

**TABLE 6 CROSS-SECTORAL REPORT: Indirect emissions of N2O and CO2**  
**(Sheet 1 of 1)**

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	SOURCE EMISSIONS					INDIRECT EMISSIONS	
	CH <sub>4</sub>	CO	NMVOC	NO <sub>x</sub>	NH <sub>3</sub>	CO <sub>2</sub>	N <sub>2</sub> O
	(Gg)					(Gg)	
<b>Total</b>							
<b>1. Energy</b>							
<b>2. Industrial processes and product use</b>							
<b>3. AFOLU - Agriculture</b>							
<b>4. AFOLU - Forestry and other land use</b>							
Indirect N <sub>2</sub> O emissions from managed soils							
Indirect N <sub>2</sub> O emissions from manure management							
Other (please specify)							
<b>5. Waste</b>							
<b>6. Other (please specify)</b>							

NEW TABLE

**SUMMARY 1.A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (IPCC TABLE 7A)**

(Sheet 1 of 3)

Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Net CO <sub>2</sub> emissions/removals	CH <sub>4</sub>	N <sub>2</sub> O	HFCs <sup>(1)</sup>	PFCs <sup>(1)</sup>	SF <sub>6</sub>	NF <sub>3</sub>	halogenated	NO <sub>x</sub>	CO	NMVOC	SO <sub>2</sub>												
													(Gg)											
													Total National Emissions and Removals											
<b>1. Energy</b>																								
A. Fuel Combustion	Reference Approach <sup>(2)</sup>																							
	Sectoral Approach <sup>(2)</sup>																							
1. Energy Industries																								
2. Manufacturing Industries and Construction																								
3. Transport																								
4. Other Sectors																								
5. Other																								
B. Fugitive Emissions from Fuels																								
1. Solid Fuels																								
2. Oil and Natural Gas																								
3. Other Emissions from Energy Production																								
C. CO <sub>2</sub> Transport and Storage																								
<b>2. Industrial Processes</b>																								
A. Mineral Products																								
B. Chemical Industry																								
C. Metal Production																								
D. Non-Energy Products from Fuels and Solvent Use Other Production <sup>(2)</sup>																								
E. Electronic Industry Production of Halocarbons and SF <sub>6</sub>																								
F. Product Uses as ODS Substitutes Consumption of Halocarbons and SF <sub>6</sub>																								
G. Other Product Manufacture and Use Consumption of Halocarbons and SF <sub>6</sub>																								
H. Other																								

**Note:** A = Actual emissions based on Tier 2 approach of the IPCC Guidelines.  
P = Potential emissions based on Tier 1 approach of the IPCC Guidelines.

**Note:** All footnotes for this table are given at the end of the table on sheet 3.

**SUMMARY 1.A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (IPCC TABLE 7A)**  
**(Sheet 2 of 3)**

Year  
 Submission  
 Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Net CO <sub>2</sub> emissions/removals	CH <sub>4</sub>	N <sub>2</sub> O	HFCs <sup>(1)</sup>		PFCs <sup>(1)</sup>		SF <sub>6</sub>		NO <sub>x</sub>	CO	NMVOC	SO <sub>2</sub>
				P	A	P	A	P	A				
	(Gg)				CO <sub>2</sub> equivalent (Gg)						(Gg)		
<b>3. Solvent and Other Product Use</b>													
<b>3. Agriculture, Forestry and Other Land Use</b>													
<b>A. AFOLU - Agriculture</b>													
A. Enteric Fermentation													
B. Manure Management													
C. Rice Cultivation													
D. Agricultural Soils <sup>(4)</sup>													
E. Prescribed Burning of Savannas													
F. Field Burning of Agricultural Residues													
G. Other													
<b>B. AFOLU - Land Use, Land-Use Change and Forestry</b>	<sup>(5)</sup>												
A. Forest Land	<sup>(5)</sup>												
B. Cropland	<sup>(5)</sup>												
C. Grassland	<sup>(5)</sup>												
D. Wetlands	<sup>(5)</sup>												
E. Settlements	<sup>(5)</sup>												
F. Other Land	<sup>(5)</sup>												
G. Other	<sup>(5)</sup>												
<b>C. Aggregate sources and non-CO2 emissions sources on land</b>													
<b>4. Waste</b>													
A. Solid Waste Disposal <del>on Land</del>													
B. Biological Treatment of Solid Waste	<sup>(6)</sup>												
C. Waste Incineration Incineration and Open Burning of Waste													
D. Waste Water <del>Handling</del> <b>Treatment and Discharge</b>	<sup>(6)</sup>												
E. Other													
<b>5. Other (please specify) <sup>(7)</sup></b>													
Indirect CO <sub>2</sub> and N <sub>2</sub> O													

Note: All footnotes for this table are given at the end of the table on sheet 3.

**SUMMARY 1.A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (IPCC TABLE 7A)**  
**(Sheet 3 of 3)**

Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Net CO <sub>2</sub> emissions/removals	CH <sub>4</sub>	N <sub>2</sub> O	HFCs		PFCs		SF <sub>6</sub>		NO <sub>x</sub>	CO	NMVOC	SO <sub>2</sub>
				P	A	P	A	P	A				
	(Gg)			CO <sub>2</sub> equivalent (Gg)				(Gg)					
<b>Memo Items:</b> <sup>(8)</sup>													
<b>International Bunkers</b>													
Aviation													
Marine													
<b>Multilateral Operations</b>													
<b>CO<sub>2</sub> Emissions from Biomass</b>													
<b>CO<sub>2</sub> captured</b>													
<b>Long-term storage of C in waste disposal sites</b>													
<b>Indirect CO<sub>2</sub> and N<sub>2</sub>O</b>													

- <sup>(1)</sup> The emissions of HFCs and PFCs are to be expressed as CO<sub>2</sub> equivalent emissions. Data on disaggregated emissions of HFCs and PFCs are to be provided in Table 2(II) of this common reporting format.
- <sup>(2)</sup> For verification purposes, countries are asked to report the results of their calculations using the Reference approach and to explain any differences with the Sectoral approach in the documentation box to Table 1.A.(c). For estimating national total emissions, the results from the Sectoral approach should be used, where possible.
- <sup>(3)</sup> Other Production includes Pulp and Paper and Food and Drink Production.
- <sup>(4)</sup> Parties which previously reported CO<sub>2</sub> from soils in the Agriculture sector should note this in the NIR.
- <sup>(5)</sup> For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).
- <sup>(6)</sup> CO<sub>2</sub> from source categories Solid Waste Disposal on Land and Waste Incineration should only be included if it stems from non-biogenic or inorganic waste streams. Only emissions from Waste Incineration Without Energy Recovery are to be reported in the Waste sector, whereas emissions from Incineration With Energy Recovery are to be reported in the Energy sector.
- <sup>(7)</sup> If reporting any country-specific source category under sector "7. Other", detailed explanations should be provided in Chapter 9: Other (CRF sector 7) of the NIR
- <sup>(8)</sup> Countries are asked to report emissions from international aviation and marine bunkers and multilateral operations, as well as CO<sub>2</sub> emissions from biomass, under Memo Items. These emissions should not be included in the national total emissions from the energy sector. Amounts of biomass used as fuel are included in the national energy consumption but the corresponding CO<sub>2</sub> emissions are not included in the national total as it is assumed that the biomass is produced in a sustainable manner. If the biomass is harvested at an unsustainable rate, net CO<sub>2</sub> emissions are accounted for as a loss of biomass stocks in the Land Use, Land-use Change and Forestry sector.

**SUMMARY 1.B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (IPCC TABLE 7B)**  
**(Sheet 1 of 1)**

Year  
 Submission  
 Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Net CO <sub>2</sub> emissions/removals	CH <sub>4</sub>	N <sub>2</sub> O	HFCs <sup>(1)</sup>		PFCs <sup>(1)</sup>		SF <sub>6</sub>		NO <sub>x</sub>	CO	NMVOC	SO <sub>2</sub>
				P	A	P	A	P	A				
				(Gg)									
<b>Total National Emissions and Removals</b>													
<b>1. Energy</b>													
A. Fuel Combustion	Reference Approach <sup>(2)</sup>												
	Sectoral Approach <sup>(2)</sup>												
B. Fugitive Emissions from Fuels													
<b>2. Industrial Processes</b>													
<b>3. Agriculture, Forestry and Other Land Use Solvent and Other</b>													
A. Agriculture <sup>(3)</sup>													
B. Forestry and Other Land Use, Land-Use Change and Forestry <sup>(4)</sup>													
<b>6. Waste</b>													
<b>7. Other</b>													
<b>Memo Items:</b> <sup>(5)</sup>													
<b>International Bunkers</b>													
Aviation													
Marine													
<b>Multilateral Operations</b>													
<b>CO<sub>2</sub> Emissions from Biomass</b>													

**Note:** A = Actual emissions based on Tier 2 approach of the IPCC Guidelines.  
 P = Potential emissions based on Tier 1 approach of the IPCC Guidelines.

- <sup>(1)</sup> The emissions of HFCs and PFCs are to be expressed as CO<sub>2</sub> equivalent emissions. Data on disaggregated emissions of HFCs and PFCs are to be provided in Table 2(II) of this common reporting format.
- <sup>(2)</sup> For verification purposes, countries are asked to report the results of their calculations using the Reference approach and to explain any differences with the Sectoral approach in the documentation box to Table 1.A.(c). For estimating national total emissions, the result from the Sectoral approach should be used, where possible.
- <sup>(3)</sup> Parties which previously reported CO<sub>2</sub> from soils in the Agriculture sector should note this in the NIR.
- <sup>(4)</sup> For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).
- <sup>(5)</sup> Countries are asked to report emissions from international aviation and marine bunkers and multilateral operations, as well as CO<sub>2</sub> emissions from biomass, under Memo Items. These emissions should not be included in the national total emissions from the energy sector. Amounts of biomass used as fuel are included in the national energy consumption but the corresponding CO<sub>2</sub> emissions are not included in the national total as it is assumed that the biomass is produced in a sustainable manner. If the biomass is harvested at an unsustainable rate, net CO<sub>2</sub> emissions are accounted for as a loss of biomass stocks in the Land Use, Land-use Change and Forestry sector.

**SUMMARY 2 SUMMARY REPORT FOR CO<sub>2</sub> EQUIVALENT EMISSIONS**  
(Sheet 1 of 1)

Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub> <sup>(1)</sup>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs <sup>(2)</sup>	PFCs <sup>(2)</sup>	SF <sub>6</sub> <sup>(2)</sup>	NF <sub>3</sub>	Perfluorinated gases	Total
	CO <sub>2</sub> equivalent (Gg)								
<b>Total (Net Emissions)<sup>(1)</sup></b>									
<b>1. Energy</b>									
A. Fuel Combustion (Sectoral Approach)									
1. Energy Industries									
2. Manufacturing Industries and Construction									
3. Transport									
4. Other Sectors									
5. Other									
B. Fugitive Emissions from Fuels									
1. Solid Fuels									
2. Oil and Natural Gas									
3. Other Emissions from Energy Production									
C. CO <sub>2</sub> Transport and Storage									
<b>2. Industrial Processes</b>									
A. Mineral Products									
B. Chemical Industry									
C. Metal Production									
D. Non-Energy Products from Fuels and Solvent Use Other Production <sup>(3)</sup>									
E. Electronic Industry Production of Halocarbons and SF <sub>6</sub>									
F. Product Uses as ODS Substitutes Consumption of Halocarbons and SF <sub>6</sub>									
G. Other Product Manufacture and Use Consumption of Halocarbons and SF <sub>6</sub>									
H. Other									
<b>3. Agriculture, Forestry and Other Land Use</b>									
<b>3.1. Solvent and Other Product Use</b>									
<b>4. Agriculture</b>									
A. Enteric Fermentation									
B. Manure Management									
C. Rice Cultivation									
D. Agricultural Soils <sup>(3)</sup>									
E. Prescribed Burning of Savannas									
F. Field Burning of Agricultural Residues									
G. Other									
<b>5. Land Use, Land-Use Change and Forestry<sup>(1)</sup></b>									
A. Forest Land									
B. Cropland									
C. Grassland									
D. Wetlands									
E. Settlements									
F. Other Land									
G. Other									
<b>C. Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>									
<b>4. Waste</b>									
A. Solid Waste Disposal on Land									
B. Biological Treatment of Solid Waste									
C. Waste Incineration and Open Burning of Waste									
D. Waste Water Handling, Treatment and Discharge									
E. Other									
<b>5. Other (as specified in Summary 1.A)</b>									
<b>Indirect emissions</b>									
<b>Memo Items:<sup>(4)</sup></b>									
<b>International Bunkers</b>									
Aviation									
Marine									
<b>Multilateral Operations</b>									
<b>CO<sub>2</sub> Emissions from Biomass</b>									
<b>CO<sub>2</sub> captured</b>									
<b>Long-term storage of C in waste disposal sites</b>									
<b>Indirect CO<sub>2</sub> and N<sub>2</sub>O</b>									
Total direct CO <sub>2</sub> Equivalent Emissions without Land Use, Land-Use Change and Forestry									
Total direct CO <sub>2</sub> Equivalent Emissions with Land Use, Land-Use Change and Forestry									
Total Direct and Indirect CO <sub>2</sub> Equivalent Emissions without Land Use, Land-Use Change and Forestry									
Total CO <sub>2</sub> Equivalent Emissions with Land Use, Land-Use Change and Forestry									

(1) For CO<sub>2</sub> from Land Use, Land-use Change and Forestry the net emissions/removals are to be reported. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

(2) Actual emissions should be included in the national totals. If no actual emissions were reported, potential emissions should be included.

(3) Parties which previously reported CO<sub>2</sub> from soils in the Agriculture sector should note this in the NIR.

(4) See footnote 8 to table Summary 1.A.

**SUMMARY 3 SUMMARY REPORT FOR METHODS AND EMISSION FACTORS USED**  
(Sheet 1 of 2)

Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		HFCs		PFCs		SF <sub>6</sub>	
	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor
<b>1. Energy</b>												
A. Fuel Combustion												
1. Energy Industries												
2. Manufacturing Industries and Construction												
3. Transport												
4. Other Sectors												
5. Other												
B. Fugitive Emissions from Fuels												
1. Solid Fuels												
2. Oil and Natural Gas												
<b>2. Industrial Processes</b>												
A. Mineral Products												
B. Chemical Industry												
C. Metal Production												
D. Other Production												
E. Production of Halocarbons and SF <sub>6</sub>												
F. Consumption of Halocarbons and SF <sub>6</sub>												
G. Other												

To be updated.  
(Simplification)

Use the following notation keys to specify the method applied:

- |                                |  |                              |
|--------------------------------|--|------------------------------|
| <b>D</b> (IPCC default)        | <b>T1a, T1b, T1c</b> (IPCC Tier 1a, Tier 1b and Tier 1c, respectively) | <b>CR</b> (CORINAIR)         |
| <b>RA</b> (Reference Approach) | <b>T2</b> (IPCC Tier 2)  | <b>CS</b> (Country Specific) |
| <b>T1</b> (IPCC Tier 1)        | <b>T3</b> (IPCC Tier 3)  | <b>OTH</b> (Other)           |

If using more than one method within one source category, list all the relevant methods. Explanations regarding country-specific methods, other methods or any modifications to the default IPCC methods, as well as information regarding the use of different methods per source category where more than one method is indicated, should be provided in the documentation box. Also use the documentation box to explain the use of notation OTH.

Use the following notation keys to specify the emission factor used:

- |                         |                              |                    |
|-------------------------|------------------------------|--------------------|
| <b>D</b> (IPCC default) | <b>CS</b> (Country Specific) | <b>OTH</b> (Other) |
| <b>CR</b> (CORINAIR)    | <b>PS</b> (Plant Specific)   |                    |

Where a mix of emission factors has been used, list all the methods in the relevant cells and give further explanations in the documentation box. Also use the documentation box to explain the use of notation OTH.

**SUMMARY 3 SUMMARY REPORT FOR METHODS AND EMISSION FACTORS USED**

(Sheet 2 of 2)

Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		HFCs		PFCs		SF <sub>6</sub>	
	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor	Method applied	Emission factor
<b>3. Solvent and Other Product Use</b>												
<b>4. Agriculture</b>												
A. Enteric Fermentation												
B. Manure Management												
C. Rice Cultivation												
D. Agricultural Soils												
E. Prescribed Burning of Savannas												
F. Field Burning of Agricultural Residues												
G. Other												
<b>5. Land Use, Land-Use Change and Forestry</b>												
A. Forest Land												
B. Cropland												
C. Grassland												
D. Wetlands												
E. Settlements												
F. Other Land												
G. Other												
<b>6. Waste</b>												
A. Solid Waste Disposal on Land												
B. Waste-water Handling												
C. Waste Incineration												
D. Other												
<b>7. Other (as specified in Summary 1.A)</b>												

To be updated...

Use the following notation keys to specify the method applied:

- |                                |  |                              |
|--------------------------------|--|------------------------------|
| <b>D</b> (IPCC default)        | <b>T1a, T1b, T1c</b> (IPCC Tier 1a, Tier 1b and Tier 1c, respectively) | <b>CR</b> (CORINAIR)         |
| <b>RA</b> (Reference Approach) | <b>T2</b> (IPCC Tier 2)  | <b>CS</b> (Country Specific) |
| <b>T1</b> (IPCC Tier 1)        | <b>T3</b> (IPCC Tier 3)  | <b>OTH</b> (Other)           |

If using more than one method within one source category, list all the relevant methods. Explanations regarding country-specific methods, other methods or any modifications to the default IPCC methods, as well as information regarding the use of different methods per source category where more than one method is indicated, should be provided in the documentation box. Also use the documentation box to explain the use of notation OTH.

Use the following notation keys to specify the emission factor used:

- |                         |                              |                    |
|-------------------------|------------------------------|--------------------|
| <b>D</b> (IPCC default) | <b>CS</b> (Country Specific) | <b>OTH</b> (Other) |
| <b>CR</b> (CORINAIR)    | <b>PS</b> (Plant Specific)   |                    |

Where a mix of emission factors has been used, list all the methods in the relevant cells and give further explanations in the documentation box. Also use the documentation box to explain the use of notation OTH.

**Documentation box:**

- Parties should provide the full information on methodological issues, such as methods and emission factors used, in the relevant sections of Chapters 3 to 9 (see section 2.2 of each of Chapters 3 - 9) of the NIR. Use this documentation box to provide references to relevant sections of the NIR if any additional information and further details are needed to understand the content of this table.
- Where a mix of methods/emission factors has been used within one source category, use this documentation box to specify those methods/emission factors for the various sub-sources where they have been applied.
- Where the notation OTH (Other) has been entered in this table, use this documentation box to specify those other methods/emission factors.



TABLE 7 SUMMARY OVERVIEW FOR KEY CATEGORIES  
(Sheet 1 of 1)

Year  
Submission  
Country

KEY CATEGORIES OF EMISSIONS AND REMOVALS	Gas	Criteria used for key source identification			Key category excluding LULUCF <sup>(1)</sup>	Key category including LULUCF <sup>(1)</sup>	Comments <sup>(1)</sup>
		L	T	Q			
Specify key categories according to the national level of disaggregation used:							
<i>For example: 4.B Manure Management</i>	CH4	X			X		

Note: L = Level assessment; T = Trend assessment; Q = Qualitative assessment

<sup>(1)</sup> The term “key categories” refers to both the key source categories as addressed in the IPCC good practice guidance and the key categories as addressed in the IPCC good practice guidance for LULUCF.

<sup>(2)</sup> For estimating key categories Parties may chose the disaggregation level presented as an example in table 7.1 of the IPCC good practice guidance (page 7.6) and table 5.4.1 (page 5.31) of the IPCC good practice guidance for LULUCF, the level used in table Summary 1.A of the common reporting format or any other disaggregation level that the Party used to determine its key categories.

**Documentation box:**

Parties should provide the full information on methodologies used for identifying key categories and the quantitative results from the level and trend assessments (according to tables 7.1–7.3 of the IPCC good practice guidance and tables 5.4.1–5.4.3 of the IPCC good practice guidance for LULUCF) in Annex 1 to the NIR.

TABLE 8(a) RECALCULATION - RECALCULATED DATA  
(Sheet 1 of 4) Recalculated year:

Recalculated year: Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>					CH <sub>4</sub>					N <sub>2</sub> O							
	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>
	CO <sub>2</sub> equivalent (Gg)		%			CO <sub>2</sub> equivalent (Gg)		%			CO <sub>2</sub> equivalent (Gg)		%					
<b>Total National Emissions and Removals</b>																		
<b>1. Energy</b>																		
I.A.	Fuel Combustion Activities																	
I.A.1.	Energy Industries																	
I.A.2.	Manufacturing Industries and Construction																	
I.A.3.	Transport																	
I.A.4.	Other Sectors																	
I.A.5.	Other																	
I.B.	Fugitive Emissions from Fuels																	
I.B.1.	Solid fuel																	
I.B.2.	Oil and Natural Gas																	
<b>2. Industrial Processes</b>																		
2.A.	Mineral Products																	
2.B.	Chemical Industry																	
2.C.	Metal Production																	
2.D.	Other Production																	
2.G.	Other																	

To be updated

Note: All footnotes for this table are given at the end of the table on sheet 2.

TABLE 8(a) RECALCULATION - RECALCULATED DATA  
(Sheet 2 of 4) Recalculated year:

Recalculated year: Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>						CH <sub>4</sub>						N <sub>2</sub> O					
	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>
	CO <sub>2</sub> equivalent (Gg)			(%)			CO <sub>2</sub> equivalent (Gg)			(%)			CO <sub>2</sub> equivalent (Gg)			(%)		
Total National Emissions and Removals																		
3. Solvent and Other Product Use																		
4. Agriculture																		
4.A. Enteric Fermentation																		
4.B. Manure Management																		
4.C. Rice Cultivation																		
4.D. Agricultural Soils <sup>(4)</sup>																		
4.E. Prescribed Burning of Savannas																		
4.F. Field Burning of Agricultural Residues																		
4.G. Other																		
5. Land Use, Land-Use Change and Forestry (net) <sup>(9)</sup>																		
5.A. Forest Land																		
5.B. Cropland																		
5.C. Grassland																		
5.D. Wetlands																		
5.E. Settlements																		
5.F. Other Land																		
5.G. Other																		

To be updated ...

Note: All footnotes for this table are given at the end of the table on sheet 2.

TABLE 8(a) RECALCULATION - RECALCULATED DATA  
(Sheet 3 of 4)

Recalculated year:

Recalculated year: Year  
Submission  
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO <sub>2</sub>					CH <sub>4</sub>					N <sub>2</sub> O							
	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>
	CO <sub>2</sub> equivalent (Gg)			(%)		CO <sub>2</sub> equivalent (Gg)			(%)		CO <sub>2</sub> equivalent (Gg)			(%)				
<b>6. Waste</b>																		
6.A. Solid Waste Disposal on Land																		
6.B. Waste-water Handling																		
6.C. Waste Incineration																		
6.D. Other																		
<b>7. Other (as specified in Summary 1.A)</b>																		
<b>Memo Items:</b>																		
<b>International Bankers</b>																		
<b>Multilateral Operations</b>																		
<b>CO<sub>2</sub> Emissions from Biomass</b>																		

To be updated ...

TABLE 8(a) RECALCULATION - RECALCULATED DATA  
(Sheet 4 of 4)

Recalculated year:

Recalculated year: Year  
Submission

Submission

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	HFCs						PFCs						SF <sub>6</sub>					
	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>	Previous submission	Latest submission	Difference	Difference <sup>(1)</sup>	Impact of recalculation on total emissions excluding LULUCF <sup>(2)</sup>	Impact of recalculation on total emissions including LULUCF <sup>(3)</sup>
	CO <sub>2</sub> equivalent (Gg)			(%)			CO <sub>2</sub> equivalent (Gg)			(%)			CO <sub>2</sub> equivalent (Gg)			(%)		
Total Actual Emissions																		
2.C.3. Aluminium Production																		
2.E. Production of Halocarbons and SF <sub>6</sub>																		
2.F. Consumption of Halocarbons and SF <sub>6</sub>																		
2.G. Other																		
Potential Emissions from Consumption of HFCs/PFCs and SF <sub>6</sub>																		

<sup>(1)</sup> Estimate the percentage change due to recalculation with respect to the previous submission (percentage change = 100 x [(LS-PS)/PS], where LS = latest submission and PS = previous submission. All cases of recalculation of the estimate of the source/sink category should be addressed and explained in table 8(b).

<sup>(2)</sup> Total emissions refer to total aggregate GHG emissions expressed in terms of CO<sub>2</sub> equivalent, excluding GHGs from the LULUCF sector. The impact of the recalculation on the total emissions is calculated as follows: impact of recalculation (%) = 100 x [(source (LS) - source (PS))/total emissions (LS)], where LS = latest submission, PS = previous submission.

<sup>(3)</sup> Total emissions refer to total aggregate GHG emissions expressed in terms of CO<sub>2</sub> equivalent, including GHGs from the LULUCF sector. The impact of the recalculation on the total emissions is calculated as follows: impact of recalculation (%) = 100 x [(source (LS) - source (PS))/total emissions (LS)], where LS = latest submission, PS = previous submission.

<sup>(4)</sup> Parties which previously reported CO<sub>2</sub> from soils in the Agriculture sector should note this in the NIR.

<sup>(5)</sup> Net CO<sub>2</sub> emissions/removals to be reported.

**Documentation box:**

Parties should provide detailed information on recalculations in Chapter 10: Recalculations and Improvements, and in the relevant sections of Chapters 3 to 9 (see section 2.5 of each of Chapters 3 - 9) of the NIR. Use this documentation box to provide r

**TABLE 8(b) RECALCULATION - EXPLANATORY INFORMATION**  
**(Sheet 1 of 1)**

Year  
 Submission  
 Country

Specify the sector and source/sink category <sup>(1)</sup> where changes in estimates have occurred:	GHG	RECALCULATION DUE TO				
		CHANGES IN:			Addition/removal/ reallocation of source/sink categories	Other changes in data (e.g. statistical or editorial changes, correction of errors)
		Methods <sup>(2)</sup>	Emission factors <sup>(2)</sup>	Activity data <sup>(2)</sup>		

<sup>(1)</sup> Enter the identification code of the source/sink category (e.g. 1.B.1) in the first column and the name of the category (e.g. Fugitive Emissions from Solid Fuels) in the second column of the table. Note that the source categories entered in this table should match those used in table 8(a).

<sup>(2)</sup> Explain changes in methods, emission factors and activity data that have resulted in recalculation of the estimate of the source/sink as indicated in table 8(a). Include changes in the assumptions and coefficients in the Methods column.

**Documentation box:**

Parties should provide the full information on recalculations in Chapter 10: Recalculations and Improvements, and in the relevant sections of Chapters 3 to 9 (see section 2.5 of each of Chapters 3 to 9) of the NIR. Use this documentation box to provide references to relevant sections of the NIR if any additional information and further details are needed to understand the content of this table. References should point particularly to the sections of the NIR in which justifications of the changes as to improvements in the accuracy, completeness and consistency of the inventory are reported.

**TABLE 9(a) COMPLETENESS - INFORMATION ON NOTATION KEYS  
(Sheet 1 of 1)**

Year  
Submission  
Country

Sources and sinks not estimated (NE) <sup>(1)</sup>				
GHG	Sector <sup>(2)</sup>	Source/sink category <sup>(2)</sup>	Explanation	
CO2				
CH4				
N2O				
HFCs				
PFCs				
SF6				
Sources and sinks reported elsewhere (IE) <sup>(3)</sup>				
GHG	Source/sink category	Allocation as per IPCC Guidelines	Allocation used by the Party	Explanation
CO2				
CH4				
N2O				
HFCs				
PFCs				
SF6				

<sup>(1)</sup> Clearly indicate sources and sinks which are considered in the IPCC Guidelines but are not considered in the submitted inventory. Explain the reason for excluding these sources and sinks, in order to avoid arbitrary interpretations. An entry should be made for each source/sink category for which the notation key NE (not estimated) is entered in the sectoral tables.

<sup>(2)</sup> Indicate omitted source/sink following the IPCC source/sink category structure (e.g. sector: Waste, source category: Waste-Water Handling).

<sup>(3)</sup> Clearly indicate sources and sinks in the submitted inventory that are allocated to a sector other than that indicated by the IPCC Guidelines. Show the sector indicated in the IPCC Guidelines and the sector to which the source or sink is allocated in the submitted inventory. Explain the reason for reporting these sources and sinks in a different sector. An entry should be made for each source/sink for which the notation key IE (included elsewhere) is used in the sectoral tables.

**TABLE 9(b) COMPLETENESS - INFORMATION ON ADDITIONAL GREENHOUSE GASES**  
**(Sheet 1 of 1)**

Year  
 Submission  
 Country

Additional GHG emissions reported <sup>(1)</sup>						
GHG	Source category	Emissions (Gg)	Estimated GWP value (100-year horizon)	Emissions CO <sub>2</sub> equivalent (Gg)	Reference to the source of GWP value	Explanation

<sup>(1)</sup> Parties are encouraged to provide information on emissions of greenhouse gases whose GWP values have not yet been agreed upon by the COP. Include such gases in this table if they are considered in the submitted inventory. Provide additional information on the estimation methods used.

**Documentation box:**

Parties should provide detailed information regarding completeness of the inventory in the NIR (Chapter 1.8: General Assessment of the Completeness, and Annex 5). Use this documentation box to provide references to relevant sections of the NIR if any additional information and further details are needed to understand the content of this table.



**TABLE 10 EMISSION TRENDS**  
**CO<sub>2</sub>**  
 (Sheet 1 of 5)

Year  
 Submission  
 Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	(Years 1991 to latest reported year)	Change from base to latest reported year
			(Gg)	%
<b>1. Energy</b>				
A. Fuel Combustion (Sectoral Approach)				
1. Energy Industries				
2. Manufacturing Industries and Construction				
3. Transport				
4. Other Sectors				
5. Other				
B. Fugitive Emissions from Fuels				
1. Solid Fuels				
2. Oil and Natural Gas				
<b>2. Industrial Processes</b>				
A. Mineral Products				
B. Chemical Industry				
C. Metal Production				
D. Other Production				
E. Production of Halocarbons and SF <sub>6</sub>				
F. Consumption of Halocarbons and SF <sub>6</sub>				
G. Other				
<b>3. Solvent and Other Product Use</b>				
<b>4. Agriculture</b>				
A. Enteric Fermentation				
B. Manure Management				
C. Rice Cultivation				
D. Agricultural Soils				
E. Prescribed Burning of Savannas				
F. Field Burning of Agricultural Residues				
G. Other				
<b>5. Land Use, Land-Use Change and Forestry<sup>(2)</sup></b>				
A. Forest Land				
B. Cropland				
C. Grassland				
D. Wetlands				
E. Settlements				
F. Other Land				
G. Other				
<b>6. Waste</b>				
A. Solid Waste Disposal on Land				
B. Waste-water Handling				
C. Waste Incineration				
D. Other				
<b>7. Other (as specified in Summary 1.A)</b>				
<b>Indirect CO<sub>2</sub> Emissions</b>				
<b>Total direct CO<sub>2</sub> emissions including net CO<sub>2</sub> from LULUCF</b>				
<b>Total direct CO<sub>2</sub> emissions excluding net CO<sub>2</sub> from LULUCF</b>				
<b>Total direct and indirect CO<sub>2</sub> emissions including net CO<sub>2</sub> from LULUCF</b>				
<b>Total direct and indirect CO<sub>2</sub> emissions excluding net CO<sub>2</sub> from LULUCF</b>				
<b>Memo Items:</b>				
<b>International Bunkers</b>				
Aviation				
Marine				
<b>Multilateral Operations</b>				
<b>CO<sub>2</sub> Emissions from Biomass</b>				
<b>CO<sub>2</sub> captured</b>				
<b>Long-term storage of C in waste disposal sites</b>				
<b>Indirect CO<sub>2</sub> Emissions</b>				

Note: All footnotes for this table are given at the end of the table on sheet 5.

**TABLE 10 EMISSION TRENDS**  
**CH<sub>4</sub>**  
 (Sheet 2 of 5)

Year  
 Submission  
 Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	(Years 1991 to latest reported year)	Change from base to latest reported year
			(%)	%
<b>1. Energy</b>				
A. Fuel Combustion (Sectoral Approach)				
1. Energy Industries				
2. Manufacturing Industries and Construction				
3. Transport				
4. Other Sectors				
5. Other				
B. Fugitive Emissions from Fuels				
1. Solid Fuels				
2. Oil and Natural Gas				
<b>2. Industrial Processes</b>				
A. Mineral Products				
B. Chemical Industry				
C. Metal Production				
D. Other Production				
E. Production of Halocarbons and SF <sub>6</sub>				
F. Consumption of Halocarbons and SF <sub>6</sub>				
G. Other				
<b>3. Solvent and Other Product Use</b>				
<b>4. Agriculture</b>				
A. Enteric Fermentation				
B. Manure Management				
C. Rice Cultivation				
D. Agricultural Soils				
E. Prescribed Burning of Savannas				
F. Field Burning of Agricultural Residues				
G. Other				
<b>5. Land Use, Land-Use Change and Forestry</b>				
A. Forest Land				
B. Cropland				
C. Grassland				
D. Wetlands				
E. Settlements				
F. Other Land				
G. Other				
<b>6. Waste</b>				
A. Solid Waste Disposal on Land				
B. Waste-water Handling				
C. Waste Incineration				
D. Other				
<b>7. Other (as specified in Summary I.A)</b>				
<b>Total CH<sub>4</sub> emissions including CH<sub>4</sub> from LULUCF</b>				
<b>Total CH<sub>4</sub> emissions excluding CH<sub>4</sub> from LULUCF</b>				
<b>Memo Items:</b>				
<b>International Bunkers</b>				
Aviation				
Marine				
<b>Multilateral Operations</b>				
<b>CO<sub>2</sub> Emissions from Biomass</b>				

Note: All footnotes for this table are given at the end of the table on sheet 5.

**TABLE 10 EMISSION TRENDS**  
**N<sub>2</sub>O**  
 (Sheet 3 of 5)

Year  
 Submission  
 Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	(Years 1991 to latest reported year)	Change from base to latest reported year
	(Gg)			%
<b>1. Energy</b>				
A. Fuel Combustion (Sectoral Approach)				
1. Energy Industries				
2. Manufacturing Industries and Construction				
3. Transport				
4. Other Sectors				
5. Other				
B. Fugitive Emissions from Fuels				
1. Solid Fuels				
2. Oil and Natural Gas				
<b>2. Industrial Processes</b>				
A. Mineral Products				
B. Chemical Industry				
C. Metal Production				
D. Other Production				
E. Production of Halocarbons and SF <sub>6</sub>				
F. Consumption of Halocarbons and SF <sub>6</sub>				
G. Other				
<b>3. Solvent and Other Product Use</b>				
<b>4. Agriculture</b>				
A. Enteric Fermentation				
B. Manure Management				
C. Rice Cultivation				
D. Agricultural Soils				
E. Prescribed Burning of Savannas				
F. Field Burning of Agricultural Residues				
G. Other				
<b>5. Land Use, Land-Use Change and Forestry</b>				
A. Forest Land				
B. Cropland				
C. Grassland				
D. Wetlands				
E. Settlements				
F. Other Land				
G. Other				
<b>6. Waste</b>				
A. Solid Waste Disposal on Land				
B. Waste-water Handling				
C. Waste Incineration				
D. Other				
<b>7. Other (as specified in Summary I.A)</b>				
<b>Indirect N<sub>2</sub>O Emissions</b>				
<b>Total Direct N<sub>2</sub>O emissions including N<sub>2</sub>O from LULUCF</b>				
<b>Total Direct N<sub>2</sub>O emissions excluding N<sub>2</sub>O from LULUCF</b>				
<b>Total Direct and Indirect N<sub>2</sub>O emissions including N<sub>2</sub>O from LULUCF</b>				
<b>Total Direct and Indirect N<sub>2</sub>O emissions excluding N<sub>2</sub>O from LULUCF</b>				
<b>Memo Items:</b>				
<b>International Bunkers</b>				
Aviation				
Marine				
<b>Multilateral Operations</b>				
<b>CO<sub>2</sub> Emissions from Biomass</b>				
<b>Indirect N<sub>2</sub>O Emissions</b>				

Note: All footnotes for this table are given at the end of the table on sheet 5.

**TABLE 10 EMISSION TRENDS**  
**HFCs, PFCs and SF<sub>6</sub>**  
 (Sheet 4 of 5)

Year  
 Submission  
 Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	(Years 1991 to latest reported year)	Change from base to latest reported year
	(Gg)			%
<b>Emissions of PFC and HFCs<sup>(3)</sup> - (Gg CO<sub>2</sub> equivalent)</b>				
<b>Emissions of HFCs<sup>(3)</sup> - (Gg CO<sub>2</sub> equivalent)</b>				
HFC-23				
HFC-32				
HFC-41				
HFC-43-10mee				
HFC-125				
HFC-134				
HFC-134a				
HFC-152a				
HFC-143				
HFC-143a				
HFC-227ea				
HFC-236fa				
HFC-245ca				
Unspecified mix of listed HFCs <sup>(4)</sup> - (Gg CO <sub>2</sub> equivalent)				
<b>Emissions of PFCs<sup>(3)</sup> - (Gg CO<sub>2</sub> equivalent)</b>				
CF <sub>4</sub>				
C <sub>2</sub> F <sub>6</sub>				
C <sub>3</sub> F <sub>8</sub>				
C <sub>4</sub> F <sub>10</sub>				
o-C <sub>3</sub> F <sub>8</sub>				
C <sub>3</sub> F <sub>12</sub>				
C <sub>6</sub> F <sub>14</sub>				
Unspecified mix of listed PFCs <sup>(4)</sup> - (Gg CO <sub>2</sub> equivalent)				
<b>ADD GASES</b>				
<b>Emissions of SF<sub>6</sub><sup>(3)</sup> - (Gg CO<sub>2</sub> equivalent)</b>				
SF <sub>6</sub>				

To be updated ...

Note: All footnotes for this table are given at the end of the table on sheet 5.

**TABLE 10 EMISSION TRENDS**  
**GHG CO<sub>2</sub> eq. emissions**  
 (Sheet 3 of 5)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	Years 1991 to latest reported year	Change from base to latest reported year %
Total (Net Emissions) <sup>(1)</sup>	(Gg CO <sub>2</sub> eq.)			%
<b>1. Energy</b>				
A. Fuel Combustion (Sectoral Approach)				
1. Energy Industries				
2. Manufacturing Industries and Construction				
3. Transport				
4. Other Sectors				
5. Other				
B. Fugitive Emissions from Fuels				
1. Solid Fuels				
2. Oil and Natural Gas				
3. Other Emissions from Energy Production				
C. CO <sub>2</sub> Transport and Storage				
<b>2. Industrial Processes</b>				
A. Mineral Industry				
B. Chemical Industry				
C. Metal Industry				
D. Non-Energy Products from Fuels and Solvent Use Other Production <sup>(2)</sup>				
E. Electronic Industry Production of Halocarbons and SF <sub>6</sub>				
F. Product Uses as ODS Substitutes Consumption of Halocarbons and SF <sub>6</sub>				
G. Other Product Manufacture and Use Consumption of Halocarbons and SF <sub>6</sub>				
H. Other				
<b>3. Agriculture, Forestry and Other Land Use</b>				
<b>4. Agriculture</b>				
A. Enteric Fermentation				
B. Manure Management				
C. Rice Cultivation				
D. Agricultural Soils <sup>(3)</sup>				
E. Prescribed Burning of Savannas				
F. Field Burning of Agricultural Residues				
G. Other				
<b>5. Land Use, Land-Use Change and Forestry<sup>(1)</sup></b>				
A. Forest Land				
B. Cropland				
C. Grassland				
D. Wetlands				
E. Settlements				
F. Other Land				
G. Other				
<b>C. Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>				
<b>4. Waste</b>				
A. Solid Waste Disposal <del>on Land</del>				
B. Biological Treatment of Solid Waste				
C. Waste Incineration Incineration and Open Burning of Waste				
D. Waste Water <del>Handling</del> Treatment and Discharge				
E. Other				
<b>5. Other (as specified in Summary 1.A)</b>				
<b>Indirect emissions</b>				
<b>Memo Items: <sup>(4)</sup></b>				
<b>International Bunkers</b>				
Aviation				
Marine				
<b>Multilateral Operations</b>				
CO <sub>2</sub> Emissions from Biomass				
CO <sub>2</sub> captured				
Long-term storage of C in waste disposal sites				
Indirect CO <sub>2</sub> and N <sub>2</sub> O				
Total direct CO <sub>2</sub> Equivalent Emissions without LULUCF				
Total direct CO <sub>2</sub> Equivalent Emissions with LULUCF				
Total Direct and Indirect CO <sub>2</sub> Equivalent Emissions without LULUCF				
Total CO <sub>2</sub> Equivalent Emissions with LULUCF				

New sheet

**TABLE 10 EMISSION TRENDS  
SUMMARY  
(Sheet 5 of 5)**

Year  
Submission  
Country

GREENHOUSE GAS EMISSIONS	Base year <sup>(1)</sup>	1990	(Years 1991 to latest reported year)	Change from base to latest reported year
	CO <sub>2</sub> equivalent (Gg)			(%)
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF				
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF				
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF				
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF				
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF				
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF				
direct/indirect				
HFCs				
PFCs				
SF <sub>6</sub>				
Other gases				
<b>Total (including LULUCF)</b>				
<b>Total (excluding LULUCF)</b>				
<b>Total (including LULUCF, including indirect)</b>				
<b>Total (excluding LULUCF, including indirect)</b>				

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>			Change from base to latest reported year
	CO <sub>2</sub> equivalent (Gg)			(%)
1. Energy				
2. Industrial Processes				
3. Solvent and Other Product Use				
4. Agriculture				
5. Land Use, Land-Use Change and Forestry <sup>(5)</sup>				
6. Waste				
7. Other				
<b>Total (including LULUCF)<sup>(5)</sup></b>				

<sup>(1)</sup> The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the COP. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

<sup>(2)</sup> Fill in net emissions/removals as reported in table Summary 1.A. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

<sup>(3)</sup> Enter actual emissions estimates. If only potential emissions estimates are available, these should be reported in this table and an indication for this be provided in the documentation box. Only in these rows are the emissions expressed as CO<sub>2</sub> equivalent emissions.

<sup>(4)</sup> In accordance with the UNFCCC reporting guidelines, HFC and PFC emissions should be reported for each relevant chemical. However, if it is not possible to report values for each chemical (i.e. mixtures, confidential data, lack of disaggregation), this row could be used for reporting aggregate figures for HFCs and PFCs, respectively. Note that the unit used for this row is Gg of CO<sub>2</sub> equivalent and that appropriate notation keys should be entered in the cells for the individual chemicals.

<sup>(5)</sup> Includes net CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O from LULUCF.

**Documentation box:**

• Parties should provide detailed explanations on emissions trends in Chapter 2: Trends in Greenhouse Gas Emissions and, as appropriate, in the corresponding Chapters 3 - 9 of the NIR. Use this documentation box to provide references to relevant sections of the NIR if any additional information and further details are needed to understand the content of this table.

• Use the documentation box to provide explanations if potential emissions are reported.