

ANNEX 1.  
 SUMMARY REPORTS FOR NATIONAL GREENHOUSE GAS  
 INVENTORIES

## 1990 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens |
|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|----------|
| <b>Total National Emissions and Removals</b>           | <b>29105</b>              | <b>-830.16</b>           | <b>280.03</b>   | <b>3.7160</b>    | <b>133.84</b>   | <b>132.21</b> | <b>100.30</b> | <b>113.19</b>   |          |
| <b>Energy</b>  | <b>28195</b>              |                          | <b>38.634</b>   | <b>0.2892</b>    | <b>132.58</b>   | <b>93.624</b> | <b>84.210</b> | <b>111.91</b>   |          |
| A Fuel Combustion (Sectoral Approach)                  | 28195                     |                          | 1.9825          | 0.2892           | 132.58          | 93.624        | 84.210        | 111.91          |          |
| 1 Energy Industries                                    | 11988                     |                          | 0.2498          | 0.1008           | 34.456          | 3.1359        | 0.8357        | 49.645          |          |
| 2 Manufacturing Industries and Construction            | 706                       |                          | 0.01            | 0.0103           | 2.5858          | 0.7185        | 0.1508        | 3.9504          |          |
| 3 Transport  | 5060                      |                          | 1.0849          | 0.0443           | 47.050          | 60.807        | 77.335        | 5.2087          |          |
| 4 Other Sectors  | 10441                     |                          | 0.6378          | 0.1338           | 48.490          | 28.962        | 5.8889        | 53.103          |          |
| B Fugitive Emissions from Fuels                        | 0                         |                          | 36.65           | 0                | 0               | 0             | 0             | 0               |          |
| 1 Solid Fuels  | 0                         |                          | 14.04           | 0                | 0               | 0             | 0             | 0               |          |
| 2 Oil and Natural Gas                                  | 0                         |                          | 22.61           | 0                | 0               | 0             | 0             | 0               |          |
| <b>Industrial Processes</b>                            | <b>708.2</b>              |                          |                 |                  | <b>0.1845</b>   | <b>8.737</b>  | <b>16.085</b> | <b>1.2806</b>   |          |
| A Mineral Products                                     | 694.5                     |                          |                 |                  |                 |               | 5.3700        | 0.4160          |          |
| B Chemical Industry                                    |                           |                          |                 |                  |                 |               | 0.0201        |                 |          |
| C Metal Production                                     | 13.7                      |                          |                 |                  | 0.1845          | 8.7369        | 0.0554        | 0.8646          |          |
| D Other Production                                     |                           |                          |                 |                  |                 |               | 10.640        |                 |          |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>Agriculture</b>                                     | <b>197.5</b>              |                          | <b>141.04</b>   | <b>3.2003</b>    | <b>0.9533</b>   | <b>25.450</b> |               |                 |          |
| A Enteric Fermentation                                 |                           |                          | 122.33          |                  |                 |               |               |                 |          |
| B Storage Systems                                      |                           |                          | 17.258          | 0.0046           |                 |               |               |                 |          |
| C Rice Cultivation                                     |                           |                          | 0.48            |                  |                 |               |               |                 |          |
| D Agricultural Soils                                   |                           |                          |                 | 3.1684           |                 |               |               |                 |          |
| E Natural Fires in Mountains                           |                           |                          | 0.0             | 0.0000           | 0.0000          | 0.0000        |               |                 |          |
| F Field Burning of Agricultural Residues               | 197.5                     |                          | 0.9695          | 0.0274           | 0.9533          | 25.450        |               |                 |          |
| <b>Land-Use Change &amp; Forestry</b>                  | <b>4.7</b>                | <b>-830.16</b>           | <b>0.5025</b>   | <b>0.0035</b>    | <b>0.1249</b>   | <b>4.3971</b> |               |                 |          |
| A Change in Woody Biomass Stocks                       |                           | -749.97                  |                 |                  |                 |               |               |                 |          |
| B Forests and Grassland Conversion                     | 4.7                       |                          | 0.5025          | 0.0035           | 0.1249          | 4.3971        |               |                 |          |
| C Abandonment of Managed Lands                         |                           |                          |                 |                  |                 |               |               |                 |          |
| D CO <sub>2</sub> Emissions from Soils                 | 0.0023                    |                          |                 |                  |                 |               |               |                 |          |
| <b>Waste</b>   |                           |                          | <b>99.85</b>    | <b>0.2230</b>    |                 |               |               |                 |          |
| A Solid Waste Disposal                                 |                           |                          | 78.31           |                  |                 |               |               |                 |          |
| B Sewage Water Cleaning                                |                           |                          | 21.54           |                  |                 |               |               |                 |          |
| <b>Memo Items:</b>                                     |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>International Bunkers</b>                           | <b>403.0</b>              |                          | <b>0.00</b>     | <b>0.01</b>      | <b>1.71</b>     | <b>0.57</b>   | <b>0.28</b>   | <b>0.13</b>     |          |
| <b>CO<sub>2</sub> Emission from Biomass</b>            | <b>84.3</b>               |                          | <b>1.35</b>     | <b>0.09</b>      | <b>0.34</b>     | <b>1.18</b>   |               |                 |          |

 NOTE: Empty cells mean not applicable  
 Zero cells mean not estimated

## 1991 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|----------|
| <b>Total National Emissions and Removals</b>           |  | <b>27914</b>              | <b>-843.71</b>           | <b>289.19</b>   | <b>0.5371</b>    | <b>130.63</b>   | <b>128.86</b> | <b>102.09</b> | <b>107.76</b>   |          |
| <b>Energy</b>  |  | <b>27072</b>              |                          | <b>35.571</b>   | <b>0.2711</b>    | <b>129.46</b>   | <b>94.229</b> | <b>85.769</b> | <b>106.49</b>   |          |
| A Fuel Combustion (Sectoral Approach)                  |  | 27072                     |                          | 1.9788          | 0.2711           | 129.46          | 94.229        | 85.769        | 106.49          |          |
| 1 Energy Industries                                    |  | 10765                     |                          | 0.2166          | 0.0995           | 31.349          | 2.7318        | 0.7274        | 49.870          |          |
| 2 Manufacturing Industries and Construction            |  | 664.29                    |                          | 0.0094          | 0.0097           | 2.4360          | 0.6643        | 0.1396        | 4.0679          |          |
| 3 Transport  |  | 5112.0                    |                          | 1.1075          | 0.0440           | 47.689          | 61.801        | 78.989        | 5.2692          |          |
| 4 Other Sectors  |  | 10531                     |                          | 0.6454          | 0.1179           | 47.987          | 29.032        | 5.9132        | 47.280          |          |
| B Fugitive Emissions from Fuels                        |  |                           |                          | 33.592          |                  |                 |               |               |                 |          |
| 1 Solid Fuels  |  |                           |                          | 13.027          |                  |                 |               |               |                 |          |
| 2 Oil and Natural Gas                                  |  |                           |                          | 20.565          |                  |                 |               |               |                 |          |
| <b>Industrial Processes</b>                            |  | <b>671.41</b>             |                          |                 |                  | <b>0.1842</b>   | <b>7.3048</b> | <b>16.319</b> | <b>1.2741</b>   |          |
| A Mineral Products                                     |  | 659.95                    |                          |                 |                  |                 |               | 5.328         | 0.416           |          |
| B Chemical Industry                                    |  |                           |                          |                 |                  |                 |               | 0.0178        | no              |          |
| C Metal Production                                     |  | 11.463                    |                          |                 |                  | 0.1842          | 7.3048        | 0.0442        | 0.8581          |          |
| D Other Production                                     |  |                           |                          |                 |                  |                 |               | 10.929        | no              |          |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>Agriculture</b>                                     |  | <b>166.45</b>             |                          | <b>140.51</b>   | <b>0.0348</b>    | <b>0.8748</b>   | <b>23.304</b> |               |                 |          |
| A Enteric Fermentation                                 |  |                           |                          | 121.87          |                  |                 |               |               |                 |          |
| B Storage Systems                                      |  |                           |                          | 17.032          | 0.0045           |                 |               |               |                 |          |
| C Rice Cultivation                                     |  |                           |                          | 0.7200          |                  |                 |               |               |                 |          |
| D Agricultural Soils                                   |  |                           |                          |                 | 0.0061           |                 |               |               |                 |          |
| E Natural Fires in Mountains                           |  |                           |                          | 0.0000          | 0.0000           | 0.0000          | 0.0000        |               |                 |          |
| F Field Burning of Agricultural Residues               |  | 166.45                    |                          | 0.8878          | 0.0242           | 0.8748          | 23.304        |               |                 |          |
| <b>Land-Use Change &amp; Forestry</b>                  |  | <b>4.2648</b>             | <b>-843.71</b>           | <b>0.4593</b>   | <b>0.0032</b>    | <b>0.1141</b>   | <b>4.0186</b> |               |                 |          |
| A Change in Woody Biomass Stocks                       |  |                           | -763.52                  |                 |                  |                 |               |               |                 |          |
| B Forests and Grassland Conversion                     |  | 4.2625                    |                          | 0.4593          | 0.0032           | 0.1141          | 4.0186        |               |                 |          |
| C Abandonment of Managed Lands                         |  |                           | -80.183                  |                 |                  |                 |               |               |                 |          |
| D CO <sub>2</sub> Emissions from Soils                 |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |          |
| <b>Waste</b>   |  |                           |                          | <b>112.65</b>   | <b>0.2280</b>    |                 |               |               |                 |          |
| A Solid Waste Disposal                                 |  |                           |                          | 92.150          |                  |                 |               |               |                 |          |
| B Sewage Water Cleaning                                |  |                           |                          | 20.500          |                  |                 |               |               |                 |          |
| <b>Memo Items:</b>                                     |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>International Bunkers</b>                           |  | <b>111.95</b>             |                          | <b>0.0008</b>   | <b>0.0032</b>    | <b>0.4744</b>   | <b>0.1581</b> | <b>0.0791</b> | <b>0.0355</b>   |          |
| <b>CO<sub>2</sub> Emission from Biomass</b>            |  | <b>67.950</b>             |                          | <b>1.0900</b>   | <b>0.0700</b>    | <b>0.2700</b>   | <b>0.9500</b> |               |                 |          |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1992 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens |
|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|----------|
| <b>Total National Emissions and Removals</b>           | <b>18727</b>              | <b>-859.15</b>           | <b>260.84</b>   | <b>0.4360</b>    | <b>102.35</b>   | <b>128.74</b> | <b>94.365</b> | <b>55.218</b>   |          |
| <b>Energy</b>  | <b>17942</b>              |                          | <b>26.70</b>    | <b>0.1680</b>    | <b>100.94</b>   | <b>89.665</b> | <b>81.868</b> | <b>54.042</b>   |          |
| A Fuel Combustion (Sectoral Approach)                  | 17942                     |                          | 1.7429          | 0.1680           | 100.94          | 89.665        | 81.868        | 54.042          |          |
| 1 Energy Industries                                    | 5331.7                    |                          | 0.0765          | 0.0450           | 15.788          | 1.5309        | 0.3827        | 17.877          |          |
| 2 Manufacturing Industries and Construction            | 651.35                    |                          | 0.0091          | 0.0095           | 2.3760          | 0.6232        | 0.1313        | 4.0620          |          |
| 3 Transport  | 4934.2                    |                          | 1.0638          | 0.0422           | 46.177          | 59.868        | 75.759        | 5.1398          |          |
| 4 Other Sectors  | 7025.0                    |                          | 0.5934          | 0.0713           | 36.603          | 27.643        | 5.5950        | 26.963          |          |
| B Fugitive Emissions from Fuels                        |                           |                          | 24.953          |                  |                 |               |               |                 |          |
| 1 Solid Fuels  |                           |                          | 8.0670          |                  |                 |               |               |                 |          |
| 2 Oil and Natural Gas                                  |                           |                          | 16.886          |                  |                 |               |               |                 |          |
| <b>Industrial Processes</b>                            | <b>565.28</b>             |                          |                 |                  | <b>0.1831</b>   | <b>4.9642</b> | <b>12.496</b> | <b>1.1761</b>   |          |
| A Mineral Products                                     | 557.50                    |                          |                 |                  |                 |               | 5.6700        | 0.3290          |          |
| B Chemical Industry                                    |                           |                          |                 |                  |                 |               | 0.0093        |                 |          |
| C Metal Production                                     | 7.7882                    |                          |                 |                  | 0.1831          | 4.9642        | 0.0260        | 0.8471          |          |
| D Other Production                                     |                           |                          |                 |                  |                 |               | 6.7909        |                 |          |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>Agriculture</b>                                     | <b>215.21</b>             |                          | <b>131.74</b>   | <b>0.0399</b>    | <b>1.1103</b>   | <b>30.134</b> |               |                 |          |
| A Enteric Fermentation                                 |                           |                          | 113.93          |                  |                 |               |               |                 |          |
| B Storage Systems                                      |                           |                          | 15.905          | 0.0041           |                 |               |               |                 |          |
| C Rice Cultivation                                     |                           |                          | 0.7600          |                  |                 |               |               |                 |          |
| D Agricultural Soils                                   |                           |                          |                 | 0.0058           |                 |               |               |                 |          |
| E Natural Fires in Mountains                           | 0.062841                  |                          | 0.0010          | 0.0000           | 0.0003          | 0.0088        |               |                 |          |
| F Field Burning of Agricultural Residues               | 215.21                    |                          | 1.1470          | 0.0300           | 1.1100          | 30.125        |               |                 |          |
| <b>Land-Use Change &amp; Forestry</b>                  | <b>4.2216</b>             | <b>-859.15</b>           | <b>0.4546</b>   | <b>0.0031</b>    | <b>0.1130</b>   | <b>3.9778</b> |               |                 |          |
| A Change in Woody Biomass Stocks                       |                           | -778.97                  |                 |                  |                 |               |               |                 |          |
| B Forests and Grassland Conversion                     | 4.2193                    |                          | 0.4546          | 0.0031           | 0.1130          | 3.9778        |               |                 |          |
| C Abandonment of Managed Lands                         |                           | -80.183                  |                 |                  |                 |               |               |                 |          |
| D CO <sub>2</sub> Emissions from Soils                 | 0.0023                    |                          |                 |                  |                 |               |               |                 |          |
| <b>Waste</b>   |                           |                          | <b>101.95</b>   | <b>0.2250</b>    |                 |               |               |                 |          |
| A Solid Waste Disposal                                 |                           |                          | 86.010          |                  |                 |               |               |                 |          |
| B Sewage Water Cleaning                                |                           |                          | 15.940          |                  |                 |               |               |                 |          |
| <b>Memo Items:</b>                                     |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>International Bunkers</b>                           |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>CO<sub>2</sub> Emission from Biomass</b>            | <b>65.990</b>             |                          | <b>1.0600</b>   | <b>0.0700</b>    | <b>0.2600</b>   | <b>0.9200</b> |               |                 |          |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1993 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|----------|
| <b>Total National Emissions and Removals</b>           |  | <b>17652</b>              | <b>-874.26</b>           | <b>224.18</b>   | <b>1.0627</b>    | <b>99.341</b>   | <b>132.59</b> | <b>88.563</b> | <b>56.753</b>   |          |
| <b>Energy</b>  |  | <b>17029</b>              |                          | <b>21.188</b>   | <b>0.1621</b>    | <b>98.790</b>   | <b>90.545</b> | <b>82.989</b> | <b>54.422</b>   |          |
| A Fuel Combustion (Sectoral Approach)                  |  | 17 029                    |                          | 1.7550          | 0.1621           | 98.790          | 90.545        | 82.989        | 54.422          |          |
| 1 Energy Industries                                    |  | 5265.5                    |                          | 0.0915          | 0.0471           | 15.472          | 1.4145        | 0.3651        | 21.554          |          |
| 2 Manufacturing Industries and Construction            |  | 639.35                    |                          | 0.0086          | 0.0094           | 2.2965          | 0.5462        | 0.1158        | 4.0729          |          |
| 3 Transport  |  | 5078.1                    |                          | 1.0845          | 0.0434           | 47.624          | 61.705        | 77.079        | 5.3471          |          |
| 4 Other Sectors  |  | 6046.6                    |                          | 0.5704          | 0.0622           | 33.398          | 26.879        | 5.4294        | 23.448          |          |
| B Fugitive Emissions from Fuels                        |  |                           |                          | 19.433          |                  |                 |               |               |                 |          |
| 1 Solid Fuels  |  |                           |                          | 6.4536          |                  |                 |               |               |                 |          |
| 2 Oil and Natural Gas                                  |  |                           |                          | 12.980          |                  |                 |               |               |                 |          |
| <b>Industrial Processes</b>                            |  | <b>370.52</b>             |                          |                 |                  | <b>0.1835</b>   | <b>3.2876</b> | <b>5.5740</b> | <b>2.3312</b>   |          |
| A Mineral Products                                     |  | 354.21                    |                          |                 |                  |                 |               | 0.3930        | 0.2080          |          |
| B Chemical Industry                                    |  |                           |                          |                 |                  |                 |               | 0.0071        |                 |          |
| C Metal Production                                     |  | 16.306                    |                          |                 |                  | 0.1835          | 3.2876        | 0.0129        | 2.1232          |          |
| D Other Production                                     |  |                           |                          |                 |                  |                 |               | 5.1610        |                 |          |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>Agriculture</b>                                     |  | <b>248.06</b>             |                          | <b>120.79</b>   | <b>0.6764</b>    | <b>0.2530</b>   | <b>34.723</b> |               |                 |          |
| A Enteric Fermentation                                 |  |                           |                          | 103.63          |                  |                 |               |               |                 |          |
| B Storage Systems                                      |  |                           |                          | 14.841          | 0.0035           |                 |               |               |                 |          |
| C Rice Cultivation                                     |  |                           |                          | 1.000           |                  |                 |               |               |                 |          |
| D Agricultural Soils                                   |  |                           |                          |                 | 0.639            |                 |               |               |                 |          |
| E Natural Fires in Mountains                           |  | 0.0001                    |                          | 0.000           | 0.000            | 0.000           | 0.000         |               |                 |          |
| F Field Burning of Agricultural Residues               |  | 248.06                    |                          | 1.322           | 0.034            | 0.253           | 34.723        |               |                 |          |
| <b>Land-Use Change &amp; Forestry</b>                  |  | <b>4.2834</b>             | <b>-874.26</b>           | <b>0.4613</b>   | <b>0.0032</b>    | <b>0.1146</b>   | <b>4.0360</b> |               |                 |          |
| A Change in Woody Biomass Stocks                       |  |                           | -794.08                  |                 |                  |                 |               |               |                 |          |
| B Forests and Grassland Conversion                     |  | 4.2811                    |                          | 0.4613          | 0.0032           | 0.1146          | 4.0360        |               |                 |          |
| C Abandonment of Managed Lands                         |  |                           | -80.183                  |                 |                  |                 |               |               |                 |          |
| D CO <sub>2</sub> Emissions from Soils                 |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |          |
| <b>Waste</b>   |  |                           |                          |                 |                  |                 |               |               |                 |          |
| A Solid Waste Disposal                                 |  |                           |                          | <b>81.740</b>   | <b>0.2210</b>    |                 |               |               |                 |          |
| B Sewage Water Cleaning                                |  |                           |                          | 69.260          |                  |                 |               |               |                 |          |
|  |  |                           |                          | 12.480          |                  |                 |               |               |                 |          |
| <b>Memo Items:</b>                                     |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>International Bunkers</b>                           |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>CO<sub>2</sub> Emission from Biomass</b>            |  | <b>64.030</b>             |                          | <b>1.0200</b>   | <b>0.0700</b>    | <b>0.2500</b>   | <b>0.9000</b> |               |                 |          |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1994 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens |
|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|----------|
| <b>Total National Emissions and Removals</b>           | <b>14624</b>              | <b>-891.05</b>           | <b>159.51</b>   | <b>0.7327</b>    | <b>90.525</b>   | <b>115.55</b> | <b>87.253</b> | <b>47.783</b>   |          |
| <b>Energy</b>  | <b>14228</b>              |                          | <b>10.481</b>   | <b>0.1483</b>    | <b>89.420</b>   | <b>87.060</b> | <b>83.531</b> | <b>45.976</b>   |          |
| A Fuel Combustion (Sectoral Approach)                  | 14 228                    |                          | 1.6548          | 0.1483           | 89.420          | 87.060        | 83.531        | 45.976          |          |
| 1 Energy Industries                                    | 3679.4                    |                          | 0.0543          | 0.0416           | 11.236          | 0.9150        | 0.2335        | 17.598          |          |
| 2 Manufacturing Industries and Construction            | 589.95                    |                          | 0.0076          | 0.0087           | 2.0690          | 0.4152        | 0.0892        | 3.5376          |          |
| 3 Transport  | 5145.6                    |                          | 1.1035          | 0.0441           | 48.182          | 62.431        | 78.510        | 5.3848          |          |
| 4 Other Sectors  | 4813.0                    |                          | 0.4895          | 0.0539           | 27.934          | 23.299        | 4.6979        | 19.456          |          |
| B Fugitive Emissions from Fuels                        |                           |                          | 8.8259          |                  |                 |               |               |                 |          |
| 1 Solid Fuels  |                           |                          | 3.1817          |                  |                 |               |               |                 |          |
| 2 Oil and Natural Gas                                  |                           |                          | 5.6442          |                  |                 |               |               |                 |          |
| <b>Industrial Processes</b>                            | <b>228.42</b>             |                          |                 |                  | <b>0.1828</b>   | <b>2.0791</b> | <b>3.7223</b> | <b>1.8072</b>   |          |
| A Mineral Products                                     | 217.84                    |                          |                 |                  |                 |               | 0.2324        | 0.1273          |          |
| B Chemical Industry                                    |                           |                          |                 |                  |                 |               | 0.0017        |                 |          |
| C Metal Production                                     | 10.582                    |                          |                 |                  | 0.1828          | 2.0791        | 0.0034        | 1.6799          |          |
| D Other Production                                     |                           |                          |                 |                  |                 |               | 3.4847        |                 |          |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>Agriculture</b>                                     | <b>164.42</b>             |                          | <b>98.651</b>   | <b>0.3827</b>    | <b>0.8259</b>   | <b>23.012</b> |               |                 |          |
| A Enteric Fermentation                                 |                           |                          | 83.912          |                  |                 |               |               |                 |          |
| B Storage Systems                                      |                           |                          | 12.621          | 0.0026           |                 |               |               |                 |          |
| C Rice Cultivation                                     |                           |                          | 1.2400          |                  |                 |               |               |                 |          |
| D Agricultural Soils                                   |                           |                          |                 | 0.3580           |                 |               |               |                 |          |
| E Natural Fires in Mountains                           | 0.2029                    |                          | 0.0030          | 0.0000           | 0.0009          | 0.0258        |               |                 |          |
| F Field Burning of Agricultural Residues               | 164.22                    |                          | 0.8750          | 0.0220           | 0.8250          | 22.986        |               |                 |          |
| <b>Land-Use Change &amp; Forestry</b>                  | <b>3.6038</b>             | <b>-891.05</b>           | <b>0.3880</b>   | <b>0.0027</b>    | <b>0.0964</b>   | <b>3.3954</b> |               |                 |          |
| A Change in Woody Biomass Stocks                       |                           | -810.87                  |                 |                  |                 |               |               |                 |          |
| B Forests and Grassland Conversion                     | 3.6015                    |                          | 0.3880          | 0.0027           | 0.0964          | 3.3954        |               |                 |          |
| C Abandonment of Managed Lands                         |                           | -80.183                  |                 |                  |                 |               |               |                 |          |
| D CO <sub>2</sub> Emissions from Soils                 | 0.0023                    |                          |                 |                  |                 |               |               |                 |          |
| <b>Waste</b>   |                           |                          | <b>49.990</b>   | <b>0.1990</b>    |                 |               |               |                 |          |
| A Solid Waste Disposal                                 |                           |                          | 41.100          |                  |                 |               |               |                 |          |
| B Sewage Water Cleaning                                |                           |                          | 8.8900          |                  |                 |               |               |                 |          |
| <b>Memo Items:</b>                                     |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>International Bunkers</b>                           | <b>33.864</b>             |                          | <b>0.0002</b>   | <b>0.0010</b>    | <b>0.1435</b>   | <b>0.0478</b> | <b>0.0239</b> | <b>0.0107</b>   |          |
| <b>CO<sub>2</sub> Emission from Biomass</b>            | <b>58.150</b>             |                          | <b>0.9300</b>   | <b>0.0600</b>    | <b>0.2300</b>   | <b>0.8100</b> |               |                 |          |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1995 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories            |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|----------|
| <b>Total National Emissions and Removals</b>         |  | <b>12693</b>              | <b>-901.87</b>           | <b>145.63</b>   | <b>0.5862</b>    | <b>82.811</b>   | <b>120.98</b> | <b>82.730</b> | <b>35.059</b>   |          |
| <b>Energy</b>  |  | <b>12290</b>              |                          | <b>11.609</b>   | <b>0.1120</b>    | <b>81.066</b>   | <b>83.494</b> | <b>79.507</b> | <b>33.333</b>   |          |
| A Fuel Combustion (Sectoral Approach)                |  | 12290                     |                          | 1.6237          | 0.1120           | 81.066          | 83.494        | 79.507        | 33.333          |          |
| 1 Energy Industries                                  |  | 4397.7                    |                          | 0.0703          | 0.0458           | 13.225          | 1.1219        | 0.2884        | 21.206          |          |
| 2 Manufacturing Industries and Construction          |  | 140.60                    |                          | 0.0028          | 0.0020           | 0.6249          | 0.3322        | 0.0677        | 0.8051          |          |
| 3 Transport  |  | 4725.7                    |                          | 1.0361          | 0.0409           | 43.902          | 56.910        | 74.106        | 4.7858          |          |
| 4 Other Sectors                                      |  | 3025.8                    |                          | 0.5145          | 0.0232           | 23.314          | 25.130        | 5.0448        | 6.5355          |          |
| B Fugitive Emissions from Fuels                      |  |                           |                          | 9.9852          |                  |                 |               |               |                 |          |
| 1 Solid Fuels  |  |                           |                          | 1.7351          |                  |                 |               |               |                 |          |
| 2 Oil and Natural Gas                                |  |                           |                          | 8.2501          |                  |                 |               |               |                 |          |
| <b>Industrial Processes</b>                          |  | <b>167.84</b>             |                          |                 |                  | <b>0.1821</b>   | <b>1.955</b>  | <b>3.2228</b> | <b>1.7259</b>   |          |
| A Mineral Products                                   |  | 157.82                    |                          |                 |                  |                 |               | 0.3655        | 0.0928          |          |
| B Chemical Industry                                  |  |                           |                          |                 |                  |                 |               | 0.0014        |                 |          |
| C Metal Production                                   |  | 10.019                    |                          |                 |                  | 0.1821          | 1.9550        | 0.0025        | 1.6331          |          |
| D Other Production                                   |  |                           |                          |                 |                  |                 |               | 2.8534        |                 |          |
| F Consumption of Fluocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>Agriculture</b>                                   |  | <b>231.47</b>             |                          | <b>91.685</b>   | <b>0.2537</b>    | <b>1.4693</b>   | <b>32.223</b> |               |                 |          |
| A Enteric Fermentation                               |  |                           |                          | 76.741          |                  |                 |               |               |                 |          |
| B Storage Systems                                    |  |                           |                          | 11.886          | 0.0023           |                 |               |               |                 |          |
| C Rice Cultivation                                   |  |                           |                          | 1.8000          |                  |                 |               |               |                 |          |
| D Agricultural Soils                                 |  |                           |                          |                 | 0.2110           |                 |               |               |                 |          |
| E Natural Fires in Mountains                         |  | 3.6333                    |                          | 0.0444          | 0.0003           | 0.0093          | 0.3314        |               |                 |          |
| F Field Burning of Agricultural Residues             |  | 227.84                    |                          | 1.2140          | 0.0400           | 1.4600          | 31.892        |               |                 |          |
| <b>Land-Use Change &amp; Forestry</b>                |  | <b>3.5112</b>             | <b>-901.87</b>           | <b>0.3781</b>   | <b>0.0026</b>    | <b>0.0939</b>   | <b>3.3080</b> |               |                 |          |
| A Change in Woody Biomass Stocks                     |  |                           | -821.69                  |                 |                  |                 |               |               |                 |          |
| B Forests and Grassland Conversion                   |  | 3.5089                    |                          | 0.3781          | 0.0026           | 0.0939          | 3.3080        |               |                 |          |
| C Abandonment of Managed Lands                       |  |                           | -80.183                  |                 |                  |                 |               |               |                 |          |
| D CO <sub>2</sub> Emissions from Soils               |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |          |
| <b>Waste</b>   |  |                           |                          | <b>51.940</b>   | <b>0.2180</b>    |                 |               |               |                 |          |
| A Solid Waste Disposal                               |  |                           |                          | 45.430          |                  |                 |               |               |                 |          |
| B Sewage Water Cleaning                              |  |                           |                          | 6.5100          |                  |                 |               |               |                 |          |
| <b>Memo Items:</b>                                   |  |                           |                          |                 |                  |                 |               |               |                 |          |
| <b>International Bunkers</b>                         |  | <b>174.08</b>             |                          | <b>0.0012</b>   | <b>0.0049</b>    | <b>0.7378</b>   | <b>0.2459</b> | <b>0.1230</b> | <b>0.0552</b>   |          |
| <b>CO<sub>2</sub> Emission from Biomass</b>          |  | <b>71.220</b>             |                          | <b>1.1400</b>   | <b>0.0800</b>    | <b>0.2800</b>   | <b>1.0000</b> |               |                 |          |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1996 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens      |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|---------------|
| <b>Total National Emissions and Removals</b>           |  | <b>12832</b>              | <b>-917.00</b>           | <b>143.99</b>   | <b>0.6663</b>    | <b>79.630</b>   | <b>127.46</b> | <b>77.526</b> | <b>33.225</b>   | <b>0.0055</b> |
| <b>Energy</b>  |  | <b>12220</b>              |                          | <b>12.816</b>   | <b>0.1090</b>    | <b>77.316</b>   | <b>77.164</b> | <b>71.466</b> | <b>30.930</b>   |               |
| A Fuel Combustion (Sectoral Approach)                  |  | 12220                     |                          | 1.5129          | 0.1090           | 77.316          | 77.164        | 71.466        | 30.930          |               |
| 1 Energy Industries                                    |  | 4754.6                    |                          | 0.0771          | 0.0475           | 14.213          | 1.2354        | 0.3174        | 19.908          |               |
| 2 Manufacturing Industries and Construction            |  | 144.25                    |                          | 0.0030          | 0.0020           | 0.6539          | 0.3634        | 0.0740        | 0.7343          |               |
| 3 Transport  |  | 4222.6                    |                          | 0.9241          | 0.0367           | 39.195          | 50.779        | 66.097        | 4.2725          |               |
| 4 Other Sectors  |  | 3098.5                    |                          | 0.5087          | 0.0229           | 23.255          | 24.787        | 4.9780        | 6.0150          |               |
| B Fugitive Emissions from Fuels                        |  |                           |                          | 11.303          |                  |                 |               |               |                 |               |
| 1 Solid Fuels  |  |                           |                          | 1.5376          |                  |                 |               |               |                 |               |
| 2 Oil and Natural Gas                                  |  |                           |                          | 9.7654          |                  |                 |               |               |                 |               |
| <b>Industrial Processes</b>                            |  | <b>290.86</b>             |                          |                 |                  | <b>0.1811</b>   | <b>2.0042</b> | <b>6.0598</b> | <b>2.2951</b>   | <b>0.0055</b> |
| A Mineral Products                                     |  | 276.44                    |                          |                 |                  |                 |               | 1.2028        | 0.1636          |               |
| B Chemical Industry                                    |  |                           |                          |                 |                  |                 |               | 0.0015        |                 |               |
| C Metal Production                                     |  | 14.427                    |                          |                 |                  | 0.1811          | 2.0042        | 0.0003        | 2.1315          |               |
| D Other Production                                     |  |                           |                          |                 |                  |                 |               | 4.8552        |                 |               |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 | 0.0055        |
| <b>Agriculture</b>                                     |  | <b>317.01</b>             |                          | <b>87.994</b>   | <b>0.3414</b>    | <b>2.0270</b>   | <b>44.550</b> |               |                 |               |
| A Enteric Fermentation                                 |  |                           |                          | 72.623          |                  |                 |               |               |                 |               |
| B Storage Systems                                      |  |                           |                          | 11.521          | 0.0022           |                 |               |               |                 |               |
| C Rice Cultivation                                     |  |                           |                          | 2.1600          |                  |                 |               |               |                 |               |
| D Agricultural Soils                                   |  |                           |                          |                 | 0.2832           |                 |               |               |                 |               |
| E Natural Fires in Mountains                           |  | 0.0104                    |                          | 0.0001          | 0.0000           | 0.0000          | 0.1799        |               |                 |               |
| F Field Burning of Agricultural Residues               |  | 317.00                    |                          | 1.6900          | 0.0560           | 2.0270          | 44.370        |               |                 |               |
| <b>Land-Use Change &amp; Forestry</b>                  |  | <b>3.9745</b>             | <b>-917.00</b>           | <b>0.4280</b>   | <b>0.0029</b>    | <b>0.1063</b>   | <b>3.7448</b> |               |                 |               |
| A Change in Woody Biomass Stocks                       |  |                           | -836.82                  |                 |                  |                 |               |               |                 |               |
| B Forests and Grassland Conversion                     |  | 3.9722                    |                          | 0.4280          | 0.0029           | 0.1063          | 3.7448        |               |                 |               |
| C Abandonment of Managed Lands                         |  |                           | -80.183                  |                 |                  |                 |               |               |                 |               |
| D CO <sub>2</sub> Emissions from Soils                 |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |               |
| <b>Waste</b>   |  |                           |                          | <b>42.750</b>   | <b>0.2130</b>    |                 |               |               |                 |               |
| A Solid Waste Disposal                                 |  |                           |                          | 37.560          |                  |                 |               |               |                 |               |
| B Sewage Water Cleaning                                |  |                           |                          | 5.1900          |                  |                 |               |               |                 |               |
| <b>Memo Items:</b>                                     |  |                           |                          |                 |                  |                 |               |               |                 |               |
| <b>International Bunkers</b>                           |  | <b>209.90</b>             |                          | <b>0.0015</b>   | <b>0.0059</b>    | <b>0.8896</b>   | <b>0.2965</b> | <b>0.1483</b> | <b>0.0665</b>   |               |
| <b>CO<sub>2</sub> Emission from Biomass</b>            |  | <b>70.570</b>             |                          | <b>1.1300</b>   | <b>0.0800</b>    | <b>0.2800</b>   | <b>0.9900</b> |               |                 |               |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1997 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens      |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|---------------|
| <b>Total National Emissions and Removals</b>           |  | <b>12055</b>              | <b>-927.01</b>           | <b>153.20</b>   | <b>0.9378</b>    | <b>76.537</b>   | <b>135.75</b> | <b>78.170</b> | <b>30.744</b>   | <b>0.1373</b> |
| <b>Energy</b>  |  | <b>11320</b>              |                          | <b>13.764</b>   | <b>0.0960</b>    | <b>74.095</b>   | <b>76.436</b> | <b>71.420</b> | <b>28.358</b>   |               |
| A Fuel Combustion (Sectoral Approach)                  |  | 11320                     |                          | 1.4979          | 0.0960           | 74.095          | 76.436        | 71.420        | 28.358          |               |
| 1 Energy Industries                                    |  | 4315.6                    |                          | 0.0762          | 0.0366           | 12.598          | 1.1795        | 0.3044        | 17.334          |               |
| 2 Manufacturing Industries and Construction            |  | 139.01                    |                          | 0.0030          | 0.0019           | 0.6484          | 0.3826        | 0.0777        | 0.7925          |               |
| 3 Transport  |  | 4200.6                    |                          | 0.9247          | 0.0363           | 39.024          | 50.617        | 66.173        | 4.2430          |               |
| 4 Other Sectors  |  | 2664.5                    |                          | 0.4940          | 0.0212           | 21.825          | 24.257        | 4.8652        | 5.9889          |               |
| B Fugitive Emissions from Fuels                        |  |                           |                          | 12.266          |                  |                 |               |               |                 |               |
| 1 Solid Fuels  |  |                           |                          | 1.9513          |                  |                 |               |               |                 |               |
| 2 Oil and Natural Gas                                  |  |                           |                          | 10.315          |                  |                 |               |               |                 |               |
| <b>Industrial Processes</b>                            |  | <b>348.20</b>             |                          |                 |                  | <b>0.1798</b>   | <b>2.0309</b> | <b>6.7501</b> | <b>2.3861</b>   | <b>0.1373</b> |
| A Mineral Products                                     |  | 333.21                    |                          |                 |                  |                 |               | 2.0090        | 0.1973          |               |
| B Chemical Industry                                    |  |                           |                          |                 |                  |                 |               | 0.0009        |                 |               |
| C Metal Production                                     |  | 14.987                    |                          |                 |                  | 0.1798          | 2.0309        | 0.0032        | 2.1887          |               |
| D Other Production                                     |  |                           |                          |                 |                  |                 |               | 4.7370        |                 |               |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 | 0.1373        |
| <b>Agriculture</b>                                     |  | <b>382.78</b>             |                          | <b>91.422</b>   | <b>0.6409</b>    | <b>2.1561</b>   | <b>53.549</b> |               |                 |               |
| A Enteric Fermentation                                 |  |                           |                          | 74.921          |                  |                 |               |               |                 |               |
| B Storage Systems                                      |  |                           |                          | 12.007          | 0.0022           |                 |               |               |                 |               |
| C Rice Cultivation                                     |  |                           |                          | 2.4400          |                  |                 |               |               |                 |               |
| D Agricultural Soils                                   |  |                           |                          |                 | 0.5794           |                 |               |               |                 |               |
| E Natural Fires in Mountains                           |  | 1.5083                    |                          | 0.0216          | 0.0002           | 0.0051          | 0.1792        |               |                 |               |
| F Field Burning of Agricultural Residues               |  | 381.27                    |                          | 2.0320          | 0.0590           | 2.1510          | 53.370        |               |                 |               |
| <b>Land-Use Change &amp; Forestry</b>                  |  | <b>3.9621</b>             | <b>-927.01</b>           | <b>0.4266</b>   | <b>0.0029</b>    | <b>0.1060</b>   | <b>3.7332</b> |               |                 |               |
| A Change in Woody Biomass Stocks                       |  |                           | -846.82                  |                 |                  |                 |               |               |                 |               |
| B Forests and Grassland Conversion                     |  | 3.9598                    |                          | 0.4266          | 0.0029           | 0.1060          | 3.7332        |               |                 |               |
| C Abandonment of Managed Lands                         |  |                           | -80.183                  |                 |                  |                 |               |               |                 |               |
| D CO <sub>2</sub> Emissions from Soils                 |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |               |
| <b>Waste</b>   |  |                           |                          | <b>47.59</b>    | <b>0.1980</b>    |                 |               |               |                 |               |
| A Solid Waste Disposal                                 |  |                           |                          | 42.800          |                  |                 |               |               |                 |               |
| B Sewage Water Cleaning                                |  |                           |                          | 4.7900          |                  |                 |               |               |                 |               |
| <b>Memo Items:</b>                                     |  |                           |                          |                 |                  |                 |               |               |                 |               |
| <b>International Bunkers</b>                           |  | <b>115.56</b>             |                          | <b>0.0008</b>   | <b>0.0033</b>    | <b>0.4898</b>   | <b>0.1633</b> | <b>0.0816</b> | <b>0.0366</b>   |               |
| <b>CO<sub>2</sub> Emission from Biomass</b>            |  | <b>81.680</b>             |                          | <b>1.3120</b>   | <b>0.0900</b>    | <b>0.3200</b>   | <b>1.1400</b> |               |                 |               |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1998 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories              |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens      |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|---------------|
| <b>Total National Emissions and Removals</b>           |  | <b>13003</b>              | <b>-944.41</b>           | <b>139.97</b>   | <b>0.8862</b>    | <b>79.868</b>   | <b>135.07</b> | <b>80.430</b> | <b>34.240</b>   | <b>0.2456</b> |
| <b>Energy</b>  |  | <b>12247</b>              |                          | <b>12.670</b>   | <b>0.1106</b>    | <b>77.415</b>   | <b>77.164</b> | <b>72.646</b> | <b>31.898</b>   |               |
| A Fuel Combustion (Sectoral Approach)                  |  | 12247                     |                          | 1.5232          | 0.1106           | 77.415          | 77.164        | 72.646        | 31.898          |               |
| 1 Energy Industries                                    |  | 4602.8                    |                          | 0.0734          | 0.0461           | 13.781          | 1.1985        | 0.3071        | 19.597          |               |
| 2 Manufacturing Industries and Construction            |  | 135.87                    |                          | 0.0031          | 0.0018           | 0.6576          | 0.4159        | 0.0843        | 0.6757          |               |
| 3 Transport  |  | 4231.3                    |                          | 0.9387          | 0.0367           | 39.201          | 50.855        | 67.293        | 4.2238          |               |
| 4 Other Sectors  |  | 3277.5                    |                          | 0.5080          | 0.0260           | 23.775          | 24.694        | 4.9614        | 7.4015          |               |
| B Fugitive Emissions from Fuels                        |  |                           |                          | 11.147          |                  |                 |               |               |                 |               |
| 1 Solid Fuels  |  |                           |                          | 1.6209          |                  |                 |               |               |                 |               |
| 2 Oil and Natural Gas                                  |  |                           |                          | 9.5256          |                  |                 |               |               |                 |               |
| <b>Industrial Processes</b>                            |  | <b>370.47</b>             |                          |                 |                  | <b>0.1282</b>   | <b>1.1074</b> | <b>7.7846</b> | <b>2.3418</b>   | <b>0.2456</b> |
| A Mineral Products                                     |  | 356.41                    |                          |                 |                  |                 |               | 3.4108        | 0.2131          |               |
| B Chemical Industry                                    |  |                           |                          |                 |                  |                 |               | 0.0006        |                 |               |
| C Metal Production                                     |  | 14.058                    |                          |                 |                  | 0.1282          | 1.1074        | 0.0014        | 2.1287          |               |
| D Other Production                                     |  |                           |                          |                 |                  |                 |               | 4.3718        |                 |               |
| F Consumption of Fluorocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 | 0.2456        |
| <b>Agriculture</b>                                     |  | <b>382.08</b>             |                          | <b>92.897</b>   | <b>0.5660</b>    | <b>2.2304</b>   | <b>53.463</b> |               |                 |               |
| A Enteric Fermentation                                 |  |                           |                          | 76.341          |                  |                 |               |               |                 |               |
| B Storage Systems                                      |  |                           |                          | 12.355          | 0.0023           |                 |               |               |                 |               |
| C Rice Cultivation                                     |  |                           |                          | 2.1600          |                  |                 |               |               |                 |               |
| D Agricultural Soils                                   |  |                           |                          |                 | 0.5027           |                 |               |               |                 |               |
| E Natural Fires in Mountains                           |  | 0.7172                    |                          | 0.0075          | 0.0000           | 0.0044          | 0.0805        |               |                 |               |
| F Field Burning of Agricultural Residues               |  | 381.36                    |                          | 2.0330          | 0.0610           | 2.2260          | 53.382        |               |                 |               |
| <b>Land-Use Change &amp; Forestry</b>                  |  | <b>3.5420</b>             | <b>-944.41</b>           | <b>0.3814</b>   | <b>0.0026</b>    | <b>0.0948</b>   | <b>3.3372</b> |               |                 |               |
| A Change in Woody Biomass Stocks                       |  |                           | -864.23                  |                 |                  |                 |               |               |                 |               |
| B Forests and Grassland Conversion                     |  | 3.5398                    |                          | 0.3814          | 0.0026           | 0.0948          | 3.3372        |               |                 |               |
| C Abandonment of Managed Lands                         |  |                           | -80.183                  |                 |                  |                 |               |               |                 |               |
| D CO <sub>2</sub> Emissions from Soils                 |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |               |
| <b>Waste</b>   |  |                           |                          | <b>34.020</b>   | <b>0.2070</b>    |                 |               |               |                 |               |
| A Solid Waste Disposal                                 |  |                           |                          | 29.560          |                  |                 |               |               |                 |               |
| B Sewage Water Cleaning                                |  |                           |                          | 4.4600          |                  |                 |               |               |                 |               |
| <b>Memo Items:</b>                                     |  |                           |                          |                 |                  |                 |               |               |                 |               |
| <b>International Bunkers</b>                           |  | <b>160.09</b>             |                          | <b>0.0011</b>   | <b>0.0045</b>    | <b>0.6785</b>   | <b>0.2262</b> | <b>0.1131</b> | <b>0.0507</b>   |               |
| <b>CO<sub>2</sub> Emission from Biomass</b>            |  | <b>87.560</b>             |                          | <b>1.4000</b>   | <b>0.1000</b>    | <b>0.3500</b>   | <b>1.2300</b> |               |                 |               |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 1999 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories            |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens      |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|---------------|
| <b>Total National Emissions and Removals</b>         |  | <b>11258</b>              | <b>-967.18</b>           | <b>144.55</b>   | <b>0.8800</b>    | <b>75.152</b>   | <b>125.53</b> | <b>76.911</b> | <b>30.078</b>   | <b>0.0746</b> |
| <b>Energy</b>  |  | <b>10723</b>              |                          | <b>8.7741</b>   | <b>0.1008</b>    | <b>72.694</b>   | <b>76.015</b> | <b>71.428</b> | <b>28.392</b>   |               |
| A Fuel Combustion (Sectoral Approach)                |  | 10723                     |                          | 1.4898          | 0.1008           | 72.694          | 76.015        | 71.428        | 28.392          |               |
| 1 Energy Industries                                  |  | 3259.1                    |                          | 0.0530          | 0.0341           | 9.7936          | 0.8258        | 0.2130        | 14.730          |               |
| 2 Manufacturing Industries and Construction          |  | 122.96                    |                          | 0.0028          | 0.0017           | 0.5893          | 0.3669        | 0.0744        | 0.6035          |               |
| 3 Transport  |  | 4141.9                    |                          | 0.9219          | 0.0358           | 38.377          | 49.814        | 66.120        | 4.1266          |               |
| 4 Other Sectors                                      |  | 3199.5                    |                          | 0.5121          | 0.0292           | 23.934          | 25.009        | 5.0206        | 8.9327          |               |
| B Fugitive Emissions from Fuels                      |  |                           |                          | 7.2842          |                  |                 |               |               |                 |               |
| 1 Solid Fuels  |  |                           |                          | 1.5610          |                  |                 |               |               |                 |               |
| 2 Oil and Natural Gas                                |  |                           |                          | 5.7232          |                  |                 |               |               |                 |               |
| <b>Industrial Processes</b>                          |  | <b>207.50</b>             |                          |                 |                  | <b>0.0695</b>   | <b>0.4190</b> | <b>5.4834</b> | <b>1.6853</b>   | <b>0.0746</b> |
| A Mineral Products                                   |  | 194.37                    |                          |                 |                  |                 |               | 2.1389        | 0.1161          |               |
| B Chemical Industry                                  |  |                           |                          |                 |                  |                 |               | 0.0005        |                 |               |
| C Metal Production                                   |  | 13.140                    |                          |                 |                  | 0.0695          | 0.4189        | 0.0016        | 1.5692          |               |
| D Other Production                                   |  |                           |                          |                 |                  |                 |               | 3.3424        |                 |               |
| F Consumption of Fluocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 | 0.0746        |
| <b>Agriculture</b>                                   |  | <b>323.43</b>             |                          | <b>94.579</b>   | <b>0.5631</b>    | <b>2.2821</b>   | <b>45.327</b> |               |                 |               |
| A Enteric Fermentation                               |  |                           |                          | 77.767          |                  |                 |               |               |                 |               |
| B Storage Systems                                    |  |                           |                          | 12.648          | 0.0023           |                 |               |               |                 |               |
| C Rice Cultivation                                   |  |                           |                          | 2.4400          |                  |                 |               |               |                 |               |
| D Agricultural Soils                                 |  |                           |                          |                 |                  | 0.4978          |               |               |                 |               |
| E Natural Fires in Mountains                         |  | 0.0323                    |                          | 0.0004          | 0.0000           | 0.0001          | 0.0583        |               |                 |               |
| F Field Burning of Agricultural Residues             |  | 323.40                    |                          | 1.7240          | 0.0630           | 2.2820          | 45.269        |               |                 |               |
| <b>Land-Use Change &amp; Forestry</b>                |  | <b>3.9992</b>             | <b>-967.18</b>           | <b>0.4306</b>   | <b>0.0030</b>    | <b>0.1070</b>   | <b>3.7681</b> |               |                 |               |
| A Change in Woody Biomass Stocks                     |  |                           | -886.99                  |                 |                  |                 |               |               |                 |               |
| B Forests and Grassland Conversion                   |  | 3.9969                    |                          | 0.4306          | 0.0030           | 0.1070          | 3.7681        |               |                 |               |
| C Abandonment of Managed Lands                       |  |                           | -80.183                  |                 |                  |                 |               |               |                 |               |
| D CO <sub>2</sub> Emissions from Soils               |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |               |
| <b>Waste</b>   |  |                           |                          | <b>40.77</b>    | <b>0.2130</b>    |                 |               |               |                 |               |
| A Solid Waste Disposal                               |  |                           |                          | 36.820          |                  |                 |               |               |                 |               |
| B Sewage Water Cleaning                              |  |                           |                          | 3.9500          |                  |                 |               |               |                 |               |
| <b>Memo Items:</b>                                   |  |                           |                          |                 |                  |                 |               |               |                 |               |
| <b>International Bunkers</b>                         |  | <b>118.11</b>             |                          | <b>0.0008</b>   | <b>0.0033</b>    | <b>0.5006</b>   | <b>0.1669</b> | <b>0.0834</b> | <b>0.0374</b>   |               |
| <b>CO<sub>2</sub> Emission from Biomass</b>          |  | <b>100.70</b>             |                          | <b>1.6100</b>   | <b>0.1100</b>    | <b>0.4000</b>   | <b>1.4100</b> |               |                 |               |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## 2000 Summary Report for National Greenhouse Gas Inventory (Gg)

| Greenhouse Gas Source and Sink Categories            |  | CO <sub>2</sub> Emissions | CO <sub>2</sub> Removals | CH <sub>4</sub> | N <sub>2</sub> O | NO <sub>x</sub> | CO            | NMVOG         | SO <sub>2</sub> | Halogens      |
|--|--|---------------------------|--------------------------|-----------------|------------------|-----------------|---------------|---------------|-----------------|---------------|
| <b>Total National Emissions and Removals</b>         |  | <b>11702</b>              | <b>-982.94</b>           | <b>147.03</b>   | <b>0.8931</b>    | <b>75.567</b>   | <b>129.61</b> | <b>79.304</b> | <b>31.788</b>   | <b>0.0121</b> |
| <b>Energy</b>  |  | 11102                     |                          | 9.4704          | 0.1048           | 73.184          | 74.914        | 70.272        | 30.232          |               |
| A Fuel Combustion (Sectoral Approach)                |  | 11102                     |                          | 1.4796          | 0.1048           | 73.184          | 74.914        | 70.272        | 30.232          |               |
| 1 Energy Industries                                  |  | 3622.7                    |                          | 0.0559          | 0.0387           | 10.954          | 0.9194        | 0.2354        | 16.609          |               |
| 2 Manufacturing Industries and Construction          |  | 121.21                    |                          | 0.0027          | 0.0016           | 0.5723          | 0.3468        | 0.0704        | 0.6084          |               |
| 3 Transport  |  | 4032.3                    |                          | 0.9038          | 0.0349           | 37.303          | 48.445        | 64.905        | 3.9834          |               |
| 4 Other Sectors                                      |  | 3325.4                    |                          | 0.5172          | 0.0295           | 24.354          | 25.203        | 5.0614        | 9.0311          |               |
| B Fugitive Emissions from Fuels                      |  |                           |                          | 7.9908          |                  |                 |               |               |                 |               |
| 1 Solid Fuels  |  |                           |                          | 1.5685          |                  |                 |               |               |                 |               |
| 2 Oil and Natural Gas                                |  |                           |                          | 6.4222          |                  |                 |               |               |                 |               |
| <b>Industrial Processes</b>                          |  | <b>236.80</b>             |                          |                 |                  | <b>0.0944</b>   | <b>0.4793</b> | <b>9.0321</b> | <b>1.5569</b>   | <b>0.0121</b> |
| A Mineral Products                                   |  | 225.35                    |                          |                 |                  |                 |               | 5.3372        | 0.1355          |               |
| B Chemical Industry                                  |  |                           |                          |                 |                  |                 |               | 0.0004        |                 |               |
| C Metal Production                                   |  | 11.452                    |                          |                 |                  | 0.0944          | 0.4793        | 0.0012        | 1.4215          |               |
| D Other Production                                   |  |                           |                          |                 |                  |                 |               | 3.6933        |                 |               |
| F Consumption of Fluocarbons and Sulfur Hexafluoride |  |                           |                          |                 |                  |                 |               |               |                 | 0.0121        |
| <b>Agriculture</b>                                   |  | <b>359.12</b>             |                          | <b>95.939</b>   | <b>0.5813</b>    | <b>2.1761</b>   | <b>50.254</b> |               |                 |               |
| A Enteric Fermentation                               |  |                           |                          | 78.628          |                  |                 |               |               |                 |               |
| B Storage Systems                                    |  |                           |                          | 12.833          | 0.0023           |                 |               |               |                 |               |
| C Rice Cultivation                                   |  |                           |                          | 2.5600          |                  |                 |               |               |                 |               |
| D Agricultural Soils                                 |  |                           |                          |                 | 0.5189           |                 |               |               |                 |               |
| E Natural Fires in Mountains                         |  | 0.4895                    |                          | 0.0065          | 0.0001           | 0.0021          | 0.0543        |               |                 |               |
| F Field Burning of Agricultural Residues             |  | 358.63                    |                          | 1.9120          | 0.0600           | 2.1740          | 50.200        |               |                 |               |
| <b>Land-Use Change &amp; Forestry</b>                |  | <b>4.2031</b>             | <b>-982.94</b>           | <b>0.4526</b>   | <b>0.0031</b>    | <b>0.1125</b>   | <b>3.9603</b> |               |                 |               |
| A Change in Woody Biomass Stocks                     |  |                           | -902.76                  |                 |                  |                 |               |               |                 |               |
| B Forests and Grassland Conversion                   |  | 4.2008                    |                          | 0.4526          | 0.0031           | 0.1125          | 3.9603        |               |                 |               |
| C Abandonment of Managed Lands                       |  |                           | -80.183                  |                 |                  |                 |               |               |                 |               |
| D CO <sub>2</sub> Emissions from Soils               |  | 0.0023                    |                          |                 |                  |                 |               |               |                 |               |
| <b>Waste</b>   |  |                           |                          | <b>41.17</b>    | <b>0.2040</b>    |                 |               |               |                 |               |
| A Solid Waste Disposal                               |  |                           |                          | 37.130          |                  |                 |               |               |                 |               |
| B Sewage Water Cleaning                              |  |                           |                          | 4.0400          |                  |                 |               |               |                 |               |
| <b>Memo Items:</b>                                   |  |                           |                          |                 |                  |                 |               |               |                 |               |
| <b>International Bunkers</b>                         |  | <b>113.06</b>             |                          | <b>0.0008</b>   | <b>0.0032</b>    | <b>0.4792</b>   | <b>0.1597</b> | <b>0.0799</b> | <b>0.0358</b>   |               |
| <b>CO<sub>2</sub> Emission from Biomass</b>          |  | <b>110.45</b>             |                          | <b>1.7700</b>   | <b>0.1200</b>    | <b>0.4400</b>   | <b>1.5500</b> |               |                 |               |

NOTE: Empty cells mean not applicable  
Zero cells mean not estimated

## ANNEX 2.

TOTAL EMISSIONS OF GASES WITH DIRECT GREENHOUSE EFFECT  
WITH ACCOUNT OF GWP

| Sector                     | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | Total    |
|----------------------------|-----------------|-----------------|------------------|----------|
| <b>1990</b>                |                 |                 |                  |          |
| Energy                     | 28,195.1        | 888.6           | 85.6             | 29,169.3 |
| Industrial Processes       | 708.2           | 0               | 0                | 708.2    |
| Agriculture                | 197.5           | 3,243.9         | 947.3            | 4,388.7  |
| Land-Use Change & Forestry | 4.7             | 11.5            | 1.0              | 17.2     |
| Waste                      | 0               | 2,296.6         | 66.0             | 2,362.6  |
| Total                      | 29,105.5        | 6,440.6         | 1,099.9          | 36,646.0 |
|                            |                 |                 |                  |          |
| <b>1991</b>                |                 |                 |                  |          |
| Energy                     | 27,072.0        | 818.1           | 80.2             | 27,970.3 |
| Industrial Processes       | 671.4           | 0               | 0                | 671.4    |
| Agriculture                | 166.4           | 3,231.7         | 10.3             | 3,408.4  |
| Land-Use Change & Forestry | 4.3             | 10.6            | 0.9              | 15.8     |
| Waste                      | 0               | 2,588.4         | 67.5             | 2,655.9  |
| Total                      | 27,914.1        | 6,648.8         | 158.9            | 34,721.8 |
|                            |                 |                 |                  |          |
| <b>1992</b>                |                 |                 |                  |          |
| Energy                     | 17,945.2        | 614.1           | 49.7             | 18,609.0 |
| Industrial Processes       | 565.3           | 0               | 0                | 565.3    |
| Agriculture                | 215.3           | 3,030.1         | 11.8             | 3,257.2  |
| Land-Use Change & Forestry | 4.2             | 10.5            | 0.9              | 15.6     |
| Waste                      | 0               | 2,344.8         | 66.6             | 2,411.4  |
| Total                      | 18,730.0        | 5,999.5         | 129.0            | 24,858.5 |
|                            |                 |                 |                  |          |
| <b>1993</b>                |                 |                 |                  |          |
| Energy                     | 17,029.5        | 487.3           | 48.0             | 17,564.8 |
| Industrial Processes       | 370.5           | 0               | 0                | 370.5    |
| Agriculture                | 248.1           | 2,778.2         | 200.2            | 3,226.5  |
| Land-Use Change & Forestry | 4.3             | 10.6            | 0.9              | 15.8     |
| Waste                      | 0               | 1,880.0         | 65.4             | 1,945.4  |
| Total                      | 17,652.4        | 5,156.1         | 314.5            | 23,123.0 |
|                            |                 |                 |                  |          |
| <b>1994</b>                |                 |                 |                  |          |
| Energy                     | 14,228.0        | 241.0           | 43.9             | 14,512.9 |
| Industrial Processes       | 228.4           | 0               | 0                | 228.4    |
| Agriculture                | 164.4           | 2,269.0         | 113.4            | 2,546.8  |
| Land-Use Change & Forestry | 3.6             | 8.9             | 0.8              | 13.3     |
| Waste                      | 0               | 1,149.8         | 58.9             | 1,208.7  |
| Total                      | 14,624.4        | 3,668.7         | 217.0            | 18,510.1 |
|                            |                 |                 |                  |          |
| <b>1995</b>                |                 |                 |                  |          |
| Energy                     | 12,289.8        | 267.0           | 33.2             | 12,590.0 |
| Industrial Processes       | 167.8           | 0               | 0                | 167.8    |
| Agriculture                | 231.5           | 2,108.8         | 75.2             | 2,415.5  |
| Land-Use Change & Forestry | 3.5             | 8.7             | 0.8              | 13.0     |
| Waste                      | 0               | 1,194.6         | 64.5             | 1,259.1  |
| Total                      | 12,692.6        | 3,579.1         | 173.7            | 16,445.4 |
|                            |                 |                 |                  |          |



| Sector                     | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | Total    |
|----------------------------|-----------------|-----------------|------------------|----------|
| <b>1996</b>                |                 |                 |                  |          |
| Energy                     | 12,219.9        | 294.9           | 32.3             | 12,547.1 |
| Industrial Processes       | 290.9           | 0               | 0                | 290.9    |
| Agriculture                | 317.0           | 2,023.8         | 100.9            | 2,441.7  |
| Land-Use Change & Forestry | 4.0             | 9.8             | 0.8              | 14.6     |
| Waste                      | 0               | 974.0           | 63.0             | 1,037.0  |
| Total                      | 12,831.8        | 3,302.5         | 197.0            | 16,331.3 |
|                            |                 |                 |                  |          |
| <b>1997</b>                |                 |                 |                  |          |
| Energy                     | 11,319.7        | 316.6           | 28.4             | 11,664.7 |
| Industrial Processes       | 348.2           | 0               | 0                | 348.2    |
| Agriculture                | 382.8           | 2,102.7         | 189.7            | 2,675.2  |
| Land-Use Change & Forestry | 4.0             | 9.8             | 0.8              | 14.6     |
| Waste                      | 0               | 1,094.6         | 58.6             | 1,153.2  |
| Total                      | 12,054.7        | 3,523.7         | 277.5            | 15,855.9 |
|                            |                 |                 |                  |          |
| <b>1998</b>                |                 |                 |                  |          |
| Energy                     | 12,247.5        | 291.4           | 32.9             | 12,571.8 |
| Industrial Processes       | 370.5           | 0               | 0                | 370.5    |
| Agriculture                | 381.4           | 2,136.7         | 167.5            | 2,685.6  |
| Land-Use Change & Forestry | 3.5             | 8.8             | 0.8              | 13.1     |
| Waste                      | 0               | 782.5           | 61.3             | 843.8    |
| Total                      | 13,002.9        | 3,219.4         | 262.5            | 16,484.8 |
|                            |                 |                 |                  |          |
| <b>1999</b>                |                 |                 |                  |          |
| Energy                     | 10,723.4        | 201.8           | 29.9             | 10,955.1 |
| Industrial Processes       | 207.5           | 0               | 0                | 207.5    |
| Agriculture                | 323.4           | 2,175.3         | 166.6            | 2,665.3  |
| Land-Use Change & Forestry | 4.0             | 9.9             | 0.9              | 14.8     |
| Waste                      | 0               | 937.7           | 63.0             | 1,000.7  |
| Total                      | 11,258.3        | 3,324.7         | 260.4            | 14,843.4 |
|                            |                 |                 |                  |          |
| <b>2000</b>                |                 |                 |                  |          |
| Energy                     | 11,101.9        | 217.8           | 31.1             | 11,350.8 |
| Industrial Processes       | 236.8           | 0               | 0                | 236.8    |
| Agriculture                | 359.1           | 2,206.6         | 172.0            | 2,737.7  |
| Land-Use Change & Forestry | 4.2             | 10.4            | 0.9              | 15.5     |
| Waste                      | 0               | 946.9           | 60.4             | 1,007.3  |
| Total                      | 11,702.0        | 3,381.7         | 264.4            | 15,348.1 |

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