. Gaps in emission values are also displayed per pollutant.

Table 2 – Example of time series by point result sheet. Pollutants expand horizontally and years vertically.

<b>RSD (%)</b>	14.3 %	14.4 %	26.3 %	<b>NA</b>	...
----------------	--------	--------	--------	-----------	-----

Year	NOx as NO2	NMVOC	SOx as SO2	NH3	...
1990	58.828	4.54E-01	76.066		...
1991	58.760	4.29E-01	68.817		...
1992	46.651	4.12E-01	49.151		...
1993	51.175		49.486		...
1994	51.530	5.25E-01	46.905		...
1995	38.855	5.38E-01	36.616		...
1996	46.157	6.13E-01	45.303		...
⋮	⋮	⋮	⋮	⋮	...

#### 2.1.5 Time series analysis at facility level

The expert selects a pollutant to investigate. This forms a table with the dimensions of *facility x year*. The tool groups all point sources (e.g. individual boilers) into their corresponding facilities. The processes are described in the greatest detail possible. The expert can now browse through time series of all facilities and quickly investigate which events (e.g. changes in processes) actually contribute to the varying emission values. It also reveals if a point ID has changed during the

time series, thus patching the shortcomings of TS investigation by point ID only. The expert can filter the dataset by NFR category or certain range of years.

### 2.1.6 Time series by NFR and SNAP

In comparison to NFR categorization SNAP categorization is a more detailed and in IPTJ content in all cases a subset of an NFR category. The tools are identical to each other except by the controls for categorization. The tools flags missing years and if a pollutant maximum value is ten times greater than the series median.

### 2.1.7 Time series by fuel

The tool compiles time series by either a specific fuel or fuel groups (e.g. liquid fuels) by selecting the desired set from control slicers. These selections can be made independently of each other. Similarly to the previous tool, relative standard deviation for each pollutant is calculated and flagged if the maximum value is ten times greater than the series median.

### 2.1.8 Key source analysis

Categories that contribute to 80 % of emissions per pollutant are considered as key categories. The Approach 1 key categories according to the level of emissions can be quickly retrieved for all pollutants and years by using control slicers. The table calculates the sector sum, percentage of total emissions and cumulative percentage of emissions in an inclining order. Dataset can be filtered by NFR categories, for example to exclude NFR sheet memo items from key category analysis.

Year

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
2008	2009	2010	2011	2012	2013	2014	2015	2016	9999				

Pollutant

	As	BC	Cd	CO	Cr	Cu	HCB
Hg	NH3	Ni	NMVOG	NOx (as N...	PAHs	Pb	PCBs
PCDD/PC...	PCP	PM1	PM10	PM2.5	Se	SOx (as S...	TSP
Zn	benzo(a)...	benzo(b) fl...	benzo(k) fl...	HCH	Indeno(1,...	PCDD	PCDF

NFR	Sector sum	Percentage of total	Cumulative percentage	Key category?
1A1a	15 298.05	38.04 %	38.04 %	Yes
1A1b	6 624.84	16.47 %	54.51 %	Yes
1A2b	3 047.16	7.58 %	62.08 %	Yes
1A2d	2 987.89	7.43 %	69.51 %	Yes
2B10a	1 737.09	4.32 %	73.83 %	Yes
1A5a	1 256.96	3.13 %	76.96 %	Yes
1A2f	1 150.36	2.86 %	79.82 %	Yes
1A4ai	1 088.00	2.71 %	82.52 %	Yes
1A2c	1 048.83	2.61 %	85.13 %	
1A4bi	1 007.76	2.51 %	87.64 %	
2H1	960.19	2.39 %	90.02 %	
2C1	743.57	1.85 %	91.87 %	
1A4ci	705.79	1.75 %	93.63 %	
1A2gviii	671.80	1.67 %	95.30 %	

<b>1A2e</b>	550.38	1.37 %	96.66 %
<b>1A2a</b>	507.26	1.26 %	97.93 %
<b>1A3ai(ii)</b>	480.28	1.19 %	99.12 %
⋮	⋮	⋮	⋮

## Checking gaps and discontinuity in emissions of energy sector point sources

This chapter explains the search of gaps and discontinuities in the energy sector emission data that was carried out during the time series update of 2017 and 2018. Many of the observations described here have since been corrected and are not present in the latest inventories.

### 1.3 Search of discontinuities

The routine checks for gaps in time-series where the following conditions are met:

- a point has more than one entry in time series per pollutant
- missing value exist in a range between two existing values (i.e. if a missing value exists in the beginning or the end of the series, it will not be revealed)
- Series connects the same point and pollutant

The routine also marks the last known values before and ahead of the found gap. A gap can therefore consist of more than one year, and the duration of the gap is recorded.

The check-up formula translates as follows:

If  $y_i \neq y_{i-1} + 1$ , then print for the row  $i$ : "the values for the years  $y_{i-1} + 1 - y_i - 1$  missing"

where,

$i$  = row index

$y$  = year

$y_{i-1}$  = year of the previous row

$y_i - 1$  = actual previous year

If the previous condition is met, the start point of the gap is filled to the cell  $y_{i-1}$ . The print out of found gap simultaneously marks the end point of the gap. These remarks can be used when referencing data in further investigations.

Table 3 – An example of the printouts for a point with missing values

Point ID	Emission	Year	Pollutant (ID)	Printout
12121	0.3402	2003	24	<i>First in series (not checked)</i>
12121	0.335016	2004	24	
12121	0.3402	2005	24	
12121	0.335016	2006	24	Start point of a gap
12121	0.276	2009	24	The values for the years 2007-2008 missing
12121	0.21744	2010	24	
12121	0.1052062	2011	24	
12121	0.03562	2012	24	<i>Last in series (not checked)</i>

### 2.1.9 Results

The method was able to programmatically reveal 518 gaps in series which would contribute to 0.06 % in relation to the count of rows examined. The method does not disclose the reason for the missing value. Many or most of these might be valid gaps due to e.g. stoppage of the plant. The table below presents for selected pollutants the expectable maximum of possible emissions if the gaps would be filled with the value of the closest year. The overall sums are negligible.

Table 4 – Count of found gaps and estimation of the potential maximum of missing emissions in relation the overall emissions

Pollutant	Pollutant ID	Estimate of sum of miss-	Percent in relation to	Count of miss-
As (kg)	8	0.270	0.001 %	17

Cd (kg)	20	0.660	0.004 %	17
CO (t)	24	63.690	0.006 %	28
Cr (kg)	31	4.541	0.001 %	17
Cu (kg)	35	6.689	0.004 %	18
Hg (kg)	47	0.066	0.001 %	17
Ni (kg)	63	25.114	0.009 %	17
Pb (kg)	79	7.496	0.002 %	17
SOx (as SO2) (t)	97	24.012	0.002 %	22
Zn (kg)	112	90.257	0.009 %	18
NOx (as NO2) (t)	314	31.279	0.002 %	28
PCDD/ PCDF (t)	1043	0.003	0.004 %	27
TSP (t)	1047	29.808	0.010 %	30
NM VOC (t)	1064	2.572	0.008 %	28
PAHs (g)	1065	574.868	0.008 %	32
PM10 (t)	1091	10.455	0.006 %	30
PM2.5 (t)	2591	3.817	0.004 %	30

#### 1.4 Interpretation of results

Out of the combined set of nearly two million rows of emission data, 518 meaningful events of discontinuity were observed. In relation to the whole dataset, the time series for the boilers under investigation is 99,97 % complete, and a notable share of the remaining 0,03 % might be explained by valid reasons.

## **Annex 6**

### **Uncertainty Analysis**

Updated March 2023 (TF)

# Uncertainty analysis to the 2023 submission, 2021 data

## 1 Methodology

Changes in chapter	
March 2021	TF

The uncertainty analysis for emission data is carried out following the Approach 1 methodology presented in the EMEP/EEA emission inventory guidebook 2019. The Approach 1 comprise estimation of uncertainties using the error propagation equations, and simple combination of uncertainties by source category to estimate overall uncertainty for one year and the uncertainty in the trend. The uncertainties of the input parameters (activity data and emission factors) are estimated by experts compiling the inventories and those of the measured emissions by the competent authorities that supervise emission monitoring carried out at the individual plants. In the case of emissions reported by the plants, the total uncertainty of the reported emission is determined instead of separate uncertainties for AD and EF. The fuel use uncertainties are the same that Statistics Finland uses in the UC analysis for the Finnish greenhouse gas inventory. The emissions of some pollutants from certain sources are poorly understood, for instance some POP compounds from fuel combustion and industrial processes, and therefore estimation of their uncertainty is found to be very challenging at the moment.

The uncertainty analysis covers all emission sources included in the inventory and represents thus the uncertainty of the reported emission data. The possible lack of completeness of emission sources is, however, not reflected in the uncertainty analysis. Information of the completeness of the inventory is presented in Chapter 2.8.

The uncertainty analysis is carried out at the country-level, i.e. uncertainties in emissions by region are not assessed.

### 1.1 Uncertainties by pollutants

Changes in chapter	
March 2023	TF

The results of the Approach 1 uncertainty analysis are presented in this section. The results are presented by pollutant and at the bottom of each table information on total emissions and total uncertainty in the inventory are given, both for the level and for the trend.

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
NOx	1A1a	Biomass	1.017	8.055	9.8	50.0	50.9	15.243	692.291	1.9
NOx	1A1a	Gaseous	8.859	1.187	9.9	50.0	51.0	0.331	-86.603	0.3
NOx	1A1a	Liquid	3.798	0.686	9.4	50.0	50.9	0.110	-81.932	0.2
NOx	1A1a	Other	0.006	1.315	10.0	50.0	51.0	0.407	21968.164	0.3
NOx	1A1a	Peat	9.791	3.048	7.4	50.0	50.6	2.150	-68.867	0.7
NOx	1A1a	Solid	36.204	2.576	10.0		10.0	0.060	-92.885	0.1
NOx	1A1b	Biomass		0.046	10.0		10.0	0.000	NA	0.0
NOx	1A1b	Gaseous	1.269	0.786	10.0		10.0	0.006	-38.107	0.0
NOx	1A1b	Liquid	2.045	0.659	10.0		10.0	0.004	-67.756	0.0
NOx	1A1b	Solid	0.005	0.001	10.0		10.0	0.000	-81.275	0.0
NOx	1A2a	Biomass		0.003	10.0		10.0	0.000	NA	0.0
NOx	1A2a	Gaseous	0.203	1.080	10.0	50.0	51.0	0.275	432.399	0.3
NOx	1A2a	Liquid	0.466	0.070	9.8	50.0	50.9	0.001	-84.860	0.0
NOx	1A2a	Solid	2.398	1.662	10.0		10.0	0.025	-30.714	0.1
NOx	1A2b	Gaseous		0.005	9.7	50.0	50.9	0.000	NA	0.0
NOx	1A2b	Liquid	0.240	0.095	8.8	50.0	50.8	0.002	-60.497	0.0
NOx	1A2b	Solid	0.422	0.015	9.0	50.0	50.8	0.000	-96.386	0.0
NOx	1A2c	Biomass	0.089	0.018	8.4	50.0	50.7	0.000	-80.066	0.0
NOx	1A2c	Gaseous	0.181	0.086	9.9	50.0	51.0	0.002	-52.337	0.0
NOx	1A2c	Liquid	1.137	1.186	9.9	50.0	51.0	0.331	4.311	0.3
NOx	1A2c	Other	0.152	0.003	10.0		10.0	0.000	-98.066	0.0
NOx	1A2d	Biomass	8.656	12.797	9.9	50.0	51.0	38.510	47.849	3.0
NOx	1A2d	Gaseous	3.395	1.010	9.1	50.0	50.8	0.239	-70.243	0.2
NOx	1A2d	Liquid	2.136	1.174	9.8	50.0	51.0	0.324	-45.023	0.3
NOx	1A2d	Other	0.044	0.243	10.0	50.0	51.0	0.014	451.194	0.1
NOx	1A2d	Peat	1.476	0.574	10.0		10.0	0.003	-61.135	0.0
NOx	1A2d	Solid	2.455	0.017	10.0		10.0	0.000	-99.309	0.0
NOx	1A2e	Biomass	0.032	0.062	9.6	50.0	50.9	0.001	94.501	0.0
NOx	1A2e	Gaseous	0.088	0.021	8.2	50.0	50.7	0.000	-75.585	0.0
NOx	1A2e	Liquid	0.662	0.043	6.5	50.0	50.4	0.000	-93.454	0.0
NOx	1A2e	Other	0.001	0.004	7.3	50.0	50.5	0.000	791.214	0.0
NOx	1A2e	Peat	0.165	0.118	10.0		10.0	0.000	-28.207	0.0
NOx	1A2e	Solid	0.247	0.026	9.0	50.0	50.8	0.000	-89.273	0.0
NOx	1A2f	Biomass	0.000	0.029	8.9	50.0	50.8	0.000	12368.470	0.0
NOx	1A2f	Gaseous	0.261	0.086	9.9	50.0	51.0	0.002	-67.038	0.0
NOx	1A2f	Liquid	0.665	0.915	8.7	50.0	50.8	0.195	37.694	0.2
NOx	1A2f	Other	0.580	0.309	10.0		10.0	0.001	-46.724	0.0

NOx	1A2f	Solid	3.724	0.380	10.0		10.0	0.001	-89.800	0.0
NOx	1A2gvii	Liquid	12.650	4.905	4.9	50.0	50.2	5.497	-61.228	1.1
NOx	1A2gviii	Biomass	0.862	0.909	7.8	50.0	50.6	0.191	5.349	0.2
NOx	1A2gviii	Gaseous	0.075	0.160	9.4	50.0	50.9	0.006	112.413	0.0
NOx	1A2gviii	Liquid	1.266	0.342	5.4	50.0	50.3	0.027	-73.010	0.1
NOx	1A2gviii	Other	0.148	0.547	10.0		10.0	0.003	269.932	0.0
NOx	1A2gviii	Peat	0.046	0.109	10.0	50.0	51.0	0.003	136.147	0.0
NOx	1A3ai(i)	Liquid	0.251	0.270	5.0	50.0	50.2	0.017	7.459	0.1
NOx	1A3aii(i)	Liquid	0.311	0.065	4.9	50.0	50.2	0.001	-79.005	0.0
NOx	1A3bi	Diesel oil	6.783	8.042	1.0	50.0	50.0	14.642	18.551	1.9
NOx	1A3bi	Gaseous		0.007	3.0	50.0	50.1	0.000	NA	0.0
NOx	1A3bi	Gasoline	62.636	1.864	2.0	50.0	50.0	0.787	-97.024	0.4
NOx	1A3bii	Diesel oil	4.439	3.841	1.0	50.0	50.0	3.340	-13.480	0.9
NOx	1A3bii	Gaseous		0.001	3.0	50.0	50.1	0.000	NA	0.0
NOx	1A3bii	Gasoline	1.532	0.067	2.0	50.0	50.0	0.001	-95.656	0.0
NOx	1A3biii	Diesel oil	58.866	7.963	1.0	50.0	50.0	14.356	-86.473	1.8
NOx	1A3biii	Gaseous		0.013	3.0	50.0	50.1	0.000	NA	0.0
NOx	1A3biv	Diesel oil		0.035	1.0	50.0	50.0	0.000	NA	0.0
NOx	1A3biv	Gasoline	0.065	0.142	2.0	50.0	50.0	0.005	117.207	0.0
NOx	1A3c	Liquid	4.212	1.521	2.0	50.0	50.0	0.525	-63.883	0.4
NOx	1A3dii	Liquid	9.130	4.810	8.8	50.0	50.8	5.397	-47.317	1.1
NOx	1A3ei	Gaseous	0.009	0.006	10.0	50.0	51.0	0.000	-33.820	0.0
NOx	1A4ai	Biomass	0.156	0.275	20.0	50.0	53.9	0.020	76.637	0.1
NOx	1A4ai	Gaseous	0.043	0.062	9.8	50.0	51.0	0.001	44.680	0.0
NOx	1A4ai	Liquid	2.314	0.950	12.1	50.0	51.4	0.216	-58.949	0.2
NOx	1A4ai	Peat	0.015	0.013	15.0	50.0	52.2	0.000	-11.947	0.0
NOx	1A4aii	Liquid	5.216	1.121	12.9	50.0	51.6	0.303	-78.505	0.3
NOx	1A4bi	Biomass	3.303	4.249	20.0	50.0	53.9	4.739	28.627	1.1
NOx	1A4bi	Gaseous	0.030	0.058	10.0	50.0	51.0	0.001	91.657	0.0
NOx	1A4bi	Liquid	3.114	0.678	15.1	50.0	52.2	0.113	-78.240	0.2
NOx	1A4bi	Other	0.003	0.000	10.0	50.0	51.0	0.000	-97.674	0.0
NOx	1A4bi	Peat	0.065	0.017	15.0	50.0	52.2	0.000	-74.568	0.0
NOx	1A4bii	Liquid	0.396	0.919	11.5	50.0	51.3	0.201	132.262	0.2
NOx	1A4ci	Biomass	0.520	0.472	19.7	50.0	53.7	0.058	-9.268	0.1
NOx	1A4ci	Gaseous	0.056	0.006	10.0	50.0	51.0	0.000	-89.805	0.0
NOx	1A4ci	Liquid	0.744	0.318	14.0	50.0	51.9	0.025	-57.177	0.1
NOx	1A4ci	Peat	0.040	0.119	10.0	50.0	51.0	0.003	198.553	0.0
NOx	1A4ci	Solid	0.024	0.016	20.0	50.0	53.9	0.000	-32.596	0.0
NOx	1A4cii	Liquid	12.825	2.281	14.5	50.0	52.1	1.276	-82.218	0.5
NOx	1A4ciii	Liquid	3.580	1.718	15.0	50.0	52.2	0.728	-52.015	0.4
NOx	1A5a	Biomass	0.032	3.821	10.0	50.0	51.0	3.436	11819.650	0.9
NOx	1A5a	Gaseous	0.116	0.219	20.0	50.0	53.9	0.013	88.951	0.1
NOx	1A5a	Liquid	2.178	1.446	12.3	50.0	51.5	0.502	-33.614	0.3
NOx	2B10a		0.061	0.147	22.9		22.9	0.001	139.578	0.0
NOx	2B2		0.744	0.402	20.0		20.0	0.006	-45.917	0.0
NOx	2G		0.010	0.004	35.0	100.0	105.9	0.000	-57.886	0.0
NOx	3B1a		0.156	0.044	3.0	200.0	200.0	0.007	-71.658	0.0
NOx	3B1b		0.135	0.148	3.0	200.0	200.0	0.079	9.742	0.1

NOx	3B2	0.006	0.007	5.0	200.0	200.1	0.000	22.689	0.0
NOx	3B3	0.068	0.006	5.0	200.0	200.1	0.000	-91.956	0.0
NOx	3B4d	0.000	0.000	5.0	200.0	200.1	0.000	-7.246	0.0
NOx	3B4e	0.016	0.031	5.0	200.0	200.1	0.003	90.280	0.0
NOx	3B4gi	0.052	0.045	5.0	200.0	200.1	0.007	-15.185	0.0
NOx	3B4gii	0.027	0.089	5.0	200.0	200.1	0.028	226.655	0.1
NOx	3B4giii	0.001	0.009	5.0	200.0	200.1	0.000	672.424	0.0
NOx	3B4giv	0.007	0.005	5.0	200.0	200.1	0.000	-30.185	0.0
NOx	3B4h	0.042	0.036	5.0	200.0	200.1	0.005	-13.345	0.0
NOx	3Da1	9.143	5.575	10.0	100.0	100.5	28.422	-39.022	2.6
NOx	3Da2a	3.070	2.800	45.0	200.0	205.0	29.832	-8.798	2.6
NOx	3Da2b	0.063	0.110	30.0	200.0	202.2	0.045	74.091	0.1
NOx	3Da2c	0.103	0.291	45.0	160.0	166.2	0.212	181.172	0.2
NOx	3Da3	0.727	0.585	45.0	200.0	205.0	1.302	-19.527	0.6
<b>Total</b>		<b>306.578</b>	<b>105.102</b>			<b>13.2</b>		<b>-65.718</b>	<b>6.4</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
NMVOC	1A1a	Biomass	0.109	1.075	4.8	80.0	80.1	1.086	886.830	0.5
NMVOC	1A1a	Gaseous	0.042	0.061	23.3	80.0	83.3	0.004	47.149	0.0
NMVOC	1A1a	Liquid	0.027	0.028	20.6	80.0	82.6	0.001	2.463	0.0
NMVOC	1A1a	Other	0.001	0.274	11.5	80.0	80.8	0.072	26494.836	0.1
NMVOC	1A1a	Peat	0.199	0.141	3.7	80.0	80.1	0.019	-29.141	0.1
NMVOC	1A1a	Solid	0.117	0.175	12.6	80.0	81.0	0.029	48.668	0.1
NMVOC	1A1b	Biomass		0.002	10.0	80.0	80.6	0.000	NA	0.0
NMVOC	1A1b	Gaseous	0.007	0.022	15.0	80.0	81.4	0.000	235.365	0.0
NMVOC	1A1b	Liquid	0.005	0.048	9.0	80.0	80.5	0.002	888.942	0.0
NMVOC	1A1b	Solid		0.000	3.0	80.0	80.1	0.000	NA	0.0
NMVOC	1A2a	Biomass		0.001	10.0	80.0	80.6	0.000	NA	0.0
NMVOC	1A2a	Gaseous	0.111	0.004	2.0	80.0	80.0	0.000	-96.152	0.0
NMVOC	1A2a	Liquid	0.003	0.000	4.4	80.0	80.1	0.000	-96.779	0.0
NMVOC	1A2a	Solid	0.017	0.011	2.2	80.0	80.0	0.000	-34.978	0.0
NMVOC	1A2b	Gaseous		0.000	4.8	80.0	80.1	0.000	NA	0.0
NMVOC	1A2b	Liquid	0.001	0.001	7.0	80.0	80.3	0.000	-16.246	0.0
NMVOC	1A2b	Solid	0.000	0.000	4.7	80.0	80.1	0.000	-57.888	0.0
NMVOC	1A2c	Biomass	0.002	0.001	21.0	80.0	82.7	0.000	-23.977	0.0
NMVOC	1A2c	Gaseous	0.002	0.006	3.9	80.0	80.1	0.000	242.778	0.0
NMVOC	1A2c	Liquid	0.004	0.001	3.4	80.0	80.1	0.000	-58.611	0.0

NM VOC	1A2c	Other	0.003	0.000	10.0	80.0	80.6	0.000	-98.515	0.0
NM VOC	1A2d	Biomass	0.430	0.284	2.2	80.0	80.0	0.075	-33.998	0.1
NM VOC	1A2d	Gaseous	0.077	0.019	2.7	80.0	80.0	0.000	-75.479	0.0
NM VOC	1A2d	Liquid	0.174	0.007	1.9	80.0	80.0	0.000	-96.121	0.0
NM VOC	1A2d	Other	0.000	0.010	9.8	80.0	80.6	0.000	3405.135	0.0
NM VOC	1A2d	Peat	0.018	0.014	2.1	80.0	80.0	0.000	-24.045	0.0
NM VOC	1A2d	Solid	0.038	0.001	5.0	80.0	80.2	0.000	-98.451	0.0
NM VOC	1A2e	Biomass	0.007	0.007	8.6	80.0	80.5	0.000	-8.228	0.0
NM VOC	1A2e	Gaseous	0.001	0.000	2.9	80.0	80.1	0.000	-56.881	0.0
NM VOC	1A2e	Liquid	0.005	0.001	2.9	80.0	80.1	0.000	-88.465	0.0
NM VOC	1A2e	Other	0.000	0.002	10.0	80.0	80.6	0.000	738.418	0.0
NM VOC	1A2e	Peat	0.012	0.009	5.0	80.0	80.2	0.000	-25.406	0.0
NM VOC	1A2e	Solid	0.007	0.001	4.6	80.0	80.1	0.000	-88.125	0.0
NM VOC	1A2f	Biomass	0.000	0.002	7.7	80.0	80.4	0.000	54940.250	0.0
NM VOC	1A2f	Gaseous	0.003	0.001	3.0	80.0	80.1	0.000	-72.611	0.0
NM VOC	1A2f	Liquid	0.005	0.003	3.0	80.0	80.1	0.000	-43.091	0.0
NM VOC	1A2f	Other		0.008	10.0	80.0	80.6	0.000	NA	0.0
NM VOC	1A2f	Solid	0.009	0.003	3.4	80.0	80.1	0.000	-71.545	0.0
NM VOC	1A2gvii	Liquid	2.366	1.040	4.9	80.0	80.2	1.016	-56.044	0.5
NM VOC	1A2gviii	Biomass	0.199	0.147	8.7	80.0	80.5	0.020	-26.429	0.1
NM VOC	1A2gviii	Gaseous	0.002	0.003	24.0	80.0	83.5	0.000	72.263	0.0
NM VOC	1A2gviii	Liquid	0.017	0.045	27.3	80.0	84.5	0.002	157.790	0.0
NM VOC	1A2gviii	Other	0.011	0.028	9.6	80.0	80.6	0.001	143.447	0.0
NM VOC	1A2gviii	Peat	0.002	0.004	9.7	80.0	80.6	0.000	82.616	0.0
NM VOC	1A3ai(i)	Liquid	0.056	0.029	5.0	80.0	80.2	0.001	-47.841	0.0
NM VOC	1A3ai(i)	Liquid	0.056	0.009	4.9	80.0	80.2	0.000	-83.505	0.0
NM VOC	1A3bi	Diesel oil	1.332	0.083	1.0	80.0	80.0	0.006	-93.787	0.0
NM VOC	1A3bi	Gaseous		0.003	3.0	80.0	80.1	0.000	NA	0.0
NM VOC	1A3bi	Gasoline	49.364	0.996	2.0	80.0	80.0	0.928	-97.983	0.5
NM VOC	1A3bii	Diesel oil	0.796	0.206	1.0	80.0	80.0	0.040	-74.160	0.1
NM VOC	1A3bii	Gaseous		0.000	3.0	80.0	80.1	0.000	NA	0.0
NM VOC	1A3bii	Gasoline	1.669	0.022	2.0	80.0	80.0	0.000	-98.676	0.0
NM VOC	1A3biii	Diesel oil	7.843	0.225	1.0	80.0	80.0	0.047	-97.131	0.1
NM VOC	1A3biii	Gaseous		0.001	3.0	80.0	80.1	0.000	NA	0.0
NM VOC	1A3biv	Diesel oil		0.007	1.0	80.0	80.0	0.000	NA	0.0
NM VOC	1A3biv	Gasoline	2.767	0.878	2.0	80.0	80.0	0.722	-68.274	0.4
NM VOC	1A3bv		13.655	1.236	1.0	200.0	200.0	8.931	-90.951	1.5
NM VOC	1A3c	Liquid	0.234	0.086	2.0	80.0	80.0	0.007	-63.415	0.0
NM VOC	1A3dii	Liquid	9.646	3.550	8.8	80.0	80.5	11.932	-63.201	1.7
NM VOC	1A3ei	Gaseous	0.000	0.000	20.0	80.0	82.5	0.000	204.273	0.0
NM VOC	1A4ai	Biomass	0.007	0.010	20.0	80.0	82.5	0.000	47.851	0.0
NM VOC	1A4ai	Gaseous	0.003	0.006	10.0	80.0	80.6	0.000	94.045	0.0
NM VOC	1A4ai	Liquid	0.125	0.055	13.0	80.0	81.0	0.003	-55.893	0.0
NM VOC	1A4ai	Peat	0.016	0.018	15.0	80.0	81.4	0.000	13.079	0.0
NM VOC	1A4aii	Liquid	6.267	0.432	12.9	80.0	81.0	0.179	-93.111	0.2
NM VOC	1A4bi	Biomass	17.720	19.575	20.0	80.0	82.5	380.990	10.469	9.7
NM VOC	1A4bi	Gaseous	0.003	0.006	10.0	80.0	80.6	0.000	91.657	0.0
NM VOC	1A4bi	Liquid	0.195	0.042	15.1	80.0	81.4	0.002	-78.274	0.0

NMVOC	1A4bi	Other	0.000	0.000	10.0	80.0	80.6	0.000	-97.674	0.0
NMVOC	1A4bi	Peat	0.130	0.033	15.0	80.0	81.4	0.001	-74.568	0.0
NMVOC	1A4bii	Liquid	6.597	2.144	11.5	80.0	80.8	4.392	-67.493	1.0
NMVOC	1A4ci	Biomass	0.020	0.018	20.0	80.0	82.5	0.000	-9.545	0.0
NMVOC	1A4ci	Gaseous	0.002	0.001	10.0	80.0	80.6	0.000	-70.355	0.0
NMVOC	1A4ci	Liquid	0.044	0.020	14.0	80.0	81.2	0.000	-53.832	0.0
NMVOC	1A4ci	Peat	0.080	0.239	10.0	80.0	80.6	0.054	198.253	0.1
NMVOC	1A4ci	Solid	0.001	0.000	20.0	80.0	82.5	0.000	-32.672	0.0
NMVOC	1A4cii	Liquid	6.642	1.297	14.5	80.0	81.3	1.627	-80.470	0.6
NMVOC	1A4ciii	Liquid	0.144	0.079	15.0	80.0	81.4	0.006	-44.837	0.0
NMVOC	1A5a	Biomass	0.014	0.382	10.0	80.0	80.6	0.139	2669.319	0.2
NMVOC	1A5a	Gaseous	0.012	0.022	20.0	80.0	82.5	0.000	90.474	0.0
NMVOC	1A5a	Liquid	0.140	0.098	12.3	80.0	80.9	0.009	-29.457	0.0
NMVOC	1B1b		0.037	0.051	10.0	900.0	900.1	0.309	36.100	0.3
NMVOC	1B2aiv		6.600	2.234	100.0		100.0	7.295	-66.159	1.3
NMVOC	1B2av		7.411	2.629	19.6	100.0	101.9	10.492	-64.533	1.6
NMVOC	1B2b		0.255	0.249	10.0	100.0	100.5	0.092	-1.985	0.2
NMVOC	2A1		0.054	0.027	29.5		29.5	0.000	-50.560	0.0
NMVOC	2A3		0.001	0.002	99.2	80.0	127.5	0.000	69.924	0.0
NMVOC	2B10a		7.836	2.532	100.0		100.0	9.373	-67.690	1.5
NMVOC	2B10b		0.134	0.136	100.0		100.0	0.027	1.919	0.1
NMVOC	2C1		0.796	0.212	99.7		99.7	0.065	-73.371	0.1
NMVOC	2C2			0.002	100.0		100.0	0.000	NA	0.0
NMVOC	2C3		0.022	0.000	100.0		100.0	0.000	-97.750	0.0
NMVOC	2C7a			0.001	200.0		200.0	0.000	NA	0.0
NMVOC	2C7b		0.010	0.016	100.0		100.0	0.000	60.000	0.0
NMVOC	2C7c		0.025	0.002	100.0		100.0	0.000	-90.430	0.0
NMVOC	2D3a		3.825	7.321	40.0	108.0	115.2	103.944	91.399	5.1
NMVOC	2D3b		0.900	0.350	30.0	80.0	85.4	0.130	-61.154	0.2
NMVOC	2D3c		6.260	0.144	30.0	80.0	85.4	0.022	-97.693	0.1
NMVOC	2D3d		27.500	6.988	61.6	200.0	209.3	312.736	-74.590	8.8
NMVOC	2D3e		2.638	0.613	19.6	200.0	201.0	2.218	-76.770	0.7
NMVOC	2D3g		3.956	2.009	86.1	200.0	217.7	27.982	-49.208	2.6
NMVOC	2D3h		8.800	0.428	61.0	200.0	209.1	1.170	-95.139	0.5
NMVOC	2D3i		2.085	1.581	38.3	200.0	203.6	15.157	-24.182	1.9
NMVOC	2G		0.027	0.016	35.0	100.0	105.9	0.000	-40.221	0.0
NMVOC	2H1		2.966	1.113	11.9	80.0	80.9	1.185	-62.472	0.5
NMVOC	2H2		2.523	1.921	28.8	900.0	900.5	437.317	-23.882	10.4
NMVOC	2I		1.070	1.231	40.4	80.0	89.6	1.780	15.035	0.7
NMVOC	2L		0.013	0.001	100.0		100.0	0.000	-89.681	0.0
NMVOC	3B1a		7.763	5.903	3.0	200.0	200.0	203.846	-23.966	7.1
NMVOC	3B1b		3.732	4.147	3.0	200.0	200.0	100.589	11.106	5.0
NMVOC	3B2		0.105	0.142	5.0	200.0	200.1	0.117	34.882	0.2
NMVOC	3B3		0.423	0.249	5.0	200.0	200.1	0.363	-41.197	0.3
NMVOC	3B4d		0.004	0.005	5.0	200.0	200.1	0.000	6.891	0.0
NMVOC	3B4e		0.153	0.248	5.0	200.0	200.1	0.360	61.909	0.3
NMVOC	3B4gi		0.256	0.248	5.0	200.0	200.1	0.361	-3.077	0.3
NMVOC	3B4gii		0.235	0.750	5.0	200.0	200.1	3.292	219.406	0.9

NM VOC	3B4giii		0.006	0.030	5.0	200.0	200.1	0.005	400.749	0.0
NM VOC	3B4giv		0.041	0.025	5.0	200.0	200.1	0.004	-39.349	0.0
NM VOC	3B4h		1.261	0.769	5.0	200.0	200.1	3.458	-39.057	0.9
NM VOC	3Da2a		3.916	2.194	45.0	200.0	205.0	29.581	-43.978	2.7
NM VOC	3Da3		0.104	0.073	45.0	200.0	205.0	0.033	-29.627	0.1
NM VOC	3De		1.062	0.715	30.0	100.0	104.4	0.814	-32.669	0.4
NM VOC	5A		0.234	0.071	15.0	200.0	200.6	0.030	-69.671	0.1
NM VOC	5D1		0.003	0.009	10.0	200.0	200.2	0.001	190.062	0.0
NM VOC	5D2		0.022	0.018	10.0	200.0	200.2	0.002	-17.395	0.0
<b>Total</b>			<b>235.049</b>	<b>82.697</b>			<b>41.1</b>		<b>-64.817</b>	<b>20.4</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
SO2	1A1a	Biomass	0.587	0.943	9.0	40.0	41.0	2.753	60.702	0.2
SO2	1A1a	Gaseous	0.002	0.002	2.1	20.0	20.1	0.000	-3.609	0.0
SO2	1A1a	Liquid	16.678	0.413	8.5	20.0	21.7	0.148	-97.522	0.1
SO2	1A1a	Other	0.027	0.176	9.9	40.0	41.2	0.097	556.069	0.0
SO2	1A1a	Peat	8.877	1.980	7.2	40.0	40.6	11.936	-77.694	0.5
SO2	1A1a	Solid	50.545	2.638	10.0		10.0	1.283	-94.780	0.1
SO2	1A1b	Biomass		0.004	10.0		10.0	0.000	NA	0.0
SO2	1A1b	Gaseous	0.001	0.225	10.0	20.0	22.4	0.046	21490.160	0.0
SO2	1A1b	Liquid	21.319	2.879	10.0		10.0	1.527	-86.497	0.2
SO2	1A1b	Solid	0.467	0.010	10.0		10.0	0.000	-97.960	0.0
SO2	1A2a	Biomass		0.000	10.0		10.0	0.000	NA	0.0
SO2	1A2a	Gaseous	0.000	0.001	8.9	20.0	21.9	0.000	1215.478	0.0
SO2	1A2a	Liquid	1.958	0.006	9.1	20.0	22.0	0.000	-99.684	0.0
SO2	1A2a	Solid	7.266	0.386	10.0		10.0	0.027	-94.690	0.0
SO2	1A2b	Gaseous		0.000	10.0	20.0	22.4	0.000	NA	0.0
SO2	1A2b	Liquid	4.045	1.330	9.9	20.0	22.3	1.622	-67.126	0.2
SO2	1A2b	Solid	4.034	1.216	10.0		10.0	0.272	-69.858	0.1
SO2	1A2c	Biomass	0.240	0.004	9.1	40.0	41.0	0.000	-98.231	0.0
SO2	1A2c	Gaseous	0.000	0.005	9.9	20.0	22.3	0.000	6922.612	0.0
SO2	1A2c	Liquid	4.948	0.396	9.7	20.0	22.2	0.143	-91.999	0.1
SO2	1A2c	Other	0.044	0.000	10.0	40.0	41.2	0.000	-100.000	0.0
SO2	1A2d	Biomass	6.427	0.962	8.4	40.0	40.9	2.847	-85.034	0.2
SO2	1A2d	Gaseous	0.201	0.001	2.7	20.0	20.2	0.000	-99.701	0.0
SO2	1A2d	Liquid	19.440	0.280	9.8	20.0	22.3	0.071	-98.562	0.0
SO2	1A2d	Other	0.390	0.090	8.8	40.0	41.0	0.025	-76.796	0.0

SO2	1A2d	Peat	5.876	0.359	10.0		10.0	0.024	-93.887	0.0
SO2	1A2d	Solid	6.141	0.018	10.0		10.0	0.000	-99.705	0.0
SO2	1A2e	Biomass	0.030	0.049	6.8	40.0	40.6	0.007	64.491	0.0
SO2	1A2e	Gaseous	0.000	0.000	2.9	20.0	20.2	0.000	-87.731	0.0
SO2	1A2e	Liquid	3.245	0.026	2.8	20.0	20.2	0.000	-99.207	0.0
SO2	1A2e	Other	0.001	0.005	10.0	40.0	41.2	0.000	610.488	0.0
SO2	1A2e	Peat	0.230	0.098	10.0		10.0	0.002	-57.303	0.0
SO2	1A2e	Solid	0.783	0.070	9.2	40.0	41.0	0.015	-91.028	0.0
SO2	1A2f	Biomass	0.000	0.002	8.3	40.0	40.9	0.000	2925.658	0.0
SO2	1A2f	Gaseous	0.064	0.005	9.9	20.0	22.3	0.000	-91.605	0.0
SO2	1A2f	Liquid	1.827	0.127	7.1	20.0	21.2	0.013	-93.057	0.0
SO2	1A2f	Other	0.033	0.003	10.0		10.0	0.000	-89.983	0.0
SO2	1A2f	Solid	1.111	0.246	10.0		10.0	0.011	-77.864	0.0
SO2	1A2gvii	Liquid	1.003	0.004	4.9	50.0	50.2	0.000	-99.558	0.0
SO2	1A2gviii	Biomass	0.349	0.226	6.7	40.0	40.6	0.154	-35.382	0.1
SO2	1A2gviii	Gaseous	0.000	0.007	5.1	20.0	20.6	0.000	23756.765	0.0
SO2	1A2gviii	Liquid	4.935	0.139	3.6	20.0	20.3	0.015	-97.187	0.0
SO2	1A2gviii	Other	0.307	0.021	10.0		10.0	0.000	-93.050	0.0
SO2	1A2gviii	Peat	0.019	0.051	10.0	40.0	41.2	0.008	174.627	0.0
SO2	1A3ai(i)	Liquid	0.021	0.016	5.0	50.0	50.2	0.001	-25.554	0.0
SO2	1A3aii(i)	Liquid	0.021	0.005	4.9	50.0	50.2	0.000	-77.952	0.0
SO2	1A3bi	Diesel oil	0.909	0.006	1.0	50.0	50.0	0.000	-99.287	0.0
SO2	1A3bi	Gaseous		0.000	3.0	50.0	50.1	0.000	NA	0.0
SO2	1A3bi	Gasoline	0.860	0.017	2.0	50.0	50.0	0.001	-98.038	0.0
SO2	1A3bii	Diesel oil	0.705	0.003	1.0	50.0	50.0	0.000	-99.582	0.0
SO2	1A3bii	Gaseous		0.000	3.0	50.0	50.1	0.000	NA	0.0
SO2	1A3bii	Gasoline	0.032	0.000	2.0	50.0	50.0	0.000	-99.805	0.0
SO2	1A3biii	Diesel oil	2.738	0.014	1.0	50.0	50.0	0.001	-99.481	0.0
SO2	1A3biii	Gaseous		0.000	3.0	50.0	50.1	0.000	NA	0.0
SO2	1A3biv	Diesel oil		0.000	1.0	50.0	50.0	0.000	NA	0.0
SO2	1A3biv	Gasoline	0.007	0.001	2.0	50.0	50.0	0.000	-92.533	0.0
SO2	1A3c	Liquid	0.438	0.000	2.0	50.0	50.0	0.000	-99.936	0.0
SO2	1A3dii	Liquid	1.650	0.042	8.8	50.0	50.8	0.008	-97.477	0.0
SO2	1A3ei	Gaseous	0.000	0.000	20.0	50.0	53.9	0.000	204.273	0.0
SO2	1A4ai	Biomass	0.010	0.017	20.0	40.0	44.7	0.001	71.144	0.0
SO2	1A4ai	Gaseous	0.000	0.000	10.0	20.0	22.4	0.000	80.686	0.0
SO2	1A4ai	Liquid	10.103	1.112	13.0	20.0	23.9	1.296	-88.997	0.2
SO2	1A4ai	Peat	0.016	0.019	15.0	40.0	42.7	0.001	18.247	0.0
SO2	1A4aii	Liquid	0.409	0.001	12.9	50.0	51.6	0.000	-99.704	0.0
SO2	1A4bi	Biomass	0.206	0.266	20.0	40.0	44.7	0.260	28.627	0.1
SO2	1A4bi	Gaseous	0.000	0.000	10.0	20.0	22.4	0.000	126.727	0.0
SO2	1A4bi	Liquid	4.226	0.375	15.1	20.0	25.1	0.163	-91.135	0.1
SO2	1A4bi	Other	0.000	0.000	10.0	40.0	41.2	0.000	-97.674	0.0
SO2	1A4bi	Peat	0.117	0.030	15.0	40.0	42.7	0.003	-74.568	0.0
SO2	1A4bii	Liquid	0.032	0.001	11.5	50.0	51.3	0.000	-97.605	0.0
SO2	1A4ci	Biomass	0.033	0.030	19.5	40.0	44.5	0.003	-8.220	0.0
SO2	1A4ci	Gaseous	0.000	0.000	10.0	20.0	22.4	0.000	-80.629	0.0
SO2	1A4ci	Liquid	3.231	0.208	14.0	20.0	24.4	0.047	-93.558	0.0

SO2	1A4ci	Peat	0.072	0.214	10.0	40.0	41.2	0.144	197.652	0.1
SO2	1A4ci	Solid	0.093	0.060	20.0	40.0	44.7	0.013	-35.767	0.0
SO2	1A4cii	Liquid	0.986	0.003	14.5	50.0	52.1	0.000	-99.708	0.0
SO2	1A4ciii	Liquid	0.195	0.000	15.0	50.0	52.2	0.000	-99.803	0.0
SO2	1A5a	Biomass	0.008	0.764	10.0	40.0	41.2	1.829	9171.627	0.2
SO2	1A5a	Gaseous	0.000	0.074	20.0	20.0	28.3	0.008	80563.120	0.0
SO2	1A5a	Liquid	5.958	0.492	12.3	50.0	51.5	1.184	-91.737	0.1
SO2	1B1b		0.795	0.804	15.0		15.0	0.268	1.145	0.1
SO2	2B10a		13.894	1.393	15.0		15.0	0.804	-89.974	0.1
SO2	2C1		2.867	0.967	15.0		15.0	0.388	-66.281	0.1
SO2	2C2			0.002	15.0		15.0	0.000	NA	0.0
SO2	2C7a		0.000	0.111	29.4		29.4	0.020	55569.982	0.0
SO2	2C7b		0.004	0.028	15.0		15.0	0.000	650.000	0.0
SO2	2C7c		0.001	0.000	15.0		15.0	0.000	-94.091	0.0
SO2	2D3g		0.002	0.000	15.0		15.0	0.000	-99.660	0.0
SO2	2D3i		0.089	0.000	15.0		15.0	0.000	-99.482	0.0
SO2	2G		0.001	0.002	35.0	49.0	60.2	0.000	102.924	0.0
SO2	2H1		22.811	0.813	15.0		15.0	0.274	-96.434	0.1
SO2	2L			0.000	15.0		15.0	0.000	NA	0.0
<b>Total</b>			<b>248.820</b>	<b>23.296</b>			<b>5.5</b>		<b>-90.637</b>	<b>0.7</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
NH3	1A1a		0.001	0.015	30.0		30.0	0.000	1371.200	0.0
NH3	1A2gvii	Liquid	0.002	0.003	4.9	80.0	80.2	0.000	25.467	0.0
NH3	1A2gviii			0.017	30.0		30.0	0.000	NA	0.0
NH3	1A3bi	Diesel oil	0.005	0.025	1.0	80.0	80.0	0.004	384.906	0.1
NH3	1A3bi	Gaseous		0.009	3.0	80.0	80.1	0.001	NA	0.0
NH3	1A3bi	Gasoline	0.235	0.558	2.0	80.0	80.0	2.071	137.755	1.8
NH3	1A3bii	Diesel oil	0.003	0.009	1.0	80.0	80.0	0.001	167.115	0.0
NH3	1A3bii	Gaseous		0.001	3.0	80.0	80.1	0.000	NA	0.0
NH3	1A3bii	Gasoline	0.002	0.001	2.0	80.0	80.0	0.000	-31.339	0.0
NH3	1A3biii	Diesel oil	0.010	0.030	1.0	80.0	80.0	0.006	198.342	0.1
NH3	1A3biii	Gaseous		0.000	3.0	80.0	80.1	0.000	NA	0.0
NH3	1A3biv	Diesel oil		0.000	1.0	80.0	80.0	0.000	NA	0.0
NH3	1A3biv	Gasoline	0.001	0.002	2.0	80.0	80.0	0.000	165.642	0.0
NH3	1A3c	Liquid	0.000	0.000	2.0	80.0	80.0	0.000	-61.561	0.0
NH3	1A3dii	Liquid	0.001	0.001	8.8	80.0	80.5	0.000	-17.212	0.0

NH3	1A4ai	Biomass	0.003	0.006	20.0	80.0	82.5	0.000	77.073	0.0
NH3	1A4aii	Liquid	0.001	0.001	12.9	80.0	81.0	0.000	-27.195	0.0
NH3	1A4bi	Biomass	0.907	1.109	20.0	80.0	82.5	8.680	22.282	3.6
NH3	1A4bii	Liquid	0.000	0.000	11.5	80.0	80.8	0.000	53.986	0.0
NH3	1A4ci	Biomass	0.011	0.010	20.0	80.0	82.5	0.001	-10.738	0.0
NH3	1A4cii	Liquid	0.002	0.002	14.5	80.0	81.3	0.000	-18.336	0.0
NH3	1A4ciii	Liquid	0.000	0.000	15.0	80.0	81.4	0.000	-42.558	0.0
NH3	1A5a	Liquid	0.000	0.000	30.0	80.0	85.4	0.000	16.376	0.0
NH3	1B1b		0.002	0.003	10.0	170.0	170.3	0.000	71.451	0.0
NH3	2B10a		0.582	0.301	100.0		100.0	0.941	-48.251	1.2
NH3	2C1		0.003	0.039	100.0		100.0	0.016	1200.000	0.2
NH3	2C7b		0.100	0.055	100.0		100.0	0.031	-45.000	0.2
NH3	2C7c		0.000	0.001	100.0		100.0	0.000	139.878	0.0
NH3	2D3e		0.061	0.004	200.0		200.0	0.001	-93.262	0.0
NH3	2D3g		0.024	0.002	41.8	100.0	108.4	0.000	-90.716	0.0
NH3	2D3i		0.097	0.172	100.0		100.0	0.307	77.389	0.7
NH3	2G		0.042	0.010	35.0	6.0	35.5	0.000	-77.503	0.0
NH3	2H1		0.542	0.170	100.0		100.0	0.300	-68.622	0.7
NH3	2L		0.020	0.007	197.6		197.6	0.002	-66.255	0.1
NH3	3B1a		5.687	5.583	3.0	186.0	186.0	1119.243	-1.833	40.9
NH3	3B1b		4.566	5.295	3.0	186.0	186.0	1006.954	15.969	38.8
NH3	3B2		0.067	0.118	5.0	186.0	186.1	0.504	75.460	0.9
NH3	3B3		3.767	2.619	5.0	186.0	186.1	246.453	-30.478	19.2
NH3	3B4d		0.006	0.008	5.0	186.0	186.1	0.002	32.649	0.1
NH3	3B4e		0.386	0.691	5.0	186.0	186.1	17.176	79.165	5.1
NH3	3B4gi		0.535	0.265	5.0	186.0	186.1	2.529	-50.407	1.9
NH3	3B4gii		0.204	0.589	5.0	186.0	186.1	12.475	189.112	4.3
NH3	3B4giii		0.013	0.085	5.0	186.0	186.1	0.260	568.022	0.6
NH3	3B4giv		0.104	0.036	5.0	186.0	186.1	0.047	-65.067	0.3
NH3	3B4h		1.873	1.636	5.0	186.0	186.1	96.130	-12.671	12.0
NH3	3Da1		3.733	1.978	10.0	40.0	41.2	6.902	-47.019	3.2
NH3	3Da2a		9.936	6.774	45.0	186.0	191.4	1744.100	-31.818	51.1
NH3	3Da2b		0.043	0.075	30.0	100.0	104.4	0.064	74.091	0.3
NH3	3Da2c		0.207	0.582	45.0	100.0	109.7	4.223	181.172	2.5
NH3	3Da3		1.640	1.439	45.0	186.0	191.4	78.707	-12.267	10.9
NH3	5B1		0.035	0.104	25.0	192.0	193.6	0.422	197.594	0.8
NH3	5B2		0.003	0.216	10.0	75.0	75.7	0.277	6288.237	0.6
NH3	5D1		0.275	0.385	98.7	100.0	140.5	3.036	39.817	2.1
<b>Total</b>			<b>35.872</b>	<b>31.042</b>			<b>66.0</b>		<b>-13.465</b>	<b>80.7</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
PM 2.5	1A1a	Biomass	0.265	0.074	4.9	160.0	160.1	0.695	-71.966	0.4
PM 2.5	1A1a	Liquid	0.704	0.013	2.1	100.0	100.0	0.008	-98.216	0.0
PM 2.5	1A1a	Other	0.001	0.003	10.0	160.0	160.3	0.001	456.754	0.0
PM 2.5	1A1a	Peat	0.467	0.064	2.0	120.0	120.0	0.286	-86.380	0.2
PM 2.5	1A1a	Solid	1.103	0.022	1.0	160.0	160.0	0.059	-98.043	0.1
PM 2.5	1A1b	Liquid	0.096	0.014	4.9	100.0	100.1	0.010	-85.033	0.0
PM 2.5	1A1b	Solid	0.000	0.000	3.0	160.0	160.0	0.000	-89.675	0.0
PM 2.5	1A2a	Biomass		0.000	10.0	160.0	160.3	0.000	NA	0.0
PM 2.5	1A2a	Liquid	0.069	0.000	4.9	100.0	100.1	0.000	-99.929	0.0
PM 2.5	1A2a	Solid	0.089	0.001	3.0	160.0	160.0	0.000	-98.426	0.0
PM 2.5	1A2b	Liquid	0.038	0.002	3.1	100.0	100.0	0.000	-94.079	0.0
PM 2.5	1A2b	Solid	0.014	0.000	4.7	160.0	160.1	0.000	-98.821	0.0
PM 2.5	1A2c	Biomass	0.016	0.001	9.8	160.0	160.3	0.000	-94.213	0.0
PM 2.5	1A2c	Liquid	0.169	0.016	3.9	100.0	100.1	0.013	-90.321	0.0
PM 2.5	1A2d	Biomass	9.011	0.820	1.8	160.0	160.0	84.518	-90.900	3.9
PM 2.5	1A2d	Liquid	0.652	0.037	1.9	100.0	100.0	0.068	-94.293	0.1
PM 2.5	1A2d	Other	0.005	0.002	10.0	160.0	160.3	0.001	-52.249	0.0
PM 2.5	1A2d	Peat	0.154	0.011	2.0	120.0	120.0	0.008	-93.100	0.0
PM 2.5	1A2d	Solid	0.110	0.000	5.0	160.0	160.1	0.000	-99.913	0.0
PM 2.5	1A2e	Biomass	0.011	0.001	9.2	160.0	160.3	0.000	-91.271	0.0
PM 2.5	1A2e	Liquid	0.143	0.002	3.6	100.0	100.1	0.000	-98.559	0.0
PM 2.5	1A2e	Other	0.000	0.000	10.0	160.0	160.3	0.000	245.896	0.0
PM 2.5	1A2e	Peat	0.023	0.000	5.0	120.0	120.1	0.000	-98.999	0.0
PM 2.5	1A2e	Solid	0.013	0.000	4.6	160.0	160.1	0.000	-97.853	0.0
PM 2.5	1A2f	Biomass	0.000	0.000	10.0	160.0	160.3	0.000	147.163	0.0
PM 2.5	1A2f	Liquid	0.219	0.005	3.7	100.0	100.1	0.001	-97.746	0.0
PM 2.5	1A2f	Other		0.000	10.0	160.0	160.3	0.000	NA	0.0
PM 2.5	1A2f	Solid	0.526	0.000	4.6	160.0	160.1	0.000	-99.929	0.0
PM 2.5	1A2gvii	Liquid	1.422	0.258	4.9	100.0	100.1	3.273	-81.872	0.8
PM 2.5	1A2gviii	Biomass	0.211	0.090	9.4	160.0	160.3	1.030	-57.166	0.4
PM 2.5	1A2gviii	Liquid	0.464	0.006	4.4	100.0	100.1	0.002	-98.609	0.0
PM 2.5	1A2gviii	Other	0.009	0.001	10.0	160.0	160.3	0.000	-94.173	0.0
PM 2.5	1A2gviii	Peat	0.001	0.001	10.0	120.0	120.4	0.000	-48.157	0.0
PM 2.5	1A3ai(i)	Liquid	0.003	0.002	5.0	100.0	100.1	0.000	-25.563	0.0
PM 2.5	1A3aii(i)	Liquid	0.002	0.001	4.9	100.0	100.1	0.000	-67.191	0.0
PM 2.5	1A3bi	Diesel oil	2.366	0.171	1.0	100.0	100.0	1.428	-92.793	0.5
PM 2.5	1A3bi	Gaseous		0.000	3.0	100.0	100.0	0.000	NA	0.0

PM 2.5	1A3bi	Gasoline	0.174	0.032	2.0	100.0	100.0	0.049	-81.816	0.1
PM 2.5	1A3bii	Diesel oil	1.074	0.184	1.0	100.0	100.0	1.663	-82.861	0.6
PM 2.5	1A3bii	Gaseous		0.000	3.0	100.0	100.0	0.000	NA	0.0
PM 2.5	1A3bii	Gasoline	0.006	0.000	2.0	100.0	100.0	0.000	-97.741	0.0
PM 2.5	1A3biii	Diesel oil	4.287	0.118	1.0	100.0	100.0	0.681	-97.252	0.4
PM 2.5	1A3biii	Gaseous		0.000	3.0	100.0	100.0	0.000	NA	0.0
PM 2.5	1A3biv	Diesel oil		0.006	1.0	100.0	100.0	0.002	NA	0.0
PM 2.5	1A3biv	Gasoline	0.057	0.012	2.0	100.0	100.0	0.007	-78.520	0.0
PM 2.5	1A3bvi		0.542	0.616	1.0	100.0	100.0	18.615	13.694	1.8
PM 2.5	1A3bvii		0.404	0.456	1.0	100.0	100.0	10.194	12.725	1.4
PM 2.5	1A3c	Liquid	0.084	0.029	2.0	100.0	100.0	0.042	-65.489	0.1
PM 2.5	1A3dii	Liquid	0.548	0.334	8.8	100.0	100.4	5.532	-39.025	1.0
PM 2.5	1A4ai	Biomass	0.030	0.054	20.0	80.0	82.5	0.097	80.359	0.1
PM 2.5	1A4ai	Liquid	0.506	0.089	13.0	100.0	100.8	0.395	-82.431	0.3
PM 2.5	1A4ai	Peat	0.002	0.002	15.0	160.0	160.7	0.000	13.576	0.0
PM 2.5	1A4aii	Liquid	0.746	0.077	12.9	100.0	100.8	0.299	-89.630	0.2
PM 2.5	1A4bi	Biomass	7.392	7.902	20.0	80.0	82.5	2084.563	6.902	19.5
PM 2.5	1A4bi	Liquid	0.219	0.042	15.0	100.0	101.1	0.088	-80.897	0.1
PM 2.5	1A4bi	Other	0.000	0.000	10.0	160.0	160.3	0.000	-97.674	0.0
PM 2.5	1A4bi	Peat	0.208	0.053	15.0	160.0	160.7	0.355	-74.568	0.3
PM 2.5	1A4bii	Liquid	0.242	0.125	11.5	100.0	100.7	0.780	-48.206	0.4
PM 2.5	1A4ci	Biomass	0.101	0.090	20.0	80.0	82.5	0.272	-10.335	0.2
PM 2.5	1A4ci	Liquid	0.167	0.009	14.6	100.0	101.1	0.004	-94.896	0.0
PM 2.5	1A4ci	Peat	0.008	0.024	10.0	160.0	160.3	0.072	197.859	0.1
PM 2.5	1A4ci	Solid	0.001	0.000	20.0	160.0	161.2	0.000	-59.209	0.0
PM 2.5	1A4cii	Liquid	1.620	0.149	14.5	100.0	101.0	1.107	-90.829	0.5
PM 2.5	1A4ciii	Liquid	0.072	0.041	15.0	100.0	101.1	0.085	-42.518	0.1
PM 2.5	1A5a	Biomass	0.002	0.382	10.0	160.0	160.3	18.419	16540.838	1.8
PM 2.5	1A5a	Liquid	0.308	0.051	15.4	100.0	101.2	0.133	-83.265	0.2
PM 2.5	1B1b		0.003	0.007	40.0	200.0	204.0	0.010	106.316	0.0
PM 2.5	1B1c		1.085	0.138	10.0	200.0	200.2	3.753	-87.270	0.8
PM 2.5	1B2aiv		0.189	0.001	80.0	200.0	215.4	0.000	-99.724	0.0
PM 2.5	1B2av		0.005	0.000	40.0	200.0	204.0	0.000	-95.440	0.0
PM 2.5	2A2		0.026	0.000	40.0	200.0	204.0	0.000	-99.355	0.0
PM 2.5	2A3		0.124	0.004	40.0	200.0	204.0	0.003	-96.947	0.0
PM 2.5	2A5a		0.068	0.000	40.0	200.0	204.0	0.000	-99.637	0.0
PM 2.5	2A5b		0.504	0.001	40.0	200.0	204.0	0.000	-99.723	0.0
PM 2.5	2A5c		0.049	0.017	30.0	200.0	202.2	0.058	-65.226	0.1
PM 2.5	2B10a		0.738	0.156	80.0	200.0	215.4	5.577	-78.806	1.0
PM 2.5	2B10b		0.001	0.002	40.0	200.0	204.0	0.000	66.312	0.0
PM 2.5	2B6		0.149	0.001	40.0	200.0	204.0	0.000	-99.589	0.0
PM 2.5	2C1		3.152	0.209	40.0	200.0	204.0	8.955	-93.356	1.3
PM 2.5	2C2		0.014	0.078	40.0	200.0	204.0	1.254	460.515	0.5
PM 2.5	2C3		0.001	0.000	60.0	200.0	208.8	0.000	-84.197	0.0
PM 2.5	2C7a		0.026	0.000	60.0	200.0	208.8	0.000	-98.615	0.0
PM 2.5	2C7c		0.201	0.006	40.0	200.0	204.0	0.008	-96.955	0.0
PM 2.5	2C7d		0.001	0.001	30.0	100.0	104.4	0.000	18.723	0.0
PM 2.5	2D3b		0.087	0.061	30.0	200.0	202.2	0.735	-30.380	0.4

PM 2.5	2D3d	0.000	0.001	40.0	200.0	204.0	0.000	168.772	0.0
PM 2.5	2D3g	0.016	0.001	40.0	200.0	204.0	0.000	-91.345	0.0
PM 2.5	2D3i	0.064	0.056	40.0	200.0	204.0	0.630	-13.605	0.3
PM 2.5	2G	0.153	0.062	35.0	73.0	81.0	0.124	-59.484	0.2
PM 2.5	2H1	1.420	0.095	80.0	200.0	215.4	2.067	-93.293	0.6
PM 2.5	2H2	0.303	0.403	40.0	200.0	204.0	33.126	33.123	2.5
PM 2.5	2I	0.131	0.000	40.0	200.0	204.0	0.000	-99.829	0.0
PM 2.5	2L	0.054	0.006	40.0	200.0	204.0	0.008	-88.139	0.0
PM 2.5	3B1a	0.132	0.054	3.0	200.0	200.0	0.567	-59.388	0.3
PM 2.5	3B1b	0.079	0.046	3.0	200.0	200.0	0.424	-41.293	0.3
PM 2.5	3B2	0.001	0.001	5.0	200.0	200.1	0.000	78.097	0.0
PM 2.5	3B3	0.004	0.002	5.0	200.0	200.1	0.001	-50.368	0.0
PM 2.5	3B4d	0.000	0.000	5.0	200.0	200.1	0.000	41.083	0.0
PM 2.5	3B4e	0.004	0.006	5.0	200.0	200.1	0.008	53.501	0.0
PM 2.5	3B4gi	0.014	0.011	5.0	200.0	200.1	0.022	-25.005	0.1
PM 2.5	3B4gii	0.003	0.009	5.0	200.0	200.1	0.016	193.553	0.1
PM 2.5	3B4giii	0.001	0.003	5.0	200.0	200.1	0.002	379.432	0.0
PM 2.5	3B4giv	0.032	0.013	5.0	200.0	200.1	0.033	-59.873	0.1
PM 2.5	3B4h	0.013	0.008	5.0	200.0	200.1	0.013	-38.916	0.0
PM 2.5	3Dc	0.268	0.212	3.0	200.0	200.0	8.867	-20.714	1.3
PM 2.5	5A	0.000	0.000	15.0	385.0	385.3	0.000	-53.823	0.0
PM 2.5	5C1bv	0.000	0.001	10.0	900.0	900.1	0.006	358.166	0.0
PM 2.5	5E	0.301	0.101	35.0	100.0	105.9	0.565	-66.360	0.3
<b>Total</b>		<b>47.150</b>	<b>14.271</b>			<b>48.0</b>		<b>-69.732</b>	<b>20.5</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
PM10	1A1a	Biomass	0.626	0.269	4.9	160.0	160.1	2.405	-56.981	0.8
PM10	1A1a	Liquid	1.057	0.020	2.1	100.0	100.0	0.005	-98.107	0.0
PM10	1A1a	Other	0.002	0.008	10.0	160.0	160.3	0.002	358.438	0.0
PM10	1A1a	Peat	1.337	0.263	2.0	120.0	120.0	1.284	-80.370	0.6
PM10	1A1a	Solid	4.794	0.071	1.0	160.0	160.0	0.168	-98.516	0.2
PM10	1A1b	Liquid	0.223	0.018	4.9	100.0	100.1	0.004	-91.790	0.0
PM10	1A1b	Solid	0.002	0.000	3.0	160.0	160.0	0.000	-89.675	0.0
PM10	1A2a	Biomass		0.000	10.0	160.0	160.3	0.000	NA	0.0
PM10	1A2a	Liquid	0.117	0.000	4.9	100.0	100.1	0.000	-99.830	0.0
PM10	1A2a	Solid	0.398	0.007	3.0	160.0	160.0	0.002	-98.237	0.0
PM10	1A2b	Liquid	0.059	0.004	3.1	100.0	100.0	0.000	-92.745	0.0

PM10	1A2b	Solid	0.072	0.001	4.7	160.0	160.1	0.000	-98.592	0.0
PM10	1A2c	Biomass	0.025	0.001	9.8	160.0	160.3	0.000	-96.591	0.0
PM10	1A2c	Liquid	0.267	0.043	3.9	100.0	100.1	0.024	-83.936	0.1
PM10	1A2d	Biomass	11.986	1.499	1.8	160.0	160.0	74.385	-87.494	4.6
PM10	1A2d	Gaseous	0.069	0.007	2.0	100.0	100.0	0.001	-89.297	0.0
PM10	1A2d	Liquid	0.907	0.027	1.8	100.0	100.0	0.009	-97.077	0.1
PM10	1A2d	Other	0.011	0.006	10.0	160.0	160.3	0.001	-43.904	0.0
PM10	1A2d	Peat	0.326	0.023	2.0	120.0	120.0	0.010	-92.936	0.1
PM10	1A2d	Solid	0.493	0.000	5.0	160.0	160.1	0.000	-99.942	0.0
PM10	1A2e	Biomass	0.040	0.005	9.2	160.0	160.3	0.001	-87.738	0.0
PM10	1A2e	Liquid	0.221	0.004	3.6	100.0	100.1	0.000	-98.170	0.0
PM10	1A2e	Other	0.000	0.001	10.0	160.0	160.3	0.000	245.896	0.0
PM10	1A2e	Peat	0.111	0.001	5.0	120.0	120.1	0.000	-98.788	0.0
PM10	1A2e	Solid	0.065	0.001	4.6	160.0	160.1	0.000	-97.853	0.0
PM10	1A2f	Biomass	0.000	0.002	10.0	160.0	160.3	0.000	604.574	0.0
PM10	1A2f	Liquid	0.358	0.015	3.7	100.0	100.1	0.003	-95.872	0.0
PM10	1A2f	Other		0.001	10.0	160.0	160.3	0.000	NA	0.0
PM10	1A2f	Solid	0.971	0.004	4.6	160.0	160.1	0.001	-99.545	0.0
PM10	1A2gvii	Liquid	1.422	0.258	4.9	100.0	100.1	0.862	-81.872	0.5
PM10	1A2gviii	Biomass	0.678	0.207	9.4	160.0	160.3	1.418	-69.531	0.6
PM10	1A2gviii	Liquid	0.737	0.015	4.4	100.0	100.1	0.003	-98.018	0.0
PM10	1A2gviii	Other	0.048	0.002	10.0	160.0	160.3	0.000	-96.304	0.0
PM10	1A2gviii	Peat	0.005	0.003	10.0	120.0	120.4	0.000	-43.618	0.0
PM10	1A3ai(i)	Liquid	0.003	0.002	5.0	100.0	100.1	0.000	-25.563	0.0
PM10	1A3aii(i)	Liquid	0.002	0.001	4.9	100.0	100.1	0.000	-67.191	0.0
PM10	1A3bi	Diesel oil	2.366	0.171	1.0	100.0	100.0	0.376	-92.793	0.3
PM10	1A3bi	Gaseous		0.000	3.0	100.0	100.0	0.000	NA	0.0
PM10	1A3bi	Gasoline	0.174	0.032	2.0	100.0	100.0	0.013	-81.816	0.1
PM10	1A3bii	Diesel oil	1.074	0.184	1.0	100.0	100.0	0.438	-82.861	0.4
PM10	1A3bii	Gaseous		0.000	3.0	100.0	100.0	0.000	NA	0.0
PM10	1A3bii	Gasoline	0.006	0.000	2.0	100.0	100.0	0.000	-97.741	0.0
PM10	1A3biii	Diesel oil	4.287	0.118	1.0	100.0	100.0	0.179	-97.252	0.2
PM10	1A3biii	Gaseous		0.000	3.0	100.0	100.0	0.000	NA	0.0
PM10	1A3biv	Diesel oil		0.006	1.0	100.0	100.0	0.000	NA	0.0
PM10	1A3biv	Gasoline	0.057	0.012	2.0	100.0	100.0	0.002	-78.520	0.0
PM10	1A3bvi		0.982	1.117	1.0	100.0	100.0	16.149	13.742	2.1
PM10	1A3bvii		4.766	5.391	1.0	100.0	100.0	375.902	13.135	10.3
PM10	1A3c	Liquid	0.089	0.031	2.0	100.0	100.0	0.012	-65.489	0.1
PM10	1A3dii	Liquid	0.565	0.340	8.8	100.0	100.4	1.507	-39.839	0.7
PM10	1A4ai	Biomass	0.032	0.056	20.0	80.0	82.5	0.027	74.460	0.1
PM10	1A4ai	Liquid	0.814	0.158	13.0	100.0	100.8	0.327	-80.621	0.3
PM10	1A4ai	Peat	0.009	0.010	15.0	160.0	160.7	0.003	13.576	0.0
PM10	1A4aii	Liquid	0.746	0.077	12.9	100.0	100.8	0.079	-89.630	0.1
PM10	1A4bi	Biomass	7.630	8.157	20.0	80.0	82.5	584.995	6.902	12.9
PM10	1A4bi	Liquid	0.336	0.055	15.0	100.0	101.1	0.040	-83.734	0.1
PM10	1A4bi	Other	0.000	0.000	10.0	160.0	160.3	0.000	-97.674	0.0
PM10	1A4bi	Peat	0.234	0.060	15.0	160.0	160.7	0.118	-74.568	0.2
PM10	1A4bii	Liquid	0.242	0.125	11.5	100.0	100.7	0.205	-48.206	0.2

PM10	1A4ci	Biomass	0.104	0.095	20.0	80.0	82.5	0.080	-8.458	0.2
PM10	1A4ci	Liquid	0.269	0.021	14.6	100.0	101.1	0.006	-92.048	0.0
PM10	1A4ci	Peat	0.042	0.124	10.0	160.0	160.3	0.510	197.859	0.4
PM10	1A4ci	Solid	0.003	0.002	20.0	160.0	161.2	0.000	-51.197	0.0
PM10	1A4cii	Liquid	1.620	0.149	14.5	100.0	101.0	0.292	-90.829	0.3
PM10	1A4ciii	Liquid	0.077	0.044	15.0	100.0	101.1	0.026	-42.518	0.1
PM10	1A5a	Biomass	0.012	1.987	10.0	160.0	160.3	131.171	16540.838	6.1
PM10	1A5a	Liquid	0.485	0.076	15.4	100.0	101.2	0.076	-84.325	0.1
PM10	1B1b		0.008	0.016	40.0	200.0	204.0	0.015	106.316	0.1
PM10	1B1c		1.544	0.197	10.0	200.0	200.2	2.004	-87.270	0.8
PM10	1B2aiv		0.312	0.002	80.0	200.0	215.4	0.000	-99.507	0.0
PM10	1B2av		0.005	0.000	40.0	200.0	204.0	0.000	-95.440	0.0
PM10	2A2		0.072	0.001	40.0	200.0	204.0	0.000	-98.822	0.0
PM10	2A3		0.142	0.004	40.0	200.0	204.0	0.001	-97.005	0.0
PM10	2A5a		0.230	0.002	40.0	200.0	204.0	0.000	-98.939	0.0
PM10	2A5b		0.796	0.011	40.0	200.0	204.0	0.006	-98.659	0.0
PM10	2A5c		0.477	0.162	30.0	200.0	202.2	1.393	-65.989	0.6
PM10	2B10a		1.156	0.361	80.0	200.0	215.4	7.799	-68.812	1.5
PM10	2B10b		0.007	0.012	40.0	200.0	204.0	0.008	66.227	0.0
PM10	2B6		0.198	0.001	40.0	200.0	204.0	0.000	-99.589	0.0
PM10	2C1		4.059	0.227	40.0	200.0	204.0	2.761	-94.420	0.9
PM10	2C2		0.020	0.111	40.0	200.0	204.0	0.663	460.515	0.4
PM10	2C3		0.002	0.000	60.0	200.0	208.8	0.000	-84.197	0.0
PM10	2C7a		0.034	0.000	60.0	200.0	208.8	0.000	-98.733	0.0
PM10	2C7c		0.408	0.007	40.0	200.0	204.0	0.003	-98.224	0.0
PM10	2C7d		0.006	0.007	30.0	100.0	104.4	0.001	18.723	0.0
PM10	2D3b		0.095	0.066	30.0	200.0	202.2	0.230	-30.380	0.3
PM10	2D3d		0.000	0.001	40.0	200.0	204.0	0.000	168.772	0.0
PM10	2D3g		0.017	0.002	40.0	200.0	204.0	0.000	-86.929	0.0
PM10	2D3i		0.187	0.060	40.0	200.0	204.0	0.194	-67.950	0.2
PM10	2G		0.153	0.062	35.0	60.0	69.5	0.024	-59.464	0.1
PM10	2H1		1.965	0.149	80.0	200.0	215.4	1.341	-92.391	0.6
PM10	2H2		0.320	0.417	40.0	200.0	204.0	9.373	30.306	1.6
PM10	2I		0.271	0.020	40.0	200.0	204.0	0.021	-92.725	0.1
PM10	2L		0.081	0.010	40.0	200.0	204.0	0.005	-87.573	0.0
PM10	3B1a		0.203	0.083	3.0	200.0	200.0	0.353	-59.388	0.3
PM10	3B1b		0.122	0.072	3.0	200.0	200.0	0.265	-41.544	0.3
PM10	3B2		0.002	0.004	5.0	200.0	200.1	0.001	78.097	0.0
PM10	3B3		0.086	0.045	5.0	200.0	200.1	0.103	-48.043	0.2
PM10	3B4d		0.000	0.000	5.0	200.0	200.1	0.000	41.083	0.0
PM10	3B4e		0.006	0.010	5.0	200.0	200.1	0.005	53.501	0.0
PM10	3B4gi		0.189	0.142	5.0	200.0	200.1	1.039	-25.005	0.5
PM10	3B4gii		0.031	0.090	5.0	200.0	200.1	0.416	193.553	0.3
PM10	3B4giii		0.003	0.016	5.0	200.0	200.1	0.013	379.432	0.1
PM10	3B4giv		0.227	0.091	5.0	200.0	200.1	0.429	-59.901	0.3
PM10	3B4h		0.027	0.016	5.0	200.0	200.1	0.014	-38.916	0.1
PM10	3Dc		4.897	3.843	3.0	200.0	200.0	763.857	-21.536	14.7
PM10	5A		0.001	0.001	15.0	379.0	379.3	0.000	-53.823	0.0

PM10	5C1bv	0.000	0.001	10.0	900.0	900.1	0.002	358.166	0.0
PM10	5E	0.301	0.101	35.0	100.0	105.9	0.149	-66.360	0.2
<b>Total</b>		<b>73.970</b>	<b>27.809</b>				<b>44.6</b>	<b>-62.404</b>	<b>23.7</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
TSP	1A1a	Bio-mass	1.331	0.526	6.2	60.0	60.3	0.536	-60.504	0.5
TSP	1A1a	Liquid	1.214	0.030	7.9	50.0	50.6	0.001	-97.528	0.0
TSP	1A1a	Other	0.013	0.018	8.2	80.0	80.4	0.001	35.609	0.0
TSP	1A1a	Peat	2.295	0.872	2.1	60.0	60.0	1.464	-61.986	0.8
TSP	1A1a	Solid	7.164	0.087	10.0		10.0	0.000	-98.786	0.0
TSP	1A1b	Liquid	0.536	0.066	10.0		10.0	0.000	-87.706	0.0
TSP	1A1b	Solid	0.009	0.001	10.0		10.0	0.000	-89.675	0.0
TSP	1A2a	Bio-mass		0.000	10.0		10.0	0.000	NA	0.0
TSP	1A2a	Liquid	0.157	0.000	6.1	50.0	50.4	0.000	-99.750	0.0
TSP	1A2a	Solid	0.941	0.018	10.0		10.0	0.000	-98.080	0.0
TSP	1A2b	Liquid	0.069	0.005	5.7	50.0	50.3	0.000	-92.629	0.0
TSP	1A2b	Solid	0.277	0.004	10.0		10.0	0.000	-98.592	0.0
TSP	1A2c	Bio-mass	0.029	0.001	6.8	60.0	60.4	0.000	-95.512	0.0
TSP	1A2c	Liquid	0.299	0.051	9.8	50.0	50.9	0.004	-83.056	0.0
TSP	1A2d	Bio-mass	14.007	1.686	9.8	60.0	60.8	5.609	-87.962	1.5
TSP	1A2d	Gaseous	0.083	0.009	9.3	80.0	80.5	0.000	-89.663	0.0
TSP	1A2d	Liquid	1.441	0.044	8.6	50.0	50.7	0.003	-96.980	0.0
TSP	1A2d	Other	0.017	0.013	10.0	80.0	80.6	0.001	-23.035	0.0
TSP	1A2d	Peat	0.435	0.030	10.0		10.0	0.000	-93.012	0.0
TSP	1A2d	Solid	0.715	0.000	10.0		10.0	0.000	-99.947	0.0
TSP	1A2e	Bio-mass	0.073	0.005	7.2	60.0	60.4	0.000	-93.243	0.0
TSP	1A2e	Liquid	0.260	0.005	3.5	50.0	50.1	0.000	-98.027	0.0
TSP	1A2e	Other	0.001	0.003	7.7	80.0	80.4	0.000	245.880	0.0
TSP	1A2e	Peat	0.169	0.005	10.0		10.0	0.000	-97.240	0.0
TSP	1A2e	Solid	0.251	0.004	4.7	60.0	60.2	0.000	-98.552	0.0
TSP	1A2f	Bio-mass	0.001	0.009	10.0		10.0	0.000	583.673	0.0
TSP	1A2f	Liquid	0.449	0.026	7.9	50.0	50.6	0.001	-94.244	0.0
TSP	1A2f	Other	0.029	0.002	10.0		10.0	0.000	-92.971	0.0
TSP	1A2f	Solid	1.954	0.012	10.0		10.0	0.000	-99.363	0.0
TSP	1A2gvii	Liquid	1.422	0.258	4.9	50.0	50.2	0.090	-81.872	0.2

TSP	1A2gviii	Bio-mass	1.586	0.363	8.4	60.0	60.6	0.258	-77.115	0.3
TSP	1A2gviii	Liquid	0.821	0.023	5.6	50.0	50.3	0.001	-97.174	0.0
TSP	1A2gviii	Other	0.189	0.003	10.0		10.0	0.000	-98.545	0.0
TSP	1A2gviii	Peat	0.007	0.005	10.0		10.0	0.000	-35.068	0.0
TSP	1A3ai(i)	Liquid	0.003	0.002	5.0	50.0	50.2	0.000	-25.563	0.0
TSP	1A3aii(i)	Liquid	0.002	0.001	4.9	50.0	50.2	0.000	-67.191	0.0
TSP	1A3bi	Diesel oil	2.366	0.171	1.0	50.0	50.0	0.039	-92.793	0.1
TSP	1A3bi	Gaseous		0.000	3.0	50.0	50.1	0.000	NA	0.0
TSP	1A3bi	Gasoline	0.174	0.032	2.0	50.0	50.0	0.001	-81.816	0.0
TSP	1A3bii	Diesel oil	1.074	0.184	1.0	50.0	50.0	0.045	-82.861	0.1
TSP	1A3bii	Gaseous		0.000	3.0	50.0	50.1	0.000	NA	0.0
TSP	1A3bii	Gasoline	0.006	0.000	2.0	50.0	50.0	0.000	-97.741	0.0
TSP	1A3biii	Diesel oil	4.287	0.118	1.0	50.0	50.0	0.019	-97.252	0.1
TSP	1A3biii	Gaseous		0.000	3.0	50.0	50.1	0.000	NA	0.0
TSP	1A3biv	Diesel oil		0.006	1.0	50.0	50.0	0.000	NA	0.0
TSP	1A3biv	Gasoline	0.057	0.012	2.0	50.0	50.0	0.000	-78.520	0.0
TSP	1A3bvi		1.325	1.506	1.0	50.0	50.0	3.029	13.700	1.1
TSP	1A3bvii		9.531	10.783	1.0	50.0	50.0	155.238	13.135	7.7
TSP	1A3c	Liquid	0.094	0.032	2.0	50.0	50.0	0.001	-65.489	0.0
TSP	1A3dii	Liquid	0.565	0.340	8.8	50.0	50.8	0.159	-39.839	0.2
TSP	1A4ai	Bio-mass	0.037	0.058	20.0	80.0	82.5	0.012	57.192	0.1
TSP	1A4ai	Liquid	0.994	0.211	13.0	50.0	51.7	0.064	-78.752	0.2
TSP	1A4ai	Peat	0.034	0.038	13.2	80.0	81.1	0.005	13.576	0.0
TSP	1A4aii	Liquid	0.746	0.077	12.9	50.0	51.6	0.009	-89.630	0.1
TSP	1A4bi	Bio-mass	7.948	8.496	20.0	80.0	82.5	262.061	6.902	10.0
TSP	1A4bi	Liquid	0.425	0.061	15.0	50.0	52.2	0.005	-85.540	0.0
TSP	1A4bi	Other	0.000	0.000	10.0	80.0	80.6	0.000	-97.674	0.0
TSP	1A4bi	Peat	0.260	0.066	15.0	80.0	81.4	0.015	-74.568	0.1
TSP	1A4bii	Liquid	0.242	0.125	11.5	50.0	51.3	0.022	-48.206	0.1
TSP	1A4ci	Bio-mass	0.108	0.100	19.3	80.0	82.3	0.036	-7.363	0.1
TSP	1A4ci	Liquid	0.329	0.036	14.6	50.0	52.1	0.002	-89.104	0.0
TSP	1A4ci	Peat	0.160	0.477	10.0	80.0	80.6	0.788	197.859	0.6
TSP	1A4ci	Solid	0.008	0.003	20.0	80.0	82.5	0.000	-56.422	0.0
TSP	1A4cii	Liquid	1.620	0.149	14.5	50.0	52.1	0.032	-90.829	0.1
TSP	1A4ciii	Liquid	0.077	0.044	15.0	50.0	52.2	0.003	-42.518	0.0
TSP	1A5a	Bio-mass	0.046	7.641	10.0	80.0	80.6	202.612	16540.838	8.8
TSP	1A5a	Liquid	0.591	0.096	15.4	50.0	52.3	0.014	-83.730	0.1
TSP	1B1b		0.019	0.039	20.0		20.0	0.000	106.316	0.0
TSP	1B1c		2.363	0.301	10.0	200.0	200.2	1.937	-87.270	0.9
TSP	1B2aiv		0.442	0.002	40.0		40.0	0.000	-99.555	0.0
TSP	1B2av		0.005	0.000	20.0		20.0	0.000	-95.440	0.0
TSP	2A2		0.174	0.002	20.0		20.0	0.000	-98.755	0.0
TSP	2A3		0.158	0.005	20.0		20.0	0.000	-97.016	0.0
TSP	2A5a		0.400	0.005	19.0	200.0	200.9	0.001	-98.759	0.0
TSP	2A5b		1.014	0.034	29.0	200.0	202.1	0.025	-96.633	0.1

TSP	2A5c	1.217	0.423	30.0	200.0	202.2	3.916	-65.191	1.2
TSP	2B10a	1.409	0.413	40.0		40.0	0.146	-70.683	0.2
TSP	2B10b	0.023	0.039	30.0	200.0	202.2	0.033	66.214	0.1
TSP	2B6	0.248	0.001	20.0		20.0	0.000	-99.589	0.0
TSP	2C1	5.545	0.279	18.1		18.1	0.014	-94.969	0.1
TSP	2C2	0.023	0.131	20.0		20.0	0.004	460.515	0.0
TSP	2C3	0.003	0.000	19.1		19.1	0.000	-84.197	0.0
TSP	2C7a	0.043	0.001	38.9		38.9	0.000	-98.364	0.0
TSP	2C7c	0.855	0.011	20.0		20.0	0.000	-98.674	0.0
TSP	2C7d	0.012	0.015	30.0	100.0	104.4	0.001	18.723	0.0
TSP	2D3b	0.126	0.088	30.0	200.0	202.2	0.169	-30.380	0.3
TSP	2D3d	0.001	0.001	20.0		20.0	0.000	168.772	0.0
TSP	2D3g	0.019	0.003	20.0		20.0	0.000	-84.719	0.0
TSP	2D3i	0.598	0.064	20.0		20.0	0.001	-89.231	0.0
TSP	2G	0.153	0.062	35.0	55.0	65.2	0.009	-59.460	0.1
TSP	2H1	2.389	0.160	40.0		40.0	0.022	-93.285	0.1
TSP	2H2	0.329	0.433	25.8	200.0	201.7	4.079	31.875	1.3
TSP	2I	0.590	0.106	20.0		20.0	0.002	-81.981	0.0
TSP	2L	0.093	0.013	20.0		20.0	0.000	-85.488	0.0
TSP	3B1a	0.445	0.181	3.0	200.0	200.0	0.699	-59.388	0.5
TSP	3B1b	0.264	0.155	3.0	200.0	200.0	0.510	-41.435	0.4
TSP	3B2	0.005	0.009	5.0	200.0	200.1	0.002	78.097	0.0
TSP	3B3	0.518	0.285	5.0	200.0	200.1	1.738	-44.896	0.8
TSP	3B4d	0.000	0.000	5.0	200.0	200.1	0.000	41.083	0.0
TSP	3B4e	0.014	0.021	5.0	200.0	200.1	0.010	53.501	0.1
TSP	3B4gi	0.897	0.673	5.0	200.0	200.1	9.680	-25.005	1.9
TSP	3B4gii	0.061	0.179	5.0	200.0	200.1	0.687	193.553	0.5
TSP	3B4giii	0.003	0.016	5.0	200.0	200.1	0.005	379.432	0.0
TSP	3B4giv	0.234	0.093	5.0	200.0	200.1	0.187	-60.110	0.3
TSP	3B4h	0.060	0.037	5.0	200.0	200.1	0.029	-38.916	0.1
TSP	3Dc	4.897	3.843	3.0	200.0	200.0	315.359	-21.536	11.0
TSP	5A	0.003	0.001	15.0	377.0	377.3	0.000	-53.823	0.0
TSP	5C1bv	0.000	0.001	10.0	900.0	900.1	0.001	358.166	0.0
TSP	5E	0.301	0.101	35.0	100.0	105.9	0.061	-66.360	0.2
<b>Total</b>		<b>98.738</b>	<b>43.281</b>			<b>31.2</b>		<b>-56.166</b>	<b>19.3</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
BC	1A1a	Biomass	0.005	0.002	4.9	320.0	320.0	0.054	-53.003	0.1
BC	1A1a	Liquid	0.177	0.003	2.1	200.0	200.0	0.029	-98.369	0.1
BC	1A1a	Other	0.000	0.000	10.0	320.0	320.2	0.000	669.598	0.0
BC	1A1a	Peat	0.015	0.002	2.0	280.0	280.0	0.030	-86.380	0.1
BC	1A1a	Solid	0.024	0.000	1.0	320.0	320.0	0.002	-98.043	0.0
BC	1A1b	Liquid	0.011	0.001	4.9	200.0	200.1	0.001	-94.389	0.0
BC	1A1b	Solid	0.000	0.000	3.0	320.0	320.0	0.000	-90.614	0.0
BC	1A2a	Biomass		0.000	10.0	320.0	320.2	0.000	NA	0.0
BC	1A2a	Liquid	0.015	0.000	4.9	200.0	200.1	0.000	-99.891	0.0
BC	1A2a	Solid	0.002	0.000	3.0	320.0	320.0	0.000	-98.536	0.0
BC	1A2b	Liquid	0.011	0.001	3.1	200.0	200.0	0.001	-95.082	0.0
BC	1A2b	Solid	0.000	0.000	4.7	320.0	320.0	0.000	-98.893	0.0
BC	1A2c	Biomass	0.001	0.000	9.8	320.0	320.1	0.000	-94.046	0.0
BC	1A2c	Liquid	0.050	0.005	3.9	200.0	200.0	0.071	-90.972	0.1
BC	1A2d	Biomass	0.031	0.007	4.5	320.0	320.0	0.416	-78.032	0.3
BC	1A2d	Liquid	0.103	0.004	1.9	200.0	200.0	0.066	-95.755	0.1
BC	1A2d	Other	0.002	0.000	10.0	320.0	320.2	0.001	-82.306	0.0
BC	1A2d	Peat	0.005	0.000	2.0	280.0	280.0	0.001	-93.100	0.0
BC	1A2d	Solid	0.002	0.000	5.0	320.0	320.0	0.000	-99.913	0.0
BC	1A2e	Biomass	0.000	0.000	9.2	320.0	320.1	0.000	-91.271	0.0
BC	1A2e	Liquid	0.043	0.001	3.6	200.0	200.0	0.001	-98.550	0.0
BC	1A2e	Other	0.000	0.000	10.0	320.0	320.2	0.000	245.896	0.0
BC	1A2e	Peat	0.001	0.000	5.0	280.0	280.0	0.000	-98.999	0.0
BC	1A2e	Solid	0.000	0.000	4.6	320.0	320.0	0.000	-97.942	0.0
BC	1A2f	Biomass	0.000	0.000	10.0	320.0	320.2	0.000	147.163	0.0
BC	1A2f	Liquid	0.066	0.001	3.7	200.0	200.0	0.005	-98.158	0.0
BC	1A2f	Other		0.000	10.0	320.0	320.2	0.000	NA	0.0
BC	1A2f	Solid	0.012	0.000	4.6	320.0	320.0	0.000	-99.934	0.0
BC	1A2gvii	Liquid	0.877	0.157	4.9	200.0	200.1	85.755	-82.109	4.4
BC	1A2gviii	Biomass	0.007	0.003	9.4	320.0	320.1	0.080	-58.183	0.1
BC	1A2gviii	Liquid	0.140	0.002	4.4	200.0	200.0	0.012	-98.689	0.1
BC	1A2gviii	Other	0.002	0.000	10.0	320.0	320.2	0.000	-97.907	0.0
BC	1A2gviii	Peat	0.000	0.000	10.0	280.0	280.2	0.000	-48.157	0.0
BC	1A3ai(i)	Liquid	0.002	0.001	5.0	200.0	200.1	0.005	-25.563	0.0
BC	1A3aii(i)	Liquid	0.001	0.000	4.9	200.0	200.1	0.000	-67.191	0.0
BC	1A3bi	Diesel oil	1.349	0.097	1.0	200.0	200.0	32.894	-92.793	2.7

BC	1A3bi	Gasoline	0.021	0.004	2.0	200.0	200.0	0.050	-81.816	0.1
BC	1A3bii	Diesel oil	0.591	0.101	1.0	200.0	200.0	35.669	-82.861	2.8
BC	1A3bii	Gasoline	0.000	0.000	2.0	200.0	200.0	0.000	-97.741	0.0
BC	1A3biii	Diesel oil	2.272	0.062	1.0	200.0	200.0	13.575	-97.252	1.7
BC	1A3biv	Diesel oil		0.003	1.0	200.0	200.0	0.039	NA	0.1
BC	1A3biv	Gasoline	0.006	0.001	2.0	200.0	200.0	0.006	-78.520	0.0
BC	1A3bvi		0.140	0.159	1.0	200.0	200.0	88.083	13.602	4.4
BC	1A3bvii		0.079	0.089	1.0	200.0	200.0	27.890	13.135	2.5
BC	1A3c	Liquid	0.055	0.019	2.0	200.0	200.0	1.246	-65.489	0.5
BC	1A3dii	Liquid	0.069	0.056	8.8	200.0	200.2	10.914	-19.278	1.6
BC	1A4ai	Biomass	0.001	0.002	20.0	80.0	82.5	0.002	79.884	0.0
BC	1A4ai	Liquid	0.152	0.027	13.0	200.0	200.4	2.542	-82.304	0.8
BC	1A4ai	Peat	0.000	0.000	15.0	320.0	320.4	0.000	13.576	0.0
BC	1A4aii	Liquid	0.230	0.021	12.9	200.0	200.4	1.490	-91.031	0.6
BC	1A4bi	Biomass	2.260	2.283	20.0	80.0	82.5	3083.844	0.988	26.3
BC	1A4bi	Liquid	0.072	0.014	15.0	200.0	200.6	0.688	-80.569	0.4
BC	1A4bi	Other	0.000	0.000	10.0	320.0	320.2	0.000	-97.674	0.0
BC	1A4bi	Peat	0.007	0.002	15.0	320.0	320.4	0.027	-74.568	0.1
BC	1A4bii	Liquid	0.027	0.023	11.5	200.0	200.3	1.861	-13.677	0.6
BC	1A4ci	Biomass	0.003	0.003	20.0	80.0	82.5	0.005	-10.326	0.0
BC	1A4ci	Liquid	0.050	0.003	14.6	200.0	200.5	0.025	-94.694	0.1
BC	1A4ci	Peat	0.000	0.001	10.0	320.0	320.2	0.006	197.859	0.0
BC	1A4ci	Solid	0.000	0.000	20.0	320.0	320.6	0.000	-59.209	0.0
BC	1A4cii	Liquid	0.877	0.063	14.5	200.0	200.5	13.764	-92.847	1.8
BC	1A4ciii	Liquid	0.024	0.014	15.0	200.0	200.6	0.654	-42.518	0.4
BC	1A5a	Biomass	0.000	0.107	10.0	320.0	320.2	102.110	141094.991	4.8
BC	1A5a	Liquid	0.094	0.018	15.4	200.0	200.6	1.161	-80.533	0.5
BC	1B1b		0.000	0.000	80.0	400.0	407.9	0.000	-15.654	0.0
BC	2A2		0.000	0.000	80.0	400.0	407.9	0.000	-99.425	0.0
BC	2A3		0.000	0.000	80.0	400.0	407.9	0.000	-96.947	0.0
BC	2B10a		0.013	0.003	160.0	400.0	430.8	0.128	-78.745	0.2
BC	2B6		0.003	0.000	80.0	400.0	407.9	0.000	-99.589	0.0
BC	2C1		0.012	0.001	80.0	400.0	407.9	0.008	-93.572	0.0
BC	2C2		0.001	0.008	80.0	400.0	407.9	0.889	460.515	0.4
BC	2C3		0.000	0.000	120.0	400.0	417.6	0.000	-81.999	0.0
BC	2C7a		0.000	0.000	120.0	400.0	417.6	0.000	-99.948	0.0
BC	2D3b		0.005	0.003	30.0	200.0	202.2	0.042	-30.380	0.1
BC	2D3i		0.000	0.000	80.0	400.0	407.9	0.000	-91.002	0.0
BC	2G		0.001	0.000	35.0	49.0	60.2	0.000	-59.506	0.0
BC	2H1		0.046	0.002	160.0	400.0	430.8	0.099	-94.658	0.1
BC	5C1bv		0.000	0.001	10.0	900.0	900.1	0.026	358.166	0.1
BC	5E		0.027	0.009	35.0	100.0	105.9	0.073	-67.404	0.1
<b>Total</b>			<b>10.135</b>	<b>3.389</b>			<b>59.2</b>		<b>-66.559</b>	<b>28.0</b>

Pollutant	NFR	Fuel	Base year emissions, kt	Year 2021 emissions, kt	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
CO	1A1a	Biomass	1.545	12.987	4.4	70.0	70.1	7.278	740.310	1.7
CO	1A1a	Gaseous	0.779	0.446	7.8	70.0	70.4	0.009	-42.828	0.1
CO	1A1a	Liquid	0.371	0.175	3.5	70.0	70.1	0.001	-52.762	0.0
CO	1A1a	Other	0.008	0.135	7.7	70.0	70.4	0.001	1498.797	0.0
CO	1A1a	Peat	1.544	1.579	2.2	70.0	70.0	0.107	2.270	0.2
CO	1A1a	Solid	0.793	1.296	5.2	70.0	70.2	0.073	63.558	0.2
CO	1A1b	Biomass		0.037	10.0	70.0	70.7	0.000	NA	0.0
CO	1A1b	Gaseous	0.167	0.363	1.0	70.0	70.0	0.006	117.081	0.0
CO	1A1b	Liquid	0.406	0.485	3.5	70.0	70.1	0.010	19.505	0.1
CO	1A1b	Solid	0.001	0.009	3.0	70.0	70.1	0.000	626.921	0.0
CO	1A2a	Biomass		0.000	10.0		10.0	0.000	NA	0.0
CO	1A2a	Gaseous	0.023	0.140	2.0	70.0	70.0	0.001	501.824	0.0
CO	1A2a	Liquid	0.246	0.007	4.0	70.0	70.1	0.000	-96.964	0.0
CO	1A2a	Solid	6.922	0.701	2.1	70.0	70.0	0.021	-89.867	0.1
CO	1A2b	Gaseous		0.001	4.8	70.0	70.2	0.000	NA	0.0
CO	1A2b	Liquid	0.020	0.073	7.9	70.0	70.4	0.000	258.612	0.0
CO	1A2b	Solid	0.079	0.003	4.7	70.0	70.2	0.000	-95.746	0.0
CO	1A2c	Biomass	0.021	0.007	8.5	70.0	70.5	0.000	-66.984	0.0
CO	1A2c	Gaseous	0.034	0.029	3.9	70.0	70.1	0.000	-16.420	0.0
CO	1A2c	Liquid	0.191	0.278	3.5	70.0	70.1	0.003	45.987	0.0
CO	1A2c	Other	0.111	0.001	10.0	70.0	70.7	0.000	-99.187	0.0
CO	1A2d	Biomass	25.273	16.081	2.3	70.0	70.0	11.126	-36.369	2.1
CO	1A2d	Gaseous	1.836	0.680	4.8	70.0	70.2	0.020	-62.971	0.1
CO	1A2d	Liquid	1.041	0.342	1.8	70.0	70.0	0.005	-67.183	0.0
CO	1A2d	Other	0.008	0.050	8.1	70.0	70.5	0.000	526.387	0.0
CO	1A2d	Peat	0.700	0.279	2.4	70.0	70.0	0.003	-60.167	0.0
CO	1A2d	Solid	0.645	0.002	10.0		10.0	0.000	-99.694	0.0
CO	1A2e	Biomass	0.077	0.086	8.6	70.0	70.5	0.000	11.617	0.0
CO	1A2e	Gaseous	0.018	0.009	3.0	70.0	70.1	0.000	-52.086	0.0
CO	1A2e	Liquid	0.090	0.010	2.8	70.0	70.1	0.000	-89.390	0.0
CO	1A2e	Other	0.002	0.013	10.0	70.0	70.7	0.000	552.023	0.0
CO	1A2e	Peat	0.143	0.057	5.0	70.0	70.2	0.000	-60.038	0.0
CO	1A2e	Solid	0.053	0.007	4.6	70.0	70.2	0.000	-87.501	0.0
CO	1A2f	Biomass	0.000	0.123	9.0	70.0	70.6	0.001	170371.124	0.0
CO	1A2f	Gaseous	1.888	0.043	6.3	70.0	70.3	0.000	-97.706	0.0
CO	1A2f	Liquid	1.281	2.249	3.0	70.0	70.1	0.218	75.558	0.3
CO	1A2f	Other		0.476	10.0	70.0	70.7	0.010	NA	0.1

CO	1A2f	Solid	12.941	1.134	3.2	70.0	70.1	0.055	-91.238	0.1
CO	1A2gvii	Liquid	8.424	7.075	4.9	70.0	70.2	2.162	-16.009	0.9
CO	1A2gviii	Biomass	3.848	2.817	8.2	70.0	70.5	0.346	-26.811	0.4
CO	1A2gviii	Gaseous	0.053	0.084	9.3	70.0	70.6	0.000	59.033	0.0
CO	1A2gviii	Liquid	0.202	0.057	3.5	70.0	70.1	0.000	-71.769	0.0
CO	1A2gviii	Other	0.279	0.027	10.0	70.0	70.7	0.000	-90.512	0.0
CO	1A2gviii	Peat	0.024	0.058	9.3	70.0	70.6	0.000	141.067	0.0
CO	1A3ai(i)	Liquid	0.231	0.228	5.0	70.0	70.2	0.002	-1.140	0.0
CO	1A3aii(i)	Liquid	0.631	0.194	4.9	70.0	70.2	0.002	-69.199	0.0
CO	1A3bi	Diesel oil	9.979	0.764	1.0	70.0	70.0	0.025	-92.348	0.1
CO	1A3bi	Gaseous		0.095	3.0	70.0	70.1	0.000	NA	0.0
CO	1A3bi	Gasoline	412.338	17.903	2.0	70.0	70.0	13.787	-95.658	2.3
CO	1A3bii	Diesel oil	4.107	1.136	1.0	70.0	70.0	0.055	-72.336	0.1
CO	1A3bii	Gaseous		0.009	3.0	70.0	70.1	0.000	NA	0.0
CO	1A3bii	Gasoline	18.286	0.394	2.0	70.0	70.0	0.007	-97.847	0.1
CO	1A3biii	Diesel oil	15.069	2.077	1.0	70.0	70.0	0.185	-86.218	0.3
CO	1A3biii	Gaseous		0.006	3.0	70.0	70.1	0.000	NA	0.0
CO	1A3biv	Diesel oil		0.045	1.0	70.0	70.0	0.000	NA	0.0
CO	1A3biv	Gasoline	7.906	3.354	2.0	70.0	70.0	0.484	-57.581	0.4
CO	1A3c	Liquid	0.548	0.217	2.0	70.0	70.0	0.002	-60.389	0.0
CO	1A3dii	Liquid	22.554	25.281	8.8	70.0	70.5	27.899	12.091	3.3
CO	1A3ei	Gaseous	0.001	0.002	20.0	70.0	72.8	0.000	204.273	0.0
CO	1A4ai	Biomass	0.455	0.788	20.0	70.0	72.8	0.029	73.182	0.1
CO	1A4ai	Gaseous	0.031	0.060	10.0	70.0	70.7	0.000	89.611	0.0
CO	1A4ai	Liquid	0.527	0.228	12.6	70.0	71.1	0.002	-56.793	0.0
CO	1A4ai	Peat	0.018	0.019	15.0	70.0	71.6	0.000	3.394	0.0
CO	1A4aii	Liquid	11.336	15.159	12.9	70.0	71.2	10.211	33.724	2.0
CO	1A4bi	Biomass	124.241	151.924	20.0	70.0	72.8	1072.964	22.282	20.5
CO	1A4bi	Gaseous	0.030	0.058	10.0	70.0	70.7	0.000	91.657	0.0
CO	1A4bi	Liquid	0.785	0.170	15.1	70.0	71.6	0.001	-78.411	0.0
CO	1A4bi	Other	0.001	0.000	10.0	70.0	70.7	0.000	-97.674	0.0
CO	1A4bi	Peat	0.130	0.033	15.0	70.0	71.6	0.000	-74.568	0.0
CO	1A4bii	Liquid	34.909	35.889	11.5	70.0	70.9	56.840	2.809	4.7
CO	1A4ci	Biomass	1.515	1.359	20.0	70.0	72.8	0.086	-10.242	0.2
CO	1A4ci	Gaseous	0.022	0.006	10.0	70.0	70.7	0.000	-73.857	0.0
CO	1A4ci	Liquid	0.183	0.087	14.0	70.0	71.4	0.000	-52.379	0.0
CO	1A4ci	Peat	0.080	0.243	10.0	70.0	70.7	0.003	204.176	0.0
CO	1A4ci	Solid	0.007	0.005	20.0	70.0	72.8	0.000	-32.672	0.0
CO	1A4cii	Liquid	18.799	8.690	14.5	70.0	71.5	3.385	-53.772	1.1
CO	1A4ciii	Liquid	0.442	0.265	15.0	70.0	71.6	0.003	-40.213	0.0
CO	1A5a	Biomass	0.130	19.103	10.0	70.0	70.7	16.005	14598.116	2.5
CO	1A5a	Gaseous	0.115	0.219	20.0	70.0	72.8	0.002	90.304	0.0
CO	1A5a	Liquid	2.031	0.794	12.3	70.0	71.1	0.028	-60.907	0.1
CO	2C1		0.464	0.207	20.0		20.0	0.000	-55.492	0.0
CO	2C7a		0.223	0.004	20.0		20.0	0.000	-98.272	0.0
CO	2G		0.315	0.132	35.0	5.0	35.4	0.000	-58.049	0.0
<b>Total</b>			<b>764.457</b>	<b>337.654</b>			<b>35.0</b>		<b>-55.831</b>	<b>21.8</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
Pb	1A1a	Biomass	0.179	0.580	9.9	80.0	80.6	12.922	223.382	0.2
Pb	1A1a	Liquid	0.319	0.029	5.2	80.0	80.2	0.032	-90.946	0.0
Pb	1A1a	Other	0.001	0.125	9.5	80.0	80.6	0.597	12152.013	0.0
Pb	1A1a	Peat	1.291	0.921	2.0	80.0	80.0	32.186	-28.633	0.3
Pb	1A1a	Solid	5.751	0.045	28.0	80.0	84.8	0.087	-99.215	0.0
Pb	1A1b	Liquid	2.049	2.660	5.0	80.0	80.2	269.120	29.849	0.9
Pb	1A1b	Solid	0.048	0.005	3.0	80.0	80.1	0.001	-89.675	0.0
Pb	1A2a	Biomass		0.000	10.0	80.0	80.6	0.000	NA	0.0
Pb	1A2b	Liquid	0.010	0.001	5.0	80.0	80.2	0.000	-92.647	0.0
Pb	1A2c	Biomass	0.003	0.000	5.0	80.0	80.2	0.000	-90.239	0.0
Pb	1A2c	Liquid	0.082	0.031	4.1	80.0	80.1	0.036	-62.345	0.0
Pb	1A2d	Biomass	4.479	2.814	2.3	80.0	80.0	300.245	-37.182	1.0
Pb	1A2d	Liquid	0.195	0.022	3.9	80.0	80.1	0.018	-88.955	0.0
Pb	1A2d	Other	0.001	0.037	25.7	80.0	84.0	0.056	3583.769	0.0
Pb	1A2d	Peat	0.499	0.009	28.1	80.0	84.8	0.003	-98.243	0.0
Pb	1A2d	Solid	1.025	0.000	30.0		30.0	0.000	-99.995	0.0
Pb	1A2e	Biomass	0.008	0.006	9.2	80.0	80.5	0.001	-28.746	0.0
Pb	1A2e	Liquid	0.083	0.004	19.1	80.0	82.2	0.001	-95.385	0.0
Pb	1A2e	Other	0.003	0.002	10.0	80.0	80.6	0.000	-43.246	0.0
Pb	1A2e	Peat	0.167	0.087	5.0	80.0	80.2	0.290	-47.781	0.0
Pb	1A2e	Solid	1.384	0.014	5.0	80.0	80.2	0.007	-99.006	0.0
Pb	1A2f	Biomass	0.000	0.007	23.6	80.0	83.4	0.002	4343.698	0.0
Pb	1A2f	Liquid	0.062	0.007	18.0	80.0	82.0	0.002	-88.864	0.0
Pb	1A2f	Other		0.001	30.0		30.0	0.000	NA	0.0
Pb	1A2f	Solid	2.811	0.671	4.5	80.0	80.1	17.102	-76.134	0.2
Pb	1A2gviii	Biomass	0.319	0.108	9.3	80.0	80.5	0.444	-66.260	0.0
Pb	1A2gviii	Liquid	0.113	0.004	4.3	80.0	80.1	0.001	-96.309	0.0
Pb	1A2gviii	Other	0.049	0.014	10.0	80.0	80.6	0.007	-71.908	0.0
Pb	1A2gviii	Peat	0.003	0.004	9.9	80.0	80.6	0.001	47.202	0.0
Pb	1A3aii(i)	Liquid	0.297	0.056	20.0	100.0	102.0	0.196	-80.974	0.0
Pb	1A3bi	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	102.897	0.0
Pb	1A3bi	Gasoline	166.003	0.002	2.0	100.0	100.0	0.000	-99.999	0.0
Pb	1A3bii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	18.940	0.0
Pb	1A3bii	Gasoline	6.400	0.000	2.0	100.0	100.0	0.000	-100.000	0.0
Pb	1A3biii	Diesel oil	0.000	0.001	1.0	100.0	100.0	0.000	47.577	0.0
Pb	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0

Pb	1A3biv	Gasoline	1.300	0.000	2.0	100.0	100.0	0.000	-99.996	0.0
Pb	1A3bvi		7.220	0.467	1.0	100.0	100.0	12.935	-93.526	0.2
Pb	1A3dii	Liquid	0.015	0.008	14.1	100.0	101.0	0.004	-41.537	0.0
Pb	1A4ai	Biomass	0.020	0.034	20.0	80.0	82.5	0.048	70.087	0.0
Pb	1A4ai	Liquid	0.261	0.040	15.0	80.0	81.4	0.063	-84.605	0.0
Pb	1A4ai	Peat	0.020	0.018	15.0	80.0	81.4	0.013	-10.448	0.0
Pb	1A4bi	Biomass	0.413	0.531	20.0	80.0	82.5	11.354	28.627	0.2
Pb	1A4bi	Liquid	0.046	0.001	15.0	80.0	81.4	0.000	-98.556	0.0
Pb	1A4bi	Peat	0.111	0.028	15.0	80.0	81.4	0.031	-74.568	0.0
Pb	1A4ci	Biomass	0.065	0.058	20.0	80.0	82.5	0.136	-10.421	0.0
Pb	1A4ci	Liquid	0.081	0.003	15.0	80.0	81.4	0.000	-96.690	0.0
Pb	1A4ci	Peat	0.068	0.204	10.0	80.0	80.6	1.604	200.228	0.1
Pb	1A4ci	Solid	0.035	0.000	20.0	80.0	82.5	0.000	-98.941	0.0
Pb	1A4ciii	Liquid	0.007	0.004	15.0	100.0	101.1	0.001	-42.558	0.0
Pb	1A5a	Biomass	0.015	1.719	10.0	80.0	80.6	113.739	11139.626	0.6
Pb	1A5a	Liquid	0.211	0.043	19.8	80.0	82.4	0.075	-79.512	0.0
Pb	1B1b		0.022	0.011	30.0		30.0	0.001	-49.091	0.0
Pb	2B10a		0.001	0.001	60.0		60.0	0.000	0.000	0.0
Pb	2C1		34.463	0.504	30.0		30.0	1.351	-98.537	0.1
Pb	2C2		0.001	0.029	30.0		30.0	0.005	2840.000	0.0
Pb	2C3		0.066	0.000	30.0		30.0	0.000	-99.727	0.0
Pb	2C6		0.000	0.016	30.0		30.0	0.001	3782.500	0.0
Pb	2C7a		0.374	0.002	40.8		40.8	0.000	-99.430	0.0
Pb	2C7c		80.081	0.376	30.0		30.0	0.754	-99.530	0.0
Pb	2G		0.310	0.630	35.0	283.0	285.2	190.817	102.924	0.8
Pb	5C1bv		0.000	0.001	10.0	900.0	900.1	0.005	358.166	0.0
Pb	5E		0.001	0.000	35.0	150.0	154.0	0.000	-52.263	0.0
<b>Total</b>			<b>321.435</b>	<b>12.997</b>			<b>31.1</b>		<b>-95.956</b>	<b>1.8</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
Cd	1A1a	Biomass	0.019	0.078	8.1	80.0	80.4	54.826	312.934	1.3
Cd	1A1a	Liquid	0.005	0.000	6.3	80.0	80.2	0.001	-92.251	0.0
Cd	1A1a	Other	0.000	0.014	9.5	80.0	80.6	1.800	12080.186	0.2
Cd	1A1a	Peat	0.023	0.017	2.0	80.0	80.0	2.635	-23.969	0.3
Cd	1A1a	Solid	0.155	0.003	26.0	80.0	84.1	0.089	-98.061	0.1
Cd	1A1b	Liquid	0.047	0.061	5.0	80.0	80.2	32.699	30.081	1.0
Cd	1A1b	Solid	0.001	0.000	3.0	80.0	80.1	0.000	-89.675	0.0

Cd	1A2a	Biomass		0.000	10.0	80.0	80.6	0.000	NA	0.0
Cd	1A2b	Liquid	0.000	0.000	5.0	80.0	80.2	0.000	-92.647	0.0
Cd	1A2c	Biomass	0.000	0.000	5.0	80.0	80.2	0.000	-77.276	0.0
Cd	1A2c	Liquid	0.001	0.000	4.1	80.0	80.1	0.001	-63.152	0.0
Cd	1A2d	Biomass	0.317	0.178	2.2	80.0	80.0	280.967	-43.889	3.0
Cd	1A2d	Liquid	0.003	0.001	4.9	80.0	80.1	0.003	-82.727	0.0
Cd	1A2d	Other	0.000	0.001	17.6	80.0	81.9	0.018	903.127	0.0
Cd	1A2d	Peat	0.008	0.000	30.0		30.0	0.000	-99.216	0.0
Cd	1A2d	Solid	0.024	0.000	30.0		30.0	0.000	-99.979	0.0
Cd	1A2e	Biomass	0.001	0.001	9.2	80.0	80.5	0.004	-32.292	0.0
Cd	1A2e	Liquid	0.001	0.000	18.2	80.0	82.0	0.000	-95.859	0.0
Cd	1A2e	Other	0.000	0.000	10.0	80.0	80.6	0.000	67.740	0.0
Cd	1A2e	Peat	0.003	0.001	5.0	80.0	80.2	0.018	-47.794	0.0
Cd	1A2e	Solid	0.032	0.000	5.7	80.0	80.2	0.001	-98.937	0.0
Cd	1A2f	Biomass	0.000	0.000	9.6	80.0	80.6	0.000	926.279	0.0
Cd	1A2f	Liquid	0.001	0.000	27.0	80.0	84.4	0.001	-53.479	0.0
Cd	1A2f	Other		0.000	30.0		30.0	0.000	NA	0.0
Cd	1A2f	Solid	0.068	0.015	4.6	80.0	80.1	2.051	-77.735	0.3
Cd	1A2gvii	Liquid	0.003	0.004	4.9	100.0	100.1	0.192	25.668	0.1
Cd	1A2gviii	Biomass	0.036	0.013	9.3	80.0	80.5	1.511	-63.739	0.2
Cd	1A2gviii	Liquid	0.001	0.000	4.3	80.0	80.1	0.000	-96.079	0.0
Cd	1A2gviii	Other	0.028	0.002	11.9	80.0	80.9	0.026	-94.028	0.0
Cd	1A2gviii	Peat	0.000	0.000	9.9	80.0	80.6	0.000	48.230	0.0
Cd	1A3bi	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	102.897	0.0
Cd	1A3bi	Gasoline	0.000	0.000	2.0	100.0	100.0	0.001	-32.403	0.0
Cd	1A3bii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	18.940	0.0
Cd	1A3bii	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
Cd	1A3biii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	47.577	0.0
Cd	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0
Cd	1A3biv	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	154.961	0.0
Cd	1A3bvi		0.002	0.002	1.0	100.0	100.0	0.042	13.939	0.0
Cd	1A3c	Liquid	0.001	0.000	2.0	100.0	100.0	0.001	-61.561	0.0
Cd	1A3dii	Liquid	0.001	0.001	14.1	100.0	101.0	0.007	-49.811	0.0
Cd	1A4ai	Biomass	0.006	0.010	20.0	80.0	82.5	1.003	76.260	0.2
Cd	1A4ai	Liquid	0.003	0.000	15.0	80.0	81.4	0.002	-84.638	0.0
Cd	1A4ai	Peat	0.000	0.000	15.0	80.0	81.4	0.001	-10.448	0.0
Cd	1A4aii	Liquid	0.001	0.001	12.9	100.0	100.8	0.014	-26.603	0.0
Cd	1A4bi	Biomass	0.124	0.159	20.0	80.0	82.5	239.177	28.627	2.8
Cd	1A4bi	Liquid	0.001	0.000	15.0	80.0	81.4	0.000	-98.556	0.0
Cd	1A4bi	Peat	0.002	0.000	15.0	80.0	81.4	0.002	-74.568	0.0
Cd	1A4bii	Liquid	0.000	0.001	11.5	100.0	100.7	0.005	30.672	0.0
Cd	1A4ci	Biomass	0.020	0.017	20.0	80.0	82.5	2.862	-10.608	0.3
Cd	1A4ci	Liquid	0.001	0.000	15.0	80.0	81.4	0.000	-96.698	0.0
Cd	1A4ci	Peat	0.001	0.003	10.0	80.0	80.6	0.102	200.228	0.1
Cd	1A4ci	Solid	0.001	0.000	20.0	80.0	82.5	0.000	-97.638	0.0
Cd	1A4cii	Liquid	0.003	0.002	14.5	100.0	101.0	0.081	-18.644	0.1
Cd	1A4ciii	Liquid	0.001	0.000	15.0	100.0	101.1	0.001	-42.558	0.0
Cd	1A5a	Biomass	0.002	0.191	10.0	80.0	80.6	328.660	11139.626	3.3

Cd	1A5a	Liquid	0.003	0.001	19.8	80.0	82.4	0.003	-76.818	0.0
Cd	1B1b		0.000	0.000	30.0		30.0	0.000	300.000	0.0
Cd	2C1		0.390	0.006	30.0		30.0	0.043	-98.491	0.0
Cd	2C2		0.003	0.000	30.0		30.0	0.000	-85.383	0.0
Cd	2C3		0.023	0.000	30.0		30.0	0.000	-99.957	0.0
Cd	2C6		0.850	0.010	30.0		30.0	0.113	-98.882	0.1
Cd	2C7a		0.000	0.000	30.0		30.0	0.000	-95.000	0.0
Cd	2C7c		4.203	0.037	30.0		30.0	1.737	-99.112	0.2
Cd	2G		0.028	0.013	35.0	846.0	846.7	172.077	-52.550	2.4
Cd	5C1bv		0.000	0.000	10.0	900.0	900.1	0.035	358.166	0.0
Cd	5E		0.002	0.001	35.0	100.0	105.9	0.011	-52.398	0.0
<b>Total</b>			<b>6.685</b>	<b>0.850</b>			<b>33.5</b>		<b>-87.292</b>	<b>6.0</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Uncertainty introduced into the trend in total national emissions with respect to base year, %		
								Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	
Hg	1A1a	Biomass	0.004	0.050	30.7	80.0	85.7	67.012	1148.074	5.6
Hg	1A1a	Liquid	0.001	0.000	17.6	80.0	81.9	0.000	-89.836	0.0
Hg	1A1a	Other	0.000	0.004	27.9	80.0	84.7	0.497	18760.721	0.5
Hg	1A1a	Peat	0.062	0.052	28.2	80.0	84.8	71.159	-15.540	5.7
Hg	1A1a	Solid	0.172	0.029	42.8	80.0	90.7	25.506	-83.101	3.4
Hg	1A1b	Liquid	0.010	0.012	5.0	80.0	80.2	3.640	30.323	1.3
Hg	1A1b	Solid	0.000	0.000	3.0	80.0	80.1	0.000	-89.675	0.0
Hg	1A2a	Biomass		0.000	10.0	80.0	80.6	0.000	NA	0.0
Hg	1A2a	Solid	0.017	0.000	3.0	80.0	80.1	0.000	-99.614	0.0
Hg	1A2b	Liquid	0.000	0.000	5.0	80.0	80.2	0.000	-75.205	0.0
Hg	1A2c	Biomass	0.000	0.000	5.0	80.0	80.2	0.000	-98.516	0.0
Hg	1A2c	Liquid	0.000	0.000	4.1	80.0	80.1	0.000	-64.050	0.0
Hg	1A2d	Biomass	0.089	0.097	17.0	80.0	81.8	228.584	8.833	10.3
Hg	1A2d	Liquid	0.000	0.000	10.9	80.0	80.7	0.001	-49.813	0.0
Hg	1A2d	Other	0.000	0.001	47.4	80.0	93.0	0.042	927.158	0.1
Hg	1A2d	Peat	0.016	0.005	50.0		50.0	0.194	-70.351	0.3
Hg	1A2d	Solid	0.018	0.000	50.0		50.0	0.000	-99.732	0.0
Hg	1A2e	Biomass	0.000	0.000	9.2	80.0	80.5	0.001	6.951	0.0
Hg	1A2e	Liquid	0.000	0.000	31.5	80.0	86.0	0.000	-95.726	0.0
Hg	1A2e	Other	0.000	0.000	10.0	80.0	80.6	0.000	738.700	0.0
Hg	1A2e	Peat	0.003	0.001	5.0	80.0	80.2	0.050	-56.628	0.2
Hg	1A2e	Solid	0.006	0.000	40.8	80.0	89.8	0.003	-94.898	0.0
Hg	1A2f	Biomass	0.000	0.000	38.4	80.0	88.7	0.000	4024.128	0.0

Hg	1A2f	Liquid	0.000	0.009	50.0	80.0	94.3	2.861	12869.129	1.2
Hg	1A2f	Other		0.002	50.0		50.0	0.023	NA	0.1
Hg	1A2f	Solid	0.017	0.005	18.4	80.0	82.1	0.587	-71.074	0.5
Hg	1A2gviii	Biomass	0.005	0.004	10.7	80.0	80.7	0.354	-15.954	0.4
Hg	1A2gviii	Liquid	0.000	0.000	10.5	80.0	80.7	0.000	-94.943	0.0
Hg	1A2gviii	Other	0.171	0.002	47.3	80.0	92.9	0.135	-98.794	0.3
Hg	1A2gviii	Peat	0.000	0.001	24.9	80.0	83.8	0.029	384.257	0.1
Hg	1A3bi	Diesel oil	0.002	0.004	1.0	100.0	100.0	0.457	102.897	0.5
Hg	1A3bi	Gasoline	0.016	0.011	2.0	100.0	100.0	4.057	-32.403	1.4
Hg	1A3bii	Diesel oil	0.001	0.002	1.0	100.0	100.0	0.094	18.940	0.2
Hg	1A3bii	Gasoline	0.001	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
Hg	1A3biii	Diesel oil	0.005	0.008	1.0	100.0	100.0	2.191	47.577	1.0
Hg	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0
Hg	1A3biv	Gasoline	0.000	0.000	2.0	100.0	100.0	0.004	154.961	0.0
Hg	1A3dii	Liquid	0.003	0.002	14.1	100.0	101.0	0.130	-26.062	0.2
Hg	1A4ai	Biomass	0.001	0.002	20.0	80.0	82.5	0.073	77.778	0.2
Hg	1A4ai	Liquid	0.000	0.000	15.0	80.0	81.4	0.000	-84.679	0.0
Hg	1A4ai	Peat	0.000	0.000	15.0	80.0	81.4	0.002	-10.448	0.0
Hg	1A4bi	Biomass	0.021	0.027	20.0	80.0	82.5	17.504	28.627	2.9
Hg	1A4bi	Liquid	0.000	0.000	15.0	80.0	81.4	0.000	-98.556	0.0
Hg	1A4bi	Peat	0.002	0.000	15.0	80.0	81.4	0.004	-74.568	0.0
Hg	1A4ci	Biomass	0.003	0.003	20.0	80.0	82.5	0.211	-10.367	0.3
Hg	1A4ci	Liquid	0.000	0.000	15.0	80.0	81.4	0.000	-96.708	0.0
Hg	1A4ci	Peat	0.001	0.003	10.0	80.0	80.6	0.231	200.228	0.3
Hg	1A4ci	Solid	0.000	0.000	20.0	80.0	82.5	0.000	-61.187	0.0
Hg	1A4ciii	Liquid	0.002	0.001	15.0	100.0	101.1	0.034	-42.558	0.1
Hg	1A5a	Biomass	0.000	0.019	10.0	80.0	80.6	8.659	11139.626	2.0
Hg	1A5a	Liquid	0.000	0.000	19.8	80.0	82.4	0.002	-34.473	0.0
Hg	1B1b		0.000	0.000	100.0		100.0	0.000	0.000	0.0
Hg	2B10a		0.369	0.035	99.7		99.7	44.161	-90.544	4.5
Hg	2C1		0.005	0.094	50.0		50.0	81.240	1787.000	6.1
Hg	2C2		0.000	0.002	50.0		50.0	0.040	1234.572	0.1
Hg	2C6			0.006	50.0		50.0	0.354	NA	0.4
Hg	2C7a		0.007	0.000	100.0		100.0	0.000	-99.946	0.0
Hg	2C7c		0.028	0.005	50.0		50.0	0.185	-83.918	0.3
Hg	2G		0.000	0.000	35.0	777.0	777.8	0.005	102.924	0.0
Hg	5C1bv		0.006	0.023	10.0	900.0	900.1	1613.680	294.977	27.4
Hg	5E		0.002	0.001	35.0	100.0	105.9	0.028	-52.398	0.1
<b>To- tal</b>			<b>1.086</b>	<b>0.523</b>			<b>46.6</b>		<b>-51.808</b>	<b>31.8</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
As	1A1a	Biomass	0.004	0.021	11.0	80.0	80.8	0.654	378.995	0.1
As	1A1a	Liquid	0.029	0.003	6.2	80.0	80.2	0.010	-91.426	0.0
As	1A1a	Other	0.000	0.003	10.6	80.0	80.7	0.017	14165.129	0.0
As	1A1a	Peat	0.628	0.512	2.1	80.0	80.0	393.996	-18.470	1.7
As	1A1a	Solid	1.618	0.041	27.8	80.0	84.7	2.769	-97.493	0.1
As	1A1b	Liquid	0.336	0.438	5.0	80.0	80.2	288.697	30.271	1.4
As	1A1b	Solid	0.008	0.001	3.0	80.0	80.1	0.001	-89.675	0.0
As	1A2a	Biomass		0.000	10.0	80.0	80.6	0.000	NA	0.0
As	1A2b	Liquid	0.001	0.000	5.0	80.0	80.2	0.000	-91.887	0.0
As	1A2c	Biomass	0.000	0.000	5.0	80.0	80.2	0.000	-29.491	0.0
As	1A2c	Liquid	0.007	0.002	4.1	80.0	80.1	0.009	-62.688	0.0
As	1A2d	Biomass	0.160	0.148	3.6	80.0	80.1	32.916	-7.580	0.5
As	1A2d	Liquid	0.018	0.004	3.2	80.0	80.1	0.019	-80.494	0.0
As	1A2d	Other	0.000	0.001	23.2	80.0	83.3	0.000	1769.228	0.0
As	1A2d	Peat	0.238	0.002	19.5	80.0	82.4	0.007	-99.101	0.0
As	1A2d	Solid	0.229	0.001	27.9	80.0	84.7	0.001	-99.744	0.0
As	1A2e	Biomass	0.000	0.000	9.2	80.0	80.5	0.000	-21.742	0.0
As	1A2e	Liquid	0.007	0.000	19.4	80.0	82.3	0.000	-95.532	0.0
As	1A2e	Other	0.000	0.000	10.0	80.0	80.6	0.000	738.700	0.0
As	1A2e	Peat	0.080	0.042	5.0	80.0	80.2	2.606	-47.801	0.1
As	1A2e	Solid	0.228	0.004	12.7	80.0	81.0	0.020	-98.405	0.0
As	1A2f	Biomass	0.000	0.000	9.8	80.0	80.6	0.000	883.713	0.0
As	1A2f	Liquid	0.005	0.001	24.7	80.0	83.7	0.001	-80.291	0.0
As	1A2f	Other		0.000	30.0		30.0	0.000	NA	0.0
As	1A2f	Solid	0.491	0.109	4.6	80.0	80.1	18.054	-77.708	0.4
As	1A2gviii	Biomass	0.007	0.003	9.2	80.0	80.5	0.010	-64.286	0.0
As	1A2gviii	Liquid	0.009	0.000	4.3	80.0	80.1	0.000	-96.212	0.0
As	1A2gviii	Other	0.001	0.002	25.5	80.0	84.0	0.004	118.828	0.0
As	1A2gviii	Peat	0.001	0.002	9.5	80.0	80.6	0.007	69.362	0.0
As	1A3bi	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	102.897	0.0
As	1A3bi	Gasoline	0.001	0.000	2.0	100.0	100.0	0.000	-32.403	0.0
As	1A3bii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	18.940	0.0
As	1A3bii	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
As	1A3biii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	47.577	0.0
As	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0
As	1A3biv	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	154.961	0.0
As	1A3bvi		0.036	0.042	1.0	100.0	100.0	4.051	13.888	0.2

As	1A3dii	Liquid	0.028	0.003	14.1	100.0	101.0	0.016	-90.846	0.0
As	1A4ai	Biomass	0.002	0.003	20.0	80.0	82.5	0.019	77.778	0.0
As	1A4ai	Liquid	0.021	0.003	15.0	80.0	81.4	0.016	-84.617	0.0
As	1A4ai	Peat	0.010	0.009	15.0	80.0	81.4	0.118	-10.448	0.0
As	1A4bi	Biomass	0.041	0.053	20.0	80.0	82.5	4.498	28.627	0.2
As	1A4bi	Liquid	0.004	0.000	15.0	80.0	81.4	0.000	-98.556	0.0
As	1A4bi	Peat	0.053	0.013	15.0	80.0	81.4	0.279	-74.568	0.0
As	1A4ci	Biomass	0.007	0.006	20.0	80.0	82.5	0.054	-10.660	0.0
As	1A4ci	Liquid	0.006	0.000	15.0	80.0	81.4	0.000	-96.693	0.0
As	1A4ci	Peat	0.032	0.097	10.0	80.0	80.6	14.424	200.228	0.3
As	1A4ci	Solid	0.006	0.001	20.0	80.0	82.5	0.001	-88.247	0.0
As	1A4ciii	Liquid	0.002	0.001	15.0	100.0	101.1	0.004	-42.558	0.0
As	1A5a	Biomass	0.000	0.038	10.0	80.0	80.6	2.225	11139.626	0.1
As	1A5a	Liquid	0.017	0.004	19.8	80.0	82.4	0.022	-78.267	0.0
As	1B1b		0.004	0.002	30.0		30.0	0.001	-50.500	0.0
As	2C1		0.411	0.069	30.0		30.0	1.005	-83.214	0.1
As	2C2		0.002	0.002	30.0		30.0	0.001	15.000	0.0
As	2C3		0.008	0.000	30.0		30.0	0.000	-99.250	0.0
As	2C6		1.700	0.015	30.0		30.0	0.048	-99.116	0.0
As	2C7a		0.113	0.023	32.3		32.3	0.130	-79.602	0.0
As	2C7c		28.000	0.339	30.0		30.0	24.311	-98.788	0.4
As	2G		0.001	0.001	35.0	877.0	877.7	0.083	28.700	0.0
As	5C1bv		0.000	0.000	10.0	900.0	900.1	0.043	358.166	0.0
As	5E		0.003	0.001	35.0	107.0	112.6	0.005	-52.304	0.0
<b>Total</b>			<b>34.816</b>	<b>2.065</b>			<b>28.1</b>		<b>-94.069</b>	<b>2.4</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Uncertainty introduced into the trend in total national emissions with respect to base year, %	
									Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	
Cr	1A1a	Biomass	0.117	0.416	9.4	80.0	80.6	5.460	256.816	1.0
Cr	1A1a	Liquid	0.015	0.001	5.8	80.0	80.2	0.000	-91.382	0.0
Cr	1A1a	Other	0.001	0.095	9.5	80.0	80.6	0.283	12122.099	0.2
Cr	1A1a	Peat	1.076	0.757	2.0	80.0	80.0	17.849	-29.634	1.8
Cr	1A1a	Solid	6.765	0.063	28.2	80.0	84.8	0.138	-99.070	0.2
Cr	1A1b	Liquid	2.574	3.367	5.0	80.0	80.2	354.362	30.792	8.0
Cr	1A1b	Solid	0.060	0.006	3.0	80.0	80.1	0.001	-89.675	0.0
Cr	1A2a	Biomass		0.000	10.0	80.0	80.6	0.000	NA	0.0
Cr	1A2b	Liquid	0.001	0.000	4.1	80.0	80.1	0.000	-63.151	0.0
Cr	1A2b	Solid	1.845	0.163	4.7	80.0	80.1	0.830	-91.168	0.4

Cr	1A2c	Biomass	0.000	0.000	5.0	80.0	80.2	0.000	-41.870	0.0
Cr	1A2c	Liquid	0.003	0.001	4.1	80.0	80.1	0.000	-62.694	0.0
Cr	1A2d	Biomass	0.558	0.164	21.1	80.0	82.7	0.891	-70.659	0.4
Cr	1A2d	Liquid	0.009	0.002	6.9	80.0	80.3	0.000	-76.559	0.0
Cr	1A2d	Other	0.001	0.006	12.3	80.0	80.9	0.001	909.962	0.0
Cr	1A2d	Peat	0.411	0.002	30.0		30.0	0.000	-99.453	0.0
Cr	1A2d	Solid	1.263	0.001	30.0		30.0	0.000	-99.933	0.0
Cr	1A2e	Biomass	0.006	0.004	9.2	80.0	80.5	0.001	-32.413	0.0
Cr	1A2e	Liquid	0.003	0.000	15.6	80.0	81.5	0.000	-95.380	0.0
Cr	1A2e	Other	0.006	0.001	10.0	80.0	80.6	0.000	-77.332	0.0
Cr	1A2e	Peat	0.138	0.072	5.0	80.0	80.2	0.161	-47.777	0.2
Cr	1A2e	Solid	1.752	0.017	5.0	80.0	80.2	0.009	-99.009	0.0
Cr	1A2f	Biomass	0.000	0.007	24.6	80.0	83.7	0.001	5131.894	0.0
Cr	1A2f	Liquid	0.002	0.003	28.8	80.0	85.0	0.000	25.727	0.0
Cr	1A2f	Other		0.004	30.0		30.0	0.000	NA	0.0
Cr	1A2f	Solid	3.365	0.853	4.5	80.0	80.1	22.703	-74.666	2.0
Cr	1A2gvii	Liquid	0.015	0.019	4.9	100.0	100.1	0.017	25.668	0.1
Cr	1A2gviii	Biomass	0.817	0.082	9.1	80.0	80.5	0.215	-89.908	0.2
Cr	1A2gviii	Liquid	0.016	0.000	4.3	80.0	80.1	0.000	-98.896	0.0
Cr	1A2gviii	Other	0.024	0.012	11.8	80.0	80.9	0.005	-49.249	0.0
Cr	1A2gviii	Peat	0.002	0.003	9.7	80.0	80.6	0.000	49.122	0.0
Cr	1A3bi	Diesel oil	0.003	0.006	1.0	100.0	100.0	0.002	102.897	0.0
Cr	1A3bi	Gasoline	0.011	0.008	2.0	100.0	100.0	0.003	-32.403	0.0
Cr	1A3bii	Diesel oil	0.002	0.003	1.0	100.0	100.0	0.000	18.940	0.0
Cr	1A3bii	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
Cr	1A3biii	Diesel oil	0.008	0.012	1.0	100.0	100.0	0.008	47.577	0.0
Cr	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0
Cr	1A3biv	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	154.961	0.0
Cr	1A3bvi		1.143	1.302	1.0	100.0	100.0	82.435	13.918	3.9
Cr	1A3c	Liquid	0.003	0.001	2.0	100.0	100.0	0.000	-61.561	0.0
Cr	1A3dii	Liquid	0.030	0.006	14.1	100.0	101.0	0.002	-80.433	0.0
Cr	1A4ai	Biomass	0.068	0.120	20.0	80.0	82.5	0.480	77.778	0.3
Cr	1A4ai	Liquid	0.010	0.002	15.0	80.0	81.4	0.000	-84.617	0.0
Cr	1A4ai	Peat	0.017	0.015	15.0	80.0	81.4	0.007	-10.448	0.0
Cr	1A4aai	Liquid	0.007	0.005	12.9	100.0	100.8	0.001	-26.603	0.0
Cr	1A4bi	Biomass	1.445	1.859	20.0	80.0	82.5	114.311	28.627	4.5
Cr	1A4bi	Liquid	0.002	0.000	15.0	80.0	81.4	0.000	-98.556	0.0
Cr	1A4bi	Peat	0.091	0.023	15.0	80.0	81.4	0.017	-74.568	0.1
Cr	1A4bii	Liquid	0.002	0.003	11.5	100.0	100.7	0.000	30.672	0.0
Cr	1A4ci	Biomass	0.228	0.203	20.0	80.0	82.5	1.366	-10.674	0.5
Cr	1A4ci	Liquid	0.003	0.000	15.0	80.0	81.4	0.000	-96.693	0.0
Cr	1A4ci	Peat	0.056	0.168	10.0	80.0	80.6	0.894	200.228	0.4
Cr	1A4ci	Solid	0.044	0.000	20.0	80.0	82.5	0.000	-98.926	0.0
Cr	1A4cii	Liquid	0.015	0.012	14.5	100.0	101.0	0.007	-18.644	0.0
Cr	1A4ciii	Liquid	0.003	0.002	15.0	100.0	101.1	0.000	-42.558	0.0
Cr	1A5a	Biomass	0.012	1.337	10.0	80.0	80.6	56.548	11139.626	3.2
Cr	1A5a	Liquid	0.009	0.002	19.8	80.0	82.4	0.000	-75.323	0.0
Cr	1B1b		0.003	0.004	30.0		30.0	0.000	19.333	0.0

Cr	2C1	19.554	2.078	30.0		30.0	18.901	-89.375	1.8
Cr	2C2	2.000	1.024	30.0		30.0	4.591	-48.800	0.9
Cr	2C7a	0.145	0.001	30.0		30.0	0.000	-99.429	0.0
Cr	2C7c	0.520	0.009	30.0		30.0	0.000	-98.248	0.0
Cr	2G	0.006	0.008	35.0	862.0	862.7	0.229	28.700	0.2
Cr	5C1bv	0.000	0.000	10.0	900.0	900.1	0.001	358.166	0.0
Cr	5E	0.003	0.001	35.0	108.0	113.5	0.000	-52.382	0.0
<b>Total</b>		<b>47.670</b>	<b>14.337</b>			<b>26.1</b>		<b>-69.925</b>	<b>11.1</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
Cu	1A1a	Biomass	0.174	0.766	7.8	80.0	80.4	2.483	340.948	0.6
Cu	1A1a	Liquid	0.034	0.003	7.3	80.0	80.3	0.000	-89.777	0.0
Cu	1A1a	Other	0.001	0.149	9.5	80.0	80.6	0.094	12507.957	0.1
Cu	1A1a	Peat	1.662	1.203	2.0	80.0	80.0	6.068	-27.630	0.9
Cu	1A1a	Solid	5.471	0.068	28.0	80.0	84.8	0.021	-98.765	0.1
Cu	1A1b	Liquid	0.902	1.178	5.0	80.0	80.2	5.845	30.606	0.9
Cu	1A1b	Solid	0.021	0.002	3.0	80.0	80.1	0.000	-89.675	0.0
Cu	1A2a	Biomass		0.001	10.0	80.0	80.6	0.000	NA	0.0
Cu	1A2b	Liquid	0.001	0.000	5.0	80.0	80.2	0.000	-72.639	0.0
Cu	1A2c	Biomass	0.001	0.000	5.0	80.0	80.2	0.000	-76.822	0.0
Cu	1A2c	Liquid	0.008	0.003	4.1	80.0	80.1	0.000	-62.423	0.0
Cu	1A2d	Biomass	0.813	0.352	25.2	80.0	83.9	0.570	-56.728	0.3
Cu	1A2d	Liquid	0.022	0.076	28.8	80.0	85.0	0.028	250.061	0.1
Cu	1A2d	Other	0.001	0.072	27.5	80.0	84.6	0.025	5156.766	0.1
Cu	1A2d	Peat	0.646	0.006	30.0		30.0	0.000	-99.092	0.0
Cu	1A2d	Solid	0.648	0.000	30.0		30.0	0.000	-99.970	0.0
Cu	1A2e	Biomass	0.009	0.007	9.2	80.0	80.5	0.000	-28.136	0.0
Cu	1A2e	Liquid	0.008	0.000	19.2	80.0	82.3	0.000	-95.326	0.0
Cu	1A2e	Other	0.000	0.002	10.0	80.0	80.6	0.000	738.700	0.0
Cu	1A2e	Peat	0.216	0.113	5.0	80.0	80.2	0.054	-47.790	0.1
Cu	1A2e	Solid	0.613	0.007	5.7	80.0	80.2	0.000	-98.933	0.0
Cu	1A2f	Biomass	0.000	0.002	10.4	80.0	80.7	0.000	1152.849	0.0
Cu	1A2f	Liquid	0.006	0.002	24.8	80.0	83.8	0.000	-72.224	0.0
Cu	1A2f	Other		0.003	30.0		30.0	0.000	NA	0.0
Cu	1A2f	Solid	1.280	0.295	4.6	80.0	80.1	0.366	-76.965	0.2
Cu	1A2gvii	Liquid	0.503	0.632	4.9	100.0	100.1	2.624	25.668	0.6
Cu	1A2gviii	Biomass	0.699	0.128	9.2	80.0	80.5	0.069	-81.708	0.1

Cu	1A2gviii	Liquid	0.022	0.000	4.3	80.0	80.1	0.000	-98.063	0.0
Cu	1A2gviii	Other	0.037	0.018	10.6	80.0	80.7	0.001	-50.768	0.0
Cu	1A2gviii	Peat	0.003	0.005	9.8	80.0	80.6	0.000	46.742	0.0
Cu	1A3bi	Diesel oil	0.002	0.004	1.0	100.0	100.0	0.000	102.897	0.0
Cu	1A3bi	Gasoline	0.008	0.005	2.0	100.0	100.0	0.000	-32.403	0.0
Cu	1A3bii	Diesel oil	0.001	0.002	1.0	100.0	100.0	0.000	18.940	0.0
Cu	1A3bii	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
Cu	1A3biii	Diesel oil	0.006	0.008	1.0	100.0	100.0	0.000	47.577	0.0
Cu	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0
Cu	1A3biv	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	154.961	0.0
Cu	1A3bvi		49.238	29.313	1.0	100.0	100.0	5629.640	-40.467	26.4
Cu	1A3c	Liquid	0.103	0.039	2.0	100.0	100.0	0.010	-61.561	0.0
Cu	1A3dii	Liquid	0.100	0.013	14.1	100.0	101.0	0.001	-87.192	0.0
Cu	1A4ai	Biomass	0.013	0.021	20.0	80.0	82.5	0.002	62.073	0.0
Cu	1A4ai	Liquid	0.026	0.004	15.0	80.0	81.4	0.000	-84.605	0.0
Cu	1A4ai	Peat	0.026	0.024	15.0	80.0	81.4	0.002	-10.448	0.0
Cu	1A4aii	Liquid	0.227	0.167	12.9	100.0	100.8	0.185	-26.603	0.2
Cu	1A4bi	Biomass	0.248	0.319	20.0	80.0	82.5	0.452	28.627	0.2
Cu	1A4bi	Liquid	0.005	0.000	15.0	80.0	81.4	0.000	-98.556	0.0
Cu	1A4bi	Peat	0.143	0.036	15.0	80.0	81.4	0.006	-74.568	0.0
Cu	1A4bii	Liquid	0.075	0.098	11.5	100.0	100.7	0.063	30.672	0.1
Cu	1A4ci	Biomass	0.039	0.035	20.0	80.0	82.5	0.005	-10.076	0.0
Cu	1A4ci	Liquid	0.008	0.000	15.0	80.0	81.4	0.000	-96.690	0.0
Cu	1A4ci	Peat	0.088	0.264	10.0	80.0	80.6	0.297	200.228	0.2
Cu	1A4ci	Solid	0.016	0.000	20.0	80.0	82.5	0.000	-97.572	0.0
Cu	1A4cii	Liquid	0.499	0.406	14.5	100.0	101.0	1.100	-18.644	0.4
Cu	1A4ciii	Liquid	0.049	0.006	15.0	100.0	101.1	0.000	-86.945	0.0
Cu	1A5a	Biomass	0.017	1.949	10.0	80.0	80.6	16.168	11139.626	1.4
Cu	1A5a	Liquid	0.029	0.008	19.8	80.0	82.4	0.000	-72.971	0.0
Cu	1B1b		0.004	0.002	30.0		30.0	0.000	-45.500	0.0
Cu	2B10a		0.270	0.008	30.0		30.0	0.000	-97.111	0.0
Cu	2C1		5.540	0.458	29.9		29.9	0.123	-91.741	0.1
Cu	2C2		0.003	0.041	30.0		30.0	0.001	1495.620	0.0
Cu	2C6			0.015	30.0		30.0	0.000	NA	0.0
Cu	2C7a		4.803	0.006	30.0		30.0	0.000	-99.885	0.0
Cu	2C7c		80.257	0.485	30.0		30.0	0.139	-99.396	0.1
Cu	2G		0.203	0.239	35.0	350.0	351.7	4.613	17.591	0.8
Cu	5C1bv		0.000	0.000	10.0	900.0	900.1	0.000	358.166	0.0
Cu	5E		0.006	0.003	35.0	103.0	108.8	0.000	-52.328	0.0
<b>To- tal</b>			<b>156.893</b>	<b>39.070</b>			<b>75.3</b>		<b>-75.098</b>	<b>26.5</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
Ni	1A1a	Biomass	0.101	0.423	7.8	80.0	80.4	11.428	319.033	0.6
Ni	1A1a	Liquid	3.688	0.351	6.2	80.0	80.2	7.831	-90.482	0.5
Ni	1A1a	Other	0.001	0.129	9.6	80.0	80.6	1.071	19146.862	0.2
Ni	1A1a	Peat	1.066	0.756	2.0	80.0	80.0	36.137	-29.083	1.1
Ni	1A1a	Solid	5.396	0.106	29.3	80.0	85.2	0.803	-98.039	0.2
Ni	1A1b	Liquid	1.875	0.004	19.6	80.0	82.4	0.001	-99.771	0.0
Ni	1A1b	Solid	0.003	0.005	3.0	80.0	80.1	0.002	45.034	0.0
Ni	1A2a	Biomass		0.000	10.0	80.0	80.6	0.000	NA	0.0
Ni	1A2b	Liquid	0.124	0.031	5.0	80.0	80.2	0.060	-75.205	0.0
Ni	1A2b	Solid	1.115	0.007	5.0	80.0	80.2	0.003	-99.355	0.0
Ni	1A2c	Biomass	0.000	0.000	5.0	80.0	80.2	0.000	-41.109	0.0
Ni	1A2c	Liquid	0.833	0.369	4.1	80.0	80.1	8.610	-55.738	0.5
Ni	1A2d	Biomass	0.475	0.193	22.7	80.0	83.2	2.542	-59.419	0.3
Ni	1A2d	Liquid	2.234	0.191	3.3	80.0	80.1	2.299	-91.468	0.3
Ni	1A2d	Other	0.001	0.005	9.6	80.0	80.6	0.001	654.362	0.0
Ni	1A2d	Peat	0.412	0.024	29.4	80.0	85.2	0.041	-94.181	0.0
Ni	1A2d	Solid	1.036	0.001	29.1	80.0	85.1	0.000	-99.934	0.0
Ni	1A2e	Biomass	0.005	0.006	9.2	80.0	80.5	0.002	8.223	0.0
Ni	1A2e	Liquid	1.007	0.046	19.1	80.0	82.2	0.141	-95.432	0.1
Ni	1A2e	Other	0.003	0.001	10.0	80.0	80.6	0.000	-60.062	0.0
Ni	1A2e	Peat	0.138	0.072	5.0	80.0	80.2	0.328	-47.804	0.1
Ni	1A2e	Solid	1.401	0.014	5.0	80.0	80.2	0.012	-99.007	0.0
Ni	1A2f	Biomass	0.000	0.004	21.5	80.0	82.8	0.001	3217.383	0.0
Ni	1A2f	Liquid	0.676	0.038	5.4	80.0	80.2	0.091	-94.389	0.1
Ni	1A2f	Other		0.004	30.0		30.0	0.000	NA	0.0
Ni	1A2f	Solid	2.771	0.678	4.5	80.0	80.1	29.116	-75.545	1.0
Ni	1A2gvii	Liquid	0.021	0.026	4.9	100.0	100.1	0.067	25.668	0.0
Ni	1A2gviii	Biomass	0.212	0.076	9.0	80.0	80.5	0.367	-64.273	0.1
Ni	1A2gviii	Liquid	1.361	0.049	4.3	80.0	80.1	0.153	-96.385	0.1
Ni	1A2gviii	Other	0.021	0.014	15.0	80.0	81.4	0.012	-35.776	0.0
Ni	1A2gviii	Peat	0.002	0.003	9.6	80.0	80.6	0.001	55.922	0.0
Ni	1A3bi	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	102.897	0.0
Ni	1A3bi	Gasoline	0.004	0.003	2.0	100.0	100.0	0.001	-32.403	0.0
Ni	1A3bii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	18.940	0.0
Ni	1A3bii	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
Ni	1A3biii	Diesel oil	0.000	0.000	1.0	100.0	100.0	0.000	47.577	0.0
Ni	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0

Ni	1A3biv	Gasoline	0.000	0.000	2.0	100.0	100.0	0.000	154.961	0.0
Ni	1A3bvi		0.164	0.187	1.0	100.0	100.0	3.449	13.915	0.3
Ni	1A3c	Liquid	0.004	0.002	2.0	100.0	100.0	0.000	-61.561	0.0
Ni	1A3dii	Liquid	1.280	0.192	14.1	100.0	101.0	3.702	-85.025	0.3
Ni	1A4ai	Biomass	0.058	0.103	20.0	80.0	82.5	0.715	77.778	0.2
Ni	1A4ai	Liquid	3.134	0.482	15.0	80.0	81.4	15.208	-84.617	0.7
Ni	1A4ai	Peat	0.017	0.015	15.0	80.0	81.4	0.015	-10.448	0.0
Ni	1A4aii	Liquid	0.009	0.007	12.9	100.0	100.8	0.005	-26.603	0.0
Ni	1A4bi	Biomass	1.239	1.593	20.0	80.0	82.5	170.456	28.627	2.4
Ni	1A4bi	Liquid	0.555	0.008	15.0	80.0	81.4	0.004	-98.556	0.0
Ni	1A4bi	Peat	0.091	0.023	15.0	80.0	81.4	0.035	-74.568	0.0
Ni	1A4bii	Liquid	0.003	0.004	11.5	100.0	100.7	0.002	30.672	0.0
Ni	1A4ci	Biomass	0.195	0.174	20.0	80.0	82.5	2.037	-10.671	0.3
Ni	1A4ci	Liquid	0.971	0.032	15.0	80.0	81.4	0.067	-96.693	0.0
Ni	1A4ci	Peat	0.056	0.168	10.0	80.0	80.6	1.814	200.228	0.2
Ni	1A4ci	Solid	0.035	0.000	20.0	80.0	82.5	0.000	-98.926	0.0
Ni	1A4cii	Liquid	0.021	0.017	14.5	100.0	101.0	0.028	-18.644	0.0
Ni	1A4ciii	Liquid	0.056	0.032	15.0	100.0	101.1	0.103	-42.558	0.1
Ni	1A5a	Biomass	0.010	1.146	10.0	80.0	80.6	84.322	11139.626	1.7
Ni	1A5a	Liquid	2.531	0.515	19.8	80.0	82.4	17.758	-79.669	0.8
Ni	1B1b		0.002	0.002	30.0		30.0	0.000	0.500	0.0
Ni	2B10a		1.052	0.022	30.0		30.0	0.004	-97.909	0.0
Ni	2C1		2.002	0.757	30.0		30.0	5.085	-62.188	0.4
Ni	2C2		0.017	0.049	30.0		30.0	0.022	190.000	0.0
Ni	2C7a		0.508	0.000	60.0		60.0	0.000	-99.951	0.0
Ni	2C7b		5.000	0.827	30.0		30.0	6.078	-83.460	0.4
Ni	2C7c		31.000	0.048	30.0		30.0	0.020	-99.847	0.0
Ni	2G		0.025	0.030	35.0	400.0	401.5	1.461	19.048	0.2
Ni	5C1bv		0.000	0.001	10.0	900.0	900.1	0.003	358.166	0.0
<b>Total</b>			<b>78.439</b>	<b>10.063</b>			<b>20.3</b>		<b>-87.170</b>	<b>3.7</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Uncertainty introduced into the trend in total national emissions with respect to base year, %	
									Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	
Zn	1A1a	Biomass	2.327	11.244	5.5	80.0	80.2	41.460	383.284	1.9
Zn	1A1a	Liquid	0.170	0.016	6.1	80.0	80.2	0.000	-90.359	0.0
Zn	1A1a	Other	0.016	3.268	9.8	80.0	80.6	3.538	20512.534	0.5
Zn	1A1a	Peat	2.706	1.986	2.1	80.0	80.0	1.289	-26.577	0.3
Zn	1A1a	Solid	28.018	0.494	25.1	80.0	83.8	0.088	-98.236	0.1

Zn	1A1b	Liquid	3.869	5.051	5.0	80.0	80.2	8.358	30.538	0.8
Zn	1A1b	Solid	0.090	0.009	3.0	80.0	80.1	0.000	-89.675	0.0
Zn	1A2a	Biomass		0.008	10.0	80.0	80.6	0.000	NA	0.0
Zn	1A2b	Liquid	0.005	0.000	5.0	80.0	80.2	0.000	-92.647	0.0
Zn	1A2c	Biomass	0.014	0.004	5.0	80.0	80.2	0.000	-69.949	0.0
Zn	1A2c	Liquid	0.040	0.015	4.1	80.0	80.1	0.000	-62.773	0.0
Zn	1A2d	Biomass	10.754	1.212	7.6	80.0	80.4	0.484	-88.726	0.2
Zn	1A2d	Liquid	0.110	0.172	27.7	80.0	84.7	0.011	57.144	0.0
Zn	1A2d	Other	0.016	0.136	10.0	80.0	80.6	0.006	766.367	0.0
Zn	1A2d	Peat	0.999	0.016	13.2	80.0	81.1	0.000	-98.427	0.0
Zn	1A2d	Solid	3.342	0.002	5.0	80.0	80.2	0.000	-99.928	0.0
Zn	1A2e	Biomass	0.123	0.086	9.2	80.0	80.5	0.002	-30.279	0.0
Zn	1A2e	Liquid	0.040	0.002	19.1	80.0	82.3	0.000	-95.432	0.0
Zn	1A2e	Other	0.004	0.029	10.0	80.0	80.6	0.000	738.700	0.0
Zn	1A2e	Peat	0.328	0.170	5.0	80.0	80.2	0.009	-48.155	0.0
Zn	1A2e	Solid	2.627	0.041	12.3	80.0	80.9	0.001	-98.447	0.0
Zn	1A2f	Biomass	0.003	0.034	10.0	80.0	80.6	0.000	1257.190	0.0
Zn	1A2f	Liquid	0.327	1.060	4.6	80.0	80.1	0.368	223.824	0.2
Zn	1A2f	Other		0.906	10.0	80.0	80.6	0.272	NA	0.2
Zn	1A2f	Solid	5.497	1.431	4.6	80.0	80.1	0.670	-73.974	0.2
Zn	1A2gvii	Liquid	0.296	0.372	4.9	100.0	100.1	0.071	25.668	0.1
Zn	1A2gviii	Biomass	4.949	2.138	9.4	80.0	80.6	1.513	-56.807	0.4
Zn	1A2gviii	Liquid	0.055	0.002	3.7	80.0	80.1	0.000	-95.618	0.0
Zn	1A2gviii	Other	0.221	1.088	10.0	80.0	80.6	0.392	391.307	0.2
Zn	1A2gviii	Peat	0.005	0.018	10.0	80.0	80.6	0.000	236.391	0.0
Zn	1A3bi	Diesel oil	0.006	0.012	1.0	100.0	100.0	0.000	102.897	0.0
Zn	1A3bi	Gasoline	0.059	0.040	2.0	100.0	100.0	0.001	-32.403	0.0
Zn	1A3bii	Diesel oil	0.005	0.005	1.0	100.0	100.0	0.000	18.940	0.0
Zn	1A3bii	Gasoline	0.002	0.000	2.0	100.0	100.0	0.000	-93.342	0.0
Zn	1A3biii	Diesel oil	0.018	0.026	1.0	100.0	100.0	0.000	47.577	0.0
Zn	1A3biv	Diesel oil		0.000	1.0	100.0	100.0	0.000	NA	0.0
Zn	1A3biv	Gasoline	0.000	0.001	2.0	100.0	100.0	0.000	154.961	0.0
Zn	1A3bvi		18.420	18.662	1.0	100.0	100.0	177.630	1.314	3.9
Zn	1A3c	Liquid	0.060	0.023	2.0	100.0	100.0	0.000	-61.561	0.0
Zn	1A3dii	Liquid	0.117	0.077	14.1	100.0	101.0	0.003	-34.333	0.0
Zn	1A4ai	Biomass	1.355	2.408	20.0	80.0	82.5	2.011	77.778	0.4
Zn	1A4ai	Liquid	0.125	0.019	15.0	80.0	81.4	0.000	-84.617	0.0
Zn	1A4ai	Peat	0.040	0.035	15.0	80.0	81.4	0.000	-10.448	0.0
Zn	1A4aii	Liquid	0.134	0.098	12.9	100.0	100.8	0.005	-26.603	0.0
Zn	1A4bi	Biomass	28.903	37.177	20.0	80.0	82.5	479.319	28.627	6.3
Zn	1A4bi	Liquid	0.022	0.000	15.0	80.0	81.4	0.000	-98.556	0.0
Zn	1A4bi	Peat	0.215	0.055	15.0	80.0	81.4	0.001	-74.568	0.0
Zn	1A4bii	Liquid	0.044	0.057	11.5	100.0	100.7	0.002	30.672	0.0
Zn	1A4ci	Biomass	4.550	4.065	20.0	80.0	82.5	5.728	-10.667	0.7
Zn	1A4ci	Liquid	0.039	0.001	15.0	80.0	81.4	0.000	-96.693	0.0
Zn	1A4ci	Peat	0.132	0.396	10.0	80.0	80.6	0.052	200.228	0.1
Zn	1A4ci	Solid	0.072	0.008	20.0	80.0	82.5	0.000	-88.960	0.0
Zn	1A4cii	Liquid	0.293	0.239	14.5	100.0	101.0	0.030	-18.644	0.0

Zn	1A4ciii	Liquid	0.067	0.038	15.0	100.0	101.1	0.001	-42.558	0.0
Zn	1A5a	Biomass	0.238	26.745	10.0	80.0	80.6	237.112	11139.626	4.5
Zn	1A5a	Liquid	0.111	0.032	19.8	80.0	82.4	0.000	-71.271	0.0
Zn	1B1b		0.160	0.006	30.0		30.0	0.000	-96.281	0.0
Zn	2B10a		0.010	0.250	60.0		60.0	0.011	2400.000	0.0
Zn	2C1		303.559	2.415	29.9		29.9	0.267	-99.204	0.1
Zn	2C2		0.100	1.661	30.0		30.0	0.127	1561.000	0.1
Zn	2C3		0.127	0.001	30.0		30.0	0.000	-99.378	0.0
Zn	2C6		90.174	13.607	30.0		30.0	8.498	-84.911	0.8
Zn	2C7a		2.563	0.005	30.0		30.0	0.000	-99.805	0.0
Zn	2C7c		160.391	0.633	30.0		30.0	0.018	-99.606	0.0
Zn	2G		0.116	0.215	35.0	669.0	669.9	1.058	84.598	0.3
Zn	5C1bv		0.001	0.006	10.0	900.0	900.1	0.001	358.166	0.0
<b>Total</b>			<b>682.839</b>	<b>140.029</b>			<b>31.2</b>		<b>-79.493</b>	<b>9.0</b>

Pollutant	NFR	Fuel	Base year emissions, g I-TEQ	Year 2021 emissions, g I-TEQ	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
PCDD/F	1A1a	Biomass	0.151	1.878	43.1	1000.0	1000.9	30411.787	1145.307	180.2
PCDD/F	1A1a	Gaseous	0.020	0.015	117.1	1000.0	1006.8	1.847	-27.143	1.4
PCDD/F	1A1a	Liquid	0.007	0.006	281.2	1000.0	1038.8	0.282	-23.608	0.5
PCDD/F	1A1a	Other	0.002	1.199	34.7	1000.0	1000.6	12387.461	62835.685	115.0
PCDD/F	1A1a	Peat	0.747	0.417	104.9	1000.0	1005.5	1511.425	-44.195	40.2
PCDD/F	1A1a	Solid	0.411	0.144	263.4	1000.0	1034.1	190.969	-64.958	14.3
PCDD/F	1A1b	Biomass		0.001	10.0	1000.0	1000.0	0.007	NA	0.1
PCDD/F	1A1b	Gaseous	0.004	0.009	1.0	1000.0	1000.0	0.658	109.321	0.8
PCDD/F	1A1b	Liquid	0.019	0.022	3.7	1000.0	1000.0	4.022	13.526	2.1
PCDD/F	1A1b	Solid	0.000	0.000	3.0	1000.0	1000.0	0.000	-89.675	0.0
PCDD/F	1A2a	Biomass		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
PCDD/F	1A2a	Gaseous	0.001	0.003	2.0	1000.0	1000.0	0.093	231.230	0.3
PCDD/F	1A2a	Liquid	0.001	0.000	4.4	1000.0	1000.0	0.000	-96.548	0.0
PCDD/F	1A2a	Solid	0.024	0.023	432.3	1000.0	1089.4	5.468	-3.704	2.4
PCDD/F	1A2b	Gaseous		0.000	4.8	1000.0	1000.0	0.000	NA	0.0
PCDD/F	1A2b	Liquid	0.000	0.000	2.7	1000.0	1000.0	0.001	-35.120	0.0
PCDD/F	1A2b	Solid	0.002	0.001	5.0	1000.0	1000.0	0.003	-65.861	0.1
PCDD/F	1A2c	Biomass	0.012	0.000	8.5	1000.0	1000.0	0.001	-97.929	0.0
PCDD/F	1A2c	Gaseous	0.001	0.001	3.9	1000.0	1000.0	0.017	63.314	0.1
PCDD/F	1A2c	Liquid	0.005	0.006	3.7	1000.0	1000.0	0.274	21.147	0.5
PCDD/F	1A2c	Other	0.014	0.000	10.0	1000.0	1000.0	0.000	-99.837	0.0

PCDD/F	1A2d	Biomass	0.808	0.412	100.9	1000.0	1005.1	1479.448	-48.957	39.7
PCDD/F	1A2d	Gaseous	0.016	0.034	376.8	1000.0	1068.6	11.408	119.669	3.5
PCDD/F	1A2d	Liquid	0.005	0.031	463.7	1000.0	1102.3	10.159	480.253	3.3
PCDD/F	1A2d	Other	0.009	0.241	454.7	1000.0	1098.5	601.142	2508.053	25.3
PCDD/F	1A2d	Peat	0.149	0.078	22.3	1000.0	1000.2	53.043	-47.474	7.5
PCDD/F	1A2d	Solid	0.045	0.001	15.7	1000.0	1000.1	0.005	-98.383	0.1
PCDD/F	1A2e	Biomass	0.007	0.007	8.6	1000.0	1000.0	0.437	7.084	0.7
PCDD/F	1A2e	Gaseous	0.000	0.000	2.9	1000.0	1000.0	0.000	-47.969	0.0
PCDD/F	1A2e	Liquid	0.002	0.000	2.9	1000.0	1000.0	0.001	-82.945	0.0
PCDD/F	1A2e	Other	0.000	0.001	10.0	1000.0	1000.0	0.007	738.700	0.1
PCDD/F	1A2e	Peat	0.028	0.011	5.0	1000.0	1000.0	0.969	-61.609	1.0
PCDD/F	1A2e	Solid	0.007	0.001	4.6	1000.0	1000.0	0.006	-88.125	0.1
PCDD/F	1A2f	Biomass	0.000	0.003	7.7	1000.0	1000.0	0.060	3405.369	0.3
PCDD/F	1A2f	Gaseous	0.001	0.001	3.0	1000.0	1000.0	0.002	-50.583	0.0
PCDD/F	1A2f	Liquid	0.002	0.001	101.3	1000.0	1005.1	0.015	-17.946	0.1
PCDD/F	1A2f	Other		0.001	500.0		500.0	0.003	NA	0.1
PCDD/F	1A2f	Solid	0.024	0.005	6.6	1000.0	1000.0	0.175	-81.524	0.4
PCDD/F	1A2gviii	Biomass	0.199	0.147	10.5	1000.0	1000.1	187.085	-26.048	14.1
PCDD/F	1A2gviii	Gaseous	0.000	0.000	4.6	1000.0	1000.0	0.001	-21.520	0.0
PCDD/F	1A2gviii	Liquid	0.003	0.010	442.0	1000.0	1093.3	1.067	290.571	1.1
PCDD/F	1A2gviii	Other	0.192	0.424	35.8	1000.0	1000.6	1552.815	120.691	40.7
PCDD/F	1A2gviii	Peat	0.004	0.007	32.6	1000.0	1000.5	0.482	95.903	0.7
PCDD/F	1A3bi	Diesel oil	0.008	0.270	1.0	1000.0	1000.0	629.363	3343.302	25.9
PCDD/F	1A3bi	Gasoline	0.962	0.187	2.0	1000.0	1000.0	301.913	-80.541	18.0
PCDD/F	1A3bii	Diesel oil	0.004	0.151	1.0	1000.0	1000.0	196.124	3464.730	14.5
PCDD/F	1A3bii	Gasoline	0.024	0.001	2.0	1000.0	1000.0	0.005	-96.736	0.1
PCDD/F	1A3biii	Diesel oil	0.217	0.062	1.0	1000.0	1000.0	33.591	-71.176	6.0
PCDD/F	1A3biv	Diesel oil		0.003	1.0	1000.0	1000.0	0.065	NA	0.3
PCDD/F	1A3biv	Gasoline	0.014	0.014	2.0	1000.0	1000.0	1.714	0.081	1.4
PCDD/F	1A3dii	Liquid	0.026	0.010	14.1	1000.0	1000.1	0.809	-62.139	0.9
PCDD/F	1A3ei	Gaseous	0.000	0.000	20.0	1000.0	1000.2	0.000	204.273	0.0
PCDD/F	1A4ai	Biomass	0.041	0.072	20.0	1000.0	1000.2	44.943	77.778	6.9
PCDD/F	1A4ai	Gaseous	0.000	0.001	10.0	1000.0	1000.0	0.003	81.127	0.1
PCDD/F	1A4ai	Liquid	0.012	0.005	13.0	1000.0	1000.1	0.248	-55.715	0.5
PCDD/F	1A4ai	Peat	0.002	0.002	15.0	1000.0	1000.1	0.030	-10.448	0.2
PCDD/F	1A4bi	Biomass	0.867	1.115	20.0	1000.0	1000.2	10712.552	28.627	106.9
PCDD/F	1A4bi	Gaseous	0.000	0.001	10.0	1000.0	1000.0	0.003	91.657	0.1
PCDD/F	1A4bi	Liquid	0.019	0.004	15.1	1000.0	1000.1	0.154	-78.080	0.4
PCDD/F	1A4bi	Other	0.000	0.000	10.0	1000.0	1000.0	0.000	-97.674	0.0
PCDD/F	1A4bi	Peat	0.011	0.003	15.0	1000.0	1000.1	0.072	-74.568	0.3
PCDD/F	1A4ci	Biomass	0.137	0.122	20.0	1000.0	1000.2	128.914	-10.367	11.7
PCDD/F	1A4ci	Gaseous	0.000	0.000	10.0	1000.0	1000.0	0.000	-80.138	0.0
PCDD/F	1A4ci	Liquid	0.004	0.002	14.0	1000.0	1000.1	0.035	-51.605	0.2
PCDD/F	1A4ci	Peat	0.007	0.021	10.0	1000.0	1000.0	3.802	200.228	2.0
PCDD/F	1A4ci	Solid	0.001	0.000	20.0	1000.0	1000.2	0.001	-32.672	0.0
PCDD/F	1A4ciii	Liquid	0.007	0.004	15.0	1000.0	1000.1	0.149	-42.558	0.4
PCDD/F	1A5a	Biomass	0.007	0.802	10.0	1000.0	1000.0	5542.270	11139.626	76.9
PCDD/F	1A5a	Gaseous	0.001	0.002	20.0	1000.0	1000.2	0.041	89.796	0.2

PCDD/F	1A5a	Liquid	0.009	0.006	14.1	1000.0	1000.1	0.268	-40.995	0.5
PCDD/F	1B1b		1.461	0.023	500.0		500.0	1.138	-98.426	1.1
PCDD/F	2A1		0.029	0.010	500.0		500.0	0.215	-66.094	0.5
PCDD/F	2A2		0.038	0.031	30.0	1000.0	1000.4	8.078	-19.586	2.9
PCDD/F	2A3		0.005	0.000	30.0	1000.0	1000.4	0.001	-93.366	0.0
PCDD/F	2B10a		3.000	0.700	500.0		500.0	1054.543	-76.667	33.5
PCDD/F	2C1		4.552	0.632	500.0		500.0	860.946	-86.105	30.3
PCDD/F	2C3		0.041	0.002	500.0		500.0	0.009	-95.103	0.1
PCDD/F	2C6		0.038	0.064	10.0	1000.0	1000.0	35.041	66.998	6.1
PCDD/F	2C7a		0.001	0.225	10.0	1000.0	1000.1	434.020	24792.156	21.5
PCDD/F	2D3b		0.016	0.011	30.0	1000.0	1000.4	1.043	-30.126	1.1
PCDD/F	2G		0.001	0.000	35.0	100.0	105.9	0.000	-59.475	0.0
PCDD/F	2L		0.029	0.014	60.0	1000.0	1001.8	1.771	-51.450	1.4
PCDD/F	5C1bv		0.000	0.001	10.0	900.0	900.1	0.006	358.166	0.1
PCDD/F	5E		0.201	1.062	35.0	1000.0	1000.6	9718.450	428.833	101.8
<b>Total</b>			<b>14.754</b>	<b>10.778</b>			<b>279.5</b>		<b>-26.947</b>	<b>288.8</b>

Pollutant	NFR	Fuel	Base year emissions, t	Year 2021 emissions, t	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
PAH-4	1A1a	Biomass	0.019	0.256	81.2	1000.0	1003.3	163.745	1242.117	20.0
PAH-4	1A1a	Liquid	0.050	0.053	397.7	1000.0	1076.2	7.952	5.059	4.4
PAH-4	1A1a	Other	0.000	0.236	231.9	1000.0	1026.5	145.860	204646.087	18.9
PAH-4	1A1a	Peat	0.043	0.028	162.3	1000.0	1013.1	1.934	-35.371	2.2
PAH-4	1A1a	Solid	0.001	0.000	312.6	1000.0	1047.7	0.000	-73.934	0.0
PAH-4	1A1b	Liquid	0.006	0.007	4.9	1000.0	1000.0	0.109	12.584	0.5
PAH-4	1A1b	Solid	0.000	0.000	3.0	1000.0	1000.0	0.000	-89.675	0.0
PAH-4	1A2a	Biomass		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
PAH-4	1A2a	Liquid	0.005	0.000	4.9	1000.0	1000.0	0.000	-97.363	0.0
PAH-4	1A2a	Solid	0.000	0.000	3.0	1000.0	1000.0	0.000	-96.815	0.0
PAH-4	1A2b	Liquid	0.003	0.002	3.1	1000.0	1000.0	0.007	-40.773	0.1
PAH-4	1A2b	Solid	0.000	0.000	4.7	1000.0	1000.0	0.000	-91.168	0.0
PAH-4	1A2c	Biomass	0.002	0.001	9.8	1000.0	1000.0	0.001	-64.827	0.1
PAH-4	1A2c	Liquid	0.009	0.003	4.8	1000.0	1000.0	0.029	-62.577	0.3
PAH-4	1A2d	Biomass	0.105	0.142	282.9	1000.0	1039.2	53.934	34.739	11.5
PAH-4	1A2d	Liquid	0.037	0.033	336.4	1000.0	1055.1	2.981	-11.189	2.7
PAH-4	1A2d	Other	0.001	0.049	10.0	1000.0	1000.0	5.900	8629.998	3.8
PAH-4	1A2d	Peat	0.009	0.005	2.0	1000.0	1000.0	0.056	-44.072	0.4
PAH-4	1A2d	Solid	0.000	0.000	5.0	1000.0	1000.0	0.000	-98.252	0.0

PAH-4	1A2e	Biomass	0.001	0.001	9.2	1000.0	1000.0	0.002	12.812	0.1
PAH-4	1A2e	Liquid	0.010	0.001	3.6	1000.0	1000.0	0.002	-90.647	0.1
PAH-4	1A2e	Other	0.000	0.000	10.0	1000.0	1000.0	0.000	738.700	0.0
PAH-4	1A2e	Peat	0.002	0.001	5.0	1000.0	1000.0	0.001	-61.609	0.0
PAH-4	1A2e	Solid	0.000	0.000	4.6	1000.0	1000.0	0.000	-88.125	0.0
PAH-4	1A2f	Biomass	0.000	0.000	10.0	1000.0	1000.0	0.000	3373.583	0.0
PAH-4	1A2f	Liquid	0.008	0.003	3.7	1000.0	1000.0	0.026	-60.136	0.3
PAH-4	1A2f	Other		0.004	10.0	1000.0	1000.0	0.031	NA	0.3
PAH-4	1A2f	Solid	0.000	0.000	4.6	1000.0	1000.0	0.000	-77.168	0.0
PAH-4	1A2gvii	Liquid	0.024	0.030	4.9	1000.0	1000.0	2.193	25.668	2.3
PAH-4	1A2gviii	Biomass	0.027	0.030	178.3	1000.0	1015.8	2.349	14.208	2.4
PAH-4	1A2gviii	Liquid	0.015	0.006	4.6	1000.0	1000.0	0.077	-63.196	0.4
PAH-4	1A2gviii	Other	0.017	0.160	11.3	1000.0	1000.1	63.268	843.693	12.4
PAH-4	1A2gviii	Peat	0.000	0.001	309.1	1000.0	1046.7	0.005	551.859	0.1
PAH-4	1A3bi	Diesel oil	0.025	0.051	1.0	1000.0	1000.0	6.507	102.897	4.0
PAH-4	1A3bi	Gasoline	0.047	0.032	2.0	1000.0	1000.0	2.496	-32.403	2.5
PAH-4	1A3bii	Diesel oil	0.015	0.017	1.0	1000.0	1000.0	0.738	18.940	1.3
PAH-4	1A3bii	Gasoline	0.001	0.000	2.0	1000.0	1000.0	0.000	-93.342	0.0
PAH-4	1A3biii	Diesel oil	0.077	0.114	1.0	1000.0	1000.0	32.372	47.577	8.9
PAH-4	1A3biv	Diesel oil		0.000	1.0	1000.0	1000.0	0.000	NA	0.0
PAH-4	1A3biv	Gasoline	0.000	0.001	2.0	1000.0	1000.0	0.004	154.961	0.1
PAH-4	1A3c	Liquid	0.005	0.002	2.0	1000.0	1000.0	0.009	-61.561	0.1
PAH-4	1A3dii	Liquid	0.004	0.002	12.5	1000.0	1000.1	0.009	-50.671	0.1
PAH-4	1A4ai	Biomass	0.001	0.002	20.0	200.0	201.0	0.000	68.215	0.0
PAH-4	1A4ai	Liquid	0.074	0.031	13.0	1000.0	1000.1	2.373	-58.023	2.4
PAH-4	1A4ai	Peat	0.000	0.000	15.0	1000.0	1000.1	0.000	-10.448	0.0
PAH-4	1A4aii	Liquid	0.011	0.008	12.9	1000.0	1000.1	0.152	-26.603	0.6
PAH-4	1A4bi	Biomass	17.153	18.573	20.0	200.0	201.0	34524.038	8.280	290.5
PAH-4	1A4bi	Liquid	0.109	0.024	15.0	1000.0	1000.1	1.393	-78.183	1.8
PAH-4	1A4bi	Other	0.000	0.000	10.0	1000.0	1000.0	0.000	-97.674	0.0
PAH-4	1A4bi	Peat	0.001	0.000	15.0	1000.0	1000.1	0.000	-74.568	0.0
PAH-4	1A4bii	Liquid	0.004	0.005	11.5	1000.0	1000.1	0.052	30.672	0.4
PAH-4	1A4ci	Biomass	0.003	0.003	20.0	200.0	201.0	0.001	-8.733	0.0
PAH-4	1A4ci	Liquid	0.025	0.011	14.6	1000.0	1000.1	0.289	-56.586	0.8
PAH-4	1A4ci	Peat	0.000	0.001	10.0	1000.0	1000.0	0.004	200.228	0.1
PAH-4	1A4ci	Solid	0.000	0.000	20.0	1000.0	1000.2	0.000	-32.672	0.0
PAH-4	1A4cii	Liquid	0.023	0.019	14.5	1000.0	1000.1	0.903	-18.644	1.5
PAH-4	1A4ciii	Liquid	0.001	0.001	15.0	1000.0	1000.1	0.001	-42.558	0.1
PAH-4	1A5a	Biomass	0.001	0.103	10.0	1000.0	1000.0	26.365	11139.626	8.0
PAH-4	1A5a	Liquid	0.045	0.013	19.8	1000.0	1000.2	0.415	-71.320	1.0
PAH-4	1B1b		0.000	0.000	500.0		500.0	0.000	23.078	0.0
PAH-4	2A1		0.000	0.000	500.0		500.0	0.000	43.561	0.0
PAH-4	2C1		0.132	0.010	10.0	1000.0	1000.0	0.259	-92.251	0.8
PAH-4	2C2			0.002	500.0		500.0	0.004	NA	0.1
PAH-4	2D3i		0.020	0.013	40.0	376.0	378.1	0.062	-33.414	0.4
PAH-4	2G		0.001	0.001	35.0	100.0	105.9	0.000	-59.506	0.0
PAH-4	5C1bv		0.000	0.001	10.0	900.0	900.1	0.003	358.166	0.1
<b>Total</b>			<b>18.174</b>	<b>20.091</b>			<b>187.2</b>		<b>10.549</b>	<b>292.7</b>

Pollutant	NFR	Fuel	Base year emissions, kg	Year 2021 emissions, kg	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
HCB	1A1a	Biomass	0.037	0.491	4.9	1000.0	1000.0	453.812	1244.899	19.5
HCB	1A1a	Other		0.004	10.0	1000.0	1000.0	0.031	NA	0.2
HCB	1A1a	Solid	0.001	0.000	1.0	1000.0	1000.0	0.000	-64.369	0.0
HCB	1A2a	Biomass		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
HCB	1A2a	Solid	0.003	0.000	3.0	1000.0	1000.0	0.000	-85.848	0.0
HCB	1A2b	Solid	0.002	0.000	4.7	1000.0	1000.0	0.000	-94.969	0.0
HCB	1A2c	Biomass	0.003	0.000	5.0	1000.0	1000.0	0.000	-98.947	0.0
HCB	1A2d	Biomass	0.191	0.127	4.5	1000.0	1000.0	30.360	-33.654	5.0
HCB	1A2d	Other		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
HCB	1A2d	Solid	0.007	0.000	5.0	1000.0	1000.0	0.000	-98.252	0.0
HCB	1A2e	Biomass	0.002	0.002	9.2	1000.0	1000.0	0.005	6.814	0.1
HCB	1A2e	Solid	0.001	0.000	4.6	1000.0	1000.0	0.000	-88.125	0.0
HCB	1A2f	Biomass	0.000	0.001	10.0	1000.0	1000.0	0.001	3373.583	0.0
HCB	1A2f	Solid	0.004	0.001	4.6	1000.0	1000.0	0.001	-77.168	0.0
HCB	1A2gviii	Biomass	0.049	0.055	9.4	1000.0	1000.0	5.591	11.193	2.2
HCB	1A2gviii		0.143	0.107	30.0	900.0	900.5	17.439	-25.316	3.8
HCB	1A2gviii	Other		0.001	10.0	1000.0	1000.0	0.001	NA	0.0
HCB	1A3bi	Diesel oil	0.020	0.040	1.0	1000.0	1000.0	3.017	102.897	1.6
HCB	1A3bi	Gaseous		0.001	3.0	1000.0	1000.0	0.001	NA	0.0
HCB	1A3bi	Gasoline	0.108	0.073	2.0	1000.0	1000.0	9.944	-32.403	2.9
HCB	1A3bii	Diesel oil	0.015	0.018	1.0	1000.0	1000.0	0.623	18.940	0.7
HCB	1A3bii	Gaseous		0.000	3.0	1000.0	1000.0	0.000	NA	0.0
HCB	1A3bii	Gasoline	0.004	0.000	2.0	1000.0	1000.0	0.000	-93.342	0.0
HCB	1A3biii	Diesel oil	0.059	0.088	1.0	1000.0	1000.0	14.477	47.577	3.5
HCB	1A3biii	Gaseous		0.000	3.0	1000.0	1000.0	0.000	NA	0.0
HCB	1A3biv	Diesel oil		0.000	1.0	1000.0	1000.0	0.000	NA	0.0
HCB	1A3biv	Gasoline	0.001	0.002	2.0	1000.0	1000.0	0.009	154.961	0.1
HCB	1A3dii	Liquid	0.010	0.005	14.1	1000.0	1000.1	0.054	-46.822	0.2
HCB	1A4ai	Biomass	0.010	0.017	20.0	1000.0	1000.2	0.557	80.105	0.7
HCB	1A4bi	Biomass	0.206	0.266	20.0	1000.0	1000.2	132.761	28.627	10.5
HCB	1A4ci	Biomass	0.033	0.029	20.0	1000.0	1000.2	1.584	-10.738	1.2
HCB	1A4ci	Solid		0.002	20.0	1000.0	1000.2	0.007	NA	0.1
HCB	1A4ciii	Liquid	0.004	0.003	15.0	1000.0	1000.1	0.012	-42.558	0.1
HCB	1A5a	Biomass		0.038	10.0	1000.0	1000.0	2.747	NA	1.5
HCB	1A5a	Liquid	0.001	0.001	30.0	1000.0	1000.4	0.001	16.576	0.0

HCB	2B10a		29.000	15.100	50.0		50.0	1072.746	-47.931	29.9
HCB	2C1		0.096	0.016	10.0	900.0	900.1	0.414	-82.787	0.6
HCB	2C3		0.033	0.039	10.0	1000.0	1000.0	2.926	20.722	1.6
HCB	2C7a		5.514	6.497	10.0	1000.0	1000.0	79450.667	17.821	257.6
HCB	2D3i		0.004	0.002	40.0	1000.0	1000.8	0.005	-62.192	0.1
HCB	3Df		0.057	0.020	10.0	1000.0	1000.0	0.743	-65.288	0.8
HCB	5C1bv		0.001	0.005	10.0	900.0	900.1	0.042	358.166	0.2
<b>To- tal</b>			<b>35.677</b>	<b>23.051</b>			<b>285.0</b>		<b>-35.388</b>	<b>260.4</b>

Pollutant	NFR	Fuel	Base year emissions, kg	Year 2021 emissions, kg	Activity data uncertainty, %	Emission factor uncertainty, %	Combined uncertainty, %	Contribution to variance in year 2021, fraction	Inventory trend in national emissions for year 2021 increase with respect to base year, % of base year	Uncertainty introduced into the trend in total national emissions with respect to base year, %
PCB	1A1a	Biomass	0.026	0.344	4.9	1000.0	1000.0	218.790	1244.899	17.0
PCB	1A1a	Other		0.003	10.0	1000.0	1000.0	0.015	NA	0.1
PCB	1A1a	Solid	0.000	0.000	1.0	1000.0	1000.0	0.000	-64.369	0.0
PCB	1A2a	Biomass		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
PCB	1A2a	Solid	0.784	0.111	3.0	1000.0	1000.0	22.803	-85.848	5.5
PCB	1A2b	Solid	0.551	0.028	4.7	1000.0	1000.0	1.421	-94.969	1.4
PCB	1A2c	Biomass	0.000	0.000	5.0	1000.0	1000.0	0.000	-98.947	0.0
PCB	1A2d	Biomass	0.002	0.002	4.5	1000.0	1000.0	0.004	-33.654	0.1
PCB	1A2d	Other		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
PCB	1A2d	Solid	1.907	0.033	5.0	1000.0	1000.0	2.057	-98.252	1.7
PCB	1A2e	Biomass	0.000	0.000	9.2	1000.0	1000.0	0.000	6.814	0.0
PCB	1A2e	Solid	0.298	0.035	4.6	1000.0	1000.0	2.315	-88.125	1.8
PCB	1A2f	Biomass	0.000	0.000	10.0	1000.0	1000.0	0.000	3373.583	0.0
PCB	1A2f	Solid	1.037	0.237	4.6	1000.0	1000.0	103.737	-77.168	11.7
PCB	1A2gviii	Biomass	0.001	0.001	9.4	1000.0	1000.0	0.001	11.193	0.0
PCB	1A2gviii		0.135	0.026	30.0	900.0	900.5	1.037	-80.510	1.2
PCB	1A2gviii	Other		0.000	10.0	1000.0	1000.0	0.000	NA	0.0
PCB	1A3bi	Diesel oil	0.000	0.000	1.0	1000.0	1000.0	0.000	589.386	0.0
PCB	1A3bi	Gasoline	0.000	0.000	2.0	1000.0	1000.0	0.000	-80.822	0.0
PCB	1A3bii	Diesel oil	0.000	0.000	1.0	1000.0	1000.0	0.000	614.563	0.0
PCB	1A3bii	Gasoline	0.000	0.000	2.0	1000.0	1000.0	0.000	-98.386	0.0
PCB	1A3biii	Diesel oil	0.000	0.000	1.0	1000.0	1000.0	0.000	-66.687	0.0
PCB	1A3biv	Diesel oil		0.000	1.0	1000.0	1000.0	0.000	NA	0.0
PCB	1A3biv	Gasoline	0.000	0.000	2.0	1000.0	1000.0	0.000	-76.900	0.0
PCB	1A3dii	Liquid	0.024	0.005	14.1	1000.0	1000.1	0.040	-80.750	0.2
PCB	1A4ai	Biomass	0.115	0.206	20.0	1000.0	1000.2	78.914	80.105	10.2
PCB	1A4ai	Liquid	0.002	0.001	13.0	1000.0	1000.1	0.002	-55.492	0.0

PCB	1A4ai	Peat	0.000	0.000	15.0	1000.0	1000.1	0.000	15.714	0.0
PCB	1A4bi	Biomass	2.477	3.187	20.0	1000.0	1000.2	18809.944	28.627	157.8
PCB	1A4bi	Liquid	0.003	0.001	15.0	1000.0	1000.1	0.001	-78.220	0.0
PCB	1A4bi	Peat	0.000	0.000	15.0	1000.0	1000.1	0.000	-74.568	0.0
PCB	1A4ci	Biomass	0.390	0.348	20.0	1000.0	1000.2	224.487	-10.738	17.2
PCB	1A4ci	Liquid	0.001	0.000	14.6	1000.0	1000.1	0.000	-87.144	0.0
PCB	1A4ci	Peat	0.000	0.000	10.0	1000.0	1000.0	0.000	197.595	0.0
PCB	1A4ci	Solid		0.000	20.0	1000.0	1000.2	0.000	NA	0.0
PCB	1A4ciii	Liquid	0.002	0.001	15.0	1000.0	1000.1	0.003	-42.558	0.1
PCB	1B1b		1.753	3.006	10.0	1000.0	1000.0	16731.919	71.451	148.9
PCB	2A1		3.298	3.040	10.0	1000.0	1000.0	17117.628	-7.825	150.6
PCB	2A2		0.000	0.000	30.0	1000.0	1000.4	0.000	-19.586	0.0
PCB	2C1		13.464	12.492	236.2	100.0	256.5	19011.453	-7.223	158.7
PCB	2C3		0.083	0.103	10.0	1000.0	1000.0	19.762	24.300	5.1
PCB	2C7a		0.001	0.000	10.0	67.0	67.7	0.000	-43.825	0.0
PCB	2C7c		0.002	0.015	30.0	1000.0	1000.4	0.415	750.386	0.7
PCB	5C1bv		0.003	0.014	10.0	900.0	900.1	0.306	358.166	0.6
<b>Total</b>			<b>28.558</b>	<b>23.239</b>			<b>269.0</b>		<b>-18.624</b>	<b>309.5</b>

## Annex 7

(Updated March 2023, TF)

According to the EMEP/EEA emission inventory guidebook 2019, "a key category is one that is prioritised within the national inventory system because it is significantly important for one or a number of air pollutants in a country's national inventory of air pollutants in terms of the absolute level, the trend, or the uncertainty in emissions".

The results of the key category analysis are used in prioritizing the inventory improvements. For the Finnish 2023 submission inventory, the Approach 1 methodology presented in the EMEP/EEA emission inventory guidebook 2019, including the level and the trend assessment, has been used to identify key categories for each pollutant. Key source categories are sources that together contribute with either 80 % of the level or 80 % of the overall trend of reported emissions.

The combined results of the level and trend analysis for the 2023 submission are presented below.

NO<sub>x</sub>

NFR Code	Fuel	Pollutant	Identification criteria
1A2d	Biomass	NO <sub>x</sub>	L1, T1
1A1a	Biomass	NO <sub>x</sub>	L1, T1
1A3bi	Diesel oil	NO <sub>x</sub>	L1, T1
1A3biii	Diesel oil	NO <sub>x</sub>	L1, T1
3Da1		NO <sub>x</sub>	L1, T1
1A4bi	Biomass	NO <sub>x</sub>	L1, T1
1A3bii	Diesel oil	NO <sub>x</sub>	L1, T1
1A5a	Biomass	NO <sub>x</sub>	L1, T1
3Da2a		NO <sub>x</sub>	L1, T1
1A1a	Solid	NO <sub>x</sub>	L1, T1
1A3bi	Gasoline	NO <sub>x</sub>	L1, T1
1A4cii	Liquid	NO <sub>x</sub>	L1, T1
1A2gvii	Liquid	NO <sub>x</sub>	L1
1A3dii	Liquid	NO <sub>x</sub>	L1
1A1a	Peat	NO <sub>x</sub>	L1
1A4ciii	Liquid	NO <sub>x</sub>	L1
1A2a	Solid	NO <sub>x</sub>	L1
1A3c	Liquid	NO <sub>x</sub>	L1
1A5a	Liquid	NO <sub>x</sub>	L1
1A1a	Other	NO <sub>x</sub>	L1
1A1a	Gaseous	NO <sub>x</sub>	T1

NMVOC

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	NMVOC	L1, T1
2D3a		NMVOC	L1, T1
2D3d		NMVOC	L1, T1
3B1a		NMVOC	L1, T1

3B1b		NMVOC	L1, T1
1A3bv		NMVOC	L1, T1
1A3dii	Liquid	NMVOC	L1
1B2av		NMVOC	L1
2B10a		NMVOC	L1
1B2aiv		NMVOC	L1
3Da2a		NMVOC	L1
1A4bii	Liquid	NMVOC	L1
2D3g		NMVOC	L1
2H2		NMVOC	L1
2D3i		NMVOC	L1
1A4cii	Liquid	NMVOC	L1
1A3bi	Gasoline	NMVOC	T1
2D3h		NMVOC	T1
1A3biii	Diesel oil	NMVOC	T1
2D3c		NMVOC	T1
1A4aii	Liquid	NMVOC	T1

#### SO<sub>x</sub>

NFR Code	Fuel	Pollutant	Identification criteria
1A1b	Liquid	SO <sub>x</sub>	L1, T1
1A1a	Solid	SO <sub>x</sub>	L1, T1
1A1a	Peat	SO <sub>x</sub>	L1, T1
1A2b	Liquid	SO <sub>x</sub>	L1, T1
1A2b	Solid	SO <sub>x</sub>	L1, T1
2C1		SO <sub>x</sub>	L1, T1
1A2d	Biomass	SO <sub>x</sub>	L1, T1
1A1a	Biomass	SO <sub>x</sub>	L1, T1
2H1		SO <sub>x</sub>	L1, T1
1B1b		SO <sub>x</sub>	L1, T1
1A5a	Biomass	SO <sub>x</sub>	L1, T1
1A5a	Liquid	SO <sub>x</sub>	L1, T1
1A1a	Liquid	SO <sub>x</sub>	L1, T1
2B10a		SO <sub>x</sub>	L1
1A4ai	Liquid	SO <sub>x</sub>	L1
1A2d	Liquid	SO <sub>x</sub>	T1
1A2d	Solid	SO <sub>x</sub>	T1
1A2gviii	Liquid	SO <sub>x</sub>	T1
1A2a	Solid	SO <sub>x</sub>	T1
1A2e	Liquid	SO <sub>x</sub>	T1

#### NH<sub>3</sub>

NFR Code	Fuel	Pollutant	Identification criteria
3Da2a		NH <sub>3</sub>	L1, T1
3B1a		NH <sub>3</sub>	L1, T1

3B1b		NH3	L1, T1
3B3		NH3	L1, T1
3Da1		NH3	L1, T1
3B4h		NH3	L1
3Da3		NH3	L1
3B4gii		NH3	T1
3Da2c		NH3	T1
3B4e		NH3	T1
1A3bi	Gasoline	NH3	T1
1A4bi	Biomass	NH3	T1

PM<sub>2.5</sub>

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	PM2.5	L1, T1
1A2d	Biomass	PM2.5	L1, T1
1A3bvi		PM2.5	L1, T1
1A3bvii		PM2.5	L1, T1
2H2		PM2.5	L1, T1
1A5a	Biomass	PM2.5	L1, T1
2C1		PM2.5	L1, T1
1A3dii	Liquid	PM2.5	L1
1A2gvii	Liquid	PM2.5	L1
3Dc		PM2.5	L1
1A3biii	Diesel oil	PM2.5	
1A3bi	Diesel oil	PM2.5	
1A4cii	Liquid	PM2.5	
2H1		PM2.5	
1A1a	Solid	PM2.5	
1A1a	Liquid	PM2.5	

PM<sub>10</sub>

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	PM10	L1, T1
1A3bvii		PM10	L1, T1
3Dc		PM10	L1, T1
1A5a	Biomass	PM10	L1, T1
1A2d	Biomass	PM10	L1, T1
1A3bvi		PM10	L1, T1
2H2		PM10	L1
1A1a	Solid	PM10	T1
1A3biii	Diesel oil	PM10	T1
2C1		PM10	T1
1A3bi	Diesel oil	PM10	T1
2H1		PM10	T1
1A4cii	Liquid	PM10	T1

1B1c		PM10	T1
1A1a	Liquid	PM10	T1

#### TSP

NFR Code	Fuel	Pollutant	Identification criteria
1A3bvii		TSP	L1, T1
1A4bi	Biomass	TSP	L1, T1
1A5a	Biomass	TSP	L1, T1
3Dc		TSP	L1, T1
1A2d	Biomass	TSP	L1, T1
1A3bvi		TSP	L1, T1
1A1a	Peat	TSP	L1
1A1a	Solid	TSP	T1
2C1		TSP	T1
1A3biii	Diesel oil	TSP	T1
2H1		TSP	T1
1A3bi	Diesel oil	TSP	T1
1A2f	Solid	TSP	T1
1B1c		TSP	T1
1A2d	Liquid	TSP	T1
1A4cii	Liquid	TSP	T1

#### BC

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	BC	L1, T1
1A3bvi		BC	L1, T1
1A2gvii	Liquid	BC	L1, T1
1A5a	Biomass	BC	L1
1A3bii	Diesel oil	BC	L1
1A3biii	Diesel oil	BC	T1
1A3bi	Diesel oil	BC	T1
1A4cii	Liquid	BC	T1

#### CO

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	CO	L1, T1
1A4bii	Liquid	CO	L1, T1
1A3dii	Liquid	CO	L1, T1
1A5a	Biomass	CO	L1, T1
1A3bi	Gasoline	CO	L1, T1
1A2d	Biomass	CO	L1
1A4aii	Liquid	CO	T1

Pb

NFR Code	Fuel	Pollutant	Identification criteria
1A2d	Biomass	Pb	L1, T1
1A1b	Liquid	Pb	L1, T1
1A5a	Biomass	Pb	L1, T1
1A1a	Peat	Pb	L1, T1
1A2f	Solid	Pb	L1
2G		Pb	L1
1A1a	Biomass	Pb	L1
1A4bi	Biomass	Pb	L1
1A3bi	Gasoline	Pb	T1
2C7c		Pb	T1
2C1		Pb	T1

Cd

NFR Code	Fuel	Pollutant	Identification criteria
1A5a	Biomass	Cd	L1, T1
1A2d	Biomass	Cd	L1, T1
1A4bi	Biomass	Cd	L1, T1
1A1a	Biomass	Cd	L1, T1
2C7c		Cd	L1, T1
1A1b	Liquid	Cd	L1
2C6		Cd	T1

Hg

NFR Code	Fuel	Pollutant	Identification criteria
1A2d	Biomass	Hg	L1, T1
2C1		Hg	L1, T1
1A1a	Peat	Hg	L1, T1
1A1a	Biomass	Hg	L1, T1
2B10a		Hg	L1, T1
1A1a	Solid	Hg	L1, T1
5C1bv		Hg	L1, T1
1A5a	Biomass	Hg	L1, T1
1A4bi	Biomass	Hg	L1
1A2gviii	Other	Hg	T1

As

NFR Code	Fuel	Pollutant	Identification criteria
1A1a	Peat	As	L1, T1
1A1b	Liquid	As	L1, T1
2C7c		As	L1, T1
1A2d	Biomass	As	L1, T1
1A4ci	Peat	As	L1, T1

1A2f	Solid	As	L1
2C1		As	L1

Cr

NFR Code	Fuel	Pollutant	Identification criteria
1A1b	Liquid	Cr	L1, T1
2C1		Cr	L1, T1
1A4bi	Biomass	Cr	L1, T1
1A5a	Biomass	Cr	L1, T1
1A3bvi		Cr	L1, T1
2C2		Cr	L1
1A2f	Solid	Cr	L1
1A1a	Solid	Cr	T1
1A2e	Solid	Cr	T1
1A1a	Peat	Cr	T1

Cu

NFR Code	Fuel	Pollutant	Identification criteria
1A3bvi		Cu	L1, T1
1A5a	Biomass	Cu	L1, T1
2C7c		Cu	T1

Ni

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	Ni	L1, T1
1A5a	Biomass	Ni	L1, T1
2C7b		Ni	L1, T1
2C1		Ni	L1, T1
1A1a	Peat	Ni	L1, T1
1A2f	Solid	Ni	L1, T1
1A5a	Liquid	Ni	L1, T1
1A1a	Biomass	Ni	L1, T1
1A2c	Liquid	Ni	L1, T1
1A4ai	Liquid	Ni	L1
1A1a	Liquid	Ni	L1
1A2d	Biomass	Ni	L1
2C7c		Ni	T1
1A1a	Solid	Ni	T1
1A1b	Liquid	Ni	T1
1A2e	Solid	Ni	T1

Se

NFR Code	Fuel	Pollutant	Identification criteria
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1A4bi	Biomass	Se	L1, T1
2C7a		Se	L1, T1
2C7c		Se	T1

#### Zn

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	Zn	L1, T1
1A5a	Biomass	Zn	L1, T1
1A3bvi		Zn	L1, T1
1A1a	Biomass	Zn	L1, T1
2C6		Zn	L1
1A1b	Liquid	Zn	L1
2C1		Zn	T1
2C7c		Zn	T1

#### PCDD/F

NFR Code	Fuel	Pollutant	Identification criteria
1A1a	Biomass	PCDD/F	L1, T1
1A1a	Other	PCDD/F	L1, T1
1A4bi	Biomass	PCDD/F	L1, T1
5E		PCDD/F	L1, T1
1A5a	Biomass	PCDD/F	L1, T1
2B10a		PCDD/F	L1, T1
2C1		PCDD/F	L1, T1
1A2gviii	Other	PCDD/F	L1
1A1a	Peat	PCDD/F	L1
1A2d	Biomass	PCDD/F	L1
1B1b		PCDD/F	T1
1A3bi	Gasoline	PCDD/F	T1

#### PAH-4

NFR Code	Fuel	Pollutant	Identification criteria
1A4bi	Biomass	PAH-4	L1, T1
1A1a	Other	PAH-4	T1
1A1a	Biomass	PAH-4	T1
1A2gviii	Other	PAH-4	T1
2C1		PAH-4	T1
1A5a	Biomass	PAH-4	T1
1A4bi	Liquid	PAH-4	T1
1A4ai	Liquid	PAH-4	T1

HCB

NFR Code	Fuel	Pollutant	Identification criteria
2B10a		HCB	L1, T1
2C7a		HCB	L1, T1

PCB

NFR Code	Fuel	Pollutant	Identification criteria
2C1		PCB	L1, T1
1A4bi	Biomass	PCB	L1, T1
2A1		PCB	L1
1B1b		PCB	T1
1A2d	Solid	PCB	T1
1A2f	Solid	PCB	T1
1A2a	Solid	PCB	T1

# Level and Trend Key Category Analysis to the 2023 Submission

## Level analysis

The key category assessment by level for the 2023 submission is presented below.

NO<sub>x</sub>

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A2d	Biomass	12.176	12.176	Yes	2B10a		0.140	98.219	
1A1a	Biomass	7.664	19.840	Yes	1A3biv	Gasoline	0.135	98.354	
1A3bi	Diesel oil	7.651	27.491	Yes	1A4ci	Peat	0.114	98.468	
1A3biii	Diesel oil	7.576	35.068	Yes	1A2e	Peat	0.113	98.580	
3Da1		5.305	40.373	Yes	3Da2b		0.105	98.685	
1A2gvii	Liquid	4.667	45.039	Yes	1A2gviii	Peat	0.103	98.789	
1A3dii	Liquid	4.576	49.616	Yes	1A2b	Liquid	0.090	98.879	
1A4bi	Biomass	4.043	53.658	Yes	3B4gii		0.084	98.963	
1A3bii	Diesel oil	3.654	57.312	Yes	1A2c	Gaseous	0.082	99.045	
1A5a	Biomass	3.635	60.948	Yes	1A2f	Gaseous	0.082	99.127	
1A1a	Peat	2.900	63.848	Yes	1A2a	Liquid	0.067	99.194	
3Da2a		2.664	66.512	Yes	1A3bii	Gasoline	0.063	99.258	
1A1a	Solid	2.451	68.963	Yes	1A3aii(i)	Liquid	0.062	99.320	
1A4cii	Liquid	2.170	71.133	Yes	1A4ai	Gaseous	0.059	99.379	
1A3bi	Gasoline	1.773	72.907	Yes	1A2e	Biomass	0.059	99.439	
1A4ciii	Liquid	1.634	74.541	Yes	1A4bi	Gaseous	0.055	99.494	
1A2a	Solid	1.581	76.122	Yes	1A1b	Biomass	0.044	99.537	
1A3c	Liquid	1.447	77.569	Yes	3B4gi		0.042	99.580	
1A5a	Liquid	1.376	78.945	Yes	3B1a		0.042	99.621	
1A1a	Other	1.251	80.196	Yes	1A2e	Liquid	0.041	99.663	
1A1a	Gaseous	1.129	81.325		3B4h		0.034	99.697	
1A2c	Liquid	1.129	82.454		1A3biv	Diesel oil	0.034	99.731	
1A2d	Liquid	1.117	83.571		3B4e		0.029	99.760	
1A4aii	Liquid	1.067	84.638		1A2f	Biomass	0.028	99.788	
1A2a	Gaseous	1.028	85.666		1A2e	Solid	0.025	99.813	
1A2d	Gaseous	0.961	86.627		1A2e	Gaseous	0.020	99.833	
1A4ai	Liquid	0.904	87.531		1A2c	Biomass	0.017	99.850	
1A4bii	Liquid	0.875	88.406		1A2d	Solid	0.016	99.866	
1A2f	Liquid	0.871	89.276		1A4bi	Peat	0.016	99.882	
1A2gviii	Biomass	0.864	90.141		1A4ci	Solid	0.015	99.897	
1A1b	Gaseous	0.748	90.889		1A2b	Solid	0.015	99.912	
1A1a	Liquid	0.653	91.541		1A4ai	Peat	0.013	99.924	
1A4bi	Liquid	0.645	92.186		1A3biii	Gaseous	0.012	99.937	
1A1b	Liquid	0.627	92.814		3B4giii		0.009	99.945	
3Da3		0.557	93.37		3B2		0.007	99.952	
1A2d	Peat	0.546	93.916		1A3bi	Gaseous	0.007	99.958	
1A2gviii	Other	0.520	94.436		1A3ei	Gaseous	0.006	99.964	

1A4ci	Biomass	0.449	94.885	1A4ci	Gaseous	0.005	99.970
2B2		0.383	95.268	3B3		0.005	99.975
1A2f	Solid	0.361	95.629	1A2b	Gaseous	0.005	99.980
1A2gviii	Liquid	0.325	95.954	3B4giv		0.005	99.984
1A4ci	Liquid	0.303	96.257	1A2e	Other	0.004	99.989
1A2f	Other	0.294	96.551	2G		0.004	99.993
3Da2c		0.277	96.828	1A2c	Other	0.003	99.995
1A4ai	Biomass	0.262	97.090	1A2a	Biomass	0.003	99.998
1A3ai(i)	Liquid	0.257	97.347	1A1b	Solid	0.001	99.999
1A2d	Other	0.231	97.577	1A3bii	Gaseous	0.001	99.999
1A5a	Gaseous	0.208	97.786	3B4d		0.000	100
1A2gviii	Gaseous	0.152	97.938	1A4bi	Other	0.000	100
3B1b		0.141	98.079				

## NMVOC

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	23.670	23.670	Yes	2A1		0.033	99.537	
2D3a		8.852	32.523	Yes	3B4giv		0.030	99.567	
2D3d		8.450	40.973	Yes	1A1b	Gaseous	0.027	99.593	
3B1a		7.138	48.110	Yes	1A3bii	Gasoline	0.027	99.620	
3B1b		5.014	53.125	Yes	1A5a	Gaseous	0.026	99.647	
1A3dii	Liquid	4.292	57.417	Yes	1A4ci	Liquid	0.025	99.671	
1B2av		3.179	60.595	Yes	1A2d	Gaseous	0.023	99.694	
2B10a		3.062	63.657	Yes	1A4ai	Peat	0.022	99.716	
1B2aiv		2.701	66.358	Yes	5D2		0.021	99.737	
3Da2a		2.653	69.011	Yes	1A4ci	Biomass	0.021	99.758	
1A4bii	Liquid	2.593	71.604	Yes	2G		0.020	99.778	
2D3g		2.429	74.034	Yes	2C7b		0.019	99.798	
2H2		2.322	76.356	Yes	1A2d	Peat	0.017	99.814	
2D3i		1.912	78.268	Yes	1A2a	Solid	0.013	99.827	
1A4cii	Liquid	1.569	79.837	Yes	1A4ai	Biomass	0.012	99.840	
1A3bv		1.494	81.331	Yes	1A2d	Other	0.012	99.851	
2I		1.489	82.819		5D1		0.011	99.863	
2H1		1.346	84.165		1A3aii(i)	Liquid	0.011	99.874	
1A1a	Biomass	1.300	85.466		1A2e	Peat	0.010	99.884	
1A2gvii	Liquid	1.258	86.723		1A2f	Other	0.010	99.894	
1A3bi	Gasoline	1.204	87.927		1A3biv	Diesel oil	0.008	99.902	
1A3biv	Gasoline	1.061	88.989		1A2d	Liquid	0.008	99.911	
3B4h		0.930	89.918		1A2e	Biomass	0.008	99.919	
3B4gii		0.907	90.825		1A2c	Gaseous	0.007	99.926	
3De		0.864	91.689		1A4ai	Gaseous	0.007	99.933	
2D3e		0.741	92.431		1A4bi	Gaseous	0.007	99.940	
1A4aii	Liquid	0.522	92.953		3B4d		0.006	99.946	
2D3h		0.517	93.470		1A2a	Gaseous	0.005	99.951	

1A5a	Biomass	0.462	93.932	1A2gviii	Peat	0.005	99.956
2D3b		0.423	94.355	1A2gviii	Gaseous	0.004	99.960
1A2d	Biomass	0.343	94.698	1A3bi	Gaseous	0.004	99.964
1A1a	Other	0.332	95.029	1A2f	Liquid	0.003	99.967
1B2b		0.302	95.331	1A2f	Solid	0.003	99.970
3B3		0.301	95.632	2C7c		0.003	99.973
3B4gi		0.300	95.932	2A3		0.003	99.976
3B4e		0.300	96.232	1A2e	Other	0.003	99.978
1A4ci	Peat	0.289	96.521	1A2f	Biomass	0.002	99.981
1A3biii	Diesel oil	0.272	96.793	1A1b	Biomass	0.002	99.983
2C1		0.256	97.049	2C2		0.002	99.985
1A3bii	Diesel oil	0.249	97.298	1A2c	Liquid	0.002	99.986
1A1a	Solid	0.211	97.509	1A2c	Biomass	0.002	99.988
1A2gviii	Biomass	0.177	97.686	2L		0.002	99.990
2D3c		0.175	97.861	1A2b	Liquid	0.001	99.991
3B2		0.171	98.032	1A2e	Solid	0.001	99.992
1A1a	Peat	0.171	98.203	1A2f	Gaseous	0.001	99.993
2B10b		0.165	98.368	1A3biii	Gaseous	0.001	99.994
1A5a	Liquid	0.119	98.487	1A2e	Liquid	0.001	99.995
1A3c	Liquid	0.103	98.590	1A2d	Solid	0.001	99.995
1A3bi	Diesel oil	0.100	98.690	1A4ci	Gaseous	0.001	99.996
1A4ciii	Liquid	0.096	98.786	2C7a		0.001	99.997
3Da3		0.088	98.874	1A2a	Biomass	0.001	99.997
5A		0.086	98.960	2C3		0.001	99.998
1A1a	Gaseous	0.074	99.034	1A2e	Gaseous	0.001	99.999
1A4ai	Liquid	0.067	99.101	1A4ci	Solid	0.000	99.999
1B1b		0.062	99.163	1A3bii	Gaseous	0.000	99.999
1A1b	Liquid	0.057	99.220	1A2b	Solid	0.000	100
1A2gviii	Liquid	0.054	99.274	1A3ei	Gaseous	0.000	100
1A4bi	Liquid	0.051	99.325	1A2a	Liquid	0.000	100
1A4bi	Peat	0.040	99.365	1A2b	Gaseous	0.000	100
3B4giii		0.037	99.402	1A2c	Other	0.000	100
1A3ai(i)	Liquid	0.035	99.437	1A1b	Solid	0.000	100
1A1a	Liquid	0.034	99.471	1A4bi	Other	0.000	100
1A2gviii	Other	0.033	99.504				

## SO<sub>x</sub>

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A1b	Liquid	12.357	12.357	Yes	1A3bi	Gasoline	0.072	99.499	
1A1a	Solid	11.325	23.682	Yes	1A3ai(i)	Liquid	0.068	99.566	
1A1a	Peat	8.500	32.182	Yes	1A3biii	Diesel oil	0.061	99.627	
2B10a		5.979	38.161	Yes	1A1b	Solid	0.041	99.668	
1A2b	Liquid	5.707	43.868	Yes	1A2gviii	Gaseous	0.031	99.699	
1A2b	Solid	5.220	49.088	Yes	1A3bi	Diesel oil	0.028	99.727	

1A4ai	Liquid	4.772	53.860	Yes	1A2a	Liquid	0.027	99.754
2C1		4.150	58.010	Yes	1A2f	Gaseous	0.023	99.777
1A2d	Biomass	4.129	62.139	Yes	1A2e	Other	0.023	99.799
1A1a	Biomass	4.048	66.187	Yes	1A2c	Gaseous	0.022	99.822
2H1		3.491	69.678	Yes	1A3aii(i)	Liquid	0.02	99.842
1B1b		3.452	73.130	Yes	1A2gvii	Liquid	0.019	99.861
1A5a	Biomass	3.280	76.410	Yes	1A2c	Biomass	0.018	99.879
1A5a	Liquid	2.113	78.523	Yes	1A1b	Biomass	0.017	99.896
1A1a	Liquid	1.774	80.297	Yes	1A2f	Other	0.014	99.910
1A2c	Liquid	1.699	81.996		1A3bii	Diesel oil	0.013	99.923
1A2a	Solid	1.656	83.652		1A4cii	Liquid	0.012	99.935
1A4bi	Liquid	1.608	85.261		2G		0.010	99.946
1A2d	Peat	1.542	86.802		1A2f	Biomass	0.010	99.956
1A2d	Liquid	1.200	88.002		2C2		0.010	99.966
1A4bi	Biomass	1.140	89.142		1A1a	Gaseous	0.008	99.973
1A2f	Solid	1.056	90.198		1A4aii	Liquid	0.005	99.978
1A2gviii	Biomass	0.969	91.166		1A2a	Gaseous	0.004	99.982
1A1b	Gaseous	0.964	92.130		1A4bii	Liquid	0.003	99.985
1A4ci	Peat	0.920	93.050		1A2d	Gaseous	0.003	99.988
1A4ci	Liquid	0.893	93.944		1A3biv	Gasoline	0.002	99.990
1A1a	Other	0.756	94.700		2D3i		0.002	99.992
1A2gviii	Liquid	0.596	95.295		1A4ciii	Liquid	0.002	99.994
1A2f	Liquid	0.545	95.840		2L		0.001	99.995
2C7a		0.478	96.318		1A2a	Biomass	0.001	99.997
1A2e	Peat	0.422	96.740		1A3c	Liquid	0.001	99.998
1A2d	Other	0.388	97.128		1A2b	Gaseous	0.001	99.999
1A5a	Gaseous	0.320	97.448		1A3bii	Gasoline	0.000	99.999
1A2e	Solid	0.302	97.749		1A4ai	Gaseous	0.000	99.999
1A4ci	Solid	0.256	98.005		1A4bi	Gaseous	0.000	99.999
1A2gviii	Peat	0.219	98.224		2C7c		0.000	100
1A2e	Biomass	0.210	98.434		1A3bi	Gaseous	0.000	100
1A3dii	Liquid	0.179	98.613		1A2e	Gaseous	0.000	100
1A4ci	Biomass	0.128	98.741		1A3biv	Diesel oil	0.000	100
1A4bi	Peat	0.128	98.868		1A4bi	Other	0.000	100
2C7b		0.121	98.990		2D3g		0.000	100
1A2e	Liquid	0.110	99.100		1A3ei	Gaseous	0.000	100
1A2gviii	Other	0.092	99.192		1A4ci	Gaseous	0.000	100
1A4ai	Peat	0.083	99.275		1A3biii	Gaseous	0.000	100
1A2d	Solid	0.078	99.352		1A3bii	Gaseous	0.000	100
1A4ai	Biomass	0.074	99.426		1A2c	Other	0.000	100

### NH<sub>3</sub>

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
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3Da2a		21.823	21.823	Yes	1A2gviii		0.054	99.698
3B1a		17.984	39.808	Yes	1A1a		0.047	99.746
3B1b		17.058	56.866	Yes	1A4ci	Biomass	0.032	99.777
3B3		8.437	65.303	Yes	2G		0.031	99.808
3Da1		6.372	71.675	Yes	1A3bii	Diesel oil	0.029	99.837
3B4h		5.269	76.944	Yes	1A3bi	Gaseous	0.029	99.866
3Da3		4.636	81.580	Yes	3B4d		0.024	99.891
1A4bi	Biomass	3.573	85.153		2L		0.022	99.913
3B4e		2.227	87.380		1A4ai	Biomass	0.019	99.931
3B4gii		1.898	89.279		2D3e		0.013	99.945
3Da2c		1.874	91.152		1B1b		0.010	99.954
1A3bi	Gasoline	1.798	92.951		1A2gvii	Liquid	0.010	99.964
5D1		1.240	94.191		2D3g		0.007	99.971
2B10a		0.970	95.161		1A4cii	Liquid	0.006	99.977
3B4gi		0.855	96.016		1A3biv	Gasoline	0.006	99.983
5B2		0.696	96.712		1A3bii	Gasoline	0.005	99.988
2D3i		0.554	97.265		1A3dii	Liquid	0.003	99.991
2H1		0.548	97.813		1A4aii	Liquid	0.002	99.993
3B2		0.381	98.195		1A3bii	Gaseous	0.002	99.995
5B1		0.336	98.530		2C7c		0.002	99.996
3B4giii		0.274	98.804		1A4bii	Liquid	0.001	99.997
3Da2b		0.243	99.047		1A3biii	Gaseous	0.001	99.998
2C7b		0.177	99.225		1A4ciii	Liquid	0.001	99.999
2C1		0.126	99.350		1A3c	Liquid	0.001	100
3B4giv		0.117	99.467		1A5a	Liquid	0.000	100
1A3biii	Diesel oil	0.096	99.563		1A3biv	Diesel oil	0.000	100
1A3bi	Diesel oil	0.082	99.645					

## PM<sub>2.5</sub>

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	55.367	55.367	Yes	1A2gviii	Liquid	0.045	99.551	
1A2d	Biomass	5.745	61.113	Yes	3B4e		0.043	99.595	
1A3bvi		4.314	65.427	Yes	2C7c		0.043	99.638	
1A3bvii		3.193	68.620	Yes	1A3biv	Diesel oil	0.041	99.679	
2H2		2.822	71.442	Yes	1A2f	Liquid	0.035	99.714	
1A5a	Biomass	2.677	74.119	Yes	2A3		0.026	99.740	
1A3dii	Liquid	2.343	76.462	Yes	1A1a	Other	0.020	99.760	
1A2gvii	Liquid	1.807	78.269	Yes	3B4giii		0.020	99.780	
3Dc		1.489	79.757	Yes	1A3ai(i)	Liquid	0.016	99.797	
2C1		1.467	81.224	Yes	1A2b	Liquid	0.016	99.813	
1A3bii	Diesel oil	1.289	82.514		1A2d	Other	0.015	99.828	
1A3bi	Diesel oil	1.195	83.709		1A2e	Liquid	0.014	99.843	
2B10a		1.096	84.805		3B3		0.014	99.857	
1A4cii	Liquid	1.041	85.846		1A4ai	Peat	0.013	99.870	

1B1c		0.967	86.814	2B10b		0.011	99.881
1A4bii	Liquid	0.877	87.691	2A5b		0.010	99.891
1A3biii	Diesel oil	0.825	88.516	1A2a	Solid	0.010	99.901
5E		0.710	89.226	2D3g		0.010	99.910
2H1		0.667	89.894	3B2		0.009	99.919
1A2gviii	Biomass	0.633	90.527	5C1bv		0.008	99.928
1A4ci	Biomass	0.633	91.160	1A2e	Biomass	0.007	99.935
1A4ai	Liquid	0.623	91.783	1A2c	Biomass	0.006	99.941
2C2		0.549	92.332	2C7d		0.005	99.946
1A4aii	Liquid	0.542	92.874	1A3aii(i)	Liquid	0.005	99.951
1A1a	Biomass	0.521	93.395	2D3d		0.005	99.956
1A1a	Peat	0.445	93.840	1A2gviii	Peat	0.004	99.960
2G		0.435	94.275	2B6		0.004	99.964
2D3b		0.424	94.699	1A2gviii	Other	0.004	99.968
2D3i		0.389	95.088	1B2aiv		0.004	99.972
1A4ai	Biomass	0.377	95.466	1A2f	Solid	0.003	99.975
3B1a		0.377	95.842	2C7a		0.002	99.977
1A4bi	Peat	0.371	96.213	1A4ci	Solid	0.002	99.979
1A5a	Liquid	0.361	96.574	1A3bi	Gaseous	0.002	99.981
3B1b		0.326	96.899	1A2e	Solid	0.002	99.983
1A4bi	Liquid	0.294	97.193	2A5a		0.002	99.985
1A4ciii	Liquid	0.288	97.481	1A2e	Peat	0.002	99.987
1A2d	Liquid	0.261	97.742	2I		0.002	99.988
1A3bi	Gasoline	0.221	97.963	1B2av		0.001	99.990
1A3c	Liquid	0.204	98.167	1A2e	Other	0.001	99.991
1A4ci	Peat	0.167	98.334	2A2		0.001	99.992
1A1a	Solid	0.151	98.486	1A2b	Solid	0.001	99.993
2A5c		0.119	98.605	1A2f	Biomass	0.001	99.994
1A2c	Liquid	0.115	98.719	1A2f	Other	0.001	99.995
1A1b	Liquid	0.100	98.819	1A3bii	Gasoline	0.001	99.996
3B4giv		0.091	98.910	2C3		0.001	99.997
1A1a	Liquid	0.088	98.998	1A2d	Solid	0.001	99.998
1A3biv	Gasoline	0.085	99.084	5A		0.001	99.998
1A2d	Peat	0.075	99.158	3B4d		0.000	99.999
3B4gi		0.074	99.233	1A2a	Liquid	0.000	99.999
3B4gii		0.063	99.296	1A1b	Solid	0.000	99.999
1A4ci	Liquid	0.060	99.355	1A3biii	Gaseous	0.000	100
3B4h		0.057	99.413	1A3bii	Gaseous	0.000	100
1B1b		0.048	99.461	1A2a	Biomass	0.000	100
2L		0.045	99.506	1A4bi	Other	0.000	100

## PM<sub>10</sub>

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	29.331	29.331	Yes	1A2f	Liquid	0.053	99.332	

1A3bvii		19.387	48.718	Yes	1A2gviii	Liquid	0.053	99.385
3Dc		13.817	62.535	Yes	2B10b		0.045	99.429
1A5a	Biomass	7.144	69.679	Yes	1A3biv	Gasoline	0.044	99.473
1A2d	Biomass	5.390	75.070	Yes	2A5b		0.038	99.511
1A3bvi		4.018	79.088	Yes	2L		0.036	99.548
2H2		1.501	80.589	Yes	1A4ai	Peat	0.036	99.583
2B10a		1.296	81.885		3B4e		0.035	99.618
1A3dii	Liquid	1.223	83.108		1A1a	Other	0.029	99.648
1A1a	Biomass	0.969	84.077		1A2d	Gaseous	0.026	99.674
1A1a	Peat	0.944	85.021		2C7d		0.026	99.700
1A2gvii	Liquid	0.927	85.949		2C7c		0.026	99.726
2C1		0.815	86.763		1A2a	Solid	0.025	99.752
1A2gviii	Biomass	0.743	87.506		1A2d	Other	0.023	99.775
1B1c		0.707	88.213		1A3biv	Diesel oil	0.021	99.796
1A3bii	Diesel oil	0.662	88.875		1A2e	Biomass	0.018	99.814
1A3bi	Diesel oil	0.613	89.488		1A2f	Solid	0.016	99.829
2A5c		0.584	90.072		1A2b	Liquid	0.015	99.845
1A4ai	Liquid	0.567	90.639		2A3		0.015	99.860
2H1		0.538	91.176		1A2e	Liquid	0.015	99.875
1A4cii	Liquid	0.534	91.710		3B2		0.014	99.888
3B4gi		0.510	92.220		1A2gviii	Peat	0.010	99.899
1A4bii	Liquid	0.450	92.670		2A5a		0.009	99.908
1A4ci	Peat	0.446	93.116		1A3ai(i)	Liquid	0.008	99.916
1A3biii	Diesel oil	0.424	93.539		1A2f	Biomass	0.008	99.924
2C2		0.399	93.939		2D3g		0.008	99.932
5E		0.364	94.303		1A2gviii	Other	0.006	99.939
1A4ci	Biomass	0.342	94.645		1A4ci	Solid	0.006	99.945
3B4giv		0.327	94.973		1B2aiv		0.006	99.950
3B4gii		0.322	95.295		1A2e	Solid	0.005	99.955
3B1a		0.297	95.592		1A2e	Peat	0.005	99.960
1A4aii	Liquid	0.278	95.870		5C1bv		0.004	99.965
1A5a	Liquid	0.273	96.143		2D3d		0.004	99.968
3B1b		0.257	96.400		1A2b	Solid	0.004	99.972
1A1a	Solid	0.256	96.656		1A2e	Other	0.003	99.975
2D3b		0.237	96.894		1A2c	Biomass	0.003	99.978
2G		0.223	97.117		2A2		0.003	99.981
2D3i		0.216	97.333		2B6		0.003	99.984
1A4bi	Peat	0.214	97.547		1A3aii(i)	Liquid	0.003	99.987
1A4ai	Biomass	0.200	97.747		1A2f	Other	0.002	99.989
1A4bi	Liquid	0.197	97.944		5A		0.002	99.991
3B3		0.160	98.104		2C7a		0.002	99.993
1A4ciii	Liquid	0.159	98.263		1A3bi	Gaseous	0.001	99.994
1A2c	Liquid	0.154	98.417		2C3		0.001	99.995
1A3bi	Gasoline	0.114	98.530		1A2d	Solid	0.001	99.996
1A3c	Liquid	0.110	98.640		1A1b	Solid	0.001	99.997
1A2d	Liquid	0.095	98.735		1B2av		0.001	99.998
1A2d	Peat	0.083	98.818		1A2a	Liquid	0.001	99.998
1A4ci	Liquid	0.077	98.895		3B4d		0.001	99.999

1A1a	Liquid	0.072	98.967	1A3bii	Gasoline	0.000	99.999
2I		0.071	99.038	1A2a	Biomass	0.000	100
1A1b	Liquid	0.066	99.104	1A3biii	Gaseous	0.000	100
1B1b		0.059	99.163	1A3bii	Gaseous	0.000	100
3B4h		0.059	99.222	1A4bi	Other	0.000	100
3B4giii		0.057	99.279				

## TSP

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A3bvii		24.914	24.914	Yes	1A2d	Peat	0.070	99.225	
1A4bi	Biomass	19.631	44.545	Yes	1A1a	Liquid	0.069	99.295	
1A5a	Biomass	17.655	62.200	Yes	1A2f	Liquid	0.060	99.355	
3Dc		8.878	71.079	Yes	1A2gviii	Liquid	0.054	99.408	
1A2d	Biomass	3.896	74.974	Yes	3B4e		0.049	99.457	
1A3bvi		3.480	78.454	Yes	1A2a	Solid	0.042	99.499	
1A1a	Peat	2.015	80.470	Yes	1A1a	Other	0.041	99.540	
3B4gi		1.555	82.025		3B4giii		0.036	99.577	
1A1a	Biomass	1.214	83.239		2C7d		0.034	99.610	
1A4ci	Peat	1.101	84.340		2L		0.031	99.641	
2H2		1.001	85.342		1A2d	Other	0.031	99.672	
2A5c		0.978	86.320		1A2f	Solid	0.029	99.700	
2B10a		0.954	87.275		1A3biv	Gasoline	0.028	99.729	
1A2gviii	Biomass	0.839	88.113		2C7c		0.026	99.755	
1A3dii	Liquid	0.786	88.899		3B2		0.021	99.776	
1B1c		0.695	89.594		1A2f	Biomass	0.020	99.795	
3B3		0.659	90.253		1A2d	Gaseous	0.020	99.815	
2C1		0.644	90.898		1A3biv	Diesel oil	0.014	99.829	
1A2gvii	Liquid	0.596	91.493		1A2e	Liquid	0.012	99.841	
1A4ai	Liquid	0.488	91.981		1A2b	Liquid	0.012	99.853	
1A3bii	Diesel oil	0.425	92.406		2A5a		0.011	99.864	
3B1a		0.418	92.824		1A2e	Biomass	0.011	99.875	
3B4gii		0.414	93.239		1A2gviii	Peat	0.011	99.886	
1A3bi	Diesel oil	0.394	93.633		2A3		0.011	99.897	
2H1		0.371	94.003		1A2e	Peat	0.011	99.908	
3B1b		0.357	94.360		1A2b	Solid	0.009	99.917	
1A4cii	Liquid	0.343	94.704		1A2e	Solid	0.008	99.925	
2C2		0.302	95.006		1A2e	Other	0.008	99.933	
1A4bii	Liquid	0.289	95.295		1A4ci	Solid	0.008	99.941	
1A3biii	Diesel oil	0.272	95.567		2D3g		0.007	99.948	
2I		0.246	95.813		1A2gviii	Other	0.006	99.954	
5E		0.234	96.047		1A3ai(i)	Liquid	0.005	99.959	
1A4ci	Biomass	0.232	96.278		2A2		0.005	99.964	
1A5a	Liquid	0.222	96.501		1A2f	Other	0.005	99.969	
3B4giv		0.216	96.717		1B2aiv		0.005	99.974	

2D3b		0.203	96.920	5C1bv		0.003	99.977
1A1a	Solid	0.201	97.121	2D3d		0.003	99.980
1A4aii	Liquid	0.179	97.300	1A2c	Biomass	0.003	99.983
1A4bi	Peat	0.153	97.453	5A		0.003	99.986
1A1b	Liquid	0.152	97.605	2B6		0.002	99.988
2D3i		0.149	97.754	1A1b	Solid	0.002	99.990
2G		0.144	97.897	1A3aii(i)	Liquid	0.002	99.992
1A4bi	Liquid	0.142	98.039	2C7a		0.002	99.994
1A4ai	Biomass	0.134	98.173	1A2a	Biomass	0.001	99.995
1A2c	Liquid	0.117	98.290	2C3		0.001	99.996
1A4ciii	Liquid	0.102	98.392	3B4d		0.001	99.997
1A2d	Liquid	0.101	98.492	1A2a	Liquid	0.001	99.997
1B1b		0.091	98.583	1A2d	Solid	0.001	99.998
2B10b		0.090	98.673	1A3bi	Gaseous	0.001	99.999
1A4ai	Peat	0.088	98.761	1B2av		0.000	100
3B4h		0.085	98.846	1A3bii	Gasoline	0.000	100
1A4ci	Liquid	0.083	98.929	1A3biii	Gaseous	0.000	100
2A5b		0.079	99.008	1A3bii	Gaseous	0.000	100
1A3c	Liquid	0.075	99.082	1A4bi	Other	0.000	100
1A3bi	Gasoline	0.073	99.155				

## BC

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	67.343	67.343	Yes	1A4ci	Peat	0.023	99.837	
1A3bvi		4.693	72.035	Yes	2C1		0.022	99.859	
1A2gvii	Liquid	4.629	76.664	Yes	1A2e	Liquid	0.018	99.877	
1A5a	Biomass	3.156	79.821	Yes	5C1bv		0.018	99.895	
1A3bii	Diesel oil	2.986	82.807	Yes	1A1b	Liquid	0.018	99.913	
1A3bi	Diesel oil	2.868	85.674		1A2b	Liquid	0.017	99.929	
1A3bvii		2.641	88.315		1A1a	Solid	0.014	99.943	
1A4cii	Liquid	1.850	90.165		1A3aii(i)	Liquid	0.011	99.954	
1A3biii	Diesel oil	1.842	92.007		1A2d	Peat	0.010	99.964	
1A3dii	Liquid	1.650	93.657		2G		0.008	99.973	
1A4ai	Liquid	0.795	94.453		1A2d	Other	0.008	99.981	
1A4bii	Liquid	0.681	95.134		1A1a	Other	0.005	99.986	
1A4aii	Liquid	0.609	95.743		1A2e	Other	0.004	99.990	
1A3c	Liquid	0.558	96.301		1A4ai	Peat	0.002	99.991	
1A5a	Liquid	0.537	96.838		1A2gviii	Other	0.002	99.993	
1A4bi	Liquid	0.414	97.252		1A2c	Biomass	0.002	99.994	
1A4ciii	Liquid	0.403	97.655		1A2e	Biomass	0.001	99.995	
5E		0.256	97.911		1A2a	Solid	0.001	99.996	
2C2		0.231	98.142		1A2f	Other	0.001	99.997	
1A2d	Biomass	0.202	98.343		1A2gviii	Peat	0.001	99.997	
1A2c	Liquid	0.133	98.476		1A2a	Liquid	0.000	99.998	

1A2d	Liquid	0.129	98.605	2B6		0.000	99.998
1A3bi	Gasoline	0.112	98.717	1A2e	Peat	0.000	99.998
2D3b		0.102	98.819	1A2f	Solid	0.000	99.999
1A3biv	Diesel oil	0.099	98.918	1A4ci	Solid	0.000	99.999
1A2gviii	Biomass	0.088	99.006	1A3bii	Gasoline	0.000	99.999
1A4ci	Biomass	0.086	99.092	1A2e	Solid	0.000	99.999
1A1a	Liquid	0.085	99.177	1A2f	Biomass	0.000	99.999
2B10a		0.083	99.261	1A4bi	Other	0.000	99.999
1A4ci	Liquid	0.079	99.339	1B1b		0.000	100
2H1		0.073	99.413	1A2b	Solid	0.000	100
1A1a	Biomass	0.073	99.485	2C3		0.000	100
1A1a	Peat	0.062	99.547	2A3		0.000	100
1A2gviii	Liquid	0.054	99.601	1A2d	Solid	0.000	100
1A4bi	Peat	0.052	99.652	2D3i		0.000	100
1A4ai	Biomass	0.051	99.704	1A1b	Solid	0.000	100
1A3biv	Gasoline	0.040	99.743	2A2		0.000	100
1A2f	Liquid	0.036	99.779	1A2a	Biomass	0.000	100
1A3ai(i)	Liquid	0.034	99.813	2C7a		0.000	100

## CO

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	44.994	44.994	Yes	1A2a	Gaseous	0.042	99.560	
1A4bii	Liquid	10.629	55.623	Yes	1A1a	Other	0.040	99.600	
1A3dii	Liquid	7.487	63.110	Yes	2G		0.039	99.639	
1A5a	Biomass	5.658	68.768	Yes	1A2f	Biomass	0.036	99.676	
1A3bi	Gasoline	5.302	74.070	Yes	1A3bi	Gaseous	0.028	99.704	
1A2d	Biomass	4.763	78.833	Yes	1A4ci	Liquid	0.026	99.730	
1A4aii	Liquid	4.490	83.322	Yes	1A2e	Biomass	0.025	99.755	
1A1a	Biomass	3.846	87.168		1A2gviii	Gaseous	0.025	99.780	
1A4cii	Liquid	2.574	89.742		1A2b	Liquid	0.022	99.801	
1A2gvii	Liquid	2.095	91.838		1A4ai	Gaseous	0.018	99.819	
1A3biv	Gasoline	0.993	92.831		1A2gviii	Peat	0.017	99.836	
1A2gviii	Biomass	0.834	93.665		1A4bi	Gaseous	0.017	99.853	
1A2f	Liquid	0.666	94.331		1A2e	Peat	0.017	99.870	
1A3biii	Diesel oil	0.615	94.946		1A2gviii	Liquid	0.017	99.887	
1A1a	Peat	0.468	95.414		1A2d	Other	0.015	99.902	
1A4ci	Biomass	0.403	95.816		1A3biv	Diesel oil	0.013	99.915	
1A1a	Solid	0.384	96.200		1A2f	Gaseous	0.013	99.928	
1A3bii	Diesel oil	0.337	96.537		1A1b	Biomass	0.011	99.939	
1A2f	Solid	0.336	96.873		1A4bi	Peat	0.010	99.948	
1A5a	Liquid	0.235	97.108		1A2c	Gaseous	0.009	99.957	
1A4ai	Biomass	0.233	97.341		1A2gviii	Other	0.008	99.965	
1A3bi	Diesel oil	0.226	97.567		1A4ai	Peat	0.006	99.971	
1A2a	Solid	0.208	97.775		1A2e	Other	0.004	99.974	

1A2d	Gaseous	0.201	97.976	1A2e	Liquid	0.003	99.977
1A1b	Liquid	0.144	98.120	1A1b	Solid	0.003	99.980
1A2f	Other	0.141	98.261	1A3bii	Gaseous	0.003	99.982
1A1a	Gaseous	0.132	98.393	1A2e	Gaseous	0.003	99.985
1A3bii	Gasoline	0.117	98.510	1A2a	Liquid	0.002	99.987
1A1b	Gaseous	0.107	98.617	1A2c	Biomass	0.002	99.989
1A2d	Liquid	0.101	98.718	1A2e	Solid	0.002	99.991
1A2d	Peat	0.083	98.801	1A4ci	Gaseous	0.002	99.993
1A2c	Liquid	0.082	98.883	1A3biii	Gaseous	0.002	99.994
1A4ciii	Liquid	0.078	98.961	1A4ci	Solid	0.001	99.996
1A4ci	Peat	0.072	99.034	2C7a		0.001	99.997
1A3ai(i)	Liquid	0.068	99.101	1A2b	Solid	0.001	99.998
1A4ai	Liquid	0.067	99.169	1A3ei	Gaseous	0.001	99.999
1A5a	Gaseous	0.065	99.233	1A2d	Solid	0.001	99.999
1A3c	Liquid	0.064	99.298	1A2b	Gaseous	0.000	100
2C1		0.061	99.359	1A2c	Other	0.000	100
1A3aii(i)	Liquid	0.058	99.417	1A2a	Biomass	0.000	100
1A1a	Liquid	0.052	99.469	1A4bi	Other	0.000	100
1A4bi	Liquid	0.050	99.519				

## Pb

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A2d	Biomass	21.65	21.650	Yes	1A2d	Peat	0.067	99.493	
1A1b	Liquid	20.466	42.116	Yes	1A3dii	Liquid	0.065	99.558	
1A5a	Biomass	13.228	55.345	Yes	1A2f	Biomass	0.055	99.614	
1A1a	Peat	7.089	62.434	Yes	1A2f	Liquid	0.053	99.667	
1A2f	Solid	5.161	67.595	Yes	1A2e	Biomass	0.044	99.711	
2G		4.844	72.439	Yes	1A1b	Solid	0.038	99.748	
1A1a	Biomass	4.460	76.899	Yes	1A2gviii	Liquid	0.032	99.781	
1A4bi	Biomass	4.086	80.985	Yes	1A4ciii	Liquid	0.032	99.813	
2C1		3.879	84.864		1A2gviii	Peat	0.030	99.842	
1A3bvi		3.596	88.460		1A2e	Liquid	0.029	99.872	
2C7c		2.894	91.354		1A4ci	Liquid	0.021	99.892	
1A4ci	Peat	1.571	92.925		2C7a		0.016	99.909	
1A1a	Other	0.959	93.884		1A3bi	Gasoline	0.015	99.924	
1A2gviii	Biomass	0.827	94.711		1A2e	Other	0.015	99.938	
1A2e	Peat	0.671	95.383		1A2f	Other	0.012	99.950	
1A4ci	Biomass	0.448	95.831		5C1bv		0.008	99.958	
1A3aii(i)	Liquid	0.434	96.265		2B10a		0.008	99.965	
1A1a	Solid	0.348	96.613		1A2b	Liquid	0.006	99.971	
1A5a	Liquid	0.333	96.946		1A3biii	Diesel oil	0.006	99.977	
1A4ai	Liquid	0.309	97.255		1A4bi	Liquid	0.005	99.982	
1A2d	Other	0.281	97.536		1A2a	Biomass	0.004	99.986	
1A4ai	Biomass	0.265	97.801		5E		0.003	99.989	

1A2c	Liquid	0.236	98.037	1A4ci	Solid	0.003	99.992
2C2		0.226	98.263	1A3bi	Diesel oil	0.003	99.995
1A1a	Liquid	0.222	98.485	1A2c	Biomass	0.002	99.997
1A4bi	Peat	0.216	98.702	2C3		0.001	99.998
1A2d	Liquid	0.166	98.867	1A3bii	Diesel oil	0.001	99.999
1A4ai	Peat	0.141	99.008	1A3biv	Gasoline	0.000	100
2C6		0.119	99.127	1A2d	Solid	0.000	100
1A2gviii	Other	0.106	99.233	1A3bii	Gasoline	0.000	100
1A2e	Solid	0.106	99.339	1A3biv	Diesel oil	0.000	100
1B1b		0.086	99.425				

## Cd

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A5a	Biomass	22.486	22.486	Yes	1A1a	Liquid	0.047	99.540	
1A2d	Biomass	20.944	43.431	Yes	1A2c	Liquid	0.043	99.583	
1A4bi	Biomass	18.755	62.185	Yes	1A2f	Other	0.042	99.626	
1A1a	Biomass	9.208	71.393	Yes	1A2e	Solid	0.039	99.665	
1A1b	Liquid	7.134	78.527	Yes	1A2f	Liquid	0.039	99.704	
2C7c		4.394	82.921	Yes	1A4ciii	Liquid	0.038	99.742	
1A4ci	Biomass	2.052	84.973		1A4ai	Peat	0.035	99.777	
1A1a	Peat	2.029	87.001		1A3bi	Gasoline	0.029	99.806	
1A2f	Solid	1.787	88.788		1A3c	Liquid	0.027	99.833	
1A1a	Other	1.665	90.453		1A2e	Other	0.025	99.858	
2G		1.549	92.003		1B1b		0.024	99.881	
1A2gviii	Biomass	1.526	93.529		1A2f	Biomass	0.022	99.903	
1A4ai	Biomass	1.215	94.744		5C1bv		0.021	99.924	
2C6		1.118	95.862		1A1b	Solid	0.013	99.937	
2C1		0.693	96.555		1A3biii	Diesel oil	0.009	99.946	
1A2gvii	Liquid	0.438	96.993		1A2gviii	Peat	0.008	99.953	
1A4ci	Peat	0.396	97.389		1A2d	Peat	0.008	99.961	
1A1a	Solid	0.355	97.743		1A2a	Biomass	0.007	99.967	
1A4cii	Liquid	0.281	98.024		1A2gviii	Liquid	0.006	99.974	
1A3bvi		0.205	98.229		1A2e	Liquid	0.005	99.979	
1A2gviii	Other	0.198	98.427		1A3bi	Diesel oil	0.004	99.983	
1A2e	Peat	0.169	98.596		1A4ci	Liquid	0.004	99.987	
1A2d	Other	0.162	98.758		1A2c	Biomass	0.004	99.990	
1A4aii	Liquid	0.115	98.873		1A4ci	Solid	0.002	99.992	
5E		0.098	98.971		1A3bii	Diesel oil	0.002	99.994	
1A3dii	Liquid	0.080	99.051		2C3		0.001	99.995	
1A2e	Biomass	0.075	99.126		2C7a		0.001	99.996	
1A5a	Liquid	0.071	99.197		1A2b	Liquid	0.001	99.998	
1A4bii	Liquid	0.068	99.265		1A4bi	Liquid	0.001	99.998	
1A2d	Liquid	0.063	99.327		1A3biv	Gasoline	0.001	99.999	
1A4ai	Liquid	0.057	99.384		1A2d	Solid	0.001	100	

1A4bi	Peat	0.054	99.439	1A3bii	Gasoline	0.000	100
2C2		0.054	99.493	1A3biv	Diesel oil	0.000	100

## Hg

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A2d	Biomass	18.485	18.485	Yes	1A4ciii	Liquid	0.183	99.334	
2C1		18.027	36.512	Yes	5E		0.159	99.493	
1A1a	Peat	9.944	46.456	Yes	1A4bi	Peat	0.082	99.575	
1A1a	Biomass	9.554	56.010	Yes	1A2e	Solid	0.063	99.638	
2B10a		6.666	62.676	Yes	1A5a	Liquid	0.060	99.698	
1A1a	Solid	5.567	68.243	Yes	1A3biv	Gasoline	0.060	99.757	
1A4bi	Biomass	5.074	73.317	Yes	1A4ai	Peat	0.053	99.811	
5C1bv		4.463	77.780	Yes	1A2d	Liquid	0.036	99.846	
1A5a	Biomass	3.650	81.430	Yes	1A2e	Biomass	0.032	99.879	
1A1b	Liquid	2.380	83.810		1A4ci	Solid	0.025	99.904	
1A3bi	Gasoline	2.014	85.824		1A2f	Biomass	0.014	99.918	
1A2f	Liquid	1.793	87.617		1A2a	Solid	0.012	99.931	
1A3biii	Diesel oil	1.480	89.097		1A1a	Liquid	0.010	99.941	
2C6		1.190	90.287		1A2d	Solid	0.009	99.950	
1A2f	Solid	0.933	91.221		1A4ai	Liquid	0.009	99.959	
1A2d	Peat	0.882	92.103		2G		0.009	99.968	
2C7c		0.860	92.963		1A3bii	Gasoline	0.007	99.975	
1A1a	Other	0.832	93.795		1A2c	Liquid	0.007	99.982	
1A2gviii	Biomass	0.737	94.532		1A1b	Solid	0.004	99.987	
1A3bi	Diesel oil	0.676	95.207		1A2e	Other	0.004	99.991	
1A4ci	Peat	0.597	95.804		1B1b		0.002	99.993	
1A4ci	Biomass	0.557	96.361		1A3biv	Diesel oil	0.001	99.994	
2C2		0.401	96.762		1A2gviii	Liquid	0.001	99.995	
1A2gviii	Other	0.395	97.157		1A2a	Biomass	0.001	99.997	
1A3dii	Liquid	0.358	97.514		1A2e	Liquid	0.001	99.997	
1A4ai	Biomass	0.329	97.843		2C7a		0.001	99.998	
1A3bii	Diesel oil	0.307	98.150		1A4ci	Liquid	0.001	99.999	
1A2f	Other	0.301	98.451		1A2b	Liquid	0.001	99.999	
1A2e	Peat	0.278	98.729		1A2c	Biomass	0.001	100	
1A2d	Other	0.219	98.949		1A4bi	Liquid	0.000	100	
1A2gviii	Peat	0.202	99.151						

As

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A1a	Peat	24.803	24.803	Yes	1B1b		0.096	99.477	
1A1b	Liquid	21.198	46.001	Yes	1A2gviii	Other	0.076	99.553	
2C7c		16.435	62.436	Yes	5E		0.064	99.617	
1A2d	Biomass	7.164	69.600	Yes	1A4ciii	Liquid	0.062	99.679	
1A2f	Solid	5.303	74.903	Yes	1A2f	Liquid	0.045	99.724	
1A4ci	Peat	4.711	79.613	Yes	1A1b	Solid	0.039	99.763	
2C1		3.341	82.954	Yes	1A4ci	Solid	0.036	99.799	
1A4bi	Biomass	2.572	85.526		2G		0.033	99.831	
1A2e	Peat	2.014	87.540		1A2d	Solid	0.028	99.860	
1A3bvi		2.013	89.553		1A2d	Other	0.025	99.885	
1A1a	Solid	1.965	91.518		5C1bv		0.023	99.908	
1A5a	Biomass	1.850	93.368		1A3bi	Gasoline	0.018	99.925	
2C7a		1.116	94.484		1A2gviii	Liquid	0.017	99.942	
1A1a	Biomass	1.002	95.486		1A2e	Liquid	0.015	99.956	
2C6		0.727	96.213		1A4ci	Liquid	0.010	99.967	
1A4bi	Peat	0.648	96.862		1A3biii	Diesel oil	0.007	99.974	
1A4ai	Peat	0.421	97.283		1A2e	Biomass	0.007	99.981	
1A4ci	Biomass	0.281	97.564		1A3bi	Diesel oil	0.003	99.984	
1A5a	Liquid	0.180	97.744		1A2b	Liquid	0.003	99.987	
1A2e	Solid	0.176	97.920		2C3		0.003	99.990	
1A2d	Liquid	0.172	98.092		1A4bi	Liquid	0.003	99.992	
1A4ai	Biomass	0.167	98.259		1A2e	Other	0.002	99.994	
1A1a	Other	0.160	98.419		1A2f	Biomass	0.002	99.996	
1A4ai	Liquid	0.156	98.575		1A3bii	Diesel oil	0.001	99.998	
1A3dii	Liquid	0.126	98.700		1A2f	Other	0.001	99.999	
1A2gviii	Biomass	0.123	98.824		1A2a	Biomass	0.001	99.999	
1A1a	Liquid	0.122	98.945		1A3biv	Gasoline	0.001	100	
1A2c	Liquid	0.119	99.064		1A2c	Biomass	0.000	100	
2C2		0.111	99.176		1A3bii	Gasoline	0.000	100	
1A2d	Peat	0.104	99.279		1A3biv	Diesel oil	0.000	100	
1A2gviii	Peat	0.101	99.381						

Cr

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A1b	Liquid	23.485	23.485	Yes	1A4aii	Liquid	0.034	99.696	
2C1		14.492	37.977	Yes	1A2e	Biomass	0.029	99.724	
1A4bi	Biomass	12.965	50.942	Yes	1A2f	Other	0.027	99.752	
1A5a	Biomass	9.327	60.269	Yes	1B1b		0.025	99.777	

1A3bvi		9.079	69.348	Yes	1A2gviii	Peat	0.023	99.799
2C2		7.142	76.491	Yes	1A2f	Liquid	0.020	99.819
1A2f	Solid	5.946	82.437	Yes	1A4bii	Liquid	0.020	99.839
1A1a	Peat	5.279	87.716		1A3bii	Diesel oil	0.018	99.857
1A1a	Biomass	2.901	90.617		1A2d	Peat	0.016	99.873
1A4ci	Biomass	1.417	92.035		1A5a	Liquid	0.015	99.888
1A4ci	Peat	1.173	93.207		1A2d	Liquid	0.015	99.903
1A2d	Biomass	1.141	94.348		1A4ai	Liquid	0.011	99.914
1A2b	Solid	1.137	95.485		1A4ciii	Liquid	0.011	99.926
1A4ai	Biomass	0.840	96.325		1A2e	Other	0.010	99.936
1A1a	Other	0.660	96.985		5E		0.009	99.945
1A2gviii	Biomass	0.575	97.561		1A1a	Liquid	0.009	99.953
1A2e	Peat	0.501	98.062		1A2c	Liquid	0.009	99.962
1A1a	Solid	0.439	98.501		1A3c	Liquid	0.008	99.970
1A4bi	Peat	0.161	98.662		1A2d	Solid	0.006	99.976
1A2gvii	Liquid	0.130	98.792		2C7a		0.006	99.982
1A2e	Solid	0.121	98.913		1A4ci	Solid	0.003	99.985
1A4ai	Peat	0.105	99.018		5C1bv		0.003	99.988
1A3biii	Diesel oil	0.087	99.104		1A2a	Biomass	0.003	99.991
1A2gviii	Other	0.087	99.191		1A2b	Liquid	0.002	99.993
1A4cii	Liquid	0.083	99.274		1A3biv	Gasoline	0.002	99.995
2C7c		0.064	99.338		1A2c	Biomass	0.001	99.996
2G		0.055	99.393		1A2gviii	Liquid	0.001	99.998
1A3bi	Gasoline	0.053	99.447		1A2e	Liquid	0.001	99.999
1A2f	Biomass	0.046	99.493		1A4ci	Liquid	0.001	100
1A2d	Other	0.045	99.537		1A3bii	Gasoline	0.000	100
1A1b	Solid	0.043	99.580		1A4bi	Liquid	0.000	100
1A3dii	Liquid	0.042	99.622		1A3biv	Diesel oil	0.000	100
1A3bi	Diesel oil	0.040	99.661					

## Cu

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A3bvi		75.027	75.027	Yes	2B10a		0.020	99.803	
1A5a	Biomass	4.987	80.015	Yes	1A2e	Solid	0.017	99.820	
1A1a	Peat	3.078	83.093		1A2e	Biomass	0.017	99.836	
1A1b	Liquid	3.016	86.109		1A4ciii	Liquid	0.016	99.853	
1A1a	Biomass	1.960	88.069		1A2d	Peat	0.015	99.868	
1A2gvii	Liquid	1.618	89.687		2C7a		0.014	99.882	
2C7c		1.241	90.929		1A3bi	Gasoline	0.014	99.896	
2C1		1.171	92.100		1A2gviii	Peat	0.013	99.909	
1A4cii	Liquid	1.038	93.138		1A4ai	Liquid	0.010	99.919	
1A2d	Biomass	0.900	94.038		1A3bi	Diesel oil	0.010	99.929	
1A4bi	Biomass	0.816	94.854		1A1a	Liquid	0.009	99.937	
1A2f	Solid	0.755	95.609		1A2c	Liquid	0.008	99.945	

1A4ci	Peat	0.676	96.285	5E		0.007	99.953
2G		0.611	96.896	1A2f	Other	0.007	99.960
1A4aii	Liquid	0.427	97.322	1A2f	Biomass	0.006	99.966
1A1a	Other	0.381	97.704	1B1b		0.006	99.971
1A2gviii	Biomass	0.327	98.031	1A1b	Solid	0.006	99.977
1A2e	Peat	0.289	98.320	1A2e	Other	0.005	99.983
1A4bii	Liquid	0.25	98.570	1A3bii	Diesel oil	0.004	99.987
1A2d	Liquid	0.195	98.765	1A2f	Liquid	0.004	99.991
1A2d	Other	0.185	98.950	1A2a	Biomass	0.001	99.993
1A1a	Solid	0.173	99.123	5C1bv		0.001	99.994
2C2		0.104	99.228	1A2gviii	Liquid	0.001	99.995
1A3c	Liquid	0.101	99.329	1A2e	Liquid	0.001	99.996
1A4bi	Peat	0.093	99.422	1A4ci	Solid	0.001	99.997
1A4ci	Biomass	0.090	99.511	1A2c	Biomass	0.001	99.998
1A4ai	Peat	0.060	99.572	1A4ci	Liquid	0.001	99.998
1A4ai	Biomass	0.053	99.625	1A2b	Liquid	0.001	99.999
1A2gviii	Other	0.046	99.671	1A2d	Solid	0.000	99.999
2C6		0.038	99.709	1A3biv	Gasoline	0.000	100
1A3dii	Liquid	0.033	99.741	1A4bi	Liquid	0.000	100
1A3biii	Diesel oil	0.021	99.763	1A3bii	Gasoline	0.000	100
1A5a	Liquid	0.020	99.783	1A3biv	Diesel oil	0.000	100

## Ni

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	15.833	15.833	Yes	1A4bi	Peat	0.230	98.528	
1A5a	Biomass	11.390	27.222	Yes	2B10a		0.219	98.746	
2C7b		8.218	35.440	Yes	1A4cii	Liquid	0.166	98.912	
2C1		7.524	42.964	Yes	1A4ai	Peat	0.149	99.062	
1A1a	Peat	7.512	50.476	Yes	1A2e	Solid	0.138	99.200	
1A2f	Solid	6.734	57.210	Yes	1A2gviii	Other	0.135	99.335	
1A5a	Liquid	5.113	62.323	Yes	1A4bi	Liquid	0.080	99.414	
1A4ai	Liquid	4.791	67.114	Yes	1A2b	Solid	0.071	99.486	
1A1a	Biomass	4.206	71.320	Yes	1A4aii	Liquid	0.068	99.554	
1A2c	Liquid	3.663	74.983	Yes	1A2e	Biomass	0.057	99.611	
1A1a	Liquid	3.488	78.471	Yes	1A1b	Solid	0.049	99.661	
1A2d	Biomass	1.917	80.388	Yes	1A2d	Other	0.045	99.706	
1A3dii	Liquid	1.905	82.293		1A1b	Liquid	0.043	99.749	
1A2d	Liquid	1.894	84.187		1A4bii	Liquid	0.040	99.788	
1A3bvi		1.857	86.044		1A2f	Other	0.036	99.825	
1A4ci	Biomass	1.731	87.775		1A2f	Biomass	0.036	99.860	
1A4ci	Peat	1.671	89.446		1A2gviii	Peat	0.033	99.894	
1A1a	Other	1.284	90.730		1A3bi	Gasoline	0.028	99.921	
1A1a	Solid	1.052	91.781		1B1b		0.020	99.941	
1A4ai	Biomass	1.025	92.807		1A3c	Liquid	0.016	99.958	

1A2gviii	Biomass	0.752	93.559	1A2e	Other	0.013	99.970
1A2e	Peat	0.714	94.273	1A2d	Solid	0.007	99.977
2C2		0.490	94.763	5C1bv		0.006	99.983
1A2gviii	Liquid	0.489	95.252	1A4ci	Solid	0.004	99.987
2C7c		0.472	95.724	1A2a	Biomass	0.003	99.990
1A2e	Liquid	0.457	96.182	1A3biii	Diesel oil	0.003	99.993
1A2f	Liquid	0.377	96.558	2C7a		0.002	99.995
1A4ci	Liquid	0.319	96.877	1A2c	Biomass	0.002	99.997
1A4ciii	Liquid	0.317	97.195	1A3bi	Diesel oil	0.001	99.998
1A2b	Liquid	0.305	97.500	1A3biv	Gasoline	0.001	99.999
2G		0.301	97.801	1A3bii	Diesel oil	0.001	100
1A2gvii	Liquid	0.259	98.060	1A3bii	Gasoline	0.00	100
1A2d	Peat	0.238	98.298	1A3biv	Diesel oil	0.000	100

## Se

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	54.416	54.416	Yes	1A4bii	Liquid	0.118	99.766	
2C7a		27.418	81.833	Yes	1A4ciii	Liquid	0.065	99.831	
1A3bvi		6.173	88.006		1A3bi	Gasoline	0.050	99.881	
1A4ci	Biomass	5.945	93.951		1A3c	Liquid	0.048	99.928	
1A4ai	Biomass	3.525	97.475		1A3biii	Diesel oil	0.030	99.958	
1A2gvii	Liquid	0.762	98.237		1A5a	Liquid	0.020	99.978	
1A4cii	Liquid	0.489	98.726		1A3bi	Diesel oil	0.014	99.992	
2C7c		0.423	99.150		1A3bii	Diesel oil	0.006	99.998	
1A4aii	Liquid	0.201	99.351		1A3biv	Gasoline	0.001	100	
1A3dii	Liquid	0.156	99.507		1A3bii	Gasoline	0.000	100	
5C1bv		0.141	99.648		1A3biv	Diesel oil	0.000	100	

## Zn

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	26.550	26.550	Yes	1A2e	Solid	0.029	99.703	
1A5a	Biomass	19.099	45.649	Yes	1A3bi	Gasoline	0.029	99.731	
1A3bvi		13.327	58.976	Yes	1A4ciii	Liquid	0.027	99.759	
2C6		9.717	68.693	Yes	1A4ai	Peat	0.025	99.784	
1A1a	Biomass	8.030	76.723	Yes	1A2f	Biomass	0.024	99.808	
1A1b	Liquid	3.607	80.330	Yes	1A5a	Liquid	0.023	99.831	
1A4ci	Biomass	2.903	83.232		1A2e	Other	0.021	99.852	
1A1a	Other	2.333	85.566		1A3biii	Diesel oil	0.019	99.871	
2C1		1.725	87.291		1A3c	Liquid	0.017	99.887	

1A4ai	Biomass	1.720	89.010	1A4ai	Liquid	0.014	99.901
1A2gviii	Biomass	1.527	90.537	1A2gviii	Peat	0.013	99.914
1A1a	Peat	1.419	91.956	1A1a	Liquid	0.012	99.925
2C2		1.186	93.142	1A2d	Peat	0.011	99.937
1A2f	Solid	1.022	94.164	1A2c	Liquid	0.011	99.947
1A2d	Biomass	0.866	95.029	1A3bi	Diesel oil	0.009	99.956
1A2gviii	Other	0.777	95.806	1A1b	Solid	0.007	99.962
1A2f	Liquid	0.757	96.564	1A4ci	Solid	0.006	99.968
1A2f	Other	0.647	97.211	1A2a	Biomass	0.006	99.974
2C7c		0.452	97.662	1B1b		0.004	99.978
1A1a	Solid	0.353	98.015	5C1bv		0.004	99.982
1A4ci	Peat	0.283	98.298	1A3bii	Diesel oil	0.004	99.986
1A2gvii	Liquid	0.266	98.564	2C7a		0.004	99.989
2B10a		0.179	98.742	1A2c	Biomass	0.003	99.992
1A4cii	Liquid	0.170	98.913	1A2gviii	Liquid	0.002	99.994
2G		0.154	99.066	1A2d	Solid	0.002	99.996
1A2d	Liquid	0.123	99.189	1A2e	Liquid	0.001	99.997
1A2e	Peat	0.121	99.311	1A4ci	Liquid	0.001	99.998
1A2d	Other	0.097	99.408	1A3biv	Gasoline	0.001	99.999
1A4aii	Liquid	0.070	99.478	2C3		0.001	99.999
1A2e	Biomass	0.061	99.539	1A2b	Liquid	0.000	100
1A3dii	Liquid	0.055	99.594	1A4bi	Liquid	0.000	100
1A4bii	Liquid	0.041	99.635	1A3bii	Gasoline	0.000	100
1A4bi	Peat	0.039	99.674	1A3biv	Diesel oil	0.000	100

## PCDD/F

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A1a	Biomass	17.423	17.423	Yes	1A1a	Liquid	0.051	99.517	
1A1a	Other	11.123	28.546	Yes	1A4ai	Liquid	0.050	99.567	
1A4bi	Biomass	10.348	38.894	Yes	1A2f	Solid	0.042	99.609	
5E		9.852	48.746	Yes	1A4bi	Liquid	0.039	99.648	
1A5a	Biomass	7.444	56.191	Yes	1A4ciii	Liquid	0.039	99.687	
2B10a		6.495	62.685	Yes	1A2a	Gaseous	0.031	99.717	
2C1		5.868	68.554	Yes	1A4bi	Peat	0.027	99.744	
1A2gviii	Other	3.938	72.492	Yes	1A3biv	Diesel oil	0.025	99.769	
1A1a	Peat	3.867	76.358	Yes	1A2f	Biomass	0.025	99.794	
1A2d	Biomass	3.827	80.185	Yes	1A5a	Gaseous	0.020	99.814	
1A3bi	Diesel oil	2.509	82.694		1A4ci	Liquid	0.019	99.833	
1A2d	Other	2.232	84.926		2C3		0.019	99.852	
2C7a		2.083	87.009		1A4ai	Peat	0.017	99.869	
1A3bi	Gasoline	1.738	88.747		1A2c	Gaseous	0.013	99.882	
1A3bii	Diesel oil	1.400	90.147		1A2f	Liquid	0.012	99.894	
1A2gviii	Biomass	1.368	91.515		1A2f	Other	0.011	99.905	
1A1a	Solid	1.336	92.851		5C1bv		0.009	99.914	

1A4ci	Biomass	1.135	93.986	1A1b	Biomass	0.009	99.923
1A2d	Peat	0.728	94.714	1A2e	Other	0.008	99.931
1A4ai	Biomass	0.670	95.385	1A2e	Solid	0.008	99.939
2C6		0.592	95.977	1A3bii	Gasoline	0.007	99.946
1A3biii	Diesel oil	0.580	96.556	1A2d	Solid	0.007	99.953
1A2d	Gaseous	0.316	96.872	1A2b	Solid	0.006	99.958
1A2d	Liquid	0.289	97.161	1A4ai	Gaseous	0.006	99.964
2A2		0.284	97.445	1A4bi	Gaseous	0.005	99.969
1A2a	Solid	0.215	97.660	1A2f	Gaseous	0.005	99.974
1B1b		0.213	97.873	1A4ci	Solid	0.004	99.978
1A1b	Liquid	0.201	98.074	2A3		0.003	99.981
1A4ci	Peat	0.195	98.269	1A2b	Liquid	0.003	99.984
1A1a	Gaseous	0.135	98.404	1A2gviii	Gaseous	0.003	99.987
2L		0.133	98.537	1A2e	Liquid	0.002	99.989
1A3biv	Gasoline	0.131	98.668	1A2c	Biomass	0.002	99.991
2D3b		0.102	98.770	1A2a	Biomass	0.002	99.994
1A2e	Peat	0.098	98.868	2G		0.002	99.996
1A2gviii	Liquid	0.094	98.963	1A2e	Gaseous	0.002	99.998
2A1		0.093	99.056	1A3ei	Gaseous	0.001	99.998
1A3dii	Liquid	0.090	99.145	1A4ci	Gaseous	0.001	99.999
1A1b	Gaseous	0.081	99.227	1A2a	Liquid	0.000	99.999
1A2gviii	Peat	0.069	99.296	1A2b	Gaseous	0.000	100
1A2e	Biomass	0.066	99.362	1A1b	Solid	0.000	100
1A2c	Liquid	0.052	99.414	1A2c	Other	0.000	100
1A5a	Liquid	0.052	99.466	1A4bi	Other	0.000	100

#### PAH-4

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
1A4bi	Biomass	92.442	92.442	Yes	1A3dii	Liquid	0.009	99.917	
1A1a	Biomass	1.275	93.718		1A3c	Liquid	0.009	99.926	
1A1a	Other	1.176	94.894		1A4ai	Biomass	0.009	99.935	
1A2gviii	Other	0.795	95.689		1A2b	Liquid	0.008	99.943	
1A2d	Biomass	0.707	96.396		1A2gviii	Peat	0.007	99.950	
1A3biii	Diesel oil	0.569	96.965		1A3biv	Gasoline	0.006	99.956	
1A5a	Biomass	0.513	97.479		1A4ci	Peat	0.006	99.962	
1A1a	Liquid	0.262	97.741		5C1bv		0.006	99.968	
1A3bi	Diesel oil	0.255	97.996		1A2e	Liquid	0.005	99.973	
1A2d	Other	0.243	98.239		1A2e	Biomass	0.005	99.978	
1A2d	Liquid	0.164	98.402		1A4ciii	Liquid	0.004	99.982	
1A3bi	Gasoline	0.158	98.560		1A2c	Biomass	0.004	99.985	
1A4ai	Liquid	0.154	98.714		1A2e	Peat	0.003	99.988	
1A2gviii	Biomass	0.151	98.865		2G		0.003	99.991	
1A2gvii	Liquid	0.148	99.013		1A2f	Biomass	0.002	99.993	
1A1a	Peat	0.137	99.150		1A1a	Solid	0.002	99.994	

1A4bi	Liquid	0.118	99.268	1B1b		0.001	99.995
1A4cii	Liquid	0.095	99.363	2A1		0.001	99.996
1A3bii	Diesel oil	0.086	99.449	1A4bi	Peat	0.001	99.997
2D3i		0.066	99.515	1A2a	Liquid	0.001	99.998
1A5a	Liquid	0.064	99.579	1A2e	Other	0.001	99.998
1A4ci	Liquid	0.054	99.633	1A4ai	Peat	0.001	99.999
2C1		0.051	99.684	1A3biv	Diesel oil	0.001	99.999
1A4aii	Liquid	0.039	99.723	1A3bii	Gasoline	0.000	100
1A1b	Liquid	0.033	99.756	1A2a	Biomass	0.000	100
1A2gviii	Liquid	0.028	99.784	1A2f	Solid	0.000	100
1A2d	Peat	0.024	99.807	1A4bi	Other	0.000	100
1A4bii	Liquid	0.023	99.830	1A2e	Solid	0.000	100
1A2f	Other	0.018	99.848	1A2d	Solid	0.000	100
1A2c	Liquid	0.017	99.865	1A2b	Solid	0.000	100
1A2f	Liquid	0.016	99.881	1A4ci	Solid	0.000	100
1A4ci	Biomass	0.015	99.896	1A2a	Solid	0.000	100
2C2		0.012	99.908	1A1b	Solid	0.000	100

## HCB

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
2B10a		65.506	65.506	Yes	1A3biv	Gasoline	0.009	99.952	
2C7a		28.186	93.691	Yes	1A4ci	Solid	0.008	99.960	
1A1a	Biomass	2.130	95.821		1A2e	Biomass	0.007	99.968	
1A4bi	Biomass	1.152	96.973		2D3i		0.007	99.975	
1A2d	Biomass	0.551	97.524		1A3bi	Gaseous	0.004	99.979	
1A2gviii		0.464	97.988		1A2f	Solid	0.004	99.982	
1A3biii	Diesel oil	0.380	98.369		1A2gviii	Other	0.004	99.986	
1A3bi	Gasoline	0.315	98.684		1A5a	Liquid	0.003	99.989	
1A2gviii	Biomass	0.236	98.920		1A2f	Biomass	0.003	99.992	
1A3bi	Diesel oil	0.174	99.094		1A2a	Solid	0.002	99.993	
2C3		0.171	99.265		1A3bii	Gasoline	0.001	99.995	
1A5a	Biomass	0.166	99.431		1A1a	Solid	0.001	99.996	
1A4ci	Biomass	0.126	99.557		1A2d	Other	0.001	99.997	
3Df		0.086	99.643		1A3biii	Gaseous	0.001	99.997	
1A3bii	Diesel oil	0.079	99.722		1A2e	Solid	0.001	99.998	
1A4ai	Biomass	0.075	99.797		1A2d	Solid	0.001	99.999	
2C1		0.071	99.868		1A2b	Solid	0.000	99.999	
1A3dii	Liquid	0.023	99.891		1A3biv	Diesel oil	0.000	99.999	
5C1bv		0.023	99.914		1A3bii	Gaseous	0.000	100	
1A1a	Other	0.018	99.932		1A2a	Biomass	0.000	100	
1A4ciii	Liquid	0.011	99.943		1A2c	Biomass	0.000	100	

## PCB

NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source	NFR Code	Fuel	Contribution percentage	Cumulative percentage	Key source
2C1		53.753	53.753	Yes	1A2gviii	Biomass	0.003	99.996	
1A4bi	Biomass	13.712	67.466	Yes	2C7a		0.001	99.998	
2A1		13.083	80.548	Yes	1A1a	Solid	0.001	99.998	
1B1b		12.935	93.483		1A4ci	Peat	0.000	99.999	
1A4ci	Biomass	1.498	94.981		1A4ci	Liquid	0.000	99.999	
1A1a	Biomass	1.479	96.460		2A2		0.000	99.999	
1A2f	Solid	1.019	97.479		1A3bi	Diesel oil	0.000	99.999	
1A4ai	Biomass	0.888	98.367		1A3bi	Gasoline	0.000	99.999	
1A2a	Solid	0.478	98.844		1A3bii	Diesel oil	0.000	100	
2C3		0.445	99.289		1A2e	Biomass	0.000	100	
1A2e	Solid	0.152	99.441		1A4ci	Solid	0.000	100	
1A2d	Solid	0.143	99.584		1A3biii	Diesel oil	0.000	100	
1A2b	Solid	0.119	99.704		1A4bi	Peat	0.000	100	
1A2gviii		0.113	99.817		1A2gviii	Other	0.000	100	
2C7c		0.064	99.881		1A2f	Biomass	0.000	100	
5C1bv		0.062	99.943		1A4ai	Peat	0.000	100	
1A3dii	Liquid	0.020	99.962		1A3biv	Gasoline	0.000	100	
1A1a	Other	0.012	99.975		1A2d	Other	0.000	100	
1A2d	Biomass	0.007	99.981		1A2a	Biomass	0.000	100	
1A4ciii	Liquid	0.005	99.987		1A3biv	Diesel oil	0.000	100	
1A4ai	Liquid	0.004	99.991		1A3bii	Gasoline	0.000	100	
1A4bi	Liquid	0.003	99.994		1A2c	Biomass	0.000	100	

## Trend analysis

The key category assessment by trend for the 2023 submission is presented below.

### NO<sub>x</sub>

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A3bi	Gasoline	62.636	306.578	1.864	105.102	Gg	0.064	19.258	19.258	Yes
1A3biii	Diesel oil	58.866	306.578	7.963	105.102	Gg	0.040	11.999	31.257	Yes
1A1a	Solid	36.204	306.578	2.576	105.102	Gg	0.032	9.660	40.917	Yes
1A2d	Biomass	8.656	306.578	12.797	105.102	Gg	0.032	9.654	50.571	Yes
1A1a	Biomass	1.017	306.578	8.055	105.102	Gg	0.025	7.568	58.139	Yes
1A3bi	Diesel oil	6.783	306.578	8.042	105.102	Gg	0.019	5.614	63.753	Yes
1A5a	Biomass	0.032	306.578	3.821	105.102	Gg	0.012	3.741	67.494	Yes
1A4bi	Biomass	3.303	306.578	4.249	105.102	Gg	0.010	3.061	70.555	Yes

3Da1		9.143	306.578	5.575	105.102	Gg	0.008	2.397	72.952	Yes
1A3bii	Diesel oil	4.439	306.578	3.841	105.102	Gg	0.008	2.277	75.230	Yes
1A4cii	Liquid	12.825	306.578	2.281	105.102	Gg	0.007	2.078	77.308	Yes
1A1a	Gaseous	8.859	306.578	1.187	105.102	Gg	0.006	1.817	79.125	Yes
3Da2a		3.070	306.578	2.800	105.102	Gg	0.006	1.716	80.841	Yes
1A3dii	Liquid	9.130	306.578	4.810	105.102	Gg	0.005	1.650	82.491	
1A1a	Other	0.006	306.578	1.315	105.102	Gg	0.004	1.289	83.780	
1A2a	Gaseous	0.203	306.578	1.080	105.102	Gg	0.003	0.993	84.773	
1A2f	Solid	3.724	306.578	0.380	105.102	Gg	0.003	0.881	85.654	
1A2a	Solid	2.398	306.578	1.662	105.102	Gg	0.003	0.824	86.478	
1A2d	Solid	2.455	306.578	0.017	105.102	Gg	0.003	0.810	87.288	
1A2c	Liquid	1.137	306.578	1.186	105.102	Gg	0.003	0.782	88.070	
1A4bii	Liquid	0.396	306.578	0.919	105.102	Gg	0.003	0.770	88.840	
1A5a	Liquid	2.178	306.578	1.446	105.102	Gg	0.002	0.687	89.527	
1A2f	Liquid	0.665	306.578	0.915	105.102	Gg	0.002	0.675	90.202	
1A4aii	Liquid	5.216	306.578	1.121	105.102	Gg	0.002	0.655	90.857	
1A1a	Liquid	3.798	306.578	0.686	105.102	Gg	0.002	0.605	91.462	
1A2gviii	Biomass	0.862	306.578	0.909	105.102	Gg	0.002	0.602	92.064	
1A2gvii	Liquid	12.65	306.578	4.905	105.102	Gg	0.002	0.558	92.621	
1A2gviii	Other	0.148	306.578	0.547	105.102	Gg	0.002	0.487	93.109	
1A4ciii	Liquid	3.580	306.578	1.718	105.102	Gg	0.002	0.482	93.590	
1A3bii	Gasoline	1.532	306.578	0.067	105.102	Gg	0.001	0.450	94.041	
1A2d	Liquid	2.136	306.578	1.174	105.102	Gg	0.001	0.434	94.475	
1A4bi	Liquid	3.114	306.578	0.678	105.102	Gg	0.001	0.383	94.858	
1A1b	Gaseous	1.269	306.578	0.786	105.102	Gg	0.001	0.344	95.202	
3Da3		0.727	306.578	0.585	105.102	Gg	0.001	0.330	95.532	
1A1a	Peat	9.791	306.578	3.048	105.102	Gg	0.001	0.303	95.835	
1A4ci	Biomass	0.520	306.578	0.472	105.102	Gg	0.001	0.288	96.123	
3Da2c		0.103	306.578	0.291	105.102	Gg	0.001	0.251	96.374	
1A2d	Other	0.044	306.578	0.243	105.102	Gg	0.001	0.224	96.597	
1A4ai	Biomass	0.156	306.578	0.275	105.102	Gg	0.001	0.218	96.815	
1A2e	Liquid	0.662	306.578	0.043	105.102	Gg	0.001	0.180	96.996	
1A3ai(i)	Liquid	0.251	306.578	0.270	105.102	Gg	0.001	0.180	97.176	
1A5a	Gaseous	0.116	306.578	0.219	105.102	Gg	0.001	0.176	97.352	
1A4ai	Liquid	2.314	306.578	0.950	105.102	Gg	0.001	0.154	97.506	
1A2d	Gaseous	3.395	306.578	1.010	105.102	Gg	0.001	0.151	97.657	
2B2		0.744	306.578	0.402	105.102	Gg	0.000	0.145	97.801	
1A2gviii	Gaseous	0.075	306.578	0.160	105.102	Gg	0.000	0.132	97.933	
1A2b	Solid	0.422	306.578	0.015	105.102	Gg	0.000	0.127	98.060	
2B10a		0.061	306.578	0.147	105.102	Gg	0.000	0.124	98.184	
1A3biv	Gasoline	0.065	306.578	0.142	105.102	Gg	0.000	0.117	98.302	
1A2f	Other	0.580	306.578	0.309	105.102	Gg	0.000	0.108	98.410	
1A4ci	Peat	0.040	306.578	0.119	105.102	Gg	0.000	0.104	98.514	
3B1b		0.135	306.578	0.148	105.102	Gg	0.000	0.100	98.613	
1A2gviii	Peat	0.046	306.578	0.109	105.102	Gg	0.000	0.091	98.705	
1A2gviii	Liquid	1.266	306.578	0.342	105.102	Gg	0.000	0.091	98.795	
1A2a	Liquid	0.466	306.578	0.070	105.102	Gg	0.000	0.088	98.883	
3Da2b		0.063	306.578	0.110	105.102	Gg	0.000	0.087	98.970	

3B4gii		0.027	306.578	0.089	105.102	Gg	0.000	0.078	99.048
1A3c	Liquid	4.212	306.578	1.521	105.102	Gg	0.000	0.076	99.124
1A2d	Peat	1.476	306.578	0.574	105.102	Gg	0.000	0.066	99.190
1A4ci	Liquid	0.744	306.578	0.318	105.102	Gg	0.000	0.062	99.253
1A2e	Peat	0.165	306.578	0.118	105.102	Gg	0.000	0.061	99.313
1A2e	Solid	0.247	306.578	0.026	105.102	Gg	0.000	0.057	99.370
1A2e	Biomass	0.032	306.578	0.062	105.102	Gg	0.000	0.050	99.421
1A2c	Other	0.152	306.578	0.003	105.102	Gg	0.000	0.048	99.469
1A4ai	Gaseous	0.043	306.578	0.062	105.102	Gg	0.000	0.047	99.516
1A4bi	Gaseous	0.030	306.578	0.058	105.102	Gg	0.000	0.047	99.563
1A1b	Biomass		306.578	0.046	105.102	Gg	0.000	0.045	99.608
1A1b	Liquid	2.045	306.578	0.659	105.102	Gg	0.000	0.041	99.649
1A3aii(i)	Liquid	0.311	306.578	0.065	105.102	Gg	0.000	0.041	99.689
1A3biv	Diesel oil		306.578	0.035	105.102	Gg	0.000	0.035	99.724
1A2f	Biomass	0.000	306.578	0.029	105.102	Gg	0.000	0.029	99.752
3B4gi		0.052	306.578	0.045	105.102	Gg	0.000	0.026	99.779
3B4e		0.016	306.578	0.031	105.102	Gg	0.000	0.025	99.803
1A2c	Gaseous	0.181	306.578	0.086	105.102	Gg	0.000	0.024	99.827
3B4h		0.042	306.578	0.036	105.102	Gg	0.000	0.021	99.848
3B3		0.068	306.578	0.006	105.102	Gg	0.000	0.018	99.866
1A4ci	Gaseous	0.056	306.578	0.006	105.102	Gg	0.000	0.013	99.879
1A2c	Biomass	0.089	306.578	0.018	105.102	Gg	0.000	0.013	99.892
1A3biii	Gaseous		306.578	0.013	105.102	Gg	0.000	0.013	99.904
1A2b	Liquid	0.240	306.578	0.095	105.102	Gg	0.000	0.012	99.917
3B1a		0.156	306.578	0.044	105.102	Gg	0.000	0.009	99.926
1A2e	Gaseous	0.088	306.578	0.021	105.102	Gg	0.000	0.009	99.934
3B4giii		0.001	306.578	0.009	105.102	Gg	0.000	0.008	99.943
1A4ai	Peat	0.015	306.578	0.013	105.102	Gg	0.000	0.008	99.951
1A4ci	Solid	0.024	306.578	0.016	105.102	Gg	0.000	0.008	99.958
1A3bi	Gaseous		306.578	0.007	105.102	Gg	0.000	0.007	99.965
1A4bi	Peat	0.065	306.578	0.017	105.102	Gg	0.000	0.006	99.971
3B2		0.006	306.578	0.007	105.102	Gg	0.000	0.005	99.976
1A2b	Gaseous		306.578	0.005	105.102	Gg	0.000	0.005	99.981
1A2e	Other	0.001	306.578	0.004	105.102	Gg	0.000	0.004	99.985
1A2f	Gaseous	0.261	306.578	0.086	105.102	Gg	0.000	0.003	99.989
1A3ei	Gaseous	0.009	306.578	0.006	105.102	Gg	0.000	0.003	99.991
1A2a	Biomass		306.578	0.003	105.102	Gg	0.000	0.003	99.994
3B4giv		0.007	306.578	0.005	105.102	Gg	0.000	0.002	99.996
1A4bi	Other	0.003	306.578	0.000	105.102	Gg	0.000	0.001	99.998
1A1b	Solid	0.005	306.578	0.001	105.102	Gg	0.000	0.001	99.998
2G		0.010	306.578	0.004	105.102	Gg	0.000	0.001	99.999
1A3bii	Gaseous		306.578	0.001	105.102	Gg	0.000	0.001	100
3B4d		0.000	306.578	0.000	105.102	Gg	0.000	0.000	100

NMVOG

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A3bi	Gasoline	49.364	235.049	0.996	82.697	Gg	0.07	23.418	23.418	Yes
1A4bi	Biomass	17.720	235.049	19.575	82.697	Gg	0.057	19.082	42.500	Yes
2D3a		3.825	235.049	7.321	82.697	Gg	0.025	8.547	51.047	Yes
1A3bv		13.655	235.049	1.236	82.697	Gg	0.015	5.105	56.151	Yes
3B1a		7.763	235.049	5.903	82.697	Gg	0.013	4.536	60.688	Yes
3B1b		3.732	235.049	4.147	82.697	Gg	0.012	4.053	64.741	Yes
2D3d		27.500	235.049	6.988	82.697	Gg	0.011	3.844	68.585	Yes
2D3h		8.800	235.049	0.428	82.697	Gg	0.011	3.817	72.402	Yes
1A3biii	Diesel oil	7.843	235.049	0.225	82.697	Gg	0.011	3.625	76.027	Yes
2D3c		6.260	235.049	0.144	82.697	Gg	0.009	2.944	78.970	Yes
1A4aii	Liquid	6.267	235.049	0.432	82.697	Gg	0.008	2.537	81.507	Yes
1A4cii	Liquid	6.642	235.049	1.297	82.697	Gg	0.004	1.487	82.994	
1A1a	Biomass	0.109	235.049	1.075	82.697	Gg	0.004	1.483	84.478	
2H2		2.523	235.049	1.921	82.697	Gg	0.004	1.477	85.955	
2I		1.070	235.049	1.231	82.697	Gg	0.004	1.222	87.177	
2D3i		2.085	235.049	1.581	82.697	Gg	0.004	1.212	88.389	
3Da2a		3.916	235.049	2.194	82.697	Gg	0.003	1.167	89.557	
3B4gii		0.235	235.049	0.750	82.697	Gg	0.003	0.955	90.511	
2D3g		3.956	235.049	2.009	82.697	Gg	0.003	0.883	91.395	
1A3bii	Gasoline	1.669	235.049	0.022	82.697	Gg	0.002	0.808	92.203	
1A3bi	Diesel oil	1.332	235.049	0.083	82.697	Gg	0.002	0.552	92.755	
1A5a	Biomass	0.014	235.049	0.382	82.697	Gg	0.002	0.540	93.294	
3De		1.062	235.049	0.715	82.697	Gg	0.001	0.488	93.782	
3B4h		1.261	235.049	0.769	82.697	Gg	0.001	0.465	94.247	
2D3e		2.638	235.049	0.613	82.697	Gg	0.001	0.451	94.698	
1A1a	Other	0.001	235.049	0.274	82.697	Gg	0.001	0.392	95.090	
2B10a		7.836	235.049	2.532	82.697	Gg	0.001	0.322	95.412	
1A4ci	Peat	0.080	235.049	0.239	82.697	Gg	0.001	0.301	95.713	
1A2gvii	Liquid	2.366	235.049	1.040	82.697	Gg	0.001	0.297	96.010	
3B4e		0.153	235.049	0.248	82.697	Gg	0.001	0.278	96.288	
1A4bii	Liquid	6.597	235.049	2.144	82.697	Gg	0.001	0.252	96.540	
1B2b		0.255	235.049	0.249	82.697	Gg	0.001	0.229	96.769	
3B4gi		0.256	235.049	0.248	82.697	Gg	0.001	0.226	96.995	
1A3dii	Liquid	9.646	235.049	3.550	82.697	Gg	0.001	0.223	97.218	
1A1a	Solid	0.117	235.049	0.175	82.697	Gg	0.001	0.191	97.409	
1A2d	Biomass	0.430	235.049	0.284	82.697	Gg	0.001	0.190	97.598	
3B2		0.105	235.049	0.142	82.697	Gg	0.000	0.150	97.748	
3B3		0.423	235.049	0.249	82.697	Gg	0.000	0.143	97.891	
1A3biv	Gasoline	2.767	235.049	0.878	82.697	Gg	0.000	0.137	98.028	
2B10b		0.134	235.049	0.136	82.697	Gg	0.000	0.128	98.155	
1B2aiv		6.600	235.049	2.234	82.697	Gg	0.000	0.127	98.282	
1A2gviii	Biomass	0.199	235.049	0.147	82.697	Gg	0.000	0.109	98.392	
1A3bii	Diesel oil	0.796	235.049	0.206	82.697	Gg	0.000	0.106	98.498	

1A1a	Peat	0.199	235.049	0.141	82.697	Gg	0.000	0.102	98.600
2H1		2.966	235.049	1.113	82.697	Gg	0.000	0.099	98.699
2C1		0.796	235.049	0.212	82.697	Gg	0.000	0.097	98.796
1A2d	Liquid	0.174	235.049	0.007	82.697	Gg	0.000	0.078	98.874
1A5a	Liquid	0.140	235.049	0.098	82.697	Gg	0.000	0.071	98.945
1A1a	Gaseous	0.042	235.049	0.061	82.697	Gg	0.000	0.067	99.012
1A1b	Liquid	0.005	235.049	0.048	82.697	Gg	0.000	0.066	99.077
1A2gviii	Liquid	0.017	235.049	0.045	82.697	Gg	0.000	0.055	99.132
1B1b		0.037	235.049	0.051	82.697	Gg	0.000	0.054	99.186
3Da3		0.104	235.049	0.073	82.697	Gg	0.000	0.052	99.239
1A2a	Gaseous	0.111	235.049	0.004	82.697	Gg	0.000	0.050	99.288
2D3b		0.900	235.049	0.350	82.697	Gg	0.000	0.047	99.336
1A4ciii	Liquid	0.144	235.049	0.079	82.697	Gg	0.000	0.041	99.377
3B4giii		0.006	235.049	0.030	82.697	Gg	0.000	0.041	99.417
1A4bi	Liquid	0.195	235.049	0.042	82.697	Gg	0.000	0.038	99.455
1A2gviii	Other	0.011	235.049	0.028	82.697	Gg	0.000	0.034	99.489
1B2av		7.411	235.049	2.629	82.697	Gg	0.000	0.030	99.519
1A1b	Gaseous	0.007	235.049	0.022	82.697	Gg	0.000	0.028	99.547
1A1a	Liquid	0.027	235.049	0.028	82.697	Gg	0.000	0.026	99.573
1A5a	Gaseous	0.012	235.049	0.022	82.697	Gg	0.000	0.026	99.599
1A2d	Solid	0.038	235.049	0.001	82.697	Gg	0.000	0.018	99.617
1A4bi	Peat	0.130	235.049	0.033	82.697	Gg	0.000	0.018	99.635
2C7b		0.010	235.049	0.016	82.697	Gg	0.000	0.018	99.653
1A4ai	Peat	0.016	235.049	0.018	82.697	Gg	0.000	0.018	99.671
5A		0.234	235.049	0.071	82.697	Gg	0.000	0.016	99.687
1A4ai	Liquid	0.125	235.049	0.055	82.697	Gg	0.000	0.016	99.703
1A4ci	Biomass	0.020	235.049	0.018	82.697	Gg	0.000	0.015	99.718
1A3aii(i)	Liquid	0.056	235.049	0.009	82.697	Gg	0.000	0.015	99.733
3B4giv		0.041	235.049	0.025	82.697	Gg	0.000	0.015	99.748
5D2		0.022	235.049	0.018	82.697	Gg	0.000	0.015	99.763
1A2d	Other	0.000	235.049	0.010	82.697	Gg	0.000	0.014	99.776
1A3ai(i)	Liquid	0.056	235.049	0.029	82.697	Gg	0.000	0.014	99.790
1A2d	Gaseous	0.077	235.049	0.019	82.697	Gg	0.000	0.012	99.801
5D1		0.003	235.049	0.009	82.697	Gg	0.000	0.012	99.813
1A2f	Other		235.049	0.008	82.697	Gg	0.000	0.011	99.825
1A4ai	Biomass	0.007	235.049	0.010	82.697	Gg	0.000	0.011	99.836
2A1		0.054	235.049	0.027	82.697	Gg	0.000	0.011	99.847
1A2d	Peat	0.018	235.049	0.014	82.697	Gg	0.000	0.011	99.857
2C3		0.022	235.049	0.000	82.697	Gg	0.000	0.010	99.868
1A3biv	Diesel oil		235.049	0.007	82.697	Gg	0.000	0.010	99.877
2G		0.027	235.049	0.016	82.697	Gg	0.000	0.010	99.887
2C7c		0.025	235.049	0.002	82.697	Gg	0.000	0.009	99.896
1A2c	Gaseous	0.002	235.049	0.006	82.697	Gg	0.000	0.008	99.904
1A2a	Solid	0.017	235.049	0.011	82.697	Gg	0.000	0.007	99.911
1A4ci	Liquid	0.044	235.049	0.020	82.697	Gg	0.000	0.007	99.918
1A4ai	Gaseous	0.003	235.049	0.006	82.697	Gg	0.000	0.007	99.925
1A4bi	Gaseous	0.003	235.049	0.006	82.697	Gg	0.000	0.007	99.932
1A2e	Peat	0.012	235.049	0.009	82.697	Gg	0.000	0.007	99.938

1A2e	Biomass	0.007	235.049	0.007	82.697	Gg	0.000	0.006	99.944
1A3c	Liquid	0.234	235.049	0.086	82.697	Gg	0.000	0.005	99.949
2L		0.013	235.049	0.001	82.697	Gg	0.000	0.005	99.953
1A2gviii	Peat	0.002	235.049	0.004	82.697	Gg	0.000	0.005	99.958
1A3bi	Gaseous		235.049	0.003	82.697	Gg	0.000	0.005	99.962
3B4d		0.004	235.049	0.005	82.697	Gg	0.000	0.005	99.967
1A2gviii	Gaseous	0.002	235.049	0.003	82.697	Gg	0.000	0.004	99.971
1A2e	Other	0.000	235.049	0.002	82.697	Gg	0.000	0.003	99.974
1A2f	Biomass	0.000	235.049	0.002	82.697	Gg	0.000	0.003	99.977
2A3		0.001	235.049	0.002	82.697	Gg	0.000	0.003	99.979
1A1b	Biomass		235.049	0.002	82.697	Gg	0.000	0.003	99.982
1A2e	Solid	0.007	235.049	0.001	82.697	Gg	0.000	0.002	99.984
2C2			235.049	0.002	82.697	Gg	0.000	0.002	99.986
1A2e	Liquid	0.005	235.049	0.001	82.697	Gg	0.000	0.002	99.988
1A2c	Other	0.003	235.049	0.000	82.697	Gg	0.000	0.001	99.990
1A2f	Liquid	0.005	235.049	0.003	82.697	Gg	0.000	0.001	99.991
1A2a	Liquid	0.003	235.049	0.000	82.697	Gg	0.000	0.001	99.992
1A3biii	Gaseous		235.049	0.001	82.697	Gg	0.000	0.001	99.994
1A2c	Biomass	0.002	235.049	0.001	82.697	Gg	0.000	0.001	99.995
1A2f	Solid	0.009	235.049	0.003	82.697	Gg	0.000	0.001	99.996
2C7a			235.049	0.001	82.697	Gg	0.000	0.001	99.996
1A2b	Liquid	0.001	235.049	0.001	82.697	Gg	0.000	0.001	99.997
1A2a	Biomass		235.049	0.001	82.697	Gg	0.000	0.001	99.998
1A3bii	Gaseous		235.049	0.000	82.697	Gg	0.000	0	99.998
1A2f	Gaseous	0.003	235.049	0.001	82.697	Gg	0.000	0	99.999
1A2c	Liquid	0.004	235.049	0.001	82.697	Gg	0.000	0	99.999
1A4ci	Solid	0.001	235.049	0.000	82.697	Gg	0.000	0	99.999
1A4ci	Gaseous	0.002	235.049	0.001	82.697	Gg	0.000	0	99.999
1A3ei	Gaseous	0.000	235.049	0.000	82.697	Gg	0.000	0	100
1A2e	Gaseous	0.001	235.049	0.000	82.697	Gg	0.000	0	100
1A4bi	Other	0.000	235.049	0.000	82.697	Gg	0.000	0	100
1A2b	Gaseous		235.049	0.000	82.697	Gg	0.000	0	100
1A2b	Solid	0.000	235.049	0.000	82.697	Gg	0.000	0	100
1A1b	Solid		235.049	0.000	82.697	Gg	0.000	0	100

SO<sub>x</sub>

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A1a	Solid	50.545	248.820	2.638	23.296	Gg	0.008	11.334	11.334	Yes
1A2d	Liquid	19.440	248.820	0.280	23.296	Gg	0.006	8.338	19.672	Yes
2H1		22.811	248.820	0.813	23.296	Gg	0.005	7.157	26.829	Yes
1A1a	Peat	8.877	248.820	1.980	23.296	Gg	0.005	6.219	33.047	Yes
1A1a	Liquid	16.678	248.820	0.413	23.296	Gg	0.005	6.214	39.262	Yes
1A2b	Liquid	4.045	248.820	1.330	23.296	Gg	0.004	5.147	44.408	Yes

1A1a	Biomass	0.587	248.820	0.943	23.296	Gg	0.004	4.807	49.215	Yes
1A1b	Liquid	21.319	248.820	2.879	23.296	Gg	0.004	4.778	53.992	Yes
1A2b	Solid	4.034	248.820	1.216	23.296	Gg	0.003	4.537	58.530	Yes
1A5a	Biomass	0.008	248.820	0.764	23.296	Gg	0.003	4.132	62.661	Yes
1B1b		0.795	248.820	0.804	23.296	Gg	0.003	3.949	66.610	Yes
2C1		2.867	248.820	0.967	23.296	Gg	0.003	3.780	70.390	Yes
1A2d	Solid	6.141	248.820	0.018	23.296	Gg	0.002	3.014	73.404	Yes
1A2d	Biomass	6.427	248.820	0.962	23.296	Gg	0.001	1.949	75.353	Yes
1A2gviii	Liquid	4.935	248.820	0.139	23.296	Gg	0.001	1.749	77.102	Yes
1A2a	Solid	7.266	248.820	0.386	23.296	Gg	0.001	1.593	78.696	Yes
1A2e	Liquid	3.245	248.820	0.026	23.296	Gg	0.001	1.505	80.201	Yes
1A4bi	Biomass	0.206	248.820	0.266	23.296	Gg	0.001	1.333	81.533	
1A3biii	Diesel oil	2.738	248.820	0.014	23.296	Gg	0.001	1.310	82.844	
1A1b	Gaseous	0.001	248.820	0.225	23.296	Gg	0.001	1.215	84.058	
1A4ci	Peat	0.072	248.820	0.214	23.296	Gg	0.001	1.123	85.182	
1A2gviii	Biomass	0.349	248.820	0.226	23.296	Gg	0.001	1.044	86.226	
1A2d	Peat	5.876	248.820	0.359	23.296	Gg	0.001	1.034	87.260	
1A2a	Liquid	1.958	248.820	0.006	23.296	Gg	0.001	0.959	88.218	
1A1a	Other	0.027	248.820	0.176	23.296	Gg	0.001	0.940	89.158	
1A4ai	Liquid	10.103	248.820	1.112	23.296	Gg	0.001	0.897	90.055	
1A2f	Solid	1.111	248.820	0.246	23.296	Gg	0.001	0.768	90.823	
1A3dii	Liquid	1.650	248.820	0.042	23.296	Gg	0.000	0.611	91.434	
2C7a		0.000	248.820	0.111	23.296	Gg	0.000	0.603	92.036	
1A4ci	Liquid	3.231	248.820	0.208	23.296	Gg	0.000	0.511	92.547	
2B10a		13.894	248.820	1.393	23.296	Gg	0.000	0.499	93.045	
1A2gvii	Liquid	1.003	248.820	0.004	23.296	Gg	0.000	0.484	93.530	
1A4cii	Liquid	0.986	248.820	0.003	23.296	Gg	0.000	0.484	94.014	
1A3bi	Diesel oil	0.909	248.820	0.006	23.296	Gg	0.000	0.426	94.439	
1A2e	Peat	0.230	248.820	0.098	23.296	Gg	0.000	0.415	94.855	
1A5a	Gaseous	0.000	248.820	0.074	23.296	Gg	0.000	0.403	95.258	
1A2c	Liquid	4.948	248.820	0.396	23.296	Gg	0.000	0.365	95.622	
1A5a	Liquid	5.958	248.820	0.492	23.296	Gg	0.000	0.355	95.977	
1A3bi	Gasoline	0.860	248.820	0.017	23.296	Gg	0.000	0.345	96.322	
1A3bii	Diesel oil	0.705	248.820	0.003	23.296	Gg	0.000	0.341	96.663	
1A2d	Other	0.390	248.820	0.090	23.296	Gg	0.000	0.292	96.955	
1A4ci	Solid	0.093	248.820	0.060	23.296	Gg	0.000	0.275	97.230	
1A2gviii	Peat	0.019	248.820	0.051	23.296	Gg	0.000	0.266	97.496	
1A2e	Biomass	0.030	248.820	0.049	23.296	Gg	0.000	0.250	97.746	
1A2f	Liquid	1.827	248.820	0.127	23.296	Gg	0.000	0.239	97.986	
1A3c	Liquid	0.438	248.820	0.000	23.296	Gg	0.000	0.220	98.206	
1A4aii	Liquid	0.409	248.820	0.001	23.296	Gg	0.000	0.201	98.407	
1A1b	Solid	0.467	248.820	0.010	23.296	Gg	0.000	0.185	98.592	
2C7b		0.004	248.820	0.028	23.296	Gg	0.000	0.151	98.743	
1A4ci	Biomass	0.033	248.820	0.030	23.296	Gg	0.000	0.145	98.888	
1A4bi	Liquid	4.226	248.820	0.375	23.296	Gg	0.000	0.114	99.001	
1A4bi	Peat	0.117	248.820	0.030	23.296	Gg	0.000	0.102	99.103	
1A2c	Biomass	0.240	248.820	0.004	23.296	Gg	0.000	0.099	99.202	
1A2d	Gaseous	0.201	248.820	0.001	23.296	Gg	0.000	0.098	99.300	

1A4ciii	Liquid	0.195	248.820	0.000	23.296	Gg	0.000	0.097	99.397
1A4ai	Peat	0.016	248.820	0.019	23.296	Gg	0.000	0.096	99.493
1A4ai	Biomass	0.010	248.820	0.017	23.296	Gg	0.000	0.088	99.581
1A3ai(i)	Liquid	0.021	248.820	0.016	23.296	Gg	0.000	0.075	99.656
2D3i		0.089	248.820	0.000	23.296	Gg	0.000	0.043	99.698
1A2gviii	Other	0.307	248.820	0.021	23.296	Gg	0.000	0.040	99.738
1A2gviii	Gaseous	0.000	248.820	0.007	23.296	Gg	0.000	0.039	99.777
1A2e	Other	0.001	248.820	0.005	23.296	Gg	0.000	0.028	99.806
1A2c	Gaseous	0.000	248.820	0.005	23.296	Gg	0.000	0.028	99.834
1A2c	Other	0.044	248.820	0.000	23.296	Gg	0.000	0.022	99.857
1A1b	Biomass		248.820	0.004	23.296	Gg	0.000	0.022	99.879
1A2e	Solid	0.783	248.820	0.070	23.296	Gg	0.000	0.017	99.895
1A3bii	Gasoline	0.032	248.820	0.000	23.296	Gg	0.000	0.016	99.911
1A3aii(i)	Liquid	0.021	248.820	0.005	23.296	Gg	0.000	0.014	99.925
2G		0.001	248.820	0.002	23.296	Gg	0.000	0.013	99.938
1A2f	Biomass	0.000	248.820	0.002	23.296	Gg	0.000	0.012	99.950
2C2			248.820	0.002	23.296	Gg	0.000	0.012	99.962
1A4bii	Liquid	0.032	248.820	0.001	23.296	Gg	0.000	0.012	99.975
1A1a	Gaseous	0.002	248.820	0.002	23.296	Gg	0.000	0.009	99.983
1A2a	Gaseous	0.000	248.820	0.001	23.296	Gg	0.000	0.005	99.988
1A2f	Gaseous	0.064	248.820	0.005	23.296	Gg	0.000	0.003	99.991
2L			248.820	0.000	23.296	Gg	0.000	0.002	99.993
1A2a	Biomass		248.820	0.000	23.296	Gg	0.000	0.002	99.995
1A2b	Gaseous		248.820	0.000	23.296	Gg	0.000	0.001	99.996
1A2f	Other	0.033	248.820	0.003	23.296	Gg	0.000	0.001	99.997
2D3g		0.002	248.820	0.000	23.296	Gg	0.000	0.001	99.998
1A3biv	Gasoline	0.007	248.820	0.001	23.296	Gg	0.000	0.001	99.999
1A4ai	Gaseous	0.000	248.820	0.000	23.296	Gg	0.000	0.000	99.999
1A4bi	Gaseous	0.000	248.820	0.000	23.296	Gg	0.000	0.000	99.999
1A4bi	Other	0.000	248.820	0.000	23.296	Gg	0.000	0.000	100
2C7c		0.001	248.820	0.000	23.296	Gg	0.000	0.000	100
1A3bi	Gaseous		248.820	0.000	23.296	Gg	0.000	0.000	100
1A3biv	Diesel oil		248.820	0.000	23.296	Gg	0.000	0.000	100
1A3ei	Gaseous	0.000	248.820	0.000	23.296	Gg	0.000	0.000	100
1A3biii	Gaseous		248.820	0.000	23.296	Gg	0.000	0.000	100
1A2e	Gaseous	0.000	248.820	0.000	23.296	Gg	0.000	0.000	100
1A4ci	Gaseous	0.000	248.820	0.000	23.296	Gg	0.000	0.000	100
1A3bii	Gaseous		248.820	0.000	23.296	Gg	0.000	0.000	100

NH<sub>3</sub>

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
3Da2a		9.936	35.872	6.774	31.042	Gg	0.051	19.548	19.548	Yes
3B1b		4.566	35.872	5.295	31.042	Gg	0.037	14.407	33.955	Yes
3Da1		3.733	35.872	1.978	31.042	Gg	0.035	13.429	47.383	Yes
3B1a		5.687	35.872	5.583	31.042	Gg	0.018	7.091	54.474	Yes

3B3		3.767	35.872	2.619	31.042	Gg	0.018	6.871	61.344	Yes
3B4gii		0.204	35.872	0.589	31.042	Gg	0.012	4.426	65.77	Yes
3Da2c		0.207	35.872	0.582	31.042	Gg	0.011	4.317	70.087	Yes
3B4e		0.386	35.872	0.691	31.042	Gg	0.010	3.832	73.919	Yes
1A3bi	Gasoline	0.235	35.872	0.558	31.042	Gg	0.010	3.806	77.725	Yes
1A4bi	Biomass	0.907	35.872	1.109	31.042	Gg	0.009	3.475	81.200	Yes
2H1		0.542	35.872	0.170	31.042	Gg	0.008	3.205	84.405	
5B2		0.003	35.872	0.216	31.042	Gg	0.006	2.284	86.689	
2B10a		0.582	35.872	0.301	31.042	Gg	0.006	2.170	88.859	
3B4gi		0.535	35.872	0.265	31.042	Gg	0.006	2.119	90.978	
5D1		0.275	35.872	0.385	31.042	Gg	0.004	1.572	92.550	
2D3i		0.097	35.872	0.172	31.042	Gg	0.002	0.944	93.494	
3B4giii		0.013	35.872	0.085	31.042	Gg	0.002	0.794	94.288	
5B1		0.035	35.872	0.104	31.042	Gg	0.002	0.792	95.080	
3B2		0.067	35.872	0.118	31.042	Gg	0.002	0.643	95.723	
3B4giv		0.104	35.872	0.036	31.042	Gg	0.001	0.574	96.297	
2D3e		0.061	35.872	0.004	31.042	Gg	0.001	0.522	96.819	
3Da2b		0.043	35.872	0.075	31.042	Gg	0.001	0.407	97.225	
2C1		0.003	35.872	0.039	31.042	Gg	0.001	0.390	97.616	
2C7b		0.100	35.872	0.055	31.042	Gg	0.001	0.338	97.954	
2G		0.042	35.872	0.010	31.042	Gg	0.001	0.291	98.245	
1A3biii	Diesel oil	0.010	35.872	0.030	31.042	Gg	0.001	0.227	98.471	
1A3bi	Diesel oil	0.005	35.872	0.025	31.042	Gg	0.001	0.224	98.695	
3Da3		1.640	35.872	1.439	31.042	Gg	0.001	0.211	98.905	
2D3g		0.024	35.872	0.002	31.042	Gg	0.001	0.202	99.108	
1A2gviii			35.872	0.017	31.042	Gg	0.000	0.179	99.287	
3B4h		1.873	35.872	1.636	31.042	Gg	0.000	0.159	99.446	
1A1a		0.001	35.872	0.015	31.042	Gg	0.000	0.148	99.594	
2L		0.020	35.872	0.007	31.042	Gg	0.000	0.115	99.710	
1A3bi	Gaseous		35.872	0.009	31.042	Gg	0.000	0.097	99.806	
1A3bii	Diesel oil	0.003	35.872	0.009	31.042	Gg	0.000	0.066	99.872	
1A4ai	Biomass	0.003	35.872	0.006	31.042	Gg	0.000	0.032	99.904	
3B4d		0.006	35.872	0.008	31.042	Gg	0.000	0.028	99.932	
1B1b		0.002	35.872	0.003	31.042	Gg	0.000	0.016	99.948	
1A3biv	Gasoline	0.001	35.872	0.002	31.042	Gg	0.000	0.013	99.961	
1A2gvii	Liquid	0.002	35.872	0.003	31.042	Gg	0.000	0.010	99.971	
1A3bii	Gaseous		35.872	0.001	31.042	Gg	0.000	0.006	99.977	
1A3bii	Gasoline	0.002	35.872	0.001	31.042	Gg	0.000	0.004	99.981	
2C7c		0.000	35.872	0.001	31.042	Gg	0.000	0.004	99.985	
1A4ci	Biomass	0.011	35.872	0.01	31.042	Gg	0.000	0.003	99.988	
1A3biii	Gaseous		35.872	0.000	31.042	Gg	0.000	0.003	99.991	
1A3c	Liquid	0.000	35.872	0.000	31.042	Gg	0.000	0.002	99.994	
1A4aii	Liquid	0.001	35.872	0.001	31.042	Gg	0.000	0.001	99.995	
1A4ciii	Liquid	0.000	35.872	0.000	31.042	Gg	0.000	0.001	99.996	
1A4bii	Liquid	0.000	35.872	0.000	31.042	Gg	0.000	0.001	99.998	
1A4cii	Liquid	0.002	35.872	0.002	31.042	Gg	0.000	0.001	99.999	
1A3biv	Diesel oil		35.872	0.000	31.042	Gg	0.000	0.001	99.999	
1A3dii	Liquid	0.001	35.872	0.001	31.042	Gg	0.000	0.000	100	

1A5a	Liquid	0.000	35.872	0.000	31.042	Gg	0.000	0.000	100
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PM<sub>2.5</sub>

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A4bi	Biomass	7.392	47.150	7.902	14.271	Gg	0.120	36.091	36.091	Yes
1A2d	Biomass	9.011	47.150	0.820	14.271	Gg	0.040	12.153	48.244	Yes
1A3biii	Diesel oil	4.287	47.150	0.118	14.271	Gg	0.025	7.516	55.761	Yes
2C1		3.152	47.150	0.209	14.271	Gg	0.016	4.744	60.504	Yes
1A3bi	Diesel oil	2.366	47.150	0.171	14.271	Gg	0.012	3.477	63.981	Yes
1A3bvi		0.542	47.150	0.616	14.271	Gg	0.010	2.879	66.86	Yes
1A5a	Biomass	0.002	47.150	0.382	14.271	Gg	0.008	2.430	69.289	Yes
1A4cii	Liquid	1.620	47.150	0.149	14.271	Gg	0.007	2.178	71.467	Yes
2H1		1.420	47.150	0.095	14.271	Gg	0.007	2.132	73.600	Yes
1A3bvii		0.404	47.150	0.456	14.271	Gg	0.007	2.124	75.723	Yes
1A1a	Solid	1.103	47.150	0.022	14.271	Gg	0.007	1.990	77.713	Yes
2H2		0.303	47.150	0.403	14.271	Gg	0.007	1.983	79.696	Yes
1A1a	Liquid	0.704	47.150	0.013	14.271	Gg	0.004	1.277	80.973	Yes
1B1c		1.085	47.150	0.138	14.271	Gg	0.004	1.212	82.185	
1A2gvii	Liquid	1.422	47.150	0.258	14.271	Gg	0.004	1.100	83.285	
1A3dii	Liquid	0.548	47.150	0.334	14.271	Gg	0.004	1.073	84.358	
1A2d	Liquid	0.652	47.150	0.037	14.271	Gg	0.003	1.020	85.378	
1A2f	Solid	0.526	47.150	0.000	14.271	Gg	0.003	1.012	86.390	
2A5b		0.504	47.150	0.001	14.271	Gg	0.003	0.963	87.353	
1A4aii	Liquid	0.746	47.150	0.077	14.271	Gg	0.003	0.946	88.299	
1A3bii	Diesel oil	1.074	47.150	0.184	14.271	Gg	0.003	0.898	89.197	
1A2gviii	Liquid	0.464	47.150	0.006	14.271	Gg	0.003	0.853	90.050	
3Dc		0.268	47.150	0.212	14.271	Gg	0.003	0.837	90.887	
1A1a	Peat	0.467	47.150	0.064	14.271	Gg	0.002	0.495	91.382	
2C2		0.014	47.150	0.078	14.271	Gg	0.002	0.472	91.855	
2B10a		0.738	47.150	0.156	14.271	Gg	0.001	0.427	92.281	
1A4ai	Liquid	0.506	47.150	0.089	14.271	Gg	0.001	0.410	92.691	
1A2f	Liquid	0.219	47.150	0.005	14.271	Gg	0.001	0.391	93.082	
1A4ci	Biomass	0.101	47.150	0.090	14.271	Gg	0.001	0.381	93.464	
1B2aiv		0.189	47.150	0.001	14.271	Gg	0.001	0.362	93.825	
2C7c		0.201	47.150	0.006	14.271	Gg	0.001	0.348	94.173	
1A4bii	Liquid	0.242	47.150	0.125	14.271	Gg	0.001	0.332	94.505	
1A4ai	Biomass	0.030	47.150	0.054	14.271	Gg	0.001	0.286	94.790	
2B6		0.149	47.150	0.001	14.271	Gg	0.001	0.283	95.074	
1A4ci	Liquid	0.167	47.150	0.009	14.271	Gg	0.001	0.268	95.342	
1A5a	Liquid	0.308	47.150	0.051	14.271	Gg	0.001	0.265	95.607	
1A2e	Liquid	0.143	47.150	0.002	14.271	Gg	0.001	0.263	95.870	
2I		0.131	47.150	0.000	14.271	Gg	0.001	0.252	96.122	
2D3i		0.064	47.150	0.056	14.271	Gg	0.001	0.230	96.352	
1A2d	Peat	0.154	47.150	0.011	14.271	Gg	0.001	0.230	96.582	
1A2c	Liquid	0.169	47.150	0.016	14.271	Gg	0.001	0.222	96.803	

2D3b		0.087	47.150	0.061	14.271	Gg	0.001	0.218	97.021
2A3		0.124	47.150	0.004	14.271	Gg	0.001	0.215	97.236
1A2d	Solid	0.110	47.150	0.000	14.271	Gg	0.001	0.211	97.447
1A2gviii	Biomass	0.211	47.150	0.090	14.271	Gg	0.001	0.169	97.616
1A2a	Solid	0.089	47.150	0.001	14.271	Gg	0.001	0.162	97.778
1A4bi	Liquid	0.219	47.150	0.042	14.271	Gg	0.001	0.156	97.934
3B1b		0.079	47.150	0.046	14.271	Gg	0.000	0.143	98.078
1A4ci	Peat	0.008	47.150	0.024	14.271	Gg	0.000	0.136	98.214
1A3bi	Gasoline	0.174	47.150	0.032	14.271	Gg	0.000	0.134	98.348
1A2a	Liquid	0.069	47.150	0.000	14.271	Gg	0.000	0.132	98.480
2A5a		0.068	47.150	0.000	14.271	Gg	0.000	0.130	98.610
1A4ciii	Liquid	0.072	47.150	0.041	14.271	Gg	0.000	0.124	98.734
2G		0.153	47.150	0.062	14.271	Gg	0.000	0.100	98.834
1A1b	Liquid	0.096	47.150	0.014	14.271	Gg	0.000	0.093	98.927
3B1a		0.132	47.150	0.054	14.271	Gg	0.000	0.087	99.014
5E		0.301	47.150	0.101	14.271	Gg	0.000	0.065	99.079
1A4bi	Peat	0.208	47.150	0.053	14.271	Gg	0.000	0.064	99.143
2L		0.054	47.150	0.006	14.271	Gg	0.000	0.064	99.207
1A2b	Liquid	0.038	47.150	0.002	14.271	Gg	0.000	0.059	99.266
3B4gii		0.003	47.150	0.009	14.271	Gg	0.000	0.051	99.317
2A2		0.026	47.150	0.000	14.271	Gg	0.000	0.049	99.366
2C7a		0.026	47.150	0.000	14.271	Gg	0.000	0.047	99.413
1A2e	Peat	0.023	47.150	0.000	14.271	Gg	0.000	0.043	99.456
3B4gi		0.014	47.150	0.011	14.271	Gg	0.000	0.040	99.497
1A1a	Biomass	0.265	47.150	0.074	14.271	Gg	0.000	0.038	99.534
1A3biv	Diesel oil		47.150	0.006	14.271	Gg	0.000	0.038	99.572
1B1b		0.003	47.150	0.007	14.271	Gg	0.000	0.037	99.610
1A3biv	Gasoline	0.057	47.150	0.012	14.271	Gg	0.000	0.032	99.641
3B4e		0.004	47.150	0.006	14.271	Gg	0.000	0.032	99.673
3B4h		0.013	47.150	0.008	14.271	Gg	0.000	0.026	99.699
1A2b	Solid	0.014	47.150	0.000	14.271	Gg	0.000	0.026	99.725
1A2c	Biomass	0.016	47.150	0.001	14.271	Gg	0.000	0.025	99.750
1A3c	Liquid	0.084	47.150	0.029	14.271	Gg	0.000	0.023	99.772
1A2e	Solid	0.013	47.150	0.000	14.271	Gg	0.000	0.022	99.795
2D3g		0.016	47.150	0.001	14.271	Gg	0.000	0.022	99.817
3B4giv		0.032	47.150	0.013	14.271	Gg	0.000	0.020	99.837
1A1a	Other	0.001	47.150	0.003	14.271	Gg	0.000	0.017	99.855
3B4giii		0.001	47.150	0.003	14.271	Gg	0.000	0.017	99.872
1A2e	Biomass	0.011	47.150	0.001	14.271	Gg	0.000	0.015	99.887
1A2gviii	Other	0.009	47.150	0.001	14.271	Gg	0.000	0.014	99.901
2A5c		0.049	47.150	0.017	14.271	Gg	0.000	0.014	99.915
1A3bii	Gasoline	0.006	47.150	0.000	14.271	Gg	0.000	0.010	99.925
1A4ai	Peat	0.002	47.150	0.002	14.271	Gg	0.000	0.009	99.934
1A3ai(i)	Liquid	0.003	47.150	0.002	14.271	Gg	0.000	0.009	99.943
2B10b		0.001	47.150	0.002	14.271	Gg	0.000	0.008	99.951
1B2av		0.005	47.150	0.000	14.271	Gg	0.000	0.007	99.959
5C1bv		0.000	47.150	0.001	14.271	Gg	0.000	0.007	99.966
3B2		0.001	47.150	0.001	14.271	Gg	0.000	0.007	99.973

1A2d	Other	0.005	47.150	0.002	14.271	Gg	0.000	0.005	99.978
3B3		0.004	47.150	0.002	14.271	Gg	0.000	0.005	99.983
2D3d		0.000	47.150	0.001	14.271	Gg	0.000	0.004	99.987
2C7d		0.001	47.150	0.001	14.271	Gg	0.000	0.003	99.990
1A3bi	Gaseous		47.150	0.000	14.271	Gg	0.000	0.002	99.992
1A2gviii	Peat	0.001	47.150	0.001	14.271	Gg	0.000	0.002	99.994
1A2e	Other	0.000	47.150	0.000	14.271	Gg	0.000	0.001	99.995
1A2f	Other		47.150	0.000	14.271	Gg	0.000	0.001	99.996
1A2f	Biomass	0.000	47.150	0.000	14.271	Gg	0.000	0.001	99.997
2C3		0.001	47.150	0.000	14.271	Gg	0.000	0.001	99.997
1A1b	Solid	0.000	47.150	0.000	14.271	Gg	0.000	0.001	99.998
1A4ci	Solid	0.001	47.150	0.000	14.271	Gg	0.000	0.001	99.998
1A4bi	Other	0.000	47.150	0.000	14.271	Gg	0.000	0.000	99.999
1A3aii(i)	Liquid	0.002	47.150	0.001	14.271	Gg	0.000	0.000	99.999
3B4d		0.000	47.150	0.000	14.271	Gg	0.000	0.000	99.999
1A3biii	Gaseous		47.150	0.000	14.271	Gg	0.000	0.000	100
5A		0.000	47.150	0.000	14.271	Gg	0.000	0.000	100
1A3bii	Gaseous		47.150	0.000	14.271	Gg	0.000	0.000	100
1A2a	Biomass		47.150	0.000	14.271	Gg	0.000	0.000	100

PM<sub>10</sub>

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A4bi	Biomass	7.630	73.970	8.157	27.809	Gg	0.071	18.107	18.107	Yes
1A3bvii		4.766	73.970	5.391	27.809	Gg	0.049	12.326	30.433	Yes
1A2d	Biomass	11.986	73.970	1.499	27.809	Gg	0.041	10.296	40.729	Yes
3Dc		4.897	73.970	3.843	27.809	Gg	0.027	6.853	47.582	Yes
1A5a	Biomass	0.012	73.970	1.987	27.809	Gg	0.027	6.787	54.370	Yes
1A1a	Solid	4.794	73.970	0.071	27.809	Gg	0.023	5.928	60.298	Yes
1A3biii	Diesel oil	4.287	73.970	0.118	27.809	Gg	0.020	5.115	65.413	Yes
2C1		4.059	73.970	0.227	27.809	Gg	0.018	4.450	69.863	Yes
1A3bvi		0.982	73.970	1.117	27.809	Gg	0.010	2.562	72.425	Yes
1A3bi	Diesel oil	2.366	73.970	0.171	27.809	Gg	0.010	2.462	74.887	Yes
2H1		1.965	73.970	0.149	27.809	Gg	0.008	2.017	76.904	Yes
1A4cii	Liquid	1.620	73.970	0.149	27.809	Gg	0.006	1.577	78.481	Yes
1B1c		1.544	73.970	0.197	27.809	Gg	0.005	1.315	79.796	Yes
1A1a	Liquid	1.057	73.970	0.020	27.809	Gg	0.005	1.292	81.088	Yes
1A2f	Solid	0.971	73.970	0.004	27.809	Gg	0.005	1.235	82.322	
1A2d	Liquid	0.907	73.970	0.027	27.809	Gg	0.004	1.077	83.399	
2H2		0.320	73.970	0.417	27.809	Gg	0.004	1.017	84.416	
2A5b		0.796	73.970	0.011	27.809	Gg	0.004	0.989	85.405	
1A2gvii	Liquid	1.422	73.970	0.258	27.809	Gg	0.004	0.948	86.353	
1A2gviii	Liquid	0.737	73.970	0.015	27.809	Gg	0.004	0.899	87.252	
1A1a	Peat	1.337	73.970	0.263	27.809	Gg	0.003	0.823	88.074	
1A3bii	Diesel oil	1.074	73.970	0.184	27.809	Gg	0.003	0.752	88.826	
1A4aii	Liquid	0.746	73.970	0.077	27.809	Gg	0.003	0.696	89.522	

1A2d	Solid	0.493	73.970	0.000	27.809	Gg	0.003	0.633	90.155
1A4ai	Liquid	0.814	73.970	0.158	27.809	Gg	0.002	0.507	90.663
2C7c		0.408	73.970	0.007	27.809	Gg	0.002	0.500	91.163
1A2a	Solid	0.398	73.970	0.007	27.809	Gg	0.002	0.488	91.651
1A3dii	Liquid	0.565	73.970	0.340	27.809	Gg	0.002	0.437	92.088
1A2f	Liquid	0.358	73.970	0.015	27.809	Gg	0.002	0.410	92.498
1B2aiv		0.312	73.970	0.002	27.809	Gg	0.002	0.396	92.894
1A4ci	Peat	0.042	73.970	0.124	27.809	Gg	0.001	0.371	93.265
1A5a	Liquid	0.485	73.970	0.076	27.809	Gg	0.001	0.364	93.629
2C2		0.020	73.970	0.111	27.809	Gg	0.001	0.355	93.983
1A2d	Peat	0.326	73.970	0.023	27.809	Gg	0.001	0.340	94.324
2A5a		0.230	73.970	0.002	27.809	Gg	0.001	0.287	94.611
2I		0.271	73.970	0.020	27.809	Gg	0.001	0.282	94.893
1A4ci	Liquid	0.269	73.970	0.021	27.809	Gg	0.001	0.273	95.166
1A2e	Liquid	0.221	73.970	0.004	27.809	Gg	0.001	0.271	95.437
3B4gii		0.031	73.970	0.090	27.809	Gg	0.001	0.268	95.705
2B10a		1.156	73.970	0.361	27.809	Gg	0.001	0.254	95.958
2B6		0.198	73.970	0.001	27.809	Gg	0.001	0.253	96.211
1A4bi	Liquid	0.336	73.970	0.055	27.809	Gg	0.001	0.245	96.456
3B4gi		0.189	73.970	0.142	27.809	Gg	0.001	0.242	96.698
1A1b	Liquid	0.223	73.970	0.018	27.809	Gg	0.001	0.224	96.923
1A2c	Liquid	0.267	73.970	0.043	27.809	Gg	0.001	0.197	97.119
1A4ci	Biomass	0.104	73.970	0.095	27.809	Gg	0.001	0.192	97.311
2A3		0.142	73.970	0.004	27.809	Gg	0.001	0.168	97.480
1A2gviii	Biomass	0.678	73.970	0.207	27.809	Gg	0.001	0.165	97.645
1A2a	Liquid	0.117	73.970	0.000	27.809	Gg	0.001	0.150	97.795
1A4ai	Biomass	0.032	73.970	0.056	27.809	Gg	0.001	0.149	97.944
1A2e	Peat	0.111	73.970	0.001	27.809	Gg	0.001	0.138	98.082
1A4bii	Liquid	0.242	73.970	0.125	27.809	Gg	0.000	0.118	98.200
1A1a	Biomass	0.626	73.970	0.269	27.809	Gg	0.000	0.116	98.316
1A3bi	Gasoline	0.174	73.970	0.032	27.809	Gg	0.000	0.116	98.432
2D3b		0.095	73.970	0.066	27.809	Gg	0.000	0.104	98.536
1A4bi	Peat	0.234	73.970	0.060	27.809	Gg	0.000	0.097	98.633
2A2		0.072	73.970	0.001	27.809	Gg	0.000	0.089	98.722
1A2b	Solid	0.072	73.970	0.001	27.809	Gg	0.000	0.089	98.811
3B1b		0.122	73.970	0.072	27.809	Gg	0.000	0.087	98.899
1A2e	Solid	0.065	73.970	0.001	27.809	Gg	0.000	0.079	98.978
2L		0.081	73.970	0.010	27.809	Gg	0.000	0.070	99.048
1A2d	Gaseous	0.069	73.970	0.007	27.809	Gg	0.000	0.063	99.111
1A2b	Liquid	0.059	73.970	0.004	27.809	Gg	0.000	0.061	99.172
2A5c		0.477	73.970	0.162	27.809	Gg	0.000	0.059	99.231
1A2gviii	Other	0.048	73.970	0.002	27.809	Gg	0.000	0.056	99.287
1A4ciii	Liquid	0.077	73.970	0.044	27.809	Gg	0.000	0.052	99.339
3B4giii		0.003	73.970	0.016	27.809	Gg	0.000	0.050	99.389
1B1b		0.008	73.970	0.016	27.809	Gg	0.000	0.046	99.435
3B3		0.086	73.970	0.045	27.809	Gg	0.000	0.042	99.477
2C7a		0.034	73.970	0.000	27.809	Gg	0.000	0.042	99.519
5E		0.301	73.970	0.101	27.809	Gg	0.000	0.041	99.560

2D3i		0.187	73.970	0.060	27.809	Gg	0.000	0.036	99.595
1A2e	Biomass	0.040	73.970	0.005	27.809	Gg	0.000	0.035	99.630
2B10b		0.007	73.970	0.012	27.809	Gg	0.000	0.033	99.663
1A3biv	Gasoline	0.057	73.970	0.012	27.809	Gg	0.000	0.031	99.694
1A2c	Biomass	0.025	73.970	0.001	27.809	Gg	0.000	0.030	99.724
1A1a	Other	0.002	73.970	0.008	27.809	Gg	0.000	0.026	99.750
3B4e		0.006	73.970	0.010	27.809	Gg	0.000	0.025	99.775
1A4ai	Peat	0.009	73.970	0.010	27.809	Gg	0.000	0.023	99.798
3B4h		0.027	73.970	0.016	27.809	Gg	0.000	0.022	99.819
3B1a		0.203	73.970	0.083	27.809	Gg	0.000	0.021	99.840
1A3biv	Diesel oil		73.970	0.006	27.809	Gg	0.000	0.020	99.860
3B4giv		0.227	73.970	0.091	27.809	Gg	0.000	0.019	99.880
2C7d		0.006	73.970	0.007	27.809	Gg	0.000	0.017	99.897
2G		0.153	73.970	0.062	27.809	Gg	0.000	0.015	99.912
2D3g		0.017	73.970	0.002	27.809	Gg	0.000	0.014	99.927
3B2		0.002	73.970	0.004	27.809	Gg	0.000	0.010	99.937
1A3c	Liquid	0.089	73.970	0.031	27.809	Gg	0.000	0.009	99.946
1A2f	Biomass	0.000	73.970	0.002	27.809	Gg	0.000	0.007	99.954
1A2d	Other	0.011	73.970	0.006	27.809	Gg	0.000	0.007	99.961
1A3bii	Gasoline	0.006	73.970	0.000	27.809	Gg	0.000	0.007	99.968
1B2av		0.005	73.970	0.000	27.809	Gg	0.000	0.005	99.973
1A3ai(i)	Liquid	0.003	73.970	0.002	27.809	Gg	0.000	0.004	99.977
5C1bv		0.000	73.970	0.001	27.809	Gg	0.000	0.004	99.981
1A2gviii	Peat	0.005	73.970	0.003	27.809	Gg	0.000	0.003	99.984
2D3d		0.000	73.970	0.001	27.809	Gg	0.000	0.003	99.987
1A2e	Other	0.000	73.970	0.001	27.809	Gg	0.000	0.003	99.990
1A1b	Solid	0.002	73.970	0.000	27.809	Gg	0.000	0.002	99.992
1A2f	Other		73.970	0.001	27.809	Gg	0.000	0.002	99.994
2C3		0.002	73.970	0.000	27.809	Gg	0.000	0.001	99.995
1A4ci	Solid	0.003	73.970	0.002	27.809	Gg	0.000	0.001	99.997
1A3bi	Gaseous		73.970	0.000	27.809	Gg	0.000	0.001	99.998
3B4d		0.000	73.970	0.000	27.809	Gg	0.000	0.000	99.998
1A2a	Biomass		73.970	0.000	27.809	Gg	0.000	0.000	99.999
5A		0.001	73.970	0.001	27.809	Gg	0.000	0.000	99.999
1A3aii(i)	Liquid	0.002	73.970	0.001	27.809	Gg	0.000	0.000	99.999
1A4bi	Other	0.000	73.970	0.000	27.809	Gg	0.000	0.000	100
1A3biii	Gaseous		73.970	0.000	27.809	Gg	0.000	0.000	100
1A3bii	Gaseous		73.970	0.000	27.809	Gg	0.000	0.000	100

TSP

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A5a	Biomass	0.046	98.738	7.641	43.281	Gg	0.077	16.340	16.340	Yes
1A3bvii		9.531	98.738	10.783	43.281	Gg	0.067	14.161	30.501	Yes
1A4bi	Biomass	7.948	98.738	8.496	43.281	Gg	0.051	10.747	41.248	Yes
1A2d	Biomass	14.007	98.738	1.686	43.281	Gg	0.045	9.549	50.797	Yes

1A1a	Solid	7.164	98.738	0.087	43.281	Gg	0.031	6.547	57.344	Yes
2C1		5.545	98.738	0.279	43.281	Gg	0.022	4.613	61.956	Yes
1A3biii	Diesel oil	4.287	98.738	0.118	43.281	Gg	0.018	3.776	65.732	Yes
3Dc		4.897	98.738	3.843	43.281	Gg	0.017	3.636	69.368	Yes
1A3bvi		1.325	98.738	1.506	43.281	Gg	0.009	1.984	71.353	Yes
2H1		2.389	98.738	0.160	43.281	Gg	0.009	1.902	73.254	Yes
1A3bi	Diesel oil	2.366	98.738	0.171	43.281	Gg	0.009	1.858	75.112	Yes
1A2f	Solid	1.954	98.738	0.012	43.281	Gg	0.009	1.810	76.922	Yes
1B1c		2.363	98.738	0.301	43.281	Gg	0.007	1.576	78.498	Yes
1A2d	Liquid	1.441	98.738	0.044	43.281	Gg	0.006	1.261	79.759	Yes
1A4cii	Liquid	1.620	98.738	0.149	43.281	Gg	0.006	1.204	80.963	Yes
1A1a	Liquid	1.214	98.738	0.030	43.281	Gg	0.005	1.077	82.039	
2A5b		1.014	98.738	0.034	43.281	Gg	0.004	0.880	82.919	
1A4ci	Peat	0.160	98.738	0.477	43.281	Gg	0.004	0.871	83.790	
1A2a	Solid	0.941	98.738	0.018	43.281	Gg	0.004	0.846	84.636	
1A2gvii	Liquid	1.422	98.738	0.258	43.281	Gg	0.004	0.784	85.420	
2C7c		0.855	98.738	0.011	43.281	Gg	0.004	0.779	86.199	
1A2gviii	Liquid	0.821	98.738	0.023	43.281	Gg	0.003	0.722	86.921	
1A2gviii	Biomass	1.586	98.738	0.363	43.281	Gg	0.003	0.712	87.634	
1A2d	Solid	0.715	98.738	0.000	43.281	Gg	0.003	0.671	88.305	
2H2		0.329	98.738	0.433	43.281	Gg	0.003	0.620	88.926	
1A3bii	Diesel oil	1.074	98.738	0.184	43.281	Gg	0.003	0.615	89.540	
3B4gi		0.897	98.738	0.673	43.281	Gg	0.003	0.600	90.140	
1A4aii	Liquid	0.746	98.738	0.077	43.281	Gg	0.003	0.535	90.675	
1A4ai	Liquid	0.994	98.738	0.211	43.281	Gg	0.002	0.481	91.156	
2B10a		1.409	98.738	0.413	43.281	Gg	0.002	0.438	91.595	
2D3i		0.598	98.738	0.064	43.281	Gg	0.002	0.424	92.019	
1B2aiv		0.442	98.738	0.002	43.281	Gg	0.002	0.411	92.430	
1A2f	Liquid	0.449	98.738	0.026	43.281	Gg	0.002	0.367	92.797	
2A5a		0.400	98.738	0.005	43.281	Gg	0.002	0.366	93.163	
1A1b	Liquid	0.536	98.738	0.066	43.281	Gg	0.002	0.362	93.525	
1A5a	Liquid	0.591	98.738	0.096	43.281	Gg	0.002	0.349	93.874	
1A2d	Peat	0.435	98.738	0.030	43.281	Gg	0.002	0.344	94.218	
3B4gii		0.061	98.738	0.179	43.281	Gg	0.002	0.327	94.545	
2I		0.590	98.738	0.106	43.281	Gg	0.002	0.326	94.871	
1A1a	Peat	2.295	98.738	0.872	43.281	Gg	0.001	0.286	95.158	
1A4bi	Liquid	0.425	98.738	0.061	43.281	Gg	0.001	0.268	95.426	
2C2		0.023	98.738	0.131	43.281	Gg	0.001	0.258	95.684	
1A2b	Solid	0.277	98.738	0.004	43.281	Gg	0.001	0.252	95.935	
2A5c		1.217	98.738	0.423	43.281	Gg	0.001	0.235	96.171	
1A2e	Liquid	0.260	98.738	0.005	43.281	Gg	0.001	0.233	96.404	
1A4ci	Liquid	0.329	98.738	0.036	43.281	Gg	0.001	0.233	96.636	
2B6		0.248	98.738	0.001	43.281	Gg	0.001	0.231	96.867	
1A2e	Solid	0.251	98.738	0.004	43.281	Gg	0.001	0.228	97.095	
1A3dii	Liquid	0.565	98.738	0.340	43.281	Gg	0.001	0.198	97.293	
1A2c	Liquid	0.299	98.738	0.051	43.281	Gg	0.001	0.172	97.465	
1A2gviii	Other	0.189	98.738	0.003	43.281	Gg	0.001	0.172	97.637	
2A2		0.174	98.738	0.002	43.281	Gg	0.001	0.159	97.796	

1A2e	Peat	0.169	98.738	0.005	43.281	Gg	0.001	0.149	97.945
1A2a	Liquid	0.157	98.738	0.000	43.281	Gg	0.001	0.146	98.091
2A3		0.158	98.738	0.005	43.281	Gg	0.001	0.139	98.230
3B3		0.518	98.738	0.285	43.281	Gg	0.001	0.125	98.355
1A1a	Biomass	1.331	98.738	0.526	43.281	Gg	0.001	0.124	98.479
1A4ci	Biomass	0.108	98.738	0.100	43.281	Gg	0.001	0.113	98.592
1A4bi	Peat	0.260	98.738	0.066	43.281	Gg	0.000	0.103	98.695
1A3bi	Gasoline	0.174	98.738	0.032	43.281	Gg	0.000	0.096	98.790
1A4ai	Biomass	0.037	98.738	0.058	43.281	Gg	0.000	0.090	98.880
3B1b		0.264	98.738	0.155	43.281	Gg	0.000	0.083	98.963
2D3b		0.126	98.738	0.088	43.281	Gg	0.000	0.070	99.033
1B1b		0.019	98.738	0.039	43.281	Gg	0.000	0.066	99.099
5E		0.301	98.738	0.101	43.281	Gg	0.000	0.066	99.165
2B10b		0.023	98.738	0.039	43.281	Gg	0.000	0.061	99.226
1A2d	Gaseous	0.083	98.738	0.009	43.281	Gg	0.000	0.060	99.286
2L		0.093	98.738	0.013	43.281	Gg	0.000	0.058	99.344
1A2e	Biomass	0.073	98.738	0.005	43.281	Gg	0.000	0.058	99.402
1A2b	Liquid	0.069	98.738	0.005	43.281	Gg	0.000	0.054	99.456
1A4ai	Peat	0.034	98.738	0.038	43.281	Gg	0.000	0.050	99.506
1A4bii	Liquid	0.242	98.738	0.125	43.281	Gg	0.000	0.041	99.547
2C7a		0.043	98.738	0.001	43.281	Gg	0.000	0.039	99.586
3B4e		0.014	98.738	0.021	43.281	Gg	0.000	0.033	99.619
3B4giii		0.003	98.738	0.016	43.281	Gg	0.000	0.031	99.650
3B1a		0.445	98.738	0.181	43.281	Gg	0.000	0.031	99.680
1A3biv	Gasoline	0.057	98.738	0.012	43.281	Gg	0.000	0.027	99.708
1A1a	Other	0.013	98.738	0.018	43.281	Gg	0.000	0.026	99.733
1A2c	Biomass	0.029	98.738	0.001	43.281	Gg	0.000	0.025	99.758
1A2f	Other	0.029	98.738	0.002	43.281	Gg	0.000	0.023	99.781
1A4ciii	Liquid	0.077	98.738	0.044	43.281	Gg	0.000	0.022	99.804
3B4h		0.060	98.738	0.037	43.281	Gg	0.000	0.022	99.826
3B4giv		0.234	98.738	0.093	43.281	Gg	0.000	0.020	99.846
2C7d		0.012	98.738	0.015	43.281	Gg	0.000	0.020	99.865
1A3c	Liquid	0.094	98.738	0.032	43.281	Gg	0.000	0.019	99.884
1A2f	Biomass	0.001	98.738	0.009	43.281	Gg	0.000	0.017	99.901
3B2		0.005	98.738	0.009	43.281	Gg	0.000	0.015	99.916
1A3biv	Diesel oil		98.738	0.006	43.281	Gg	0.000	0.013	99.928
1A2d	Other	0.017	98.738	0.013	43.281	Gg	0.000	0.012	99.941
2D3g		0.019	98.738	0.003	43.281	Gg	0.000	0.011	99.952
2G		0.153	98.738	0.062	43.281	Gg	0.000	0.011	99.963
1A1b	Solid	0.009	98.738	0.001	43.281	Gg	0.000	0.006	99.969
1A2e	Other	0.001	98.738	0.003	43.281	Gg	0.000	0.006	99.976
1A3bii	Gasoline	0.006	98.738	0.000	43.281	Gg	0.000	0.005	99.981
1B2av		0.005	98.738	0.000	43.281	Gg	0.000	0.004	99.985
1A2gviii	Peat	0.007	98.738	0.005	43.281	Gg	0.000	0.003	99.988
5C1bv		0.000	98.738	0.001	43.281	Gg	0.000	0.003	99.991
2D3d		0.001	98.738	0.001	43.281	Gg	0.000	0.002	99.993
1A3ai(i)	Liquid	0.003	98.738	0.002	43.281	Gg	0.000	0.002	99.995
2C3		0.003	98.738	0.000	43.281	Gg	0.000	0.002	99.997

1A2a	Biomass		98.738	0.000	43.281	Gg	0.000	0.001	99.998
1A3bi	Gaseous		98.738	0.000	43.281	Gg	0.000	0.001	99.998
3B4d		0.000	98.738	0.000	43.281	Gg	0.000	0.001	99.999
1A3aii(i)	Liquid	0.002	98.738	0.001	43.281	Gg	0.000	0.001	99.999
1A4bi	Other	0.000	98.738	0.000	43.281	Gg	0.000	0.000	100
5A		0.003	98.738	0.001	43.281	Gg	0.000	0.000	100
1A3biii	Gaseous		98.738	0.000	43.281	Gg	0.000	0.000	100
1A3bii	Gaseous		98.738	0.000	43.281	Gg	0.000	0.000	100
1A4ci	Solid	0.008	98.738	0.003	43.281	Gg	0.000	0.000	100

BC

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A4bi	Biomass	2.260	10.135	2.283	3.389	Gg	0.151	40.723	40.723	Yes
1A3biii	Diesel oil	2.272	10.135	0.062	3.389	Gg	0.069	18.600	59.324	Yes
1A3bi	Diesel oil	1.349	10.135	0.097	3.389	Gg	0.035	9.438	68.761	Yes
1A4cii	Liquid	0.877	10.135	0.063	3.389	Gg	0.023	6.147	74.908	Yes
1A2gvii	Liquid	0.877	10.135	0.157	3.389	Gg	0.013	3.637	78.545	Yes
1A3bvi		0.140	10.135	0.159	3.389	Gg	0.011	2.994	81.539	Yes
1A5a	Biomass	0.000	10.135	0.107	3.389	Gg	0.011	2.853	84.392	
1A3bii	Diesel oil	0.591	10.135	0.101	3.389	Gg	0.009	2.568	86.960	
1A3bvii		0.079	10.135	0.089	3.389	Gg	0.006	1.682	88.642	
1A1a	Liquid	0.177	10.135	0.003	3.389	Gg	0.006	1.506	90.147	
1A4aii	Liquid	0.230	10.135	0.021	3.389	Gg	0.006	1.502	91.650	
1A2gviii	Liquid	0.140	10.135	0.002	3.389	Gg	0.004	1.196	92.845	
1A3dii	Liquid	0.069	10.135	0.056	3.389	Gg	0.003	0.874	93.719	
1A2d	Liquid	0.103	10.135	0.004	3.389	Gg	0.003	0.800	94.519	
1A4ai	Liquid	0.152	10.135	0.027	3.389	Gg	0.002	0.640	95.159	
1A2f	Liquid	0.066	10.135	0.001	3.389	Gg	0.002	0.556	95.715	
1A4ci	Liquid	0.050	10.135	0.003	3.389	Gg	0.001	0.378	96.093	
1A4bii	Liquid	0.027	10.135	0.023	3.389	Gg	0.001	0.377	96.471	
1A2e	Liquid	0.043	10.135	0.001	3.389	Gg	0.001	0.367	96.838	
1A5a	Liquid	0.094	10.135	0.018	3.389	Gg	0.001	0.349	97.186	
2H1		0.046	10.135	0.002	3.389	Gg	0.001	0.347	97.534	
1A2c	Liquid	0.050	10.135	0.005	3.389	Gg	0.001	0.325	97.859	
1A4bi	Liquid	0.072	10.135	0.014	3.389	Gg	0.001	0.270	98.128	
1A1a	Solid	0.024	10.135	0.000	3.389	Gg	0.001	0.204	98.332	
2C2		0.001	10.135	0.008	3.389	Gg	0.001	0.197	98.529	
1A4ciii	Liquid	0.024	10.135	0.014	3.389	Gg	0.001	0.152	98.681	
1A2a	Liquid	0.015	10.135	0.000	3.389	Gg	0.000	0.134	98.815	
1A2f	Solid	0.012	10.135	0.000	3.389	Gg	0.000	0.103	98.918	
1A2d	Biomass	0.031	10.135	0.007	3.389	Gg	0.000	0.095	99.013	
1A3biv	Diesel oil		10.135	0.003	3.389	Gg	0.000	0.090	99.103	
1A2b	Liquid	0.011	10.135	0.001	3.389	Gg	0.000	0.087	99.190	
1A3bi	Gasoline	0.021	10.135	0.004	3.389	Gg	0.000	0.085	99.275	
2C1		0.012	10.135	0.001	3.389	Gg	0.000	0.084	99.359	

1A1a	Peat	0.015	10.135	0.002	3.389	Gg	0.000	0.081	99.441
1A1b	Liquid	0.011	10.135	0.001	3.389	Gg	0.000	0.079	99.519
1A4ci	Biomass	0.003	10.135	0.003	3.389	Gg	0.000	0.049	99.568
2D3b		0.005	10.135	0.003	3.389	Gg	0.000	0.048	99.616
2B10a		0.013	10.135	0.003	3.389	Gg	0.000	0.043	99.659
1A4ai	Biomass	0.001	10.135	0.002	3.389	Gg	0.000	0.038	99.696
1A2d	Peat	0.005	10.135	0.000	3.389	Gg	0.000	0.036	99.732
2B6		0.003	10.135	0.000	3.389	Gg	0.000	0.024	99.756
1A2d	Solid	0.002	10.135	0.000	3.389	Gg	0.000	0.021	99.777
1A2gviii	Other	0.002	10.135	0.000	3.389	Gg	0.000	0.021	99.798
1A3biv	Gasoline	0.006	10.135	0.001	3.389	Gg	0.000	0.020	99.818
1A1a	Biomass	0.005	10.135	0.002	3.389	Gg	0.000	0.019	99.837
1A4ci	Peat	0.000	10.135	0.001	3.389	Gg	0.000	0.019	99.856
1A3ai(i)	Liquid	0.002	10.135	0.001	3.389	Gg	0.000	0.017	99.873
1A2a	Solid	0.002	10.135	0.000	3.389	Gg	0.000	0.016	99.889
1A2gviii	Biomass	0.007	10.135	0.003	3.389	Gg	0.000	0.016	99.905
1A3c	Liquid	0.055	10.135	0.019	3.389	Gg	0.000	0.016	99.921
5C1bv		0.000	10.135	0.001	3.389	Gg	0.000	0.015	99.936
1A4bi	Peat	0.007	10.135	0.002	3.389	Gg	0.000	0.015	99.950
1A2e	Peat	0.001	10.135	0.000	3.389	Gg	0.000	0.007	99.957
1A2d	Other	0.002	10.135	0.000	3.389	Gg	0.000	0.007	99.963
1A2c	Biomass	0.001	10.135	0.000	3.389	Gg	0.000	0.006	99.970
5E		0.027	10.135	0.009	3.389	Gg	0.000	0.006	99.976
1A1a	Other	0.000	10.135	0.000	3.389	Gg	0.000	0.005	99.980
1A2e	Other	0.000	10.135	0.000	3.389	Gg	0.000	0.003	99.983
1A2b	Solid	0.000	10.135	0.000	3.389	Gg	0.000	0.003	99.986
1A2e	Biomass	0.000	10.135	0.000	3.389	Gg	0.000	0.002	99.988
1A3bii	Gasoline	0.000	10.135	0.000	3.389	Gg	0.000	0.002	99.991
1A2e	Solid	0.000	10.135	0.000	3.389	Gg	0.000	0.002	99.993
2G		0.001	10.135	0.000	3.389	Gg	0.000	0.001	99.994
1A4bi	Other	0.000	10.135	0.000	3.389	Gg	0.000	0.001	99.995
1A4ai	Peat	0.000	10.135	0.000	3.389	Gg	0.000	0.001	99.997
2A2		0.000	10.135	0.000	3.389	Gg	0.000	0.001	99.998
2A3		0.000	10.135	0.000	3.389	Gg	0.000	0.001	99.998
1A2f	Other		10.135	0.000	3.389	Gg	0.000	0.001	99.999
1A2gviii	Peat	0.000	10.135	0.000	3.389	Gg	0.000	0.000	99.999
2C7a		0.000	10.135	0.000	3.389	Gg	0.000	0.000	99.999
1A3aii(i)	Liquid	0.001	10.135	0.000	3.389	Gg	0.000	0.000	100
1A2f	Biomass	0.000	10.135	0.000	3.389	Gg	0.000	0.000	100
2D3i		0.000	10.135	0.000	3.389	Gg	0.000	0.000	100
2C3		0.000	10.135	0.000	3.389	Gg	0.000	0.000	100
1A1b	Solid	0.000	10.135	0.000	3.389	Gg	0.000	0.000	100
1B1b		0.000	10.135	0.000	3.389	Gg	0.000	0.000	100
1A4ci	Solid	0.000	10.135	0.000	3.389	Gg	0.000	0.000	100
1A2a	Biomass		10.135	0.000	3.389	Gg	0.000	0.000	100

## CO

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A3bi	Gasoline	412.338	764.457	17.903	337.654	Gg	0.215	42.992	42.992	Yes
1A4bi	Biomass	124.241	764.457	151.924	337.654	Gg	0.127	25.406	68.397	Yes
1A4bii	Liquid	34.909	764.457	35.889	337.654	Gg	0.027	5.359	73.756	Yes
1A5a	Biomass	0.130	764.457	19.103	337.654	Gg	0.025	4.986	78.742	Yes
1A3dii	Liquid	22.554	764.457	25.281	337.654	Gg	0.02	4.010	82.753	Yes
1A1a	Biomass	1.545	764.457	12.987	337.654	Gg	0.016	3.221	85.974	
1A4aii	Liquid	11.336	764.457	15.159	337.654	Gg	0.013	2.658	88.631	
1A3bii	Gasoline	18.286	764.457	0.394	337.654	Gg	0.010	2.011	90.643	
1A2d	Biomass	25.273	764.457	16.081	337.654	Gg	0.006	1.288	91.930	
1A2f	Solid	12.941	764.457	1.134	337.654	Gg	0.006	1.200	93.130	
1A3biii	Diesel oil	15.069	764.457	2.077	337.654	Gg	0.006	1.199	94.329	
1A3bi	Diesel oil	9.979	764.457	0.764	337.654	Gg	0.005	0.954	95.283	
1A2gvii	Liquid	8.424	764.457	7.075	337.654	Gg	0.004	0.878	96.161	
1A2a	Solid	6.922	764.457	0.701	337.654	Gg	0.003	0.617	96.778	
1A2f	Liquid	1.281	764.457	2.249	337.654	Gg	0.002	0.441	97.218	
1A2gviii	Biomass	3.848	764.457	2.817	337.654	Gg	0.001	0.292	97.511	
1A1a	Solid	0.793	764.457	1.296	337.654	Gg	0.001	0.248	97.758	
1A1a	Peat	1.544	764.457	1.579	337.654	Gg	0.001	0.235	97.993	
1A2f	Gaseous	1.888	764.457	0.043	337.654	Gg	0.001	0.207	98.200	
1A4ci	Biomass	1.515	764.457	1.359	337.654	Gg	0.001	0.181	98.381	
1A3bii	Diesel oil	4.107	764.457	1.136	337.654	Gg	0.001	0.177	98.558	
1A4ai	Biomass	0.455	764.457	0.788	337.654	Gg	0.001	0.154	98.712	
1A2f	Other		764.457	0.476	337.654	Gg	0.001	0.125	98.837	
1A4cii	Liquid	18.799	764.457	8.690	337.654	Gg	0.001	0.101	98.938	
1A1b	Liquid	0.406	764.457	0.485	337.654	Gg	0.000	0.080	99.018	
1A1b	Gaseous	0.167	764.457	0.363	337.654	Gg	0.000	0.076	99.094	
1A2d	Solid	0.645	764.457	0.002	337.654	Gg	0.000	0.074	99.168	
1A4ci	Peat	0.080	764.457	0.243	337.654	Gg	0.000	0.054	99.222	
1A2c	Liquid	0.191	764.457	0.278	337.654	Gg	0.000	0.051	99.273	
1A4bi	Liquid	0.785	764.457	0.170	337.654	Gg	0.000	0.046	99.319	
1A5a	Gaseous	0.115	764.457	0.219	337.654	Gg	0.000	0.044	99.364	
1A3biv	Gasoline	7.906	764.457	3.354	337.654	Gg	0.000	0.036	99.400	
1A2d	Gaseous	1.836	764.457	0.680	337.654	Gg	0.000	0.034	99.434	
1A1a	Other	0.008	764.457	0.135	337.654	Gg	0.000	0.034	99.468	
1A2a	Gaseous	0.023	764.457	0.140	337.654	Gg	0.000	0.034	99.502	
1A3ai(i)	Liquid	0.231	764.457	0.228	337.654	Gg	0.000	0.033	99.535	
1A2f	Biomass	0.000	764.457	0.123	337.654	Gg	0.000	0.032	99.568	
1A2d	Liquid	1.041	764.457	0.342	337.654	Gg	0.000	0.031	99.598	
1A5a	Liquid	2.031	764.457	0.794	337.654	Gg	0.000	0.027	99.625	
1A1a	Gaseous	0.779	764.457	0.446	337.654	Gg	0.000	0.027	99.652	
1A2a	Liquid	0.246	764.457	0.007	337.654	Gg	0.000	0.026	99.678	
1A2gviii	Other	0.279	764.457	0.027	337.654	Gg	0.000	0.025	99.704	
1A3bi	Gaseous		764.457	0.095	337.654	Gg	0.000	0.025	99.729	
2C7a		0.223	764.457	0.004	337.654	Gg	0.000	0.025	99.753	

1A3aii(i)	Liquid	0.631	764.457	0.194	337.654	Gg	0.000	0.022	99.776
1A4ciii	Liquid	0.442	764.457	0.265	337.654	Gg	0.000	0.018	99.794
1A2b	Liquid	0.020	764.457	0.073	337.654	Gg	0.000	0.017	99.810
1A2gviii	Gaseous	0.053	764.457	0.084	337.654	Gg	0.000	0.016	99.826
1A2e	Biomass	0.077	764.457	0.086	337.654	Gg	0.000	0.014	99.840
1A2c	Other	0.111	764.457	0.001	337.654	Gg	0.000	0.013	99.852
1A2gviii	Peat	0.024	764.457	0.058	337.654	Gg	0.000	0.012	99.865
1A2d	Other	0.008	764.457	0.050	337.654	Gg	0.000	0.012	99.877
1A4ai	Gaseous	0.031	764.457	0.060	337.654	Gg	0.000	0.012	99.889
1A3biv	Diesel oil		764.457	0.045	337.654	Gg	0.000	0.012	99.900
1A4bi	Gaseous	0.030	764.457	0.058	337.654	Gg	0.000	0.012	99.912
1A1b	Biomass		764.457	0.037	337.654	Gg	0.000	0.010	99.922
1A2gviii	Liquid	0.202	764.457	0.057	337.654	Gg	0.000	0.008	99.930
1A2b	Solid	0.079	764.457	0.003	337.654	Gg	0.000	0.008	99.938
1A2d	Peat	0.700	764.457	0.279	337.654	Gg	0.000	0.008	99.946
1A2e	Liquid	0.090	764.457	0.010	337.654	Gg	0.000	0.008	99.954
1A3c	Liquid	0.548	764.457	0.217	337.654	Gg	0.000	0.007	99.961
1A4bi	Peat	0.130	764.457	0.033	337.654	Gg	0.000	0.006	99.967
1A2e	Solid	0.053	764.457	0.007	337.654	Gg	0.000	0.004	99.971
1A2c	Gaseous	0.034	764.457	0.029	337.654	Gg	0.000	0.004	99.975
1A2e	Other	0.002	764.457	0.013	337.654	Gg	0.000	0.003	99.978
1A1a	Liquid	0.371	764.457	0.175	337.654	Gg	0.000	0.003	99.981
1A4ai	Peat	0.018	764.457	0.019	337.654	Gg	0.000	0.003	99.984
1A3bii	Gaseous		764.457	0.009	337.654	Gg	0.000	0.002	99.986
1A1b	Solid	0.001	764.457	0.009	337.654	Gg	0.000	0.002	99.988
2G		0.315	764.457	0.132	337.654	Gg	0.000	0.002	99.990
1A4ci	Liquid	0.183	764.457	0.087	337.654	Gg	0.000	0.002	99.992
1A2e	Peat	0.143	764.457	0.057	337.654	Gg	0.000	0.002	99.994
1A3biii	Gaseous		764.457	0.006	337.654	Gg	0.000	0.001	99.995
1A4ai	Liquid	0.527	764.457	0.228	337.654	Gg	0.000	0.001	99.996
1A4ci	Gaseous	0.022	764.457	0.006	337.654	Gg	0.000	0.001	99.997
1A2c	Biomass	0.021	764.457	0.007	337.654	Gg	0.000	0.001	99.998
1A3ei	Gaseous	0.001	764.457	0.002	337.654	Gg	0.000	0.001	99.999
1A4ci	Solid	0.007	764.457	0.005	337.654	Gg	0.000	0.000	99.999
2C1		0.464	764.457	0.207	337.654	Gg	0.000	0.000	99.999
1A2b	Gaseous		764.457	0.001	337.654	Gg	0.000	0.000	100
1A2e	Gaseous	0.018	764.457	0.009	337.654	Gg	0.000	0.000	100
1A4bi	Other	0.001	764.457	0.000	337.654	Gg	0.000	0.000	100
1A2a	Biomass		764.457	0.000	337.654	Gg	0.000	0.000	100

Pb

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A3bi	Gasoline	166.003	321.435	0.002	12.997	Mg	0.021	30.155	30.155	Yes
2C7c		80.081	321.435	0.376	12.997	Mg	0.009	12.861	43.016	Yes
1A2d	Biomass	4.479	321.435	2.814	12.997	Mg	0.008	11.831	54.847	Yes

1A1b	Liquid	2.049	321.435	2.660	12.997	Mg	0.008	11.581	66.429	Yes
1A5a	Biomass	0.015	321.435	1.719	12.997	Mg	0.005	7.723	74.152	Yes
2C1		34.463	321.435	0.504	12.997	Mg	0.003	3.996	78.149	Yes
1A1a	Peat	1.291	321.435	0.921	12.997	Mg	0.003	3.906	82.055	Yes
2G		0.310	321.435	0.630	12.997	Mg	0.002	2.773	84.827	
1A1a	Biomass	0.179	321.435	0.580	12.997	Mg	0.002	2.572	87.400	
1A2f	Solid	2.811	321.435	0.671	12.997	Mg	0.002	2.504	89.903	
1A4bi	Biomass	0.413	321.435	0.531	12.997	Mg	0.002	2.312	92.215	
1A3bii	Gasoline	6.400	321.435	0.000	12.997	Mg	0.001	1.163	93.378	
1A4ci	Peat	0.068	321.435	0.204	12.997	Mg	0.001	0.905	94.283	
1A1a	Solid	5.751	321.435	0.045	12.997	Mg	0.001	0.842	95.125	
1A3bvi		7.220	321.435	0.467	12.997	Mg	0.001	0.789	95.913	
1A1a	Other	0.001	321.435	0.125	12.997	Mg	0.000	0.560	96.473	
1A2gviii	Biomass	0.319	321.435	0.108	12.997	Mg	0.000	0.425	96.899	
1A2e	Peat	0.167	321.435	0.087	12.997	Mg	0.000	0.362	97.260	
1A4ci	Biomass	0.065	321.435	0.058	12.997	Mg	0.000	0.250	97.510	
1A3biv	Gasoline	1.300	321.435	0.000	12.997	Mg	0.000	0.236	97.746	
1A3aii(i)	Liquid	0.297	321.435	0.056	12.997	Mg	0.000	0.200	97.946	
1A2e	Solid	1.384	321.435	0.014	12.997	Mg	0.000	0.190	98.136	
1A2d	Solid	1.025	321.435	0.000	12.997	Mg	0.000	0.186	98.322	
1A2d	Other	0.001	321.435	0.037	12.997	Mg	0.000	0.164	98.486	
1A5a	Liquid	0.211	321.435	0.043	12.997	Mg	0.000	0.156	98.642	
1A4ai	Biomass	0.02	321.435	0.034	12.997	Mg	0.000	0.151	98.793	
1A4ai	Liquid	0.261	321.435	0.040	12.997	Mg	0.000	0.133	98.926	
2C2		0.001	321.435	0.029	12.997	Mg	0.000	0.132	99.058	
1A2c	Liquid	0.082	321.435	0.031	12.997	Mg	0.000	0.123	99.181	
1A4bi	Peat	0.111	321.435	0.028	12.997	Mg	0.000	0.106	99.287	
1A4ai	Peat	0.020	321.435	0.018	12.997	Mg	0.000	0.078	99.366	
1A1a	Liquid	0.319	321.435	0.029	12.997	Mg	0.000	0.072	99.437	
2C6		0.000	321.435	0.016	12.997	Mg	0.000	0.070	99.507	
1A2d	Liquid	0.195	321.435	0.022	12.997	Mg	0.000	0.061	99.569	
2C7a		0.374	321.435	0.002	12.997	Mg	0.000	0.058	99.627	
1A2gviii	Other	0.049	321.435	0.014	12.997	Mg	0.000	0.053	99.680	
1A2d	Peat	0.499	321.435	0.009	12.997	Mg	0.000	0.051	99.731	
1B1b		0.022	321.435	0.011	12.997	Mg	0.000	0.046	99.778	
1A3dii	Liquid	0.015	321.435	0.008	12.997	Mg	0.000	0.036	99.813	
1A2f	Biomass	0.000	321.435	0.007	12.997	Mg	0.000	0.032	99.845	
1A2e	Biomass	0.008	321.435	0.006	12.997	Mg	0.000	0.024	99.869	
1A2f	Liquid	0.062	321.435	0.007	12.997	Mg	0.000	0.020	99.889	
1A4ciii	Liquid	0.007	321.435	0.004	12.997	Mg	0.000	0.017	99.907	
1A2gviii	Peat	0.003	321.435	0.004	12.997	Mg	0.000	0.017	99.924	
1A1b	Solid	0.048	321.435	0.005	12.997	Mg	0.000	0.013	99.937	
2C3		0.066	321.435	0.000	12.997	Mg	0.000	0.011	99.948	
1A2e	Other	0.003	321.435	0.002	12.997	Mg	0.000	0.008	99.956	
1A2f	Other		321.435	0.001	12.997	Mg	0.000	0.007	99.963	
1A4bi	Liquid	0.046	321.435	0.001	12.997	Mg	0.000	0.005	99.968	
1A4ci	Solid	0.035	321.435	0.000	12.997	Mg	0.000	0.005	99.973	
5C1bv		0.000	321.435	0.001	12.997	Mg	0.000	0.005	99.978	

2B10a		0.001	321.435	0.001	12.997	Mg	0.000	0.004	99.982
1A3biii	Diesel oil	0.000	321.435	0.001	12.997	Mg	0.000	0.003	99.985
1A4ci	Liquid	0.081	321.435	0.003	12.997	Mg	0.000	0.003	99.988
1A2a	Biomass		321.435	0.000	12.997	Mg	0.000	0.002	99.990
1A2e	Liquid	0.083	321.435	0.004	12.997	Mg	0.000	0.002	99.992
1A2gviii	Liquid	0.113	321.435	0.004	12.997	Mg	0.000	0.002	99.994
5E		0.001	321.435	0.000	12.997	Mg	0.000	0.002	99.996
1A2b	Liquid	0.010	321.435	0.001	12.997	Mg	0.000	0.002	99.997
1A3bi	Diesel oil	0.000	321.435	0.000	12.997	Mg	0.000	0.001	99.999
1A2c	Biomass	0.003	321.435	0.000	12.997	Mg	0.000	0.001	99.999
1A3bii	Diesel oil	0.000	321.435	0.000	12.997	Mg	0.000	0.001	100
1A3biv	Diesel oil		321.435	0.000	12.997	Mg	0.000	0.000	100

Cd

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C7c		4.203	6.685	0.037	0.850	Mg	0.074	36.312	36.312	Yes
1A5a	Biomass	0.002	6.685	0.191	0.850	Mg	0.029	13.947	50.259	Yes
1A4bi	Biomass	0.124	6.685	0.159	0.850	Mg	0.021	10.495	60.754	Yes
1A2d	Biomass	0.317	6.685	0.178	0.850	Mg	0.021	10.06	70.813	Yes
2C6		0.850	6.685	0.010	0.850	Mg	0.015	7.201	78.015	Yes
1A1a	Biomass	0.019	6.685	0.078	0.850	Mg	0.011	5.542	83.556	Yes
1A1b	Liquid	0.047	6.685	0.061	0.850	Mg	0.008	3.997	87.553	
2C1		0.390	6.685	0.006	0.850	Mg	0.007	3.194	90.748	
1A1a	Solid	0.155	6.685	0.003	0.850	Mg	0.003	1.223	91.971	
1A4ci	Biomass	0.020	6.685	0.017	0.850	Mg	0.002	1.093	93.063	
1A1a	Peat	0.023	6.685	0.017	0.850	Mg	0.002	1.049	94.113	
1A1a	Other	0.000	6.685	0.014	0.850	Mg	0.002	1.033	95.145	
2G		0.028	6.685	0.013	0.850	Mg	0.001	0.704	95.850	
1A4ai	Biomass	0.006	6.685	0.010	0.850	Mg	0.001	0.700	96.550	
1A2gviii	Biomass	0.036	6.685	0.013	0.850	Mg	0.001	0.616	97.165	
1A2f	Solid	0.068	6.685	0.015	0.850	Mg	0.001	0.476	97.642	
1A2e	Solid	0.032	6.685	0.000	0.850	Mg	0.001	0.268	97.910	
1A2gvii	Liquid	0.003	6.685	0.004	0.850	Mg	0.001	0.244	98.154	
1A4ci	Peat	0.001	6.685	0.003	0.850	Mg	0.000	0.235	98.390	
1A2d	Solid	0.024	6.685	0.000	0.850	Mg	0.000	0.222	98.612	
2C3		0.023	6.685	0.000	0.850	Mg	0.000	0.213	98.825	
1A4cii	Liquid	0.003	6.685	0.002	0.850	Mg	0.000	0.147	98.972	
1A2gviii	Other	0.028	6.685	0.002	0.850	Mg	0.000	0.138	99.110	
1A3bvi		0.002	6.685	0.002	0.850	Mg	0.000	0.113	99.223	
1A2d	Other	0.000	6.685	0.001	0.850	Mg	0.000	0.099	99.323	
1A2e	Peat	0.003	6.685	0.001	0.850	Mg	0.000	0.080	99.402	
1A2d	Peat	0.008	6.685	0.000	0.850	Mg	0.000	0.072	99.474	
1A4aii	Liquid	0.001	6.685	0.001	0.850	Mg	0.000	0.059	99.533	
5E		0.002	6.685	0.001	0.850	Mg	0.000	0.044	99.578	
1A2e	Biomass	0.001	6.685	0.001	0.850	Mg	0.000	0.038	99.616	

1A4bii	Liquid	0.000	6.685	0.001	0.850	Mg	0.000	0.038	99.654
1A3dii	Liquid	0.001	6.685	0.001	0.850	Mg	0.000	0.037	99.691
1A2f	Other		6.685	0.000	0.850	Mg	0.000	0.026	99.717
1A5a	Liquid	0.003	6.685	0.001	0.850	Mg	0.000	0.020	99.737
1A4ai	Peat	0.000	6.685	0.000	0.850	Mg	0.000	0.019	99.756
1A1a	Liquid	0.005	6.685	0.000	0.850	Mg	0.000	0.019	99.775
1A4ciii	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.018	99.793
1A2f	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.018	99.811
1A2c	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.018	99.828
1A4bi	Peat	0.002	6.685	0.000	0.850	Mg	0.000	0.017	99.845
1A3bi	Gasoline	0.000	6.685	0.000	0.850	Mg	0.000	0.014	99.860
1A2e	Other	0.000	6.685	0.000	0.850	Mg	0.000	0.014	99.874
1B1b		0.000	6.685	0.000	0.850	Mg	0.000	0.014	99.888
1A2f	Biomass	0.000	6.685	0.000	0.850	Mg	0.000	0.013	99.901
5C1bv		0.000	6.685	0.000	0.850	Mg	0.000	0.012	99.914
1A3c	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.011	99.925
1A2d	Liquid	0.003	6.685	0.001	0.850	Mg	0.000	0.010	99.935
1A2gviii	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.009	99.944
1A4ci	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.007	99.951
1A2e	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.006	99.957
1A4ai	Liquid	0.003	6.685	0.000	0.850	Mg	0.000	0.006	99.963
1A4ci	Solid	0.001	6.685	0.000	0.850	Mg	0.000	0.006	99.969
1A3biii	Diesel oil	0.000	6.685	0.000	0.850	Mg	0.000	0.005	99.974
1A4bi	Liquid	0.001	6.685	0.000	0.850	Mg	0.000	0.005	99.979
2C2		0.003	6.685	0.000	0.850	Mg	0.000	0.004	99.983
1A2gviii	Peat	0.000	6.685	0.000	0.850	Mg	0.000	0.004	99.988
1A2a	Biomass		6.685	0.000	0.850	Mg	0.000	0.004	99.992
1A3bi	Diesel oil	0.000	6.685	0.000	0.850	Mg	0.000	0.002	99.994
1A1b	Solid	0.001	6.685	0.000	0.850	Mg	0.000	0.002	99.996
2C7a		0.000	6.685	0.000	0.850	Mg	0.000	0.001	99.997
1A3bii	Diesel oil	0.000	6.685	0.000	0.850	Mg	0.000	0.001	99.998
1A2c	Biomass	0.000	6.685	0.000	0.850	Mg	0.000	0.001	99.999
1A3biv	Gasoline	0.000	6.685	0.000	0.850	Mg	0.000	0.000	99.999
1A2b	Liquid	0.000	6.685	0.000	0.850	Mg	0.000	0.000	100
1A3bii	Gasoline	0.000	6.685	0.000	0.850	Mg	0.000	0.000	100
1A3biv	Diesel oil		6.685	0.000	0.850	Mg	0.000	0.000	100

Hg

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2B10a		0.369	1.086	0.035	0.523	Mg	0.132	22.236	22.236	Yes
2C1		0.005	1.086	0.094	0.523	Mg	0.085	14.303	36.539	Yes
1A2gviii	Other	0.171	1.086	0.002	0.523	Mg	0.074	12.524	49.063	Yes
1A1a	Solid	0.172	1.086	0.029	0.523	Mg	0.050	8.393	57.456	Yes
1A2d	Biomass	0.089	1.086	0.097	0.523	Mg	0.050	8.387	65.843	Yes
1A1a	Biomass	0.004	1.086	0.05	0.523	Mg	0.044	7.479	73.322	Yes

1A1a	Peat	0.062	1.086	0.052	0.523	Mg	0.021	3.477	76.798	Yes
5C1bv		0.006	1.086	0.023	0.523	Mg	0.019	3.191	79.989	Yes
1A5a	Biomass	0.000	1.086	0.019	0.523	Mg	0.018	2.959	82.948	Yes
1A4bi	Biomass	0.021	1.086	0.027	0.523	Mg	0.015	2.583	85.532	
1A2f	Liquid	0.000	1.086	0.009	0.523	Mg	0.009	1.455	86.986	
2C7c		0.028	1.086	0.005	0.523	Mg	0.008	1.399	88.385	
1A2d	Solid	0.018	1.086	0.000	0.523	Mg	0.008	1.376	89.761	
1A2a	Solid	0.017	1.086	0.000	0.523	Mg	0.007	1.230	90.990	
1A1b	Liquid	0.010	1.086	0.012	0.523	Mg	0.007	1.221	92.212	
2C6			1.086	0.006	0.523	Mg	0.006	0.969	93.181	
1A3biii	Diesel oil	0.005	1.086	0.008	0.523	Mg	0.005	0.812	93.993	
1A1a	Other	0.000	1.086	0.004	0.523	Mg	0.004	0.676	94.668	
1A2f	Solid	0.017	1.086	0.005	0.523	Mg	0.003	0.506	95.174	
2C7a		0.007	1.086	0.000	0.523	Mg	0.003	0.487	95.661	
1A3bi	Gasoline	0.016	1.086	0.011	0.523	Mg	0.003	0.471	96.132	
1A2d	Peat	0.016	1.086	0.005	0.523	Mg	0.003	0.449	96.581	
1A2e	Solid	0.006	1.086	0.000	0.523	Mg	0.003	0.434	97.015	
1A3bi	Diesel oil	0.002	1.086	0.004	0.523	Mg	0.002	0.420	97.435	
1A4ci	Peat	0.001	1.086	0.003	0.523	Mg	0.002	0.408	97.843	
2C2		0.000	1.086	0.002	0.523	Mg	0.002	0.315	98.158	
1A2gviii	Biomass	0.005	1.086	0.004	0.523	Mg	0.002	0.256	98.414	
1A2f	Other		1.086	0.002	0.523	Mg	0.001	0.245	98.659	
1A4ci	Biomass	0.003	1.086	0.003	0.523	Mg	0.001	0.210	98.868	
1A4ai	Biomass	0.001	1.086	0.002	0.523	Mg	0.001	0.195	99.063	
1A2d	Other	0.000	1.086	0.001	0.523	Mg	0.001	0.170	99.234	
1A3bii	Diesel oil	0.001	1.086	0.002	0.523	Mg	0.001	0.149	99.383	
1A2gviii	Peat	0.000	1.086	0.001	0.523	Mg	0.001	0.148	99.531	
1A3dii	Liquid	0.003	1.086	0.002	0.523	Mg	0.001	0.101	99.632	
1A4bi	Peat	0.002	1.086	0.000	0.523	Mg	0.000	0.060	99.692	
1A3biv	Gasoline	0.000	1.086	0.000	0.523	Mg	0.000	0.039	99.731	
1A3bii	Gasoline	0.001	1.086	0.000	0.523	Mg	0.000	0.037	99.768	
1A1a	Liquid	0.001	1.086	0.000	0.523	Mg	0.000	0.031	99.799	
1A2e	Peat	0.003	1.086	0.001	0.523	Mg	0.000	0.025	99.824	
1A4ciii	Liquid	0.002	1.086	0.001	0.523	Mg	0.000	0.024	99.848	
1A4ai	Peat	0.000	1.086	0.000	0.523	Mg	0.000	0.020	99.868	
1A4ai	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.016	99.884	
1A2c	Biomass	0.000	1.086	0.000	0.523	Mg	0.000	0.015	99.899	
1A2e	Biomass	0.000	1.086	0.000	0.523	Mg	0.000	0.014	99.914	
1A1b	Solid	0.000	1.086	0.000	0.523	Mg	0.000	0.013	99.927	
1A5a	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.013	99.940	
1A2f	Biomass	0.000	1.086	0.000	0.523	Mg	0.000	0.011	99.951	
1A2gviii	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.009	99.960	
1A2e	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.007	99.968	
1A4ci	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.007	99.974	
2G		0.000	1.086	0.000	0.523	Mg	0.000	0.005	99.980	
1A4ci	Solid	0.000	1.086	0.000	0.523	Mg	0.000	0.005	99.985	
1A4bi	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.004	99.989	
1A2e	Other	0.000	1.086	0.000	0.523	Mg	0.000	0.003	99.992	

1A2c	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.002	99.994
5E		0.002	1.086	0.001	0.523	Mg	0.000	0.002	99.996
1A2d	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.001	99.997
1A3biv	Diesel oil		1.086	0.000	0.523	Mg	0.000	0.001	99.998
1A2a	Biomass		1.086	0.000	0.523	Mg	0.000	0.001	99.999
1B1b		0.000	1.086	0.000	0.523	Mg	0.000	0.001	100
1A2b	Liquid	0.000	1.086	0.000	0.523	Mg	0.000	0.000	100

As

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C7c		28.000	34.816	0.339	2.065	Mg	0.038	43.914	43.914	Yes
1A1a	Peat	0.628	34.816	0.512	2.065	Mg	0.014	15.784	59.697	Yes
1A1b	Liquid	0.336	34.816	0.438	2.065	Mg	0.012	13.885	73.583	Yes
1A2d	Biomass	0.160	34.816	0.148	2.065	Mg	0.004	4.601	78.184	Yes
1A4ci	Peat	0.032	34.816	0.097	2.065	Mg	0.003	3.169	81.353	Yes
2C6		1.700	34.816	0.015	2.065	Mg	0.002	2.852	84.205	
1A2f	Solid	0.491	34.816	0.109	2.065	Mg	0.002	2.671	86.875	
1A1a	Solid	1.618	34.816	0.041	2.065	Mg	0.002	1.841	88.717	
1A4bi	Biomass	0.041	34.816	0.053	2.065	Mg	0.001	1.684	90.401	
2C1		0.411	34.816	0.069	2.065	Mg	0.001	1.483	91.883	
1A3bvi		0.036	34.816	0.042	2.065	Mg	0.001	1.309	93.193	
1A5a	Biomass	0.000	34.816	0.038	2.065	Mg	0.001	1.269	94.462	
1A2e	Peat	0.080	34.816	0.042	2.065	Mg	0.001	1.225	95.687	
1A1a	Biomass	0.004	34.816	0.021	2.065	Mg	0.001	0.679	96.366	
2C7a		0.113	34.816	0.023	2.065	Mg	0.000	0.543	96.909	
1A2d	Solid	0.229	34.816	0.001	2.065	Mg	0.000	0.433	97.342	
1A2d	Peat	0.238	34.816	0.002	2.065	Mg	0.000	0.399	97.740	
1A4bi	Peat	0.053	34.816	0.013	2.065	Mg	0.000	0.341	98.082	
1A2e	Solid	0.228	34.816	0.004	2.065	Mg	0.000	0.328	98.410	
1A4ai	Peat	0.010	34.816	0.009	2.065	Mg	0.000	0.270	98.680	
1A4ci	Biomass	0.007	34.816	0.006	2.065	Mg	0.000	0.180	98.860	
1A4ai	Biomass	0.002	34.816	0.003	2.065	Mg	0.000	0.111	98.970	
1A1a	Other	0.000	34.816	0.003	2.065	Mg	0.000	0.110	99.081	
1A5a	Liquid	0.017	34.816	0.004	2.065	Mg	0.000	0.090	99.170	
1A2d	Liquid	0.018	34.816	0.004	2.065	Mg	0.000	0.082	99.253	
2C2		0.002	34.816	0.002	2.065	Mg	0.000	0.072	99.325	
1A2gviii	Biomass	0.007	34.816	0.003	2.065	Mg	0.000	0.070	99.396	
1A2c	Liquid	0.007	34.816	0.002	2.065	Mg	0.000	0.069	99.464	
1A2gviii	Peat	0.001	34.816	0.002	2.065	Mg	0.000	0.067	99.531	
1A4ai	Liquid	0.021	34.816	0.003	2.065	Mg	0.000	0.066	99.597	
1B1b		0.004	34.816	0.002	2.065	Mg	0.000	0.058	99.655	
1A2gviii	Other	0.001	34.816	0.002	2.065	Mg	0.000	0.051	99.706	
5E		0.003	34.816	0.001	2.065	Mg	0.000	0.038	99.744	
1A4ciii	Liquid	0.002	34.816	0.001	2.065	Mg	0.000	0.038	99.782	
1A3dii	Liquid	0.028	34.816	0.003	2.065	Mg	0.000	0.030	99.813	

1A1a	Liquid	0.029	34.816	0.003	2.065	Mg	0.000	0.026	99.838
1A2f	Liquid	0.005	34.816	0.001	2.065	Mg	0.000	0.022	99.860
2G		0.001	34.816	0.001	2.065	Mg	0.000	0.021	99.881
1A2d	Other	0.000	34.816	0.001	2.065	Mg	0.000	0.017	99.898
5C1bv		0.000	34.816	0.000	2.065	Mg	0.000	0.016	99.914
2C3		0.008	34.816	0.000	2.065	Mg	0.000	0.014	99.928
1A4ci	Solid	0.006	34.816	0.001	2.065	Mg	0.000	0.012	99.940
1A1b	Solid	0.008	34.816	0.001	2.065	Mg	0.000	0.011	99.951
1A3bi	Gasoline	0.001	34.816	0.000	2.065	Mg	0.000	0.011	99.962
1A2gviii	Liquid	0.009	34.816	0.000	2.065	Mg	0.000	0.007	99.969
1A4ci	Liquid	0.006	34.816	0.000	2.065	Mg	0.000	0.006	99.974
1A4bi	Liquid	0.004	34.816	0.000	2.065	Mg	0.000	0.006	99.980
1A3biii	Diesel oil	0.000	34.816	0.000	2.065	Mg	0.000	0.005	99.985
1A2e	Biomass	0.000	34.816	0.000	2.065	Mg	0.000	0.004	99.989
1A2e	Liquid	0.007	34.816	0.000	2.065	Mg	0.000	0.003	99.992
1A3bi	Diesel oil	0.000	34.816	0.000	2.065	Mg	0.000	0.002	99.994
1A2e	Other	0.000	34.816	0.000	2.065	Mg	0.000	0.001	99.996
1A2f	Biomass	0.000	34.816	0.000	2.065	Mg	0.000	0.001	99.997
1A3bii	Diesel oil	0.000	34.816	0.000	2.065	Mg	0.000	0.001	99.998
1A2f	Other		34.816	0.000	2.065	Mg	0.000	0.001	99.999
1A2b	Liquid	0.001	34.816	0.000	2.065	Mg	0.000	0.001	99.999
1A2a	Biomass		34.816	0.000	2.065	Mg	0.000	0.000	99.999
1A3biv	Gasoline	0.000	34.816	0.000	2.065	Mg	0.000	0.000	100
1A2c	Biomass	0.000	34.816	0.000	2.065	Mg	0.000	0.000	100
1A3bii	Gasoline	0.000	34.816	0.000	2.065	Mg	0.000	0.000	100
1A3biv	Diesel oil		34.816	0.000	2.065	Mg	0.000	0.000	100

Cr

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C1		19.554	47.670	2.078	14.337	Mg	0.080	23.929	23.929	Yes
1A1b	Liquid	2.574	47.670	3.367	14.337	Mg	0.054	16.313	40.243	Yes
1A1a	Solid	6.765	47.670	0.063	14.337	Mg	0.041	12.405	52.648	Yes
1A4bi	Biomass	1.445	47.670	1.859	14.337	Mg	0.030	8.961	61.609	Yes
1A5a	Biomass	0.012	47.670	1.337	14.337	Mg	0.028	8.391	70.000	Yes
1A3bvi		1.143	47.670	1.302	14.337	Mg	0.020	6.027	76.027	Yes
1A2e	Solid	1.752	47.670	0.017	14.337	Mg	0.011	3.205	79.233	Yes
1A1a	Peat	1.076	47.670	0.757	14.337	Mg	0.009	2.727	81.959	Yes
2C2		2.000	47.670	1.024	14.337	Mg	0.009	2.658	84.617	
1A2b	Solid	1.845	47.670	0.163	14.337	Mg	0.008	2.466	87.083	
1A1a	Biomass	0.117	47.670	0.416	14.337	Mg	0.008	2.396	89.480	
1A2d	Solid	1.263	47.670	0.001	14.337	Mg	0.008	2.385	91.865	
1A2gviii	Biomass	0.817	47.670	0.082	14.337	Mg	0.003	1.028	92.893	
1A2f	Solid	3.365	47.670	0.853	14.337	Mg	0.003	1.004	93.897	
1A4ci	Peat	0.056	47.670	0.168	14.337	Mg	0.003	0.952	94.849	
2C7c		0.520	47.670	0.009	14.337	Mg	0.003	0.927	95.775	

1A4ci	Biomass	0.228	47.670	0.203	14.337	Mg	0.003	0.848	96.623
1A2d	Peat	0.411	47.670	0.002	14.337	Mg	0.003	0.763	97.387
1A4ai	Biomass	0.068	47.670	0.120	14.337	Mg	0.002	0.629	98.016
1A1a	Other	0.001	47.670	0.095	14.337	Mg	0.002	0.594	98.610
2C7a		0.145	47.670	0.001	14.337	Mg	0.001	0.270	98.880
1A2e	Peat	0.138	47.670	0.072	14.337	Mg	0.001	0.192	99.072
1A2gvii	Liquid	0.015	47.670	0.019	14.337	Mg	0.000	0.089	99.161
1A4ci	Solid	0.044	47.670	0.000	14.337	Mg	0.000	0.081	99.241
1A1b	Solid	0.060	47.670	0.006	14.337	Mg	0.000	0.075	99.316
1A4ai	Peat	0.017	47.670	0.015	14.337	Mg	0.000	0.063	99.379
1A3biii	Diesel oil	0.008	47.670	0.012	14.337	Mg	0.000	0.062	99.441
1A4cii	Liquid	0.015	47.670	0.012	14.337	Mg	0.000	0.047	99.489
1A2f	Biomass	0.000	47.670	0.007	14.337	Mg	0.000	0.041	99.53
1A2d	Other	0.001	47.670	0.006	14.337	Mg	0.000	0.039	99.569
2G		0.006	47.670	0.008	14.337	Mg	0.000	0.038	99.607
1A2gviii	Other	0.024	47.670	0.012	14.337	Mg	0.000	0.032	99.639
1A3bi	Diesel oil	0.003	47.670	0.006	14.337	Mg	0.000	0.030	99.669
1A2gviii	Liquid	0.016	47.670	0.000	14.337	Mg	0.000	0.029	99.698
1A3bi	Gasoline	0.011	47.670	0.008	14.337	Mg	0.000	0.027	99.725
1A4bi	Peat	0.091	47.670	0.023	14.337	Mg	0.000	0.027	99.752
1A2d	Biomass	0.558	47.670	0.164	14.337	Mg	0.000	0.026	99.777
1A2f	Other		47.670	0.004	14.337	Mg	0.000	0.025	99.802
1A3dii	Liquid	0.030	47.670	0.006	14.337	Mg	0.000	0.020	99.822
1A1a	Liquid	0.015	47.670	0.001	14.337	Mg	0.000	0.020	99.842
1A4aii	Liquid	0.007	47.670	0.005	14.337	Mg	0.000	0.018	99.860
1B1b		0.003	47.670	0.004	14.337	Mg	0.000	0.017	99.877
1A2gviii	Peat	0.002	47.670	0.003	14.337	Mg	0.000	0.016	99.893
1A2e	Biomass	0.006	47.670	0.004	14.337	Mg	0.000	0.014	99.908
1A4bii	Liquid	0.002	47.670	0.003	14.337	Mg	0.000	0.014	99.921
1A2f	Liquid	0.002	47.670	0.003	14.337	Mg	0.000	0.014	99.935
1A3bii	Diesel oil	0.002	47.670	0.003	14.337	Mg	0.000	0.012	99.947
1A4ai	Liquid	0.010	47.670	0.002	14.337	Mg	0.000	0.010	99.957
1A4ci	Liquid	0.003	47.670	0.000	14.337	Mg	0.000	0.005	99.962
1A2e	Liquid	0.003	47.670	0.000	14.337	Mg	0.000	0.005	99.968
1A4ciii	Liquid	0.003	47.670	0.002	14.337	Mg	0.000	0.005	99.973
1A2d	Liquid	0.009	47.670	0.002	14.337	Mg	0.000	0.004	99.976
1A4bi	Liquid	0.002	47.670	0.000	14.337	Mg	0.000	0.003	99.980
1A2e	Other	0.006	47.670	0.001	14.337	Mg	0.000	0.003	99.983
1A5a	Liquid	0.009	47.670	0.002	14.337	Mg	0.000	0.003	99.986
5E		0.003	47.670	0.001	14.337	Mg	0.000	0.003	99.989
5C1bv		0.000	47.670	0.000	14.337	Mg	0.000	0.003	99.992
1A2a	Biomass		47.670	0.000	14.337	Mg	0.000	0.002	99.994
1A3c	Liquid	0.003	47.670	0.001	14.337	Mg	0.000	0.002	99.996
1A2c	Liquid	0.003	47.670	0.001	14.337	Mg	0.000	0.001	99.997
1A3biv	Gasoline	0.000	47.670	0.000	14.337	Mg	0.000	0.001	99.998
1A2c	Biomass	0.000	47.670	0.000	14.337	Mg	0.000	0.001	99.999
1A3bii	Gasoline	0.000	47.670	0.000	14.337	Mg	0.000	0.001	100
1A2b	Liquid	0.001	47.670	0.000	14.337	Mg	0.000	0.000	100

1A3biv	Diesel oil	47.670	0.000	14.337	Mg	0.000	0.000	100
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Cu

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C7c		80.257	156.893	0.485	39.070	Mg	0.124	41.191	41.191	Yes
1A3bvi		49.238	156.893	29.313	39.070	Mg	0.109	36.018	77.209	Yes
1A5a	Biomass	0.017	156.893	1.949	39.070	Mg	0.012	4.107	81.316	Yes
1A1a	Solid	5.471	156.893	0.068	39.070	Mg	0.008	2.735	84.051	
2C7a		4.803	156.893	0.006	39.070	Mg	0.008	2.515	86.566	
1A1b	Liquid	0.902	156.893	1.178	39.070	Mg	0.006	2.015	88.580	
2C1		5.540	156.893	0.458	39.070	Mg	0.006	1.948	90.528	
1A1a	Peat	1.662	156.893	1.203	39.070	Mg	0.005	1.666	92.194	
1A1a	Biomass	0.174	156.893	0.766	39.070	Mg	0.005	1.526	93.721	
1A2gvii	Liquid	0.503	156.893	0.632	39.070	Mg	0.003	1.071	94.791	
1A4cii	Liquid	0.499	156.893	0.406	39.070	Mg	0.002	0.594	95.386	
1A4bi	Biomass	0.248	156.893	0.319	39.070	Mg	0.002	0.543	95.929	
1A4ci	Peat	0.088	156.893	0.264	39.070	Mg	0.002	0.512	96.440	
2G		0.203	156.893	0.239	39.070	Mg	0.001	0.397	96.838	
1A2d	Solid	0.648	156.893	0.000	39.070	Mg	0.001	0.340	97.178	
1A2d	Peat	0.646	156.893	0.006	39.070	Mg	0.001	0.328	97.505	
1A2d	Biomass	0.813	156.893	0.352	39.070	Mg	0.001	0.315	97.821	
1A1a	Other	0.001	156.893	0.149	39.070	Mg	0.001	0.314	98.135	
1A2e	Solid	0.613	156.893	0.007	39.070	Mg	0.001	0.309	98.444	
1A4aii	Liquid	0.227	156.893	0.167	39.070	Mg	0.001	0.233	98.676	
1A4bii	Liquid	0.075	156.893	0.098	39.070	Mg	0.001	0.167	98.843	
1A2d	Other	0.001	156.893	0.072	39.070	Mg	0.000	0.152	98.995	
1A2d	Liquid	0.022	156.893	0.076	39.070	Mg	0.000	0.150	99.145	
2B10a		0.270	156.893	0.008	39.070	Mg	0.000	0.126	99.271	
1A2e	Peat	0.216	156.893	0.113	39.070	Mg	0.000	0.125	99.395	
1A2gviii	Biomass	0.699	156.893	0.128	39.070	Mg	0.000	0.098	99.493	
2C2		0.003	156.893	0.041	39.070	Mg	0.000	0.085	99.578	
1A4ci	Biomass	0.039	156.893	0.035	39.070	Mg	0.000	0.054	99.631	
1A2f	Solid	1.280	156.893	0.295	39.070	Mg	0.000	0.050	99.682	
1A4ai	Biomass	0.013	156.893	0.021	39.070	Mg	0.000	0.037	99.719	
1A4ai	Peat	0.026	156.893	0.024	39.070	Mg	0.000	0.036	99.755	
2C6			156.893	0.015	39.070	Mg	0.000	0.031	99.786	
1A3c	Liquid	0.103	156.893	0.039	39.070	Mg	0.000	0.029	99.815	
1A3dii	Liquid	0.100	156.893	0.013	39.070	Mg	0.000	0.025	99.841	
1A2gviii	Other	0.037	156.893	0.018	39.070	Mg	0.000	0.019	99.859	
1A3biii	Diesel oil	0.006	156.893	0.008	39.070	Mg	0.000	0.015	99.874	
1A4ciii	Liquid	0.049	156.893	0.006	39.070	Mg	0.000	0.012	99.886	
1A2gviii	Liquid	0.022	156.893	0.000	39.070	Mg	0.000	0.011	99.897	
1A1a	Liquid	0.034	156.893	0.003	39.070	Mg	0.000	0.011	99.908	
1A2e	Biomass	0.009	156.893	0.007	39.070	Mg	0.000	0.009	99.917	
1A2gviii	Peat	0.003	156.893	0.005	39.070	Mg	0.000	0.009	99.926	

1A4ci	Solid	0.016	156.893	0.000	39.070	Mg	0.000	0.007	99.933
1A3bi	Gasoline	0.008	156.893	0.005	39.070	Mg	0.000	0.007	99.940
1A3bi	Diesel oil	0.002	156.893	0.004	39.070	Mg	0.000	0.007	99.947
1A1b	Solid	0.021	156.893	0.002	39.070	Mg	0.000	0.006	99.954
1A2f	Other		156.893	0.003	39.070	Mg	0.000	0.006	99.960
1A4ai	Liquid	0.026	156.893	0.004	39.070	Mg	0.000	0.005	99.965
1A2f	Biomass	0.000	156.893	0.002	39.070	Mg	0.000	0.005	99.970
1A2e	Other	0.000	156.893	0.002	39.070	Mg	0.000	0.004	99.974
1A4ci	Liquid	0.008	156.893	0.000	39.070	Mg	0.000	0.004	99.978
1A2e	Liquid	0.008	156.893	0.000	39.070	Mg	0.000	0.004	99.981
5E		0.006	156.893	0.003	39.070	Mg	0.000	0.003	99.984
1A3bii	Diesel oil	0.001	156.893	0.002	39.070	Mg	0.000	0.003	99.987
1B1b		0.004	156.893	0.002	39.070	Mg	0.000	0.003	99.990
1A4bi	Liquid	0.005	156.893	0.000	39.070	Mg	0.000	0.002	99.992
1A2c	Liquid	0.008	156.893	0.003	39.070	Mg	0.000	0.002	99.994
1A4bi	Peat	0.143	156.893	0.036	39.070	Mg	0.000	0.002	99.996
1A5a	Liquid	0.029	156.893	0.008	39.070	Mg	0.000	0.001	99.997
1A2a	Biomass		156.893	0.001	39.070	Mg	0.000	0.001	99.998
5C1bv		0.000	156.893	0.000	39.070	Mg	0.000	0.001	99.999
1A2f	Liquid	0.006	156.893	0.002	39.070	Mg	0.000	0.000	99.999
1A3biv	Gasoline	0.000	156.893	0.000	39.070	Mg	0.000	0.000	100
1A3bii	Gasoline	0.000	156.893	0.000	39.070	Mg	0.000	0.000	100
1A2b	Liquid	0.001	156.893	0.000	39.070	Mg	0.000	0.000	100
1A2c	Biomass	0.001	156.893	0.000	39.070	Mg	0.000	0.000	100
1A3biv	Diesel oil		156.893	0.000	39.070	Mg	0.000	0.000	100

Ni

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C7c		31.000	78.439	0.048	10.063	Mg	0.050	31.774	31.774	Yes
1A4bi	Biomass	1.239	78.439	1.593	10.063	Mg	0.018	11.598	43.372	Yes
1A5a	Biomass	0.010	78.439	1.146	10.063	Mg	0.015	9.257	52.629	Yes
1A1a	Peat	1.066	78.439	0.756	10.063	Mg	0.008	5.007	57.636	Yes
1A1a	Solid	5.396	78.439	0.106	10.063	Mg	0.007	4.742	62.378	Yes
2C1		2.002	78.439	0.757	10.063	Mg	0.006	4.045	66.423	Yes
1A1a	Biomass	0.101	78.439	0.423	10.063	Mg	0.005	3.318	69.741	Yes
1A2f	Solid	2.771	78.439	0.678	10.063	Mg	0.004	2.605	72.346	Yes
1A2c	Liquid	0.833	78.439	0.369	10.063	Mg	0.003	2.117	74.462	Yes
1A1b	Liquid	1.875	78.439	0.004	10.063	Mg	0.003	1.911	76.373	Yes
1A5a	Liquid	2.531	78.439	0.515	10.063	Mg	0.002	1.535	77.908	Yes
2C7b		5.000	78.439	0.827	10.063	Mg	0.002	1.500	79.408	Yes
1A2e	Solid	1.401	78.439	0.014	10.063	Mg	0.002	1.341	80.749	Yes
1A3bvi		0.164	78.439	0.187	10.063	Mg	0.002	1.341	82.090	
1A4ci	Peat	0.056	78.439	0.168	10.063	Mg	0.002	1.301	83.391	
1A4ci	Biomass	0.195	78.439	0.174	10.063	Mg	0.002	1.206	84.598	
1A2b	Solid	1.115	78.439	0.007	10.063	Mg	0.002	1.099	85.696	

1A2d	Solid	1.036	78.439	0.001	10.063	Mg	0.002	1.069	86.765
1A2d	Biomass	0.475	78.439	0.193	10.063	Mg	0.002	1.067	87.832
1A1a	Other	0.001	78.439	0.129	10.063	Mg	0.002	1.044	88.876
1A2gviii	Liquid	1.361	78.439	0.049	10.063	Mg	0.002	1.014	89.891
1A1a	Liquid	3.688	78.439	0.351	10.063	Mg	0.002	0.988	90.878
2B10a		1.052	78.439	0.022	10.063	Mg	0.001	0.913	91.792
1A2d	Liquid	2.234	78.439	0.191	10.063	Mg	0.001	0.776	92.568
1A4ai	Biomass	0.058	78.439	0.103	10.063	Mg	0.001	0.774	93.342
1A4ci	Liquid	0.971	78.439	0.032	10.063	Mg	0.001	0.747	94.089
1A2e	Liquid	1.007	78.439	0.046	10.063	Mg	0.001	0.673	94.762
1A4ai	Liquid	3.134	78.439	0.482	10.063	Mg	0.001	0.647	95.409
2C7a		0.508	78.439	0.000	10.063	Mg	0.001	0.525	95.934
1A4bi	Liquid	0.555	78.439	0.008	10.063	Mg	0.001	0.511	96.445
1A2e	Peat	0.138	78.439	0.072	10.063	Mg	0.001	0.438	96.884
1A2f	Liquid	0.676	78.439	0.038	10.063	Mg	0.001	0.394	97.278
1A2gviii	Biomass	0.212	78.439	0.076	10.063	Mg	0.001	0.392	97.670
2C2		0.017	78.439	0.049	10.063	Mg	0.001	0.381	98.051
1A2d	Peat	0.412	78.439	0.024	10.063	Mg	0.000	0.233	98.285
1A3dii	Liquid	1.280	78.439	0.192	10.063	Mg	0.000	0.222	98.507
2G		0.025	78.439	0.030	10.063	Mg	0.000	0.219	98.725
1A4ciii	Liquid	0.056	78.439	0.032	10.063	Mg	0.000	0.201	98.926
1A2gvii	Liquid	0.021	78.439	0.026	10.063	Mg	0.000	0.189	99.115
1A2b	Liquid	0.124	78.439	0.031	10.063	Mg	0.000	0.120	99.235
1A4cii	Liquid	0.021	78.439	0.017	10.063	Mg	0.000	0.114	99.348
1A4ai	Peat	0.017	78.439	0.015	10.063	Mg	0.000	0.104	99.453
1A4bi	Peat	0.091	78.439	0.023	10.063	Mg	0.000	0.093	99.545
1A2gviii	Other	0.021	78.439	0.014	10.063	Mg	0.000	0.088	99.633
1A4aii	Liquid	0.009	78.439	0.007	10.063	Mg	0.000	0.046	99.679
1A2e	Biomass	0.005	78.439	0.006	10.063	Mg	0.000	0.041	99.720
1A1b	Solid	0.003	78.439	0.005	10.063	Mg	0.000	0.037	99.757
1A2d	Other	0.001	78.439	0.005	10.063	Mg	0.000	0.036	99.793
1A4ci	Solid	0.035	78.439	0.000	10.063	Mg	0.000	0.034	99.826
1A2f	Other		78.439	0.004	10.063	Mg	0.000	0.030	99.856
1A4bii	Liquid	0.003	78.439	0.004	10.063	Mg	0.000	0.029	99.885
1A2f	Biomass	0.000	78.439	0.004	10.063	Mg	0.000	0.029	99.914
1A2gviii	Peat	0.002	78.439	0.003	10.063	Mg	0.000	0.025	99.939
1A3bi	Gasoline	0.004	78.439	0.003	10.063	Mg	0.000	0.018	99.957
1B1b		0.002	78.439	0.002	10.063	Mg	0.000	0.014	99.971
1A3c	Liquid	0.004	78.439	0.002	10.063	Mg	0.000	0.009	99.980
1A2e	Other	0.003	78.439	0.001	10.063	Mg	0.000	0.007	99.987
5C1bv		0.000	78.439	0.001	10.063	Mg	0.000	0.005	99.992
1A2a	Biomass		78.439	0.000	10.063	Mg	0.000	0.003	99.995
1A3biii	Diesel oil	0.000	78.439	0.000	10.063	Mg	0.000	0.002	99.997
1A2c	Biomass	0.000	78.439	0.000	10.063	Mg	0.000	0.001	99.998
1A3bi	Diesel oil	0.000	78.439	0.000	10.063	Mg	0.000	0.001	99.999
1A3biv	Gasoline	0.000	78.439	0.000	10.063	Mg	0.000	0.001	99.999
1A3bii	Diesel oil	0.000	78.439	0.000	10.063	Mg	0.000	0.000	100
1A3bii	Gasoline	0.000	78.439	0.000	10.063	Mg	0.000	0.000	100

1A3biv	Diesel oil	78.439	0.000	10.063	Mg	0.000	0.000	100
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Se

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C7c		1.400	1.840	0.002	0.488	Mg	0.201	47.969	47.969	Yes
1A4bi	Biomass	0.206	1.840	0.266	0.488	Mg	0.115	27.394	75.363	Yes
2C7a		0.050	1.840	0.134	0.488	Mg	0.065	15.664	91.027	Yes
1A3bvi		0.026	1.840	0.030	0.488	Mg	0.013	3.002	94.029	
1A4ci	Biomass	0.033	1.840	0.029	0.488	Mg	0.011	2.650	96.679	
1A4ai	Biomass	0.010	1.840	0.017	0.488	Mg	0.008	1.906	98.585	
1A2gvii	Liquid	0.003	1.840	0.004	0.488	Mg	0.002	0.381	98.966	
1A3dii	Liquid	0.014	1.840	0.001	0.488	Mg	0.002	0.380	99.346	
1A4cii	Liquid	0.003	1.840	0.002	0.488	Mg	0.001	0.209	99.555	
1A4ciii	Liquid	0.006	1.840	0.000	0.488	Mg	0.001	0.150	99.706	
5C1bv		0.000	1.840	0.001	0.488	Mg	0.000	0.084	99.790	
1A4aii	Liquid	0.001	1.840	0.001	0.488	Mg	0.000	0.081	99.871	
1A4bii	Liquid	0.000	1.840	0.001	0.488	Mg	0.000	0.059	99.931	
1A3bi	Gasoline	0.000	1.840	0.000	0.488	Mg	0.000	0.019	99.950	
1A3biii	Diesel oil	0.000	1.840	0.000	0.488	Mg	0.000	0.016	99.966	
1A5a	Liquid	0.001	1.840	0.000	0.488	Mg	0.000	0.013	99.979	
1A3c	Liquid	0.001	1.840	0.000	0.488	Mg	0.000	0.009	99.988	
1A3bi	Diesel oil	0.000	1.840	0.000	0.488	Mg	0.000	0.008	99.996	
1A3bii	Diesel oil	0.000	1.840	0.000	0.488	Mg	0.000	0.003	99.999	
1A3biv	Gasoline	0.000	1.840	0.000	0.488	Mg	0.000	0.001	100	
1A3bii	Gasoline	0.000	1.840	0.000	0.488	Mg	0.000	0.000	100	
1A3biv	Diesel oil		1.840	0.000	0.488	Mg	0.000	0.000	100	

Zn

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C1		303.559	682.839	2.415	140.029	Mg	0.088	28.329	28.329	Yes
2C7c		160.391	682.839	0.633	140.029	Mg	0.047	15.272	43.601	Yes
1A4bi	Biomass	28.903	682.839	37.177	140.029	Mg	0.046	14.795	58.396	Yes
1A5a	Biomass	0.238	682.839	26.745	140.029	Mg	0.039	12.639	71.035	Yes
1A3bvi		18.420	682.839	18.662	140.029	Mg	0.022	7.047	78.082	Yes
1A1a	Biomass	2.327	682.839	11.244	140.029	Mg	0.016	5.097	83.179	Yes
1A1a	Solid	28.018	682.839	0.494	140.029	Mg	0.008	2.486	85.666	
2C6		90.174	682.839	13.607	140.029	Mg	0.007	2.313	87.979	
1A1b	Liquid	3.869	682.839	5.051	140.029	Mg	0.006	2.016	89.994	
1A1a	Other	0.016	682.839	3.268	140.029	Mg	0.005	1.545	91.540	
1A4ci	Biomass	4.550	682.839	4.065	140.029	Mg	0.005	1.483	93.022	
1A4ai	Biomass	1.355	682.839	2.408	140.029	Mg	0.003	1.009	94.031	

2C2		0.100	682.839	1.661	140.029	Mg	0.002	0.777	94.807
1A1a	Peat	2.706	682.839	1.986	140.029	Mg	0.002	0.678	95.485
1A2gviii	Biomass	4.949	682.839	2.138	140.029	Mg	0.002	0.532	96.017
1A2gviii	Other	0.221	682.839	1.088	140.029	Mg	0.002	0.494	96.510
1A2f	Liquid	0.327	682.839	1.060	140.029	Mg	0.001	0.470	96.981
1A2d	Biomass	10.754	682.839	1.212	140.029	Mg	0.001	0.470	97.451
1A2f	Other		682.839	0.906	140.029	Mg	0.001	0.429	97.880
1A2d	Solid	3.342	682.839	0.002	140.029	Mg	0.001	0.323	98.203
2C7a		2.563	682.839	0.005	140.029	Mg	0.001	0.246	98.449
1A2e	Solid	2.627	682.839	0.041	140.029	Mg	0.001	0.236	98.685
1A4ci	Peat	0.132	682.839	0.396	140.029	Mg	0.001	0.175	98.860
1A2gvii	Liquid	0.296	682.839	0.372	140.029	Mg	0.000	0.147	99.007
1A2f	Solid	5.497	682.839	1.431	140.029	Mg	0.000	0.144	99.151
2B10a		0.010	682.839	0.250	140.029	Mg	0.000	0.117	99.268
2G		0.116	682.839	0.215	140.029	Mg	0.000	0.090	99.359
1A2d	Peat	0.999	682.839	0.016	140.029	Mg	0.000	0.090	99.448
1A4cii	Liquid	0.293	682.839	0.239	140.029	Mg	0.000	0.084	99.533
1A2d	Liquid	0.110	682.839	0.172	140.029	Mg	0.000	0.071	99.604
1A2d	Other	0.016	682.839	0.136	140.029	Mg	0.000	0.063	99.667
1A2e	Peat	0.328	682.839	0.170	140.029	Mg	0.000	0.049	99.715
1A4aii	Liquid	0.134	682.839	0.098	140.029	Mg	0.000	0.033	99.749
1A2e	Biomass	0.123	682.839	0.086	140.029	Mg	0.000	0.029	99.777
1A3dii	Liquid	0.117	682.839	0.077	140.029	Mg	0.000	0.025	99.802
1A4bii	Liquid	0.044	682.839	0.057	140.029	Mg	0.000	0.023	99.825
1A2f	Biomass	0.003	682.839	0.034	140.029	Mg	0.000	0.016	99.841
1A2e	Other	0.004	682.839	0.029	140.029	Mg	0.000	0.014	99.855
1A3bi	Gasoline	0.059	682.839	0.040	140.029	Mg	0.000	0.013	99.868
1A4ai	Peat	0.040	682.839	0.035	140.029	Mg	0.000	0.013	99.881
1B1b		0.160	682.839	0.006	140.029	Mg	0.000	0.013	99.893
2C3		0.127	682.839	0.001	140.029	Mg	0.000	0.012	99.905
1A4ciii	Liquid	0.067	682.839	0.038	140.029	Mg	0.000	0.012	99.917
1A3biii	Diesel oil	0.018	682.839	0.026	140.029	Mg	0.000	0.011	99.928
1A1a	Liquid	0.170	682.839	0.016	140.029	Mg	0.000	0.009	99.937
1A2gviii	Peat	0.005	682.839	0.018	140.029	Mg	0.000	0.008	99.944
1A3c	Liquid	0.060	682.839	0.023	140.029	Mg	0.000	0.005	99.949
1A3bi	Diesel oil	0.006	682.839	0.012	140.029	Mg	0.000	0.005	99.955
1A4bi	Peat	0.215	682.839	0.055	140.029	Mg	0.000	0.005	99.960
1A1b	Solid	0.090	682.839	0.009	140.029	Mg	0.000	0.004	99.964
1A5a	Liquid	0.111	682.839	0.032	140.029	Mg	0.000	0.004	99.968
1A2gviii	Liquid	0.055	682.839	0.002	140.029	Mg	0.000	0.004	99.972
1A2a	Biomass		682.839	0.008	140.029	Mg	0.000	0.004	99.976
1A4ci	Solid	0.072	682.839	0.008	140.029	Mg	0.000	0.003	99.979
1A4ci	Liquid	0.039	682.839	0.001	140.029	Mg	0.000	0.003	99.983
1A2c	Liquid	0.040	682.839	0.015	140.029	Mg	0.000	0.003	99.986
1A2e	Liquid	0.040	682.839	0.002	140.029	Mg	0.000	0.003	99.989
1A4ai	Liquid	0.125	682.839	0.019	140.029	Mg	0.000	0.003	99.992
5C1bv		0.001	682.839	0.006	140.029	Mg	0.000	0.003	99.994
1A3bii	Diesel oil	0.005	682.839	0.005	140.029	Mg	0.000	0.002	99.996

1A4bi	Liquid	0.022	682.839	0.000	140.029	Mg	0.000	0.002	99.998
1A2c	Biomass	0.014	682.839	0.004	140.029	Mg	0.000	0.001	99.999
1A3biv	Gasoline	0.000	682.839	0.001	140.029	Mg	0.000	0.001	100
1A2b	Liquid	0.005	682.839	0.000	140.029	Mg	0.000	0.000	100
1A3bii	Gasoline	0.002	682.839	0.000	140.029	Mg	0.000	0.000	100
1A3biv	Diesel oil		682.839	0.000	140.029	Mg	0.000	0.000	100

PCDD/F

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2C1		4.552	14.754	0.632	10.778	g I-Teq	0.183	20.627	20.627	Yes
1A1a	Biomass	0.151	14.754	1.878	10.778	g I-Teq	0.120	13.540	34.167	Yes
2B10a		3.000	14.754	0.700	10.778	g I-Teq	0.101	11.426	45.593	Yes
1A1a	Other	0.002	14.754	1.199	10.778	g I-Teq	0.081	9.173	54.765	Yes
1B1b		1.461	14.754	0.023	10.778	g I-Teq	0.071	7.999	62.765	Yes
5E		0.201	14.754	1.062	10.778	g I-Teq	0.062	7.010	69.775	Yes
1A5a	Biomass	0.007	14.754	0.802	10.778	g I-Teq	0.054	6.106	75.881	Yes
1A3bi	Gasoline	0.962	14.754	0.187	10.778	g I-Teq	0.035	3.951	79.832	Yes
1A4bi	Biomass	0.867	14.754	1.115	10.778	g I-Teq	0.033	3.691	83.523	Yes
1A2gviii	Other	0.192	14.754	0.424	10.778	g I-Teq	0.019	2.175	85.698	
1A3bi	Diesel oil	0.008	14.754	0.270	10.778	g I-Teq	0.018	2.027	87.725	
1A2d	Other	0.009	14.754	0.241	10.778	g I-Teq	0.016	1.791	89.516	
2C7a		0.001	14.754	0.225	10.778	g I-Teq	0.015	1.715	91.231	
1A2d	Biomass	0.808	14.754	0.412	10.778	g I-Teq	0.012	1.362	92.593	
1A1a	Solid	0.411	14.754	0.144	10.778	g I-Teq	0.011	1.197	93.790	
1A3bii	Diesel oil	0.004	14.754	0.151	10.778	g I-Teq	0.010	1.132	94.923	
1A1a	Peat	0.747	14.754	0.417	10.778	g I-Teq	0.009	0.987	95.909	
1A3biii	Diesel oil	0.217	14.754	0.062	10.778	g I-Teq	0.006	0.734	96.644	
1A4ai	Biomass	0.041	14.754	0.072	10.778	g I-Teq	0.003	0.326	96.970	
2C6		0.038	14.754	0.064	10.778	g I-Teq	0.002	0.275	97.244	
1A2d	Solid	0.045	14.754	0.001	10.778	g I-Teq	0.002	0.246	97.490	
1A2d	Peat	0.149	14.754	0.078	10.778	g I-Teq	0.002	0.235	97.725	
2C3		0.041	14.754	0.002	10.778	g I-Teq	0.002	0.213	97.938	
1A2d	Liquid	0.005	14.754	0.031	10.778	g I-Teq	0.002	0.209	98.147	
1A2d	Gaseous	0.016	14.754	0.034	10.778	g I-Teq	0.002	0.174	98.321	
1A4ci	Biomass	0.137	14.754	0.122	10.778	g I-Teq	0.002	0.173	98.494	
1A3bii	Gasoline	0.024	14.754	0.001	10.778	g I-Teq	0.001	0.130	98.624	
1A4ci	Peat	0.007	14.754	0.021	10.778	g I-Teq	0.001	0.122	98.746	
1A2f	Solid	0.024	14.754	0.005	10.778	g I-Teq	0.001	0.102	98.848	
2A1		0.029	14.754	0.010	10.778	g I-Teq	0.001	0.088	98.936	
1A2c	Other	0.014	14.754	0.000	10.778	g I-Teq	0.001	0.077	99.013	
1A4bi	Liquid	0.019	14.754	0.004	10.778	g I-Teq	0.001	0.076	99.089	
1A2e	Peat	0.028	14.754	0.011	10.778	g I-Teq	0.001	0.073	99.162	
1A3dii	Liquid	0.026	14.754	0.010	10.778	g I-Teq	0.001	0.069	99.231	
1A2c	Biomass	0.012	14.754	0.000	10.778	g I-Teq	0.001	0.065	99.297	
1A2gviii	Liquid	0.003	14.754	0.010	10.778	g I-Teq	0.001	0.063	99.360	

1A1b	Liquid	0.019	14.754	0.022	10.778	g I-Teq	0.001	0.059	99.419
2L		0.029	14.754	0.014	10.778	g I-Teq	0.000	0.055	99.475
1A1b	Gaseous	0.004	14.754	0.009	10.778	g I-Teq	0.000	0.044	99.518
1A2a	Solid	0.024	14.754	0.023	10.778	g I-Teq	0.000	0.043	99.561
1A4bi	Peat	0.011	14.754	0.003	10.778	g I-Teq	0.000	0.041	99.602
1A2gviii	Peat	0.004	14.754	0.007	10.778	g I-Teq	0.000	0.036	99.638
1A2e	Solid	0.007	14.754	0.001	10.778	g I-Teq	0.000	0.033	99.671
1A3biv	Gasoline	0.014	14.754	0.014	10.778	g I-Teq	0.000	0.029	99.700
2A3		0.005	14.754	0.000	10.778	g I-Teq	0.000	0.028	99.728
1A4ai	Liquid	0.012	14.754	0.005	10.778	g I-Teq	0.000	0.027	99.755
2A2		0.038	14.754	0.031	10.778	g I-Teq	0.000	0.021	99.776
1A3biv	Diesel oil		14.754	0.003	10.778	g I-Teq	0.000	0.021	99.797
1A2f	Biomass	0.000	14.754	0.003	10.778	g I-Teq	0.000	0.020	99.817
1A2a	Gaseous	0.001	14.754	0.003	10.778	g I-Teq	0.000	0.020	99.837
1A2e	Biomass	0.007	14.754	0.007	10.778	g I-Teq	0.000	0.017	99.854
1A2c	Liquid	0.005	14.754	0.006	10.778	g I-Teq	0.000	0.017	99.871
1A2gviii	Biomass	0.199	14.754	0.147	10.778	g I-Teq	0.000	0.014	99.885
1A5a	Gaseous	0.001	14.754	0.002	10.778	g I-Teq	0.000	0.010	99.895
1A5a	Liquid	0.009	14.754	0.006	10.778	g I-Teq	0.000	0.010	99.905
1A2f	Other		14.754	0.001	10.778	g I-Teq	0.000	0.009	99.914
1A4ciii	Liquid	0.007	14.754	0.004	10.778	g I-Teq	0.000	0.009	99.923
1A4ci	Liquid	0.004	14.754	0.002	10.778	g I-Teq	0.000	0.008	99.931
1A2a	Liquid	0.001	14.754	0.000	10.778	g I-Teq	0.000	0.007	99.938
1A1b	Biomass		14.754	0.001	10.778	g I-Teq	0.000	0.007	99.945
1A2e	Liquid	0.002	14.754	0.000	10.778	g I-Teq	0.000	0.007	99.952
1A2e	Other	0.000	14.754	0.001	10.778	g I-Teq	0.000	0.006	99.958
5C1bv		0.000	14.754	0.001	10.778	g I-Teq	0.000	0.006	99.964
1A2c	Gaseous	0.001	14.754	0.001	10.778	g I-Teq	0.000	0.006	99.970
1A2b	Solid	0.002	14.754	0.001	10.778	g I-Teq	0.000	0.005	99.975
2D3b		0.016	14.754	0.011	10.778	g I-Teq	0.000	0.004	99.979
1A4ai	Gaseous	0.000	14.754	0.001	10.778	g I-Teq	0.000	0.003	99.982
1A4bi	Gaseous	0.000	14.754	0.001	10.778	g I-Teq	0.000	0.003	99.985
1A4ai	Peat	0.002	14.754	0.002	10.778	g I-Teq	0.000	0.003	99.987
1A2f	Gaseous	0.001	14.754	0.001	10.778	g I-Teq	0.000	0.002	99.989
1A1a	Liquid	0.007	14.754	0.006	10.778	g I-Teq	0.000	0.002	99.991
1A2a	Biomass		14.754	0.000	10.778	g I-Teq	0.000	0.002	99.993
2G		0.001	14.754	0.000	10.778	g I-Teq	0.000	0.001	99.994
1A4ci	Gaseous	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.001	99.995
1A1b	Solid	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.001	99.996
1A2f	Liquid	0.002	14.754	0.001	10.778	g I-Teq	0.000	0.001	99.998
1A2e	Gaseous	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.001	99.998
1A3ei	Gaseous	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.000	99.999
1A1a	Gaseous	0.020	14.754	0.015	10.778	g I-Teq	0.000	0.000	99.999
1A2b	Liquid	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.000	99.999
1A4ci	Solid	0.001	14.754	0.000	10.778	g I-Teq	0.000	0.000	99.999
1A2b	Gaseous		14.754	0.000	10.778	g I-Teq	0.000	0.000	100
1A2gviii	Gaseous	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.000	100
1A4bi	Other	0.000	14.754	0.000	10.778	g I-Teq	0.000	0.000	100

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1A4bi	Biomass	17.153	18.174	18.573	20.091	Mg	0.021	22.726	22.726	Yes
1A1a	Other	0.000	18.174	0.236	20.091	Mg	0.013	13.795	36.520	Yes
1A1a	Biomass	0.019	18.174	0.256	20.091	Mg	0.013	13.730	50.251	Yes
1A2gviii	Other	0.017	18.174	0.160	20.091	Mg	0.008	8.238	58.488	Yes
2C1		0.132	18.174	0.010	20.091	Mg	0.007	7.914	66.402	Yes
1A5a	Biomass	0.001	18.174	0.103	20.091	Mg	0.006	5.964	72.366	Yes
1A4bi	Liquid	0.109	18.174	0.024	20.091	Mg	0.005	5.630	77.996	Yes
1A4ai	Liquid	0.074	18.174	0.031	20.091	Mg	0.003	2.952	80.948	Yes
1A2d	Other	0.001	18.174	0.049	20.091	Mg	0.003	2.813	83.762	
1A5a	Liquid	0.045	18.174	0.013	20.091	Mg	0.002	2.156	85.918	
1A3biii	Diesel oil	0.077	18.174	0.114	20.091	Mg	0.002	1.675	87.593	
1A2d	Biomass	0.105	18.174	0.142	20.091	Mg	0.001	1.488	89.081	
1A3bi	Diesel oil	0.025	18.174	0.051	20.091	Mg	0.001	1.362	90.443	
1A3bi	Gasoline	0.047	18.174	0.032	20.091	Mg	0.001	1.178	91.621	
1A1a	Peat	0.043	18.174	0.028	20.091	Mg	0.001	1.144	92.765	
1A4ci	Liquid	0.025	18.174	0.011	20.091	Mg	0.001	0.975	93.740	
1A2gviii	Liquid	0.015	18.174	0.006	20.091	Mg	0.001	0.651	94.392	
1A2e	Liquid	0.010	18.174	0.001	20.091	Mg	0.001	0.617	95.009	
2D3i		0.020	18.174	0.013	20.091	Mg	0.000	0.508	95.517	
1A2d	Liquid	0.037	18.174	0.033	20.091	Mg	0.000	0.470	95.987	
1A4cii	Liquid	0.023	18.174	0.019	20.091	Mg	0.000	0.400	96.387	
1A2c	Liquid	0.009	18.174	0.003	20.091	Mg	0.000	0.389	96.776	
1A2f	Liquid	0.008	18.174	0.003	20.091	Mg	0.000	0.337	97.113	
1A2a	Liquid	0.005	18.174	0.000	20.091	Mg	0.000	0.300	97.413	
1A2d	Peat	0.009	18.174	0.005	20.091	Mg	0.000	0.272	97.685	
1A4aii	Liquid	0.011	18.174	0.008	20.091	Mg	0.000	0.232	97.917	
1A2gvii	Liquid	0.024	18.174	0.030	20.091	Mg	0.000	0.209	98.126	
1A2f	Other		18.174	0.004	20.091	Mg	0.000	0.207	98.333	
1A3c	Liquid	0.005	18.174	0.002	20.091	Mg	0.000	0.203	98.536	
1A1a	Liquid	0.050	18.174	0.053	20.091	Mg	0.000	0.161	98.697	
2C2			18.174	0.002	20.091	Mg	0.000	0.140	98.837	
1A3dii	Liquid	0.004	18.174	0.002	20.091	Mg	0.000	0.136	98.973	
1A2c	Biomass	0.002	18.174	0.001	20.091	Mg	0.000	0.091	99.064	
1A2b	Liquid	0.003	18.174	0.002	20.091	Mg	0.000	0.082	99.146	
1A3bii	Gasoline	0.001	18.174	0.000	20.091	Mg	0.000	0.081	99.227	
1A3bii	Diesel oil	0.015	18.174	0.017	20.091	Mg	0.000	0.071	99.298	
1A2gviii	Peat	0.000	18.174	0.001	20.091	Mg	0.000	0.069	99.367	
1A2e	Peat	0.002	18.174	0.001	20.091	Mg	0.000	0.067	99.434	
1A1a	Solid	0.001	18.174	0.000	20.091	Mg	0.000	0.061	99.494	
2G		0.001	18.174	0.001	20.091	Mg	0.000	0.057	99.552	
1A2gviii	Biomass	0.027	18.174	0.03	20.091	Mg	0.000	0.057	99.608	
5C1bv		0.000	18.174	0.001	20.091	Mg	0.000	0.052	99.661	

1A4ci	Peat	0.000	18.174	0.001	20.091	Mg	0.000	0.044	99.705
1A3biv	Gasoline	0.000	18.174	0.001	20.091	Mg	0.000	0.041	99.746
1A4bii	Liquid	0.004	18.174	0.005	20.091	Mg	0.000	0.041	99.787
1A4ciii	Liquid	0.001	18.174	0.001	20.091	Mg	0.000	0.040	99.827
1A4ci	Biomass	0.003	18.174	0.003	20.091	Mg	0.000	0.037	99.864
1A4ai	Biomass	0.001	18.174	0.002	20.091	Mg	0.000	0.034	99.898
1A4bi	Peat	0.001	18.174	0.000	20.091	Mg	0.000	0.032	99.930
1A2f	Biomass	0.000	18.174	0.000	20.091	Mg	0.000	0.019	99.950
1A2d	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.009	99.958
1A4bi	Other	0.000	18.174	0.000	20.091	Mg	0.000	0.008	99.966
1A1b	Liquid	0.006	18.174	0.007	20.091	Mg	0.000	0.007	99.973
1A3biv	Diesel oil		18.174	0.000	20.091	Mg	0.000	0.006	99.979
1A2e	Other	0.000	18.174	0.000	20.091	Mg	0.000	0.006	99.985
1A2f	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.004	99.988
2A1		0.000	18.174	0.000	20.091	Mg	0.000	0.003	99.991
1A2a	Biomass		18.174	0.000	20.091	Mg	0.000	0.002	99.993
1A4ai	Peat	0.000	18.174	0.000	20.091	Mg	0.000	0.001	99.994
1A2b	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.001	99.995
1A2e	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.001	99.997
1B1b		0.000	18.174	0.000	20.091	Mg	0.000	0.001	99.998
1A2e	Biomass	0.001	18.174	0.001	20.091	Mg	0.000	0.001	99.999
1A2a	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.001	100
1A4ci	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.000	100
1A1b	Solid	0.000	18.174	0.000	20.091	Mg	0.000	0.000	100

HCB

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
2B10a		29.000	35.677	15.100	23.051	kg	0.102	48.694	48.694	Yes
2C7a		5.514	35.677	6.497	23.051	kg	0.082	39.278	87.973	Yes
1A1a	Biomass	0.037	35.677	0.491	23.051	kg	0.013	6.258	94.230	
1A4bi	Biomass	0.206	35.677	0.266	23.051	kg	0.004	1.769	95.999	
1A3biii	Diesel oil	0.059	35.677	0.088	23.051	kg	0.001	0.660	96.659	
2C1		0.096	35.677	0.016	23.051	kg	0.001	0.608	97.267	
1A5a	Biomass		35.677	0.038	23.051	kg	0.001	0.511	97.778	
1A3bi	Diesel oil	0.020	35.677	0.040	23.051	kg	0.001	0.365	98.144	
1A2gviii	Biomass	0.049	35.677	0.055	23.051	kg	0.001	0.306	98.449	
2C3		0.033	35.677	0.039	23.051	kg	0.001	0.245	98.695	
3Df		0.057	35.677	0.020	23.051	kg	0.000	0.229	98.924	
1A2gviii		0.143	35.677	0.107	23.051	kg	0.000	0.193	99.117	
1A4ai	Biomass	0.010	35.677	0.017	23.051	kg	0.000	0.148	99.265	
1A3bii	Diesel oil	0.015	35.677	0.018	23.051	kg	0.000	0.111	99.376	
1A4ci	Biomass	0.033	35.677	0.029	23.051	kg	0.000	0.107	99.483	
5C1bv		0.001	35.677	0.005	23.051	kg	0.000	0.060	99.543	
1A2d	Solid	0.007	35.677	0.000	23.051	kg	0.000	0.059	99.602	
1A1a	Other		35.677	0.004	23.051	kg	0.000	0.055	99.656	

1A2d	Biomass	0.191	35.677	0.127	23.051	kg	0.000	0.044	99.701
1A3bi	Gasoline	0.108	35.677	0.073	23.051	kg	0.000	0.043	99.744
1A3bii	Gasoline	0.004	35.677	0.000	23.051	kg	0.000	0.031	99.774
1A4ci	Solid		35.677	0.002	23.051	kg	0.000	0.025	99.799
1A2c	Biomass	0.003	35.677	0.000	23.051	kg	0.000	0.024	99.824
1A3biv	Gasoline	0.001	35.677	0.002	23.051	kg	0.000	0.022	99.845
1A2f	Solid	0.004	35.677	0.001	23.051	kg	0.000	0.021	99.866
1A2a	Solid	0.003	35.677	0.000	23.051	kg	0.000	0.019	99.885
1A2b	Solid	0.002	35.677	0.000	23.051	kg	0.000	0.016	99.902
2D3i		0.004	35.677	0.002	23.051	kg	0.000	0.016	99.917
1A3dii	Liquid	0.010	35.677	0.005	23.051	kg	0.000	0.015	99.933
1A3bi	Gaseous		35.677	0.001	23.051	kg	0.000	0.012	99.945
1A2gviii	Other		35.677	0.001	23.051	kg	0.000	0.011	99.956
1A2e	Biomass	0.002	35.677	0.002	23.051	kg	0.000	0.009	99.965
1A2f	Biomass	0.000	35.677	0.001	23.051	kg	0.000	0.008	99.973
1A2e	Solid	0.001	35.677	0.000	23.051	kg	0.000	0.008	99.981
1A4ciii	Liquid	0.004	35.677	0.003	23.051	kg	0.000	0.004	99.985
1A5a	Liquid	0.001	35.677	0.001	23.051	kg	0.000	0.004	99.989
1A2d	Other		35.677	0.000	23.051	kg	0.000	0.003	99.992
1A1a	Solid	0.001	35.677	0.000	23.051	kg	0.000	0.003	99.995
1A3biii	Gaseous		35.677	0.000	23.051	kg	0.000	0.002	99.997
1A3biv	Diesel oil		35.677	0.000	23.051	kg	0.000	0.001	99.998
1A3bii	Gaseous		35.677	0.000	23.051	kg	0.000	0.001	99.999
1A2a	Biomass		35.677	0.000	23.051	kg	0.000	0.001	100

PCB

NFR Code	Fuel	Base year emission of the NFR category	Base year total emission	Year 2021 emission of the NFR category	Year 2021 total emission	Unit	Trend assessment	Contribution to trend, %	Cumulative total, %	Key source
1B1b		1.753	28.558	3.006	23.239	kg	0.055	18.460	18.460	Yes
2C1		13.464	28.558	12.492	23.239	kg	0.054	17.944	36.404	Yes
1A2d	Solid	1.907	28.558	0.033	23.239	kg	0.053	17.750	54.153	Yes
1A4bi	Biomass	2.477	28.558	3.187	23.239	kg	0.041	13.684	67.837	Yes
1A2f	Solid	1.037	28.558	0.237	23.239	kg	0.021	7.094	74.932	Yes
1A2a	Solid	0.784	28.558	0.111	23.239	kg	0.018	6.162	81.094	Yes
1A2b	Solid	0.551	28.558	0.028	23.239	kg	0.015	4.914	86.008	
2A1		3.298	28.558	3.040	23.239	kg	0.012	4.164	90.171	
1A1a	Biomass	0.026	28.558	0.344	23.239	kg	0.011	3.775	93.946	
1A2e	Solid	0.298	28.558	0.035	23.239	kg	0.007	2.419	96.366	
1A4ai	Biomass	0.115	28.558	0.206	23.239	kg	0.004	1.323	97.688	
1A2gviii		0.135	28.558	0.026	23.239	kg	0.003	0.976	98.664	
2C3		0.083	28.558	0.103	23.239	kg	0.001	0.417	99.081	
1A4ci	Biomass	0.390	28.558	0.348	23.239	kg	0.001	0.359	99.440	
1A3dii	Liquid	0.024	28.558	0.005	23.239	kg	0.001	0.174	99.615	
2C7c		0.002	28.558	0.015	23.239	kg	0.000	0.158	99.773	
5C1bv		0.003	28.558	0.014	23.239	kg	0.000	0.137	99.910	
1A1a	Other		28.558	0.003	23.239	kg	0.000	0.033	99.944	

1A4bi	Liquid	0.003	28.558	0.001	23.239	kg	0.000	0.023	99.966
1A4ai	Liquid	0.002	28.558	0.001	23.239	kg	0.000	0.009	99.976
1A4ciii	Liquid	0.002	28.558	0.001	23.239	kg	0.000	0.006	99.981
1A4ci	Liquid	0.001	28.558	0.000	23.239	kg	0.000	0.004	99.986
1A2d	Biomass	0.002	28.558	0.002	23.239	kg	0.000	0.004	99.990
1A2gviii	Biomass	0.001	28.558	0.001	23.239	kg	0.000	0.002	99.992
1A1a	Solid	0.000	28.558	0.000	23.239	kg	0.000	0.002	99.994
2C7a		0.001	28.558	0.000	23.239	kg	0.000	0.001	99.995
1A3bi	Gasoline	0.000	28.558	0.000	23.239	kg	0.000	0.001	99.997
1A4ci	Peat	0.000	28.558	0.000	23.239	kg	0.000	0.001	99.997
1A3bi	Diesel oil	0.000	28.558	0.000	23.239	kg	0.000	0.001	99.998
1A2c	Biomass	0.000	28.558	0.000	23.239	kg	0.000	0.000	99.998
1A3bii	Diesel oil	0.000	28.558	0.000	23.239	kg	0.000	0.000	99.999
1A4bi	Peat	0.000	28.558	0.000	23.239	kg	0.000	0.000	99.999
1A3bii	Gasoline	0.000	28.558	0.000	23.239	kg	0.000	0.000	99.999
1A3biii	Diesel oil	0.000	28.558	0.000	23.239	kg	0.000	0.000	99.999
1A4ci	Solid		28.558	0.000	23.239	kg	0.000	0.000	100
1A2gviii	Other		28.558	0.000	23.239	kg	0.000	0.000	100
1A3biv	Gasoline	0.000	28.558	0.000	23.239	kg	0.000	0.000	100
1A2f	Biomass	0.000	28.558	0.000	23.239	kg	0.000	0.000	100
1A2e	Biomass	0.000	28.558	0.000	23.239	kg	0.000	0.000	100
1A2d	Other		28.558	0.000	23.239	kg	0.000	0.000	100
1A4ai	Peat	0.000	28.558	0.000	23.239	kg	0.000	0.000	100
2A2		0.000	28.558	0.000	23.239	kg	0.000	0.000	100
1A2a	Biomass		28.558	0.000	23.239	kg	0.000	0.000	100
1A3biv	Diesel oil		28.558	0.000	23.239	kg	0.000	0.000	100

## Energy Balance

Energy balances are available in Finland's PX-Web databases from [http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin\\_ene\\_ehk/stat-fin\\_ehk\\_pxt\\_002.px/?rxid=5c37441a-ed98-40ad-bfb5-5f29f4898d81](http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin_ene_ehk/stat-fin_ehk_pxt_002.px/?rxid=5c37441a-ed98-40ad-bfb5-5f29f4898d81)

One can select the years, fuels and quantity (TJ), Twh, Share (%) and Annual change (%) and make searches to create output files and graphs as presented below.

002 -- Total energy consumption by source (detailed)

Select variable
About table

Mark your selections and choose between table on screen and file format. Marking tips  
For variables marked \* you need to select at least one value

Year *	Source *	Tiedot *
<input checked="" type="checkbox"/> - <input type="checkbox"/> + <input type="checkbox"/>	<input checked="" type="checkbox"/> - <input type="checkbox"/> + <input type="checkbox"/>	<input checked="" type="checkbox"/> - <input type="checkbox"/> + <input type="checkbox"/>
Total 48 Selected 0	Total 26 Selected 0	Total 4 Selected 0
2012 2013 2014 2015 2016 2017	Diesel fuel Refinery gases etc. Town gas Light fuel oil Recycled fuels Recycled oil	Quantity, TJ TWh Share % Annual change %
Search <input type="text"/> <input type="button" value="▶"/> <input type="checkbox"/> Beginning of row	Search <input type="text"/> <input type="button" value="▶"/> <input type="checkbox"/> Beginning of row	Search <input type="text"/> <input type="button" value="▶"/> <input type="checkbox"/> Beginning of row

Number of selected data cells are: 0 (maximum number allowed is 1,000,000)

Table - Layout 2  
 Chart - Line  
 Chart - Bar  
 Table - Layout 1  
 Tab delimited with heading  
 Semicolon delimited with heading  
 Excel (xlsx) with code and text column  
 Excel workbook (xml) with code and text  
 Excel workbook (xml)  
 Excel (xlsx)  
 Comma delimited with heading  
 PX-file  
 Space delimited with heading

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*Energy balance data available from Finland's PX-Web databases*