

ANNEX 7

Approach 1 uncertainty analysis for Slovenia

A	B	C	D	E	F	G	H	I	J	K	L	M
IPCC Category	Gas	Emissions or removals 1986	Emissions or removals 2006	AD uncertainty	EF parameter uncertainty	combined uncertainty	Contribution to variance in 2006	Type A sensitivity	Type B sensitivity	Uncertainty in trend by EF	Uncertainty in trend by AD	Uncertainty in trend
		Gg CO2 eq	Gg CO2 eq	%	%	%		%	%	%	%	%
1. ENERGY												
1.A. Fuel Combustion												
Liquid Fuels	CO2	4761,664	7450,038	3	2,5	3,91	3,366	0,182	0,397	0,455	1,686	3,049
Solid Fuels	CO2	8932,732	6417,619	3	2,5	3,91	2,498	0,060	0,342	0,151	1,452	2,131
Gaseous Fuels	CO2	1468,239	1810,681	2	2,5	3,20	0,134	0,030	0,097	0,076	0,273	0,080
Other Fuels	CO2	12,831	31,319	10	10	14,14	0,001	0,001	0,002	0,011	0,024	0,001
1.A.1. Energy Industries												
Liquid Fuels	CH4	0,251	0,038	3	75	75,06	0,000	0,000	0,000	0,001	0,000	0,000
Solid Fuels	CH4	1,308	1,254	3	75	75,06	0,000	0,000	0,000	0,001	0,000	0,000
Gaseous Fuels	CH4	0,231	0,109	2	75	75,03	0,000	0,000	0,000	0,000	0,000	0,000
Biomass	CH4	0,100	0,468	10	50	50,99	0,000	0,000	0,000	0,001	0,000	0,000
1.A.1. Energy Industries												
Liquid Fuels	N2O	0,761	0,113	3	75	75,06	0,000	0,000	0,000	0,002	0,000	0,000
Solid Fuels	N2O	25,429	25,920	3	50	50,09	0,007	0,000	0,001	0,012	0,006	0,000
Gaseous Fuels	N2O	0,111	0,144	2	50	50,04	0,000	0,000	0,000	0,000	0,000	0,000
Biomass	N2O	0,196	0,917	10	150	150,33	0,000	0,000	0,000	0,006	0,001	0,000
1.A.2 Manufacturing Industries and Const.												
Liquid Fuels	CH4	2,293	0,903	3	75	75,06	0,000	0,000	0,000	0,004	0,000	0,000
Solid Fuels	CH4	2,942	0,777	3	75	75,06	0,000	0,000	0,000	0,007	0,000	0,000
Gaseous Fuels	CH4	2,361	2,490	2	75	75,03	0,000	0,000	0,000	0,002	0,000	0,000
Biomass	CH4	3,174	2,825	10	50	50,99	0,000	0,000	0,000	0,000	0,002	0,000
1.A.2 Manufacturing Industries and Const.												
Liquid Fuels	N2O	28,875	23,484	3	75	75,06	0,012	0,000	0,001	0,004	0,005	0,000
Solid Fuels	N2O	6,080	1,605	3	50	50,09	0,000	0,000	0,000	0,009	0,000	0,000
Gaseous Fuels	N2O	0,697	0,735	2	50	50,04	0,000	0,000	0,000	0,000	0,000	0,000
Biomass	N2O	6,248	5,560	10	150	150,33	0,003	0,000	0,000	0,002	0,004	0,000
1.A.3 Transport												
a. Civil Aviation												
Aviation Gasoline	CH4	0,000	0,000	5	100	100,12	0,000	0,000	0,000	0,000	0,000	0,000
b. Road Transportation												
Gasoline	CH4	17,275	16,933	2	50	50,04	0,003	0,000	0,001	0,006	0,003	0,000
Diesel Oil	CH4	0,945	2,974	2	50	50,04	0,000	0,000	0,000	0,006	0,000	0,000

Diesel Oil from biomass	CH4	0,000	0,008	2	50	50,04	0,000	0,000	0,000	0,000	0,000	0,000
c. Railways												
Liquid Fuels	CH4	0,078	0,043	5	110	110,11	0,000	0,000	0,000	0,000	0,000	0,000
a. Civil Aviation												
Aviation Gasoline	N2O	0,005	0,013	5	150	150,08	0,000	0,000	0,000	0,000	0,000	0,000
b. Road Transportation												
Gasoline	N2O	10,055	94,292	2	300	300,01	3,182	0,005	0,005	1,373	0,014	1,884
Diesel Oil	N2O	13,641	72,036	2	150	150,01	0,464	0,003	0,004	0,484	0,011	0,234
Diesel Oil from biomass	N2O		0,197	2	150	150,01	0,000	0,000	0,000	0,002	0,000	0,000
c. Railways												
Liquid Fuels	N2O	8,651	4,754	5	150	150,08	0,002	0,000	0,000	0,020	0,002	0,000
1.A.4 Other Sectors												
Liquid Fuels	CH4	2,587	5,577	5	75	75,17	0,001	0,000	0,000	0,014	0,002	0,000
Solid Fuels	CH4	49,276	0,000	10	75	75,66	0,000	0,002	0,000	0,167	0,000	0,028
Gaseous Fuels	CH4	0,065	0,479	3	75	75,06	0,000	0,000	0,000	0,002	0,000	0,000
Biomass	CH4	99,464	85,510	20	150	151,33	0,666	0,000	0,005	0,011	0,129	0,017
1.A.4 Other Sectors												
Liquid Fuels	N2O	50,408	32,250	5	75	75,17	0,023	0,001	0,002	0,042	0,012	0,002
Solid Fuels	N2O	5,407	0,000	10	75	75,66	0,000	0,000	0,000	0,018	0,000	0,000
Gaseous Fuels	N2O	0,019	0,141	3	75	75,06	0,000	0,000	0,000	0,001	0,000	0,000
Biomass	N2O	19,577	16,831	20	150	151,33	0,026	0,000	0,001	0,002	0,025	0,001
B. Fugitive Emissions from Fuels												
1. Solid Fuels												
a. Coal Mining and Handling	CO2	120,238	80,989	3	150	150,03	0,587	0,001	0,004	0,166	0,018	0,028
c. Other (SO2 scrubbing)	CO2	0,000	97,093	1	1	1,41	0,000	0,005	0,005	0,005	0,007	0,000
B. Fugitive Emissions from Fuels												
1. Solid Fuels												
a. Coal Mining and Handling	CH4	358,906	254,479	3	30	30,15	0,234	0,003	0,014	0,078	0,058	0,009
2. Oil and Natural Gas												
a. Oil	CH4	0,422	0,000	2	30	30,07	0,000	0,000	0,000	0,001	0,000	0,000
b. Natural Gas	CH4	56,090	31,610	5	50	50,25	0,010	0,001	0,002	0,042	0,012	0,002
2. INDUSTRIAL PROCESSES												
A. Mineral Products												
1. Cement Production	CO2	514,615	523,016	2	2	2,83	0,009	0,005	0,028	0,009	0,079	0,006
2. Lime Production	CO2	220,206	134,462	10	5	11,18	0,009	0,003	0,007	0,014	0,101	0,010
3. Limestone and Dolomite Use	CO2	20,305	5,911	20	10	22,36	0,000	0,001	0,000	0,006	0,009	0,000
4. Soda Ash Production and Use	CO2	10,290	6,899	10	5	11,18	0,000	0,000	0,000	0,000	0,005	0,000

7. Other (glass production)	CO2	0,226	0,384	5	2	5,39	0,000	0,000	0,000	0,000	0,000	0,000
B. Chemical Industry												
4. Carbide Production	CO2	44,985	46,201	20	5	20,62	0,004	0,000	0,002	0,002	0,070	0,005
B. Chemical Industry												
4. Carbide Production	CH4	0,783		20	20	28,28	0,000	0,000	0,000	0,001	0,000	0,000
5. Other (Methanol)	CH4	2,929	5,446	30	80	85,44	0,001	0,000	0,000	0,013	0,012	0,000
C. Metal Production												
1. Iron and Steel Production	CO2	40,149	28,688	5	5	7,07	0,000	0,000	0,002	0,001	0,011	0,000
2. Ferroalloys Production	CO2	57,635	38,279	10	10	14,14	0,001	0,001	0,002	0,006	0,029	0,001
3. Aluminium Production	CO2	89,402	206,881	10	10	14,14	0,034	0,007	0,011	0,070	0,156	0,029
C. Metal Production												
3. Aluminium Production	PFC	276,291	115,550	10	10	14,14	0,011	0,006	0,006	0,063	0,087	0,012
F. Consumption of Halocarbons and SF6												
1. Refrigeration and Air Conditioning Equipment	HFC	0,000	111,362	30	50	58,31	0,168	0,006	0,006	0,297	0,252	0,152
2. Foam Blowing	HFC	0,000	0,504	30	50	58,31	0,000	0,000	0,000	0,001	0,001	0,000
3. Fire Extinguishers	HFC	0,000	0,182	30	50	58,31	0,000	0,000	0,000	0,000	0,000	0,000
8. Electrical Equipment	SF6	10,241	18,840	10	0	10,00	0,000	0,001	0,001	0,000	0,014	0,000
3. SOLVENTS AND OTHER PRODUCT USED	N2O	81,903	44,153	50	20	53,85	0,022	0,001	0,002	0,027	0,167	0,028
4. AGRICULTURE												
A. Enteric Fermentation	CH4	765,086	654,889	10	20	22,36	0,853	0,000	0,035	0,008	0,494	0,244
B. Manure Management	CH4	509,785	451,542	10	30	31,62	0,811	0,001	0,024	0,033	0,341	0,117
B. Manure Management	N2O	268,295	162,967	50	100	111,80	1,320	0,003	0,009	0,341	0,615	0,494
D. Agricultural Soils												
1. Direct Soil Emissions	N2O	434,006	399,349	10	250	250,20	39,698	0,002	0,021	0,430	0,301	0,276
2. Pasture, Range and Paddock Manure	N2O	23,753	52,523	50	100	111,80	0,137	0,002	0,003	0,173	0,198	0,069
3. Indirect Emissions	N2O	333,371	307,938	50	250	254,95	24,509	0,001	0,016	0,347	1,161	1,469
5. LULUCF												
A. Forest Land	CO2	-1589,253	-4733,091	10	20	22,36	44,540	0,181	0,252	3,618	3,570	25,832
6. WASTE												
A. Solid Waste Disposal on Land	CH4	298,801	476,326	30	40	50,00	2,255	0,012	0,025	0,477	1,078	1,389
B. Waste Water Handling												
1. Industrial Wastewater	CH4	96,116	67,763	20	100	101,98	0,190	0,001	0,004	0,072	0,102	0,016
2. Domestic and Com. Waste Water	CH4	112,561	95,227	10	100	100,50	0,364	0,000	0,005	0,000	0,072	0,005
2. Domestic and Com. Waste Water	N2O	58,716	62,856	15	250	250,45	0,985	0,001	0,003	0,176	0,071	0,036
TOTAL		18750,828	15858,259				127,139					37,658
INVENTORY UNCERTAINTY	%						11,276					6,137

A	B	C	E	F	G	H
IPCC Category	Gas	Emissions or removals 1986	AD uncertainty	EF/parameter uncertainty	combined uncertainty	Contribution to variance in 1986
		Gg CO2 eq	%	%	%	
1. Energy						
1.A. Fuel Combustion						
Liquid Fuels	CO2	4761,664	5	2,5	5,590	2,015
Solid Fuels	CO2	8932,732	10	5	11,180	28,369
Gaseous Fuels	CO2	1468,239	5	2,5	5,590	0,192
Other Fuels	CO2	12,831	10	10	14,142	0,000
1.A.1. Energy Industries						
Liquid Fuels	CH4	0,251	5	75	75,166	0,000
Solid Fuels	CH4	1,308	10	75	75,664	0,000
Gaseous Fuels	CH4	0,231	5	75	75,166	0,000
Biomass	CH4	0,100	10	50	50,990	0,000
1.A.1. Energy Industries						
Liquid Fuels	N2O	0,761	5	75	75,166	0,000
Solid Fuels	N2O	25,429	10	50	50,990	0,005
Gaseous Fuels	N2O	0,111	5	50	50,249	0,000
Biomass	N2O	0,196	10	150	150,333	0,000
1.A.2 Manufacturing Industries and Construction						
Liquid Fuels	CH4	2,293	5	75	75,166	0,000
Solid Fuels	CH4	2,942	10	75	75,664	0,000
Gaseous Fuels	CH4	2,361	5	75	75,166	0,000
Biomass	CH4	3,174	10	50	50,990	0,000
1.A.2 Manufacturing Industries and Construction						
Liquid Fuels	N2O	28,875	5	75	75,166	0,013
Solid Fuels	N2O	6,080	10	50	50,990	0,000
Gaseous Fuels	N2O	0,697	5	50	50,249	0,000
Biomass	N2O	6,248	10	150	150,333	0,003
1.A.3 Transport						
a. Civil Aviation						
Aviation Gasoline	CH4	0,000	5	100	100,125	0,000
b. Road Transportation						
Gasoline	CH4	17,275	5	50	50,249	0,002
Diesel Oil	CH4	0,945	5	50	50,249	0,000
Diesel Oil from biomass	CH4		5	50	50,249	0,000
c. Railways						
Liquid Fuels	CH4	0,078	5	110	110,114	0,000

a. Civil Aviation						
Aviation Gasoline	N2O	0,005	5	150	150,083	0,000
b. Road Transportation						
Gasoline	N2O	10,055	5	300	300,042	0,026
Diesel Oil	N2O	13,641	5	150	150,083	0,012
Diesel Oil from biomass	N2O		5	150	150,083	0,000
c. Railways						
Liquid Fuels	N2O	8,651	5	150	150,083	0,005
1.A.4 Other Sectors						
Liquid Fuels	CH4	2,587	5	75	75,166	0,000
Solid Fuels	CH4	49,276	10	75	75,664	0,040
Gaseous Fuels	CH4	0,065	3	75	75,060	0,000
Biomass	CH4	99,464	20	150	151,327	0,644
1.A.4 Other Sectors						
Liquid Fuels	N2O	50,408	5	75	75,166	0,041
Solid Fuels	N2O	5,407	10	75	75,664	0,000
Gaseous Fuels	N2O	0,019	5	75	75,166	0,000
Biomass	N2O	19,577	20	150	151,327	0,025
B. Fugitive Emissions from Fuels						
1. Solid Fuels						
a. Coal Mining and Handling	CO2	120,238	10	150	150,333	0,929
SO2 scrubbing	CO2					
B. Fugitive Emissions from Fuels						
1. Solid Fuels						
a. Coal Mining and Handling	CH4	358,906	10	30	31,623	0,366
2. Oil and Natural Gas						
a. Oil	CH4	0,422	2	30	30,067	0,000
b. Natural Gas	CH4	56,090	5	50	50,249	0,023
2. Industrial Processes						
A. Mineral Products						
1. Cement Production	CO2	514,615	10	10	14,142	0,151
2. Lime Production	CO2	220,206	15	5	15,811	0,034
3. Limestone and Dolomite Use	CO2	20,305	20	10	22,361	0,001
4. Soda Ash Production and Use	CO2	10,290	10	5	11,180	0,000
7. Other (glass production)	CO2	0,226	10	10	14,142	0,000
B. Chemical Industry						
4. Carbide Production	CO2	44,985	20	5	20,616	0,002
B. Chemical Industry						

4. Carbide Production	CH4	0,783	20	20	28,284	0,000
5. Other (Methanol)	CH4	2,929	30	80	85,440	0,000
C. Metal Production						
1. Iron and Steel Production	CO2	40,149	10	10	14,142	0,001
2. Ferroalloys Production	CO2	57,635	10	10	14,142	0,002
3. Aluminium Production	CO2	89,402	10	10	14,142	0,005
C. Metal Production						
3. Aluminium Production	PFC	276,291	10	10	14,142	0,043
F. Consumption of Halocarbons and SF6						
1. Refrigeration and Air Conditioning Equipment	HFC					
2. Foam Blowing	HFC					
3. Fire Extinguishers	HFC					
8. Electrical Equipment	SF6	10,241	20	0	20,000	0,000
3. Solvent and Other Product Use	N2O	81,903	50	20	53,852	0,055
4. Agriculture						
A. Enteric Fermentation	CH4	765,086	10	20	22,361	0,832
B. Manure Management	CH4	509,785	10	30	31,623	0,739
B. Manure Management	N2O	268,295	50	100	111,803	2,559
D. Agricultural Soils (2)						
1. Direct Soil Emissions	N2O	434,006	10	250	250,200	33,537
2. Pasture, Range and Paddock Manure (3)	N2O	23,753	50	100	111,803	0,020
3. Indirect Emissions	N2O	333,371	50	250	254,951	20,546
5. Land Use, Land-Use Change and Forestry(1)						
A. Forest Land	CO2	-1589,253	20	20	28,284	5,747
6. Waste						
A. Solid Waste Disposal on Land	CH4	298,801	30	40	50,000	0,635
B. Waste Water Handling						
1. Industrial Wastewater	CH4	96,116	20	100	101,980	0,273
2. Domestic and Commercial Waste Water	CH4	112,561	10	100	100,499	0,364
2. Domestic and Commercial Waste Water	N2O	58,716	15	250	250,450	0,615
TOTAL		18750,828				98,873
INVENTORY UNCERTAINTY	%					9,943