

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 2007	AD uncertainty	EF parameter uncertainty	combined uncertainty	Contribution to variance in 2007	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	4761,623195	7346,183838	3	2,5	3,91	1,173	0,073	0,335	0,181	1,421	2,053
Solid Fuels	CO2	8932,731698	6656,298507	3	2,5	3,91	0,963	0,188	0,304	0,469	1,288	1,879
Gaseous Fuels	CO2	1468,238644	1795,680022	2	2,5	3,20	0,047	0,001	0,082	0,003	0,232	0,054
Other Fuels	CO2	11,91591382	28,27359795	10	10	14,14	0,000	0,001	0,001	0,006	0,018	0,000
1.A.1. Energy Industries												
Liquid Fuels	CH4	0,250841512	0,028338618	3	75	75,06	0,000	0,000	0,000	0,001	0,000	0,000
Solid Fuels	CH4	1,307811694	1,281234744	3	75	75,06	0,000	0,000	0,000	0,001	0,000	0,000
Gaseous Fuels	CH4	0,231357935	0,100736209	2	75	75,03	0,000	0,000	0,000	0,001	0,000	0,000
Biomass	CH4	0,0996723	0,451515917	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	0,085	3	75	75,06	0,000	0,000	0,000	0,003	0,000	0,000
Solid Fuels	N2O	25,429	26,479	3	50	50,09	0,003	0,000	0,001	0,010	0,005	0,000
Gaseous Fuels	N2O	0,111	0,149	2	50	50,04	0,000	0,000	0,000	0,000	0,000	0,000
Biomass	N2O	0,196	0,884	10	150	150,33	0,000	0,000	0,000	0,004	0,001	0,000
1.A.2 Manufacturing Industries and Const.												
Liquid Fuels	CH4	2,293	0,592	3	75	75,06	0,000	0,000	0,000	0,007	0,000	0,000
Solid Fuels	CH4	2,942	0,827	3	75	75,06	0,000	0,000	0,000	0,009	0,000	0,000
Gaseous Fuels	CH4	2,361	2,498	2	75	75,03	0,000	0,000	0,000	0,001	0,000	0,000
Biomass	CH4	3,174	2,203	10	50	50,99	0,000	0,000	0,000	0,004	0,001	0,000
Other	CH4	0,078	0,154	10	75	75,66	0,000	0,000	0,000	0,000	0,000	0,000
1.A.2 Manufacturing Industries and Const.												
Liquid Fuels	N2O	28,875	3,091	3	75	75,06	0,000	0,001	0,000	0,109	0,001	0,012
Solid Fuels	N2O	6,080	1,710	3	50	50,09	0,000	0,000	0,000	0,013	0,000	0,000
Gaseous Fuels	N2O	0,697	0,737	2	50	50,04	0,000	0,000	0,000	0,000	0,000	0,000
Biomass	N2O	6,248	4,336	10	150	150,33	0,001	0,000	0,000	0,022	0,003	0,000
Other	N2O	0,153	0,320	10	75	75,66	0,000	0,000	0,000	0,000	0,000	0,000
1.A.3 Transport												
a. Civil Aviation												
Aviation Gasoline	CH4	0,000	0,001	5	100	100,12	0,000	0,000	0,000	0,000	0,000	0,000
b. Road Transportation												
Gasoline	CH4	17,275	14,911	2	50	50,04	0,001	0,000	0,001	0,014	0,002	0,000
Diesel Oil	CH4	0,945	3,158	2	50	50,04	0,000	0,000	0,000	0,005	0,000	0,000

Diesel Oil from biomass	CH4	0,000	0,040	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	0,015	5	150	150,08	0,000	0,000	0,000	0,000	0,000	0,000
b. Road Transportation												
Gasoline	N2O	10,055	94,236	2	300	300,01	1,140	0,004	0,004	1,123	0,012	1,261
Diesel Oil	N2O	13,641	89,347	2	150	150,01	0,256	0,003	0,004	0,498	0,012	0,249
Diesel Oil from biomass	N2O	0,000	1,126	2	150	150,01	0,000	0,000	0,000	0,008	0,000	0,000
c. Railways												
Liquid Fuels	N2O	8,651	4,754	5	150	150,08	0,001	0,000	0,000	0,039	0,002	0,002
1.A.4 Other Sectors												
Liquid Fuels	CH4	2,587	4,403	5	75	75,17	0,000	0,000	0,000	0,004	0,001	0,000
Solid Fuels	CH4	49,276	0,000	10	75	75,66	0,000	0,003	0,000	0,204	0,000	0,041
Gaseous Fuels	CH4	0,065	0,426	3	75	75,06	0,000	0,000	0,000	0,001	0,000	0,000
Biomass	CH4	99,464	85,510	20	150	151,33	0,239	0,002	0,004	0,237	0,110	0,068
1.A.4 Other Sectors												
Liquid Fuels	N2O	50,408	31,020	5	75	75,17	0,008	0,001	0,001	0,102	0,010	0,011
Solid Fuels	N2O	5,407	0,000	10	75	75,66	0,000	0,000	0,000	0,022	0,000	0,000
Gaseous Fuels	N2O	0,019	0,126	3	75	75,06	0,000	0,000	0,000	0,000	0,000	0,000
Biomass	N2O	19,577	16,831	20	150	151,33	0,009	0,000	0,001	0,047	0,022	0,003
B. Fugitive Emissions from Fuels												
1. Solid Fuels												
a. Coal Mining and Handling	CO2	120,238	81,829	3	150	150,03	0,215	0,003	0,004	0,434	0,016	0,188
c. Other (SO2 scrubbing)	CO2		103,088	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	254,452	3	30	30,15	0,084	0,008	0,012	0,245	0,049	0,062
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	56,205	30,681	5	50	50,25	0,003	0,002	0,001	0,085	0,010	0,007
2. INDUSTRIAL PROCESSES												
A. Mineral Products												
1. Cement Production	CO2	514,615	555,699	2	2	2,83	0,004	0,003	0,025	0,006	0,072	0,005
2. Lime Production	CO2	220,206	123,427	10	5	11,18	0,003	0,006	0,006	0,032	0,080	0,007
3. Limestone and Dolomite Use	CO2	20,305	6,067	20	10	22,36	0,000	0,001	0,000	0,008	0,008	0,000
4. Soda Ash Production and Use	CO2	10,290	17,802	10	5	11,18	0,000	0,000	0,001	0,001	0,011	0,000
7. Other (glass production)	CO2	0,226	0,393	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	34,285	20	5	20,62	0,001	0,001	0,002	0,005	0,044	0,002
B. Chemical Industry												
4. Carbide Production	CH4	0,783	0,000	20	20	28,28	0,000	0,000	0,000	0,001	0,000	0,000
5. Other (Methanol)	CH4	2,929	6,234	30	80	85,44	0,000	0,000	0,000	0,010	0,012	0,000
C. Metal Production												
1. Iron and Steel Production	CO2	40,149	28,126	5	5	7,07	0,000	0,001	0,001	0,005	0,009	0,000
2. Ferroalloys Production	CO2	57,635	24,552	10	10	14,14	0,000	0,002	0,001	0,021	0,016	0,001
3. Aluminium Production	CO2	89,402	187,465	10	10	14,14	0,010	0,004	0,009	0,036	0,121	0,016
C. Metal Production												
3. Aluminium Production	PFC	276,291	91,691	10	10	14,14	0,002	0,011	0,004	0,110	0,059	0,016
F. Consumption of Halocarbons and SF6												
1. Refrigeration and Air Conditioning Equipment	HFC		130,226	30	50	58,31	0,082	0,006	0,006	0,297	0,252	0,152
2. Foam Blowing	HFC		0,504	30	50	58,31	0,000	0,000	0,000	0,001	0,001	0,000
3. Fire Extinguishers	HFC		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	0,000	0,001	0,000	0,012	0,000
3. SOLVENTS AND OTHER PRODUCT USED	N2O	81,903	42,160	50	20	53,85	0,007	0,003	0,002	0,052	0,136	0,021
4. AGRICULTURE												
A. Enteric Fermentation	CH4	765,086	684,378	10	20	22,36	0,334	0,011	0,031	0,218	0,441	0,243
B. Manure Management	CH4	509,785	458,996	10	30	31,62	0,300	0,007	0,021	0,214	0,296	0,134
B. Manure Management	N2O	268,295	174,394	50	100	111,80	0,542	0,007	0,008	0,682	0,562	0,782
D. Agricultural Soils												
1. Direct Soil Emissions	N2O	434,006	397,445	10	250	250,20	14,098	0,006	0,018	1,444	0,256	2,152
2. Pasture, Range and Paddock Manure	N2O	23,753	54,133	50	100	111,80	0,052	0,001	0,002	0,116	0,175	0,044
3. Indirect Emissions	N2O	333,371	312,738	50	250	254,95	9,064	0,004	0,014	1,025	1,008	2,067
5. LULUCF												
A. Forest Land	CO2	1589,253	5774,354	10	20	22,36	23,768	0,176	0,263	3,513	3,724	26,211
6. WASTE												
A. Solid Waste Disposal on Land	CH4	298,801	453,352	30	40	50,00	0,733	0,004	0,021	0,169	0,877	0,798
B. Waste Water Handling												
1. Industrial Wastewater	CH4	96,116	70,491	20	100	101,98	0,074	0,002	0,003	0,208	0,091	0,052
2. Domestic and Com. Waste Water	CH4	112,561	96,909	10	100	100,50	0,135	0,002	0,004	0,178	0,062	0,036
2. Domestic and Com. Waste Water	N2O	58,716	63,340	15	250	250,45	0,359	0,000	0,003	0,086	0,061	0,011
TOTAL		21928,724	26496,537				53,661					38,649
INVENTORY UNCERTAINTY 2007	%						7,325					6,217

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	4761,623195	5	2,5	5,59	1,473
Solid Fuels	CO2	8932,731698	10	5	11,18	20,742
Gaseous Fuels	CO2	1468,238644	5	2,5	5,59	0,140
Other Fuels	CO2	11,91591382	10	10	14,14	0,000
1.A.1. Energy Industries						
Liquid Fuels	CH4	0,250841512	5	75	75,17	0,000
Solid Fuels	CH4	1,307811694	10	75	75,66	0,000
Gaseous Fuels	CH4	0,231357935	5	75	75,17	0,000
Biomass	CH4	0,0996723	10	50	50,99	0,000
1.A.1. Energy Industries						
Liquid Fuels	N2O	0,761	5	75	75,17	0,000
Solid Fuels	N2O	25,429	10	50	50,99	0,003
Gaseous Fuels	N2O	0,111	5	50	50,25	0,000
Biomass	N2O	0,196	10	150	150,33	0,000
1.A.2 Manufacturing Industries and Construction						
Liquid Fuels	CH4	2,293	5	75	75,17	0,000
Solid Fuels	CH4	2,942	10	75	75,66	0,000
Gaseous Fuels	CH4	2,361	5	75	75,17	0,000
Biomass	CH4	3,174	10	50	50,99	0,000
Other	CH4	0,078	10	50	50,99	0,000
1.A.2 Manufacturing Industries and Construction						
Liquid Fuels	N2O	28,875	5	75	75,17	0,010
Solid Fuels	N2O	6,080	10	50	50,99	0,000
Gaseous Fuels	N2O	0,697	5	50	50,25	0,000
Biomass	N2O	6,248	10	150	150,33	0,002
Other	N2O	0,153	10	150	150,33	0,000
1.A.3 Transport						
a. Civil Aviation						
Aviation Gasoline	CH4	0,000	5	100	100,12	0,000
b. Road Transportation						
Gasoline	CH4	17,275	5	50	50,25	0,002
Diesel Oil	CH4	0,945	5	50	50,25	0,000
Diesel Oil from biomass	CH4	0,000	5	50	50,25	0,000

c. Railways						
Liquid Fuels	CH4	0,078	5	110	110,11	0,000
a. Civil Aviation						
Aviation Gasoline	N2O	0,005	5	150	150,08	0,000
b. Road Transportation						
Gasoline	N2O	10,055	5	300	300,04	0,019
Diesel Oil	N2O	13,641	5	150	150,08	0,009
Diesel Oil from biomass	N2O	0,000	5	150	150,08	0,000
c. Railways						
Liquid Fuels	N2O	8,651	5	150	150,08	0,004
1.A.4 Other Sectors						
Liquid Fuels	CH4	2,587	5	75	75,17	0,000
Solid Fuels	CH4	49,276	10	75	75,66	0,029
Gaseous Fuels	CH4	0,065	3	75	75,06	0,000
Biomass	CH4	99,464	20	150	151,33	0,471
1.A.4 Other Sectors						
Liquid Fuels	N2O	50,408	5	75	75,17	0,030
Solid Fuels	N2O	5,407	10	75	75,66	0,000
Gaseous Fuels	N2O	0,019	5	75	75,17	0,000
Biomass	N2O	19,577	20	150	151,33	0,018
B. Fugitive Emissions from Fuels						
1. Solid Fuels						
a. Coal Mining and Handling	CO2	120,238	10	150	150,33	0,679
SO2 scrubbing	CO2					
B. Fugitive Emissions from Fuels						
1. Solid Fuels						
a. Coal Mining and Handling	CH4	358,906	10	30	31,62	0,268
2. Oil and Natural Gas						
a. Oil	CH4	0,422	2	30	30,07	0,000
b. Natural Gas	CH4	56,205	5	50	50,25	0,017
2. Industrial Processes						
A. Mineral Products						
1. Cement Production	CO2	514,615	10	10	14,14	0,110
2. Lime Production	CO2	220,206	15	5	15,81	0,025
3. Limestone and Dolomite Use	CO2	20,305	20	10	22,36	0,000
4. Soda Ash Production and Use	CO2	10,290	10	5	11,18	0,000
7. Other (glass production)	CO2	0,226	10	10	14,14	0,000
B. Chemical Industry						
4. Carbide Production	CO2	44,985	20	5	20,62	0,002
B. Chemical Industry						

4. Carbide Production	CH4	0,783	20	20	28,28	0,000
5. Other (Methanol)	CH4	2,929	30	80	85,44	0,000
C. Metal Production						
1. Iron and Steel Production	CO2	40,149	10	10	14,14	0,001
2. Ferroalloys Production	CO2	57,635	10	10	14,14	0,001
3. Aluminium Production	CO2	89,402	10	10	14,14	0,003
C. Metal Production						
3. Aluminium Production	PFC	276,291	10	10	14,14	0,032
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	20,00	0,000
3. Solvent and Other Product Use	N2O	81,903	50	20	53,85	0,040
4. Agriculture						
A. Enteric Fermentation	CH4	765,086	10	20	22,36	0,609
B. Manure Management	CH4	509,785	10	30	31,62	0,540
B. Manure Management	N2O	268,295	50	100	111,80	1,871
D. Agricultural Soils (2)						
1. Direct Soil Emissions	N2O	434,006	10	250	250,20	24,521
2. Pasture, Range and Paddock Manure (3)	N2O	23,753	50	100	111,80	0,015
3. Indirect Emissions	N2O	333,371	50	250	254,95	15,022
5. Land Use, Land-Use Change and Forestry(1)						
A. Forest Land	CO2	1589,253	20	20	28,28	4,202
6. Waste						
A. Solid Waste Disposal on Land	CH4	298,801	30	40	50,00	0,464
B. Waste Water Handling						
1. Industrial Wastewater	CH4	96,116	20	100	101,98	0,200
2. Domestic and Commercial Waste Water	CH4	112,561	10	100	100,50	0,266
2. Domestic and Commercial Waste Water	N2O	58,716	15	250	250,45	0,450
TOTAL		21928,724				72,292
INVENTORY UNCERTAINTY 1986	%					8,502