

**Table 4****CO<sub>2</sub> emissions from fossil fuels**

Thousand metric tons and kilograms per capita

**Table Notes**

This table displays estimates of carbon dioxide (CO<sub>2</sub>) emissions from the combustion of fossil fuels based on information from the UN Energy Statistics Database, including country-specific net calorific values (NCVs), where applicable. No estimates for other greenhouse gases are provided, not even in CO<sub>2</sub>-equivalent terms. One thousand metric tonnes are equivalent to one Gigagram, the S.I. unit employed by the IPCC.

To arrive at estimates of carbon dioxide emissions, default IPCC emission factors (kg of CO<sub>2</sub> per TJ of fuel combusted) are applied. To obtain figures in TJ per fuel, like in other tables of this Yearbook, country-specific NCVs are used where applicable and available, and default NCVs are used where applicable but country-specific data are unavailable.

**Total** is approximately equivalent to the IPCC Reference approach for the energy sector plus the IPCC source/sink category "Industrial Processes and Product Use" (IPPU)<sup>1</sup>. In other words, it is based on the total energy supply of fossil fuels as in an energy balance, minus the non-energy use of fuels.

**Total** is broken down in **Coal**, **Oil** and **Gas** depending on the emission source, whether from solid, liquid, or gaseous fossil fuels, respectively. **Per capita** figures are calculated by dividing **Total** by population.

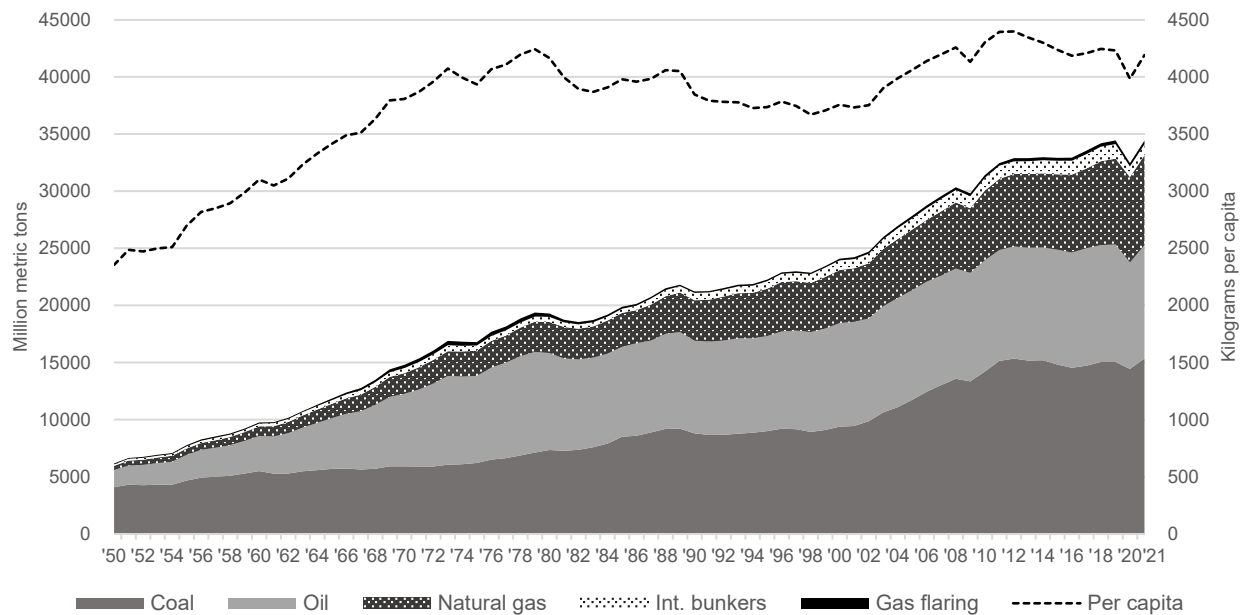
The emission estimates in this table exclude those from the combustion of non-renewable waste, which is a deviation from the IPCC guidelines (including the reference approach). On the other hand, such emissions are minor compared with those from fossil fuels and may be added in future versions of this table.

The table also provides estimates for emissions coming from **International bunkers** (marine and aviation combined) and natural **Gas flaring**. In the IPCC methodology, emissions from **International bunkers** are excluded from national emission inventories and therefore are not included in **Total**. For the world inventories, **International bunkers** should be added to **Total**. Emissions from natural **Gas flaring**, although part of the energy sector, are not accounted for as combustion<sup>2</sup>, but rather as fugitive emissions, likewise being excluded from **Total**. In this table, only flaring occurred in the extraction (production) of natural gas is accounted for as flaring, and data may be missing for some countries and/or years.

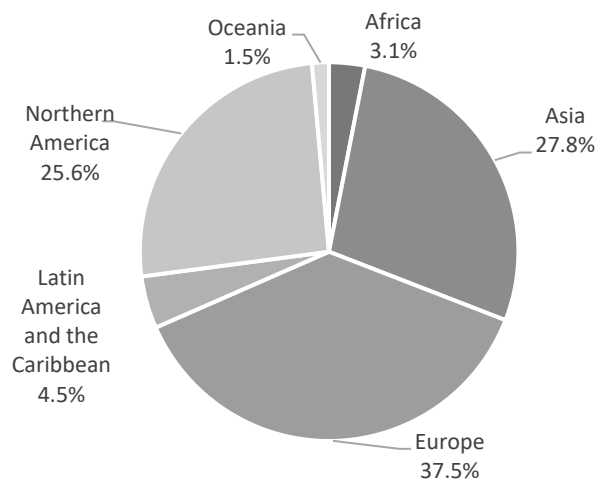
<sup>1</sup> Please refer to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories available from <https://www.ipcc.ch/report/2006-ipcc-guidelines-for-national-greenhouse-gas-inventories/>

<sup>2</sup> For inventory purposes, the IPCC defines fuel combustion as the intentional oxidation of materials within an apparatus that is designed to provide heat or mechanical work to a process, or for use away from the apparatus. Information about fossil fuel combustion tends to be much more accurate than information about fugitive emissions (which are not directly observable), and the separation between these categories preserves the accuracy of the emission estimates from combustion.

**Figure 11: CO<sub>2</sub> emissions from fossil fuel combustion, 1950-2021**



**Figure 12: CO<sub>2</sub> emissions from fossil fuel combustion by region, 1990**



**Figure 13: CO<sub>2</sub> emissions from fossil fuel combustion by region, 2021**

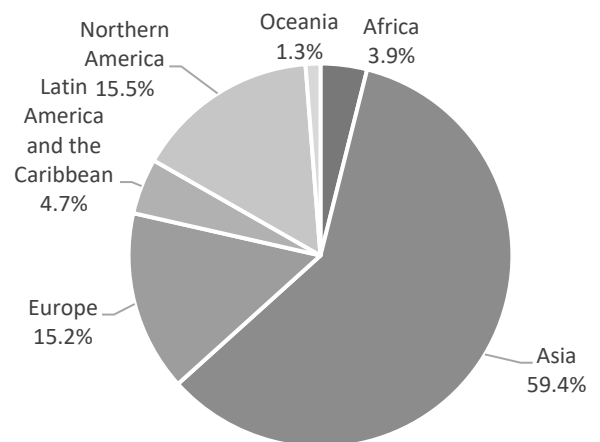


Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area      | Year | Type of fuel |            |             | Total      | Per capita | Additional sources    |             |
|----------------------|------|--------------|------------|-------------|------------|------------|-----------------------|-------------|
|                      |      | Coal         | Oil        | Natural gas |            |            | International bunkers | Gas flaring |
| World                | 2018 | 15,042,053   | 10,247,959 | 7,326,202   | 32,616,214 | 4,245      | 1,274,538             | 305,135     |
|                      | 2019 | 15,046,470   | 10,276,069 | 7,529,816   | 32,852,354 | 4,231      | 1,272,741             | 321,565     |
|                      | 2020 | 14,448,873   | 9,308,173  | 7,481,997   | 31,239,043 | 3,984      | 919,423               | 300,899     |
|                      | 2021 | 15,368,277   | 9,905,258  | 7,873,493   | 33,147,028 | 4,191      | 964,828               | 318,798     |
| Africa               | 2018 | 435,641      | 527,677    | 296,082     | 1,259,399  | 973        | 44,060                | 51,401      |
|                      | 2019 | 477,765      | 563,421    | 300,361     | 1,341,546  | 1,011      | 44,418                | 45,528      |
|                      | 2020 | 448,211      | 495,780    | 281,204     | 1,225,195  | 901        | 32,147                | 40,521      |
|                      | 2021 | 438,015      | 554,877    | 305,895     | 1,298,787  | 933        | 32,955                | 46,202      |
| Algeria              | 2018 | 1,826        | 52,708     | 81,870      | 136,405    | 3,253      | *2,041                | 5,733       |
|                      | 2019 | 1,501        | 56,452     | 86,100      | 144,053    | 3,373      | *1,201                | 5,398       |
|                      | 2020 | 679          | 50,678     | 82,233      | 133,590    | 3,074      | *1,406                | 6,285       |
|                      | 2021 | 1,384        | 53,847     | 90,744      | 145,975    | 3,304      | *1,416                | 5,477       |
| Angola               | 2018 | ..           | 15,271     | 1,650       | 16,921     | 541        | 1,714                 | 8,275       |
|                      | 2019 | ..           | 14,027     | 2,494       | 16,521     | 511        | 1,773                 | 5,516       |
|                      | 2020 | ..           | 9,238      | *2,552      | 11,789     | 353        | 808                   | 4,531       |
|                      | 2021 | ..           | 11,989     | *2,533      | 14,522     | 421        | 821                   | 4,137       |
| Benin                | 2018 | 0            | 5,322      | 37          | 5,359      | 449        | 94                    | ..          |
|                      | 2019 | 248          | 4,581      | 111         | 4,940      | 402        | 68                    | ..          |
|                      | 2020 | 269          | 4,603      | 326         | 5,198      | 411        | 51                    | ..          |
|                      | 2021 | 307          | 4,765      | 362         | 5,434      | 418        | 55                    | ..          |
| Botswana             | 2018 | 4,833        | 3,077      | ..          | 7,910      | 3,227      | 45                    | ..          |
|                      | 2019 | 4,033        | 2,923      | ..          | 6,956      | 2,783      | 49                    | ..          |
|                      | 2020 | 3,060        | 2,676      | ..          | 5,737      | 2,253      | 12                    | ..          |
|                      | 2021 | 3,438        | 2,768      | ..          | 6,206      | 2,398      | 17                    | ..          |
| Burkina Faso         | 2018 | ..           | 4,468      | ..          | 4,468      | 219        | 94                    | ..          |
|                      | 2019 | ..           | 4,626      | ..          | 4,626      | 221        | 96                    | ..          |
|                      | 2020 | ..           | *4,597     | ..          | *4,597     | *214       | 57                    | ..          |
|                      | 2021 | ..           | *5,185     | ..          | *5,185     | *235       | 92                    | ..          |
| Burundi              | 2018 | 19           | 640        | ..          | 659        | 57         | 15                    | ..          |
|                      | 2019 | 49           | *653       | ..          | *702       | *59        | 16                    | ..          |
|                      | 2020 | *26          | *725       | ..          | *751       | *61        | 7                     | ..          |
|                      | 2021 | 45           | *737       | ..          | *781       | *62        | 8                     | ..          |
| Cabo Verde           | 2018 | ..           | *584       | ..          | *584       | *1,023     | *392                  | ..          |
|                      | 2019 | ..           | *645       | ..          | *645       | *1,118     | *372                  | ..          |
|                      | 2020 | ..           | *531       | ..          | *531       | *911       | *249                  | ..          |
|                      | 2021 | ..           | *560       | ..          | *560       | *952       | *249                  | ..          |
| Cameroon             | 2018 | ..           | 5,352      | 1,497       | 6,849      | 273        | 50                    | ..          |
|                      | 2019 | ..           | 5,322      | 1,362       | 6,684      | 259        | 52                    | ..          |
|                      | 2020 | ..           | 5,084      | 1,746       | 6,830      | 258        | 23                    | ..          |
|                      | 2021 | ..           | 5,078      | 1,439       | 6,517      | 240        | 29                    | ..          |
| Central African Rep. | 2018 | ..           | *226       | ..          | *226       | *44        | 54                    | ..          |
|                      | 2019 | ..           | *232       | ..          | *232       | *45        | *54                   | ..          |
|                      | 2020 | ..           | *245       | ..          | *245       | *46        | *57                   | ..          |
|                      | 2021 | ..           | *248       | ..          | *248       | *45        | *60                   | ..          |
| Chad                 | 2018 | ..           | 1,861      | ..          | 1,861      | 119        | 87                    | ..          |
|                      | 2019 | ..           | 1,842      | ..          | 1,842      | 114        | 84                    | ..          |
|                      | 2020 | ..           | *1,945     | ..          | *1,945     | *117       | *86                   | ..          |
|                      | 2021 | ..           | *2,155     | ..          | *2,155     | *125       | *86                   | ..          |
| Comoros              | 2018 | ..           | *294       | ..          | *294       | *379       | *18                   | ..          |
|                      | 2019 | ..           | *320       | ..          | *320       | *404       | *21                   | ..          |
|                      | 2020 | ..           | *380       | ..          | *380       | *472       | *18                   | ..          |
|                      | 2021 | ..           | *511       | ..          | *511       | *622       | *21                   | ..          |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area        | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                        |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Congo                  | 2018 | ..           | 1,964   | 1,379       | 3,343   | 614        | 100                   | 3,119       |
|                        | 2019 | ..           | 1,986   | 1,935       | 3,922   | 704        | 100                   | 3,300       |
|                        | 2020 | ..           | 2,126   | 2,021       | 4,147   | 727        | 88                    | 3,524       |
|                        | 2021 | ..           | 2,220   | 2,088       | 4,308   | 738        | 91                    | 2,999       |
| Côte d'Ivoire          | 2018 | ..           | 6,322   | 4,098       | 10,420  | 409        | 731                   | 3           |
|                        | 2019 | ..           | 6,164   | 4,370       | 10,534  | 403        | 816                   | 2           |
|                        | 2020 | ..           | 6,568   | 4,482       | 11,050  | 412        | 467                   | 2           |
|                        | 2021 | ..           | 9,078   | 4,675       | 13,753  | 501        | 620                   | 1           |
| Dem. Rep. of the Congo | 2018 | ..           | 3,024   | ..          | 3,024   | 35         | 388                   | ..          |
|                        | 2019 | ..           | 3,242   | ..          | 3,242   | 36         | 420                   | ..          |
|                        | 2020 | ..           | 3,430   | ..          | 3,430   | 37         | 311                   | ..          |
|                        | 2021 | ..           | 3,287   | ..          | 3,287   | 34         | 380                   | ..          |
| Djibouti               | 2018 | ..           | *393    | ..          | *393    | *372       | *305                  | ..          |
|                        | 2019 | ..           | *452    | ..          | *452    | *421       | *315                  | ..          |
|                        | 2020 | ..           | 378     | ..          | 378     | 347        | *293                  | ..          |
|                        | 2021 | ..           | *397    | ..          | *397    | *359       | *301                  | ..          |
| Egypt                  | 2018 | 13,644       | 108,749 | 104,973     | 227,366 | 2,192      | 2,250                 | 4,468       |
|                        | 2019 | 10,523       | 104,348 | 111,167     | 226,039 | 2,140      | 2,705                 | 4,573       |
|                        | 2020 | 5,817        | 90,429  | 107,228     | 203,474 | 1,893      | 2,642                 | 4,649       |
|                        | 2021 | 9,286        | 105,338 | 113,026     | 227,651 | 2,084      | 2,578                 | 4,103       |
| Equatorial Guinea      | 2018 | ..           | 1,136   | 5,490       | 6,626   | 4,412      | 143                   | 4,692       |
|                        | 2019 | ..           | 1,164   | 3,985       | 5,149   | 3,315      | 145                   | 3,775       |
|                        | 2020 | ..           | 1,040   | 4,726       | 5,766   | 3,612      | 96                    | 3,647       |
|                        | 2021 | ..           | 1,047   | 5,781       | 6,828   | 4,178      | 91                    | *3,940      |
| Eritrea                | 2018 | ..           | 564     | ..          | 564     | 164        | 111                   | ..          |
|                        | 2019 | ..           | 588     | ..          | 588     | 168        | 98                    | ..          |
|                        | 2020 | ..           | 597     | ..          | 597     | 168        | 63                    | ..          |
|                        | 2021 | ..           | 629     | ..          | 629     | 174        | 55                    | ..          |
| Eswatini               | 2018 | 149          | 890     | ..          | 1,038   | 895        | 5                     | ..          |
|                        | 2019 | 185          | *942    | ..          | *1,127  | *964       | 5                     | ..          |
|                        | 2020 | *182         | *944    | ..          | *1,125  | *953       | *5                    | ..          |
|                        | 2021 | *182         | *829    | ..          | *1,011  | *848       | *5                    | ..          |
| Ethiopia               | 2018 | 1,025        | 11,337  | ..          | 12,362  | 111        | 2,305                 | ..          |
|                        | 2019 | 1,110        | 12,711  | ..          | 13,820  | 121        | 2,586                 | ..          |
|                        | 2020 | 822          | 11,546  | ..          | 12,368  | 106        | 1,195                 | ..          |
|                        | 2021 | 874          | 11,892  | ..          | 12,766  | 106        | 1,553                 | ..          |
| Gabon                  | 2018 | ..           | 1,858   | 1,009       | 2,867   | 1,308      | 549                   | *1,666      |
|                        | 2019 | ..           | 1,528   | 883         | 2,411   | 1,075      | 641                   | *1,666      |
|                        | 2020 | ..           | 1,749   | 956         | 2,704   | 1,180      | 573                   | *1,666      |
|                        | 2021 | ..           | 1,986   | 864         | 2,850   | 1,217      | 534                   | *1,717      |
| Gambia                 | 2018 | ..           | 665     | ..          | 665     | 272        | *61                   | ..          |
|                        | 2019 | ..           | *730    | ..          | *730    | *291       | *63                   | ..          |
|                        | 2020 | ..           | *718    | ..          | *718    | *279       | *55                   | ..          |
|                        | 2021 | ..           | *745    | ..          | *745    | *282       | *60                   | ..          |
| Ghana                  | 2018 | ..           | 11,569  | 3,468       | 15,038  | 487        | 582                   | 0           |
|                        | 2019 | ..           | 12,147  | 4,213       | 16,359  | 519        | 692                   | 0           |
|                        | 2020 | ..           | 12,395  | 6,371       | 18,766  | 583        | 396                   | 1           |
|                        | 2021 | ..           | 13,024  | 6,741       | 19,765  | 602        | 624                   | 1           |
| Guinea                 | 2018 | ..           | 3,239   | ..          | 3,239   | 258        | *94                   | ..          |
|                        | 2019 | ..           | 4,009   | ..          | 4,009   | 311        | *131                  | ..          |
|                        | 2020 | ..           | 4,601   | ..          | 4,601   | 348        | *82                   | ..          |
|                        | 2021 | ..           | *4,225  | ..          | *4,225  | *312       | *102                  | ..          |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area | Year | Type of fuel |        |             | Total  | Per capita | Additional sources    |             |
|-----------------|------|--------------|--------|-------------|--------|------------|-----------------------|-------------|
|                 |      | Coal         | Oil    | Natural gas |        |            | International bunkers | Gas flaring |
| Guinea-Bissau   | 2018 | ..           | *323   | ..          | *323   | *168       | *40                   | ..          |
|                 | 2019 | ..           | *332   | ..          | *332   | *168       | *41                   | ..          |
|                 | 2020 | ..           | *309   | ..          | *309   | *153       | *40                   | ..          |
|                 | 2021 | ..           | *311   | ..          | *311   | *151       | *40                   | ..          |
| Kenya           | 2018 | 1,691        | 14,314 | ..          | 16,006 | 320        | 2,279                 | ..          |
|                 | 2019 | 1,494        | 15,490 | ..          | 16,983 | 333        | 2,265                 | ..          |
|                 | 2020 | 2,006        | 16,423 | ..          | 18,429 | 355        | 1,256                 | ..          |
|                 | 2021 | 2,329        | 15,483 | ..          | 17,812 | 336        | 1,675                 | ..          |
| Lesotho         | 2018 | *1,547       | 698    | ..          | *2,245 | *1,021     | *1                    | ..          |
|                 | 2019 | *1,538       | 730    | ..          | *2,268 | *1,019     | 1                     | ..          |
|                 | 2020 | *1,414       | 645    | ..          | *2,059 | *913       | 0                     | ..          |
|                 | 2021 | *2,506       | 711    | ..          | *3,217 | *1,410     | *1                    | ..          |
| Liberia         | 2018 | ..           | *494   | ..          | *494   | *101       | *30                   | ..          |
|                 | 2019 | ..           | 812    | ..          | 812    | 163        | *30                   | ..          |
|                 | 2020 | ..           | 630    | ..          | 630    | 124        | *29                   | ..          |
|                 | 2021 | ..           | 589    | ..          | 589    | 113        | *30                   | ..          |
| Libya           | 2018 | ..           | 25,902 | 28,884      | 54,786 | 8,457      | 1,024                 | 7,112       |
|                 | 2019 | ..           | 44,542 | 20,843      | 65,385 | 9,953      | 1,066                 | 7,231       |
|                 | 2020 | ..           | 21,952 | 6,417       | 28,369 | 4,263      | 356                   | 4,874       |
|                 | 2021 | ..           | 30,660 | 12,877      | 43,537 | 6,464      | 1,081                 | 11,818      |
| Madagascar      | 2018 | 1,169        | 2,508  | ..          | 3,678  | 137        | 149                   | ..          |
|                 | 2019 | 1,316        | 2,927  | ..          | 4,243  | 154        | 158                   | ..          |
|                 | 2020 | *1,289       | 2,617  | ..          | 3,907  | 138        | *84                   | ..          |
|                 | 2021 | *1,328       | 3,064  | ..          | 4,392  | 152        | *103                  | ..          |
| Malawi          | 2018 | 214          | 1,413  | ..          | 1,627  | 89         | *24                   | ..          |
|                 | 2019 | 220          | 1,404  | ..          | 1,625  | 86         | *11                   | ..          |
|                 | 2020 | 202          | 1,330  | ..          | 1,532  | 79         | *3                    | ..          |
|                 | 2021 | 78           | 1,516  | ..          | 1,595  | 80         | *9                    | ..          |
| Mali            | 2018 | ..           | 4,935  | ..          | 4,935  | 248        | 215                   | ..          |
|                 | 2019 | ..           | 5,368  | ..          | 5,368  | 261        | 196                   | ..          |
|                 | 2020 | ..           | 5,931  | ..          | 5,931  | 279        | 192                   | ..          |
|                 | 2021 | ..           | *6,329 | ..          | *6,329 | *289       | *196                  | ..          |
| Mauritania      | 2018 | ..           | 4,581  | ..          | 4,581  | 1,073      | 71                    | ..          |
|                 | 2019 | ..           | 4,759  | ..          | 4,759  | 1,086      | 64                    | ..          |
|                 | 2020 | ..           | 4,927  | ..          | 4,927  | 1,095      | 38                    | ..          |
|                 | 2021 | ..           | *4,637 | ..          | *4,637 | *1,005     | 53                    | ..          |
| Mauritius       | 2018 | 1,772        | 2,809  | ..          | 4,581  | 3,536      | 2,321                 | ..          |
|                 | 2019 | 1,630        | 3,016  | ..          | 4,646  | 3,584      | 2,539                 | ..          |
|                 | 2020 | 1,622        | 2,284  | ..          | 3,906  | 3,010      | 2,187                 | ..          |
|                 | 2021 | 1,809        | 2,270  | ..          | 4,079  | 3,140      | 2,037                 | ..          |
| Morocco         | 2018 | 20,397       | 36,480 | 2,171       | 59,048 | 1,620      | 2,745                 | ..          |
|                 | 2019 | 26,398       | 37,182 | 2,055       | 65,635 | 1,781      | 2,875                 | ..          |
|                 | 2020 | 26,495       | 33,728 | 1,599       | 61,822 | 1,660      | 1,310                 | ..          |
|                 | 2021 | 27,789       | 37,666 | 1,597       | 67,051 | 1,781      | 1,616                 | ..          |
| Mozambique      | 2018 | 66           | 4,509  | 1,660       | 6,235  | 212        | 105                   | *30         |
|                 | 2019 | 48           | 4,396  | 1,776       | 6,220  | 205        | 111                   | *59         |
|                 | 2020 | 80           | 3,651  | 1,704       | 5,436  | 174        | 61                    | *99         |
|                 | 2021 | 27           | 5,009  | 1,849       | 6,885  | 215        | 72                    | *177        |
| Namibia         | 2018 | *102         | 3,718  | ..          | 3,819  | 1,588      | 177                   | ..          |
|                 | 2019 | *137         | 3,674  | ..          | 3,811  | 1,558      | 173                   | ..          |
|                 | 2020 | *152         | 3,304  | ..          | 3,455  | 1,388      | *81                   | ..          |
|                 | 2021 | *129         | 3,355  | ..          | 3,484  | 1,377      | 98                    | ..          |

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area        | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                        |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Niger                  | 2018 | 339          | 1,383   | ..          | 1,722   | 76         | *141                  | ..          |
|                        | 2019 | 342          | 2,044   | 75          | 2,461   | 105        | *146                  | ..          |
|                        | 2020 | 373          | 1,923   | 80          | 2,376   | 98         | 132                   | ..          |
|                        | 2021 | *375         | *2,166  | *75         | *2,617  | *104       | *161                  | ..          |
| Nigeria                | 2018 | 6,570        | 48,892  | 32,219      | 87,680  | 442        | 3,092                 | 15,722      |
|                        | 2019 | 6,645        | 68,540  | 32,938      | 108,123 | 532        | 3,136                 | 13,515      |
|                        | 2020 | 5,739        | 64,979  | 33,113      | 103,831 | 498        | 1,766                 | 10,777      |
|                        | 2021 | 6,116        | 67,135  | 35,472      | 108,723 | 509        | 2,111                 | 11,289      |
| Rwanda                 | 2018 | *16          | 1,066   | *96         | 1,178   | 94         | *95                   | ..          |
|                        | 2019 | *23          | 1,134   | *94         | 1,251   | 97         | *77                   | ..          |
|                        | 2020 | *14          | 1,130   | *91         | 1,235   | 94         | *50                   | ..          |
|                        | 2021 | *22          | 1,353   | *93         | 1,469   | 109        | *76                   | ..          |
| Sao Tome and Principe  | 2018 | ..           | 142     | ..          | 142     | 673        | *15                   | ..          |
|                        | 2019 | ..           | 149     | ..          | 149     | 696        | *11                   | ..          |
|                        | 2020 | ..           | *143    | ..          | *143    | *652       | *11                   | ..          |
|                        | 2021 | ..           | *147    | ..          | *147    | *661       | *12                   | ..          |
| Senegal                | 2018 | 2,361        | 7,044   | 23          | 9,429   | 605        | 1,051                 | ..          |
|                        | 2019 | 2,182        | 8,082   | 28          | 10,292  | 643        | 1,221                 | ..          |
|                        | 2020 | 1,410        | 6,801   | 28          | 8,239   | 501        | 1,178                 | ..          |
|                        | 2021 | 2,061        | 7,528   | 14          | 9,604   | 569        | 1,062                 | ..          |
| Seychelles             | 2018 | ..           | 611     | ..          | 611     | 5,931      | *539                  | ..          |
|                        | 2019 | ..           | 604     | ..          | 604     | 5,785      | *490                  | ..          |
|                        | 2020 | ..           | *611    | ..          | *611    | *5,790     | *371                  | ..          |
|                        | 2021 | ..           | *624    | ..          | *624    | *5,858     | *340                  | ..          |
| Sierra Leone           | 2018 | ..           | 1,049   | ..          | 1,049   | 133        | 16                    | ..          |
|                        | 2019 | ..           | 1,023   | ..          | 1,023   | 127        | 12                    | ..          |
|                        | 2020 | ..           | 1,048   | ..          | 1,048   | 127        | 5                     | ..          |
|                        | 2021 | ..           | 1,283   | ..          | 1,283   | 152        | 9                     | ..          |
| Somalia                | 2018 | ..           | *655    | ..          | *655    | *42        | 225                   | ..          |
|                        | 2019 | ..           | *655    | ..          | *655    | *41        | 225                   | ..          |
|                        | 2020 | ..           | *614    | ..          | *614    | *37        | *178                  | ..          |
|                        | 2021 | ..           | *636    | ..          | *636    | *37        | *213                  | ..          |
| South Africa           | 2018 | 367,020      | 65,427  | 9,361       | 441,808 | 7,705      | 14,526                | ..          |
|                        | 2019 | 407,966      | 55,693  | 9,344       | 473,003 | 8,143      | 14,228                | ..          |
|                        | 2020 | 387,337      | 46,099  | 9,899       | 443,335 | 7,539      | 12,376                | ..          |
|                        | 2021 | 368,065      | 57,514  | 8,606       | 434,184 | 7,310      | 9,965                 | ..          |
| South Sudan            | 2018 | ..           | 1,790   | ..          | 1,790   | 172        | 234                   | ..          |
|                        | 2019 | ..           | 1,832   | ..          | 1,832   | 175        | 263                   | ..          |
|                        | 2020 | ..           | 1,742   | ..          | 1,742   | 164        | 171                   | ..          |
|                        | 2021 | ..           | 1,798   | ..          | 1,798   | 167        | 231                   | ..          |
| St. Helena and Depend. | 2018 | ..           | 13      | ..          | 13      | 2,302      | ..                    | ..          |
|                        | 2019 | ..           | 14      | ..          | 14      | 2,596      | ..                    | ..          |
|                        | 2020 | ..           | 11      | ..          | 11      | 2,027      | ..                    | ..          |
|                        | 2021 | ..           | *12     | ..          | *12     | *2,190     | ..                    | ..          |
| Sudan                  | 2018 | ..           | 18,574  | ..          | 18,574  | 442        | 483                   | ..          |
|                        | 2019 | ..           | *19,871 | ..          | *19,871 | *460       | 290                   | ..          |
|                        | 2020 | ..           | 19,460  | ..          | 19,460  | 438        | 168                   | ..          |
|                        | 2021 | ..           | *20,557 | ..          | *20,557 | *450       | *461                  | ..          |
| Togo                   | 2018 | ..           | 1,347   | 58          | 1,404   | 175        | 208                   | ..          |
|                        | 2019 | ..           | 1,299   | 127         | 1,426   | 173        | 183                   | ..          |
|                        | 2020 | ..           | 1,457   | 144         | 1,601   | 190        | 177                   | ..          |
|                        | 2021 | ..           | 1,532   | 253         | 1,784   | 206        | 234                   | ..          |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area         | Year        | Type of fuel      |                  |                  | Total             | Per capita   | Additional sources    |                |
|-------------------------|-------------|-------------------|------------------|------------------|-------------------|--------------|-----------------------|----------------|
|                         |             | Coal              | Oil              | Natural gas      |                   |              | International bunkers | Gas flaring    |
| Tunisia                 | 2018        | ..                | 13,907           | 12,914           | 26,821            | 2,248        | 927                   | 576            |
|                         | 2019        | ..                | 13,298           | 12,978           | 26,276            | 2,181        | 977                   | 486            |
|                         | 2020        | ..                | 12,615           | 12,377           | 24,992            | 2,055        | 340                   | 460            |
|                         | 2021        | ..                | 13,633           | 13,267           | 26,900            | 2,194        | 436                   | 537            |
| Uganda                  | 2018        | 0                 | 5,275            | ..               | 5,275             | 127          | 341                   | ..             |
|                         | 2019        | 0                 | 5,413            | ..               | 5,413             | 126          | 335                   | ..             |
|                         | 2020        | *1                | 5,117            | ..               | 5,118             | 115          | 178                   | ..             |
|                         | 2021        | *1                | 5,657            | ..               | 5,658             | 123          | 264                   | ..             |
| United Rep. of Tanzania | 2018        | 1,227             | 8,366            | 3,225            | 12,818            | 221          | 509                   | *6             |
|                         | 2019        | 1,446             | 9,091            | 3,480            | 14,017            | 234          | 540                   | *6             |
|                         | 2020        | 1,407             | 9,353            | 3,113            | 13,873            | 225          | 256                   | *5             |
|                         | 2021        | 1,909             | 10,434           | 3,540            | 15,883            | 250          | 327                   | *6             |
| Zambia                  | 2018        | 2,895             | 3,682            | ..               | 6,577             | 369          | 91                    | ..             |
|                         | 2019        | 2,480             | 4,536            | ..               | 7,015             | 382          | 91                    | ..             |
|                         | 2020        | 2,721             | 4,594            | ..               | 7,314             | 386          | 55                    | ..             |
|                         | 2021        | 2,061             | 4,911            | ..               | 6,972             | 358          | 73                    | ..             |
| Zimbabwe                | 2018        | 6,757             | 4,257            | ..               | 11,014            | 732          | 159                   | ..             |
|                         | 2019        | 6,252             | 3,879            | ..               | 10,130            | 660          | 160                   | ..             |
|                         | 2020        | 5,093             | 3,135            | ..               | 8,228             | 525          | 57                    | ..             |
|                         | 2021        | 5,892             | 3,816            | ..               | 9,708             | 607          | 118                   | ..             |
| <b>Asia</b>             | <b>2018</b> | <b>11,310,462</b> | <b>4,519,672</b> | <b>2,719,343</b> | <b>18,549,477</b> | <b>4,041</b> | <b>597,155</b>        | <b>152,384</b> |
|                         | <b>2019</b> | <b>11,616,211</b> | <b>4,607,495</b> | <b>2,851,546</b> | <b>19,075,252</b> | <b>4,121</b> | <b>610,401</b>        | <b>154,557</b> |
|                         | <b>2020</b> | <b>11,498,772</b> | <b>4,252,963</b> | <b>2,929,836</b> | <b>18,681,571</b> | <b>4,005</b> | <b>469,195</b>        | <b>153,542</b> |
|                         | <b>2021</b> | <b>12,176,446</b> | <b>4,419,005</b> | <b>3,096,630</b> | <b>19,692,081</b> | <b>4,195</b> | <b>478,694</b>        | <b>172,629</b> |
| Afghanistan             | 2018        | 3,380             | 6,645            | 302              | 10,327            | 281          | *170                  | ..             |
|                         | 2019        | 3,429             | 6,863            | 254              | 10,545            | 279          | *30                   | ..             |
|                         | 2020        | *3,803            | 7,290            | 158              | 11,251            | 289          | *36                   | ..             |
|                         | 2021        | *3,131            | *6,720           | *161             | *10,013           | *250         | *39                   | ..             |
| Armenia                 | 2018        | 5                 | 838              | 4,801            | 5,644             | 1,990        | 195                   | ..             |
|                         | 2019        | 11                | 1,055            | 5,017            | 6,083             | 2,157        | 217                   | ..             |
|                         | 2020        | 30                | 1,468            | 5,029            | 6,527             | 2,326        | 117                   | ..             |
|                         | 2021        | 46                | 1,536            | 5,496            | 7,078             | 2,536        | *164                  | ..             |
| Azerbaijan              | 2018        | 3                 | 11,482           | 21,773           | 33,258            | 3,276        | 479                   | 2,734          |
|                         | 2019        | 3                 | 11,599           | 23,694           | 35,297            | 3,449        | 1,084                 | 2,802          |
|                         | 2020        | 3                 | 9,738            | 23,922           | 33,663            | 3,273        | 1,160                 | 2,361          |
|                         | 2021        | 1                 | 10,383           | 24,844           | 35,228            | 3,416        | 1,409                 | *2,649         |
| Bahrain                 | 2018        | ..                | 2,960            | 26,051           | 29,011            | 19,505       | 1,523                 | 150            |
|                         | 2019        | ..                | 2,993            | 30,814           | 33,807            | 22,625       | 1,602                 | 336            |
|                         | 2020        | ..                | 2,934            | 30,778           | 33,712            | 22,817       | 905                   | 465            |
|                         | 2021        | ..                | 2,569            | 29,730           | 32,300            | 22,074       | 1,015                 | 267            |
| Bangladesh              | 2018        | 8,548             | 24,876           | 51,644           | 85,067            | 520          | 1,635                 | 20             |
|                         | 2019        | 9,070             | 25,707           | 57,716           | 92,493            | 559          | 1,735                 | 28             |
|                         | 2020        | 11,025            | 24,152           | 58,336           | 93,512            | 559          | 1,472                 | 29             |
|                         | 2021        | 13,501            | 32,676           | 59,076           | 105,252           | 621          | 1,183                 | 51             |
| Bhutan                  | 2018        | 675               | 582              | ..               | 1,256             | 1,648        | *12                   | ..             |
|                         | 2019        | 564               | 590              | ..               | 1,154             | 1,503        | *13                   | ..             |
|                         | 2020        | 530               | 417              | ..               | 946               | 1,225        | *4                    | ..             |
|                         | 2021        | 770               | 423              | ..               | 1,193             | 1,534        | *3                    | ..             |
| Brunei Darussalam       | 2018        | ..                | 1,921            | 5,780            | 7,701             | 17,733       | 255                   | 573            |
|                         | 2019        | 633               | 3,624            | 5,027            | 9,284             | 21,194       | 341                   | 536            |
|                         | 2020        | 2,227             | 3,587            | 4,262            | 10,076            | 22,811       | 135                   | 501            |
|                         | 2021        | 2,867             | 3,374            | 4,486            | 10,727            | 24,086       | 56                    | 577            |

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area        | Year | Type of fuel |           |             | Total      | Per capita | Additional sources    |             |
|------------------------|------|--------------|-----------|-------------|------------|------------|-----------------------|-------------|
|                        |      | Coal         | Oil       | Natural gas |            |            | International bunkers | Gas flaring |
| Cambodia               | 2018 | 3,511        | 7,406     | ..          | 10,917     | 681        | 440                   | ..          |
|                        | 2019 | 4,685        | 9,350     | ..          | 14,035     | 866        | 491                   | ..          |
|                        | 2020 | 4,561        | 9,541     | ..          | 14,102     | 860        | 132                   | ..          |
|                        | 2021 | 4,094        | 9,637     | ..          | 13,731     | 828        | 63                    | ..          |
| China                  | 2018 | 7,370,990    | 1,466,126 | 570,817     | 9,407,934  | 6,639      | 65,829                | 3,572       |
|                        | 2019 | 7,566,704    | 1,524,025 | 626,002     | 9,716,731  | 6,834      | 66,271                | 4,023       |
|                        | 2020 | 7,699,968    | 1,477,433 | 672,652     | 9,850,052  | 6,913      | 49,783                | 5,418       |
|                        | 2021 | 8,190,403    | 1,470,381 | 763,937     | 10,424,722 | 7,311      | 52,489                | 5,044       |
| China, Hong Kong SAR   | 2018 | 25,510       | 11,843    | 6,220       | 43,573     | 5,824      | 56,265                | ..          |
|                        | 2019 | 24,430       | 11,962    | 6,453       | 42,845     | 5,716      | 50,336                | ..          |
|                        | 2020 | 13,008       | 11,378    | 9,679       | 34,065     | 4,541      | 33,397                | ..          |
|                        | 2021 | 14,454       | 10,175    | 9,672       | 34,301     | 4,577      | 29,931                | ..          |
| China, Macao SAR       | 2018 | ..           | 947       | 183         | 1,131      | 1,737      | 204                   | ..          |
|                        | 2019 | ..           | 844       | 263         | 1,108      | 1,669      | 140                   | ..          |
|                        | 2020 | ..           | 778       | 143         | 920        | 1,361      | 13                    | ..          |
|                        | 2021 | ..           | 746       | 168         | 914        | 1,332      | 10                    | ..          |
| Cyprus                 | 2018 | 55           | 6,257     | ..          | 6,312      | 5,179      | 1,829                 | ..          |
|                        | 2019 | 68           | 6,195     | ..          | 6,263      | 5,097      | 1,814                 | ..          |
|                        | 2020 | 55           | 5,689     | ..          | 5,744      | 4,642      | 1,159                 | ..          |
|                        | 2021 | 162          | 5,660     | ..          | 5,822      | 4,680      | 1,272                 | ..          |
| Georgia                | 2018 | 1,321        | 3,478     | 4,466       | 9,265      | 2,456      | 328                   | -4          |
|                        | 2019 | 1,068        | 3,647     | 5,086       | 9,801      | 2,599      | 325                   | -5          |
|                        | 2020 | 936          | 3,522     | 5,104       | 9,562      | 2,539      | 186                   | -6          |
|                        | 2021 | 951          | 3,753     | 5,335       | 10,039     | 2,671      | 307                   | 0           |
| India                  | 2018 | 1,761,197    | 651,654   | 81,532      | 2,494,383  | 1,822      | *18,288               | 1,720       |
|                        | 2019 | 1,739,782    | *661,370  | *82,613     | 2,483,765  | 1,796      | *17,940               | *1,619      |
|                        | 2020 | 1,576,927    | *560,506  | *73,421     | 2,210,855  | 1,583      | *8,648                | *1,569      |
|                        | 2021 | 1,764,631    | *597,841  | *79,092     | 2,441,564  | 1,735      | 10,643                | *1,788      |
| Indonesia              | 2018 | 308,390      | 215,168   | 75,838      | 599,395    | 2,244      | 3,892                 | 15,106      |
|                        | 2019 | 372,496      | 218,395   | 75,722      | 666,612    | 2,473      | 3,585                 | 15,015      |
|                        | 2020 | 354,074      | 198,121   | 71,006      | 623,201    | 2,292      | 2,500                 | 12,387      |
|                        | 2021 | 347,130      | 203,714   | 73,301      | 624,145    | 2,280      | 1,500                 | 12,341      |
| Iran (Islamic Rep. of) | 2018 | 1,999        | 199,750   | 372,434     | 574,184    | 6,706      | 6,991                 | 61,686      |
|                        | 2019 | 2,478        | 212,836   | 407,700     | 623,015    | 7,197      | 5,927                 | 68,680      |
|                        | 2020 | 3,201        | 193,673   | 441,272     | 638,146    | 7,311      | 5,569                 | *68,956     |
|                        | 2021 | 2,758        | 198,214   | 451,427     | 652,399    | 7,420      | 5,943                 | *89,901     |
| Iraq                   | 2018 | ..           | 114,835   | 28,981      | 143,816    | 3,543      | 1,623                 | 33,099      |
|                        | 2019 | ..           | 114,599   | 33,146      | 147,746    | 3,555      | 1,611                 | 35,294      |
|                        | 2020 | ..           | 83,669    | 35,262      | 118,932    | 2,795      | 1,240                 | 34,229      |
|                        | 2021 | ..           | 79,023    | 36,295      | 115,318    | 2,649      | 1,740                 | 35,250      |
| Israel                 | 2018 | 18,965       | 22,833    | 18,139      | 59,937     | 7,088      | 4,400                 | 0           |
|                        | 2019 | 18,840       | 21,879    | 18,086      | 58,805     | 6,832      | 4,610                 | *2          |
|                        | 2020 | 17,885       | 18,400    | 22,757      | 59,042     | 6,742      | 2,535                 | *2          |
|                        | 2021 | 14,998       | 19,957    | 23,697      | 58,653     | 6,590      | 2,937                 | 1           |
| Japan                  | 2018 | 461,700      | 409,427   | 224,453     | 1,095,580  | 8,677      | 35,320                | ..          |
|                        | 2019 | 454,270      | 393,317   | 215,573     | 1,063,161  | 8,452      | 35,464                | ..          |
|                        | 2020 | 401,085      | 365,297   | 215,929     | 982,311    | 7,843      | 23,553                | ..          |
|                        | 2021 | 430,043      | 371,920   | 203,148     | 1,005,112  | 8,066      | 26,827                | ..          |
| Jordan                 | 2018 | 835          | 14,960    | 8,074       | 23,869     | 2,282      | 194                   | ..          |
|                        | 2019 | 851          | 15,056    | 8,066       | 23,974     | 2,241      | *386                  | ..          |
|                        | 2020 | 838          | 11,791    | 7,555       | 20,184     | 1,847      | 268                   | ..          |
|                        | 2021 | 768          | 12,707    | 6,225       | 19,700     | 1,767      | 332                   | ..          |



Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area        | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                        |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Kazakhstan             | 2018 | 149,349      | 44,993  | 42,890      | 237,233 | 12,797     | 1,900                 | ..          |
|                        | 2019 | 137,398      | 46,037  | 46,670      | 230,105 | 12,269     | 1,462                 | ..          |
|                        | 2020 | 130,263      | 32,946  | 46,535      | 209,744 | 11,051     | 651                   | ..          |
|                        | 2021 | 133,699      | 51,006  | 39,323      | 224,028 | 11,670     | 1,526                 | ..          |
| Korea, Dem.Ppl's.Rep.  | 2018 | 59,444       | 2,929   | ..          | 62,374  | 2,433      | ..                    | ..          |
|                        | 2019 | 66,369       | 3,203   | ..          | 69,572  | 2,701      | ..                    | ..          |
|                        | 2020 | 62,378       | 3,080   | ..          | 65,458  | 2,531      | ..                    | ..          |
|                        | 2021 | 50,883       | 2,491   | ..          | 53,375  | 2,055      | ..                    | ..          |
| Korea, Republic of     | 2018 | 318,445      | 182,048 | 111,622     | 612,115 | 11,845     | 45,146                | ..          |
|                        | 2019 | 317,062      | 157,696 | 114,785     | 589,544 | 11,380     | 42,363                | ..          |
|                        | 2020 | 292,896      | 156,721 | 116,224     | 565,841 | 10,914     | 39,636                | ..          |
|                        | 2021 | 296,152      | 178,520 | 127,768     | 602,440 | 11,623     | 40,358                | ..          |
| Kuwait                 | 2018 | ..           | 51,457  | 43,898      | 95,355  | 22,087     | 6,136                 | 1,715       |
|                        | 2019 | ..           | 50,274  | 47,486      | 97,760  | 22,013     | 6,100                 | 1,440       |
|                        | 2020 | ..           | 32,362  | 53,050      | 85,412  | 19,588     | 4,329                 | 1,456       |
|                        | 2021 | ..           | 29,965  | 55,525      | 85,489  | 20,115     | 4,402                 | 1,340       |
| Kyrgyzstan             | 2018 | 4,222        | 5,666   | 656         | 10,545  | 1,694      | 13                    | ..          |
|                        | 2019 | 3,312        | 4,408   | 636         | 8,355   | 1,321      | *16                   | ..          |
|                        | 2020 | 3,315        | 3,693   | 667         | 7,675   | 1,195      | *6                    | ..          |
|                        | 2021 | 4,342        | 4,294   | 786         | 9,421   | 1,443      | *13                   | ..          |
| Lao People's Dem. Rep. | 2018 | 16,049       | 3,413   | ..          | 19,462  | 2,739      | 183                   | ..          |
|                        | 2019 | 14,308       | *3,444  | ..          | 17,752  | 2,461      | *114                  | ..          |
|                        | 2020 | 14,374       | *3,374  | ..          | 17,748  | 2,425      | *112                  | ..          |
|                        | 2021 | 14,532       | *3,382  | ..          | 17,914  | 2,413      | *113                  | ..          |
| Lebanon                | 2018 | *655         | 23,996  | ..          | 24,651  | 4,142      | *925                  | ..          |
|                        | 2019 | *655         | 24,159  | ..          | 24,813  | 4,292      | *947                  | ..          |
|                        | 2020 | *655         | *22,829 | ..          | *23,483 | *4,147     | *908                  | ..          |
|                        | 2021 | *655         | *18,268 | ..          | *18,922 | *3,383     | *740                  | ..          |
| Malaysia               | 2018 | 88,458       | 75,331  | 64,404      | 228,193 | 7,043      | 8,944                 | 9,129       |
|                        | 2019 | 84,227       | 92,030  | 66,719      | 242,976 | 7,407      | 8,906                 | 2,364       |
|                        | 2020 | 98,834       | 64,138  | 64,360      | 227,332 | 6,847      | 4,554                 | 1,970       |
|                        | 2021 | 91,027       | 71,198  | 78,786      | 241,010 | 7,178      | 4,361                 | 1,773       |
| Maldives               | 2018 | ..           | 1,793   | ..          | 1,793   | 3,662      | *247                  | ..          |
|                        | 2019 | ..           | 2,059   | ..          | 2,059   | 4,081      | *231                  | ..          |
|                        | 2020 | ..           | 1,734   | ..          | 1,734   | 3,371      | *199                  | ..          |
|                        | 2021 | ..           | 2,033   | ..          | 2,033   | 3,898      | *243                  | ..          |
| Mongolia               | 2018 | 42,780       | 4,060   | ..          | 46,840  | 14,804     | 117                   | ..          |
|                        | 2019 | 43,633       | 5,125   | ..          | 48,758  | 15,084     | 136                   | ..          |
|                        | 2020 | 32,997       | 5,085   | ..          | 38,082  | 11,560     | 56                    | ..          |
|                        | 2021 | 38,105       | 4,921   | ..          | 43,026  | 12,852     | 80                    | ..          |
| Myanmar                | 2018 | 3,397        | 21,390  | 8,090       | 32,877  | 624        | 224                   | 48          |
|                        | 2019 | 4,109        | 20,231  | 7,843       | 32,183  | 607        | 230                   | 45          |
|                        | 2020 | 4,520        | 19,649  | 8,778       | 32,948  | 617        | 50                    | 50          |
|                        | 2021 | 3,338        | 15,052  | 9,285       | 27,675  | 514        | 32                    | 0           |
| Nepal                  | 2018 | 3,858        | 7,051   | ..          | 10,909  | 383        | 345                   | ..          |
|                        | 2019 | 4,087        | 5,154   | ..          | 9,241   | 320        | 252                   | ..          |
|                        | 2020 | 5,529        | 7,324   | ..          | 12,853  | 438        | 122                   | ..          |
|                        | 2021 | 4,727        | 7,904   | ..          | 12,631  | 421        | 271                   | ..          |
| Oman                   | 2018 | ..           | 8,766   | 48,755      | 57,521  | 12,502     | 1,452                 | 4,720       |
|                        | 2019 | ..           | -1,491  | 49,811      | 48,320  | 10,498     | 2,212                 | 5,184       |
|                        | 2020 | ..           | 7,546   | 48,933      | 56,479  | 12,431     | *1,115                | 4,959       |
|                        | 2021 | ..           | 6,073   | 54,552      | 60,625  | 13,411     | 616                   | 4,876       |

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area      | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|----------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                      |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Other Asia           | 2018 | 155,229      | 67,338  | 52,378      | 274,946 | 11,588     | 14,237                | ..          |
|                      | 2019 | 154,367      | 64,270  | 51,595      | 270,232 | 11,365     | 15,018                | ..          |
|                      | 2020 | 143,821      | 59,518  | 55,724      | 259,063 | 10,875     | 10,663                | ..          |
|                      | 2021 | 169,741      | 55,147  | 60,626      | 285,514 | 11,966     | 11,516                | ..          |
| Pakistan             | 2018 | 49,292       | 67,680  | 73,584      | 190,556 | 867        | *788                  | 602         |
|                      | 2019 | 52,849       | 62,490  | 72,406      | 187,745 | 841        | *882                  | 485         |
|                      | 2020 | 64,642       | 80,993  | 62,904      | 208,540 | 918        | 547                   | 476         |
|                      | 2021 | 66,227       | 96,241  | 62,158      | 224,625 | 971        | 768                   | 463         |
| Philippines          | 2018 | 66,333       | 58,348  | 8,626       | 133,307 | 1,228      | 5,463                 | ..          |
|                      | 2019 | 71,351       | 56,394  | 8,686       | 136,431 | 1,236      | 5,347                 | ..          |
|                      | 2020 | 71,485       | 47,144  | 7,877       | 126,506 | 1,128      | 2,142                 | ..          |
|                      | 2021 | 77,122       | 50,349  | 6,755       | 134,227 | 1,179      | 1,941                 | ..          |
| Qatar                | 2018 | ..           | -7,397  | 82,882      | 75,485  | 27,283     | 13,660                | 1,182       |
|                      | 2019 | ..           | -959    | 83,146      | 82,187  | 29,277     | 14,515                | 1,379       |
|                      | 2020 | ..           | -3,255  | 82,108      | 78,853  | 28,566     | 9,696                 | 2,167       |
|                      | 2021 | ..           | -6,343  | 85,942      | 79,599  | 29,610     | 5,578                 | 1,399       |
| Saudi Arabia         | 2018 | 484          | 270,120 | 224,693     | 495,297 | 14,144     | *21,788               | *4,545      |
|                      | 2019 | 501          | 292,587 | 227,466     | 520,553 | 14,529     | *21,134               | *4,138      |
|                      | 2020 | 439          | 245,845 | 228,803     | 475,087 | 13,198     | *12,008               | *4,461      |
|                      | 2021 | 543          | 311,626 | 237,002     | 549,170 | 15,276     | *12,642               | *4,183      |
| Singapore            | 2018 | 1,891        | 46,017  | 21,126      | 69,034  | 11,873     | 181,660               | ..          |
|                      | 2019 | 1,814        | 55,667  | 21,440      | 78,921  | 13,453     | 175,225               | ..          |
|                      | 2020 | 1,715        | 57,788  | 21,673      | 81,176  | 13,736     | 162,263               | ..          |
|                      | 2021 | 1,838        | 57,611  | 22,120      | 81,570  | 13,730     | 162,838               | ..          |
| Sri Lanka            | 2018 | 5,778        | 13,648  | ..          | 19,426  | 900        | 3,617                 | ..          |
|                      | 2019 | 6,167        | 14,207  | ..          | 20,374  | 941        | 3,466                 | ..          |
|                      | 2020 | 7,411        | 12,646  | ..          | 20,057  | 924        | 1,720                 | ..          |
|                      | 2021 | 7,404        | 14,630  | ..          | 22,035  | 1,012      | 2,217                 | ..          |
| State of Palestine   | 2018 | ..           | 3,010   | ..          | 3,010   | 626        | ..                    | ..          |
|                      | 2019 | ..           | 3,328   | ..          | 3,328   | 678        | ..                    | ..          |
|                      | 2020 | ..           | 3,388   | ..          | 3,388   | 675        | ..                    | ..          |
|                      | 2021 | ..           | 3,703   | ..          | 3,703   | 721        | ..                    | ..          |
| Syrian Arab Republic | 2018 | 3            | 20,461  | 6,248       | 26,712  | 1,382      | 865                   | 1,713       |
|                      | 2019 | 3            | 18,335  | 5,993       | 24,332  | 1,211      | 865                   | 1,903       |
|                      | 2020 | 3            | 17,870  | 5,263       | 23,136  | 1,114      | 829                   | 2,094       |
|                      | 2021 | 3            | 17,064  | 5,603       | 22,669  | 1,063      | 808                   | 2,284       |
| Tajikistan           | 2018 | 3,284        | 2,937   | 111         | 6,332   | 694        | 91                    | ..          |
|                      | 2019 | 3,577        | 2,938   | 284         | 6,799   | 728        | 126                   | ..          |
|                      | 2020 | 3,684        | 3,369   | *456        | 7,509   | 787        | 77                    | ..          |
|                      | 2021 | 3,835        | 3,145   | 477         | 7,457   | 765        | 52                    | ..          |
| Thailand             | 2018 | 63,334       | 97,022  | 78,658      | 239,015 | 3,360      | 19,418                | 642         |
|                      | 2019 | 65,318       | 101,353 | 81,428      | 248,099 | 3,479      | 19,157                | 621         |
|                      | 2020 | 61,800       | 102,553 | 83,919      | 248,272 | 3,474      | 8,576                 | 636         |
|                      | 2021 | 53,375       | 100,225 | 83,842      | 237,442 | 3,316      | 7,279                 | 524         |
| Timor-Leste          | 2018 | ..           | 515     | 0           | 515     | 408        | *11                   | 139         |
|                      | 2019 | ..           | 624     | 0           | 624     | 487        | *9                    | 83          |
|                      | 2020 | ..           | 605     | 0           | 605     | 466        | *10                   | 70          |
|                      | 2021 | ..           | 592     | 0           | 592     | 448        | *11                   | 78          |
| Türkiye              | 2018 | 165,003      | 119,648 | 94,246      | 378,898 | 4,576      | 14,589                | 2           |
|                      | 2019 | 169,145      | 117,974 | 85,893      | 373,012 | 4,468      | 16,387                | 4           |
|                      | 2020 | 161,117      | 111,438 | 91,753      | 364,307 | 4,330      | 7,462                 | 4           |
|                      | 2021 | 166,113      | 118,979 | 113,493     | 398,585 | 4,702      | 10,069                | 4           |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area        | Year        | Type of fuel     |                  |                  | Total            | Per capita   | Additional sources    |               |
|------------------------|-------------|------------------|------------------|------------------|------------------|--------------|-----------------------|---------------|
|                        |             | Coal             | Oil              | Natural gas      |                  |              | International bunkers | Gas flaring   |
| Turkmenistan           | 2018        | ..               | 20,292           | 39,539           | 59,831           | 9,865        | 1,214                 | 2,936         |
|                        | 2019        | ..               | 19,353           | 41,336           | 60,688           | 9,855        | 1,047                 | 2,649         |
|                        | 2020        | ..               | 18,461           | 42,953           | 61,415           | 9,826        | 234                   | 3,285         |
|                        | 2021        | ..               | 18,496           | 42,953           | 61,449           | 9,689        | 100                   | 2,305         |
| United Arab Emirates   | 2018        | 7,614            | 47,936           | 120,038          | 175,588          | 19,211       | 49,188                | 2,386         |
|                        | 2019        | 7,040            | 48,935           | 133,250          | 189,226          | 20,542       | 74,987                | 1,774         |
|                        | 2020        | 8,451            | 55,203           | 134,665          | 198,319          | 21,354       | 65,520                | 1,882         |
|                        | 2021        | 10,269           | 57,865           | 126,772          | 194,906          | 20,812       | 69,811                | 1,712         |
| Uzbekistan             | 2018        | 10,103           | 11,205           | 77,670           | 98,979           | 3,050        | *283                  | 1,557         |
|                        | 2019        | 8,674            | 10,781           | 85,342           | 104,797          | 3,178        | *418                  | 1,228         |
|                        | 2020        | 12,046           | 12,250           | 79,801           | 104,097          | 3,105        | *350                  | 1,085         |
|                        | 2021        | 10,711           | *10,410          | 93,647           | 114,769          | 3,367        | 289                   | 924           |
| Viet Nam               | 2018        | 128,090          | 64,537           | 17,535           | 210,162          | 2,214        | 4,454                 | 1,439         |
|                        | 2019        | 200,575          | 71,706           | 17,896           | 290,178          | 3,030        | 4,599                 | 1,522         |
|                        | 2020        | 225,975          | 69,223           | 15,863           | 311,061          | 3,218        | 2,245                 | 1,317         |
|                        | 2021        | 180,835          | 65,003           | 12,720           | 258,558          | 2,653        | 1,863                 | 1,042         |
| Yemen                  | 2018        | 285              | 9,471            | 202              | 9,958            | 323          | 323                   | 973           |
|                        | 2019        | 289              | 9,278            | 202              | 9,769            | 310          | 327                   | 1,408         |
|                        | 2020        | 264              | 8,061            | 263              | 8,588            | 266          | 300                   | 1,718         |
|                        | 2021        | 262              | 7,748            | 405              | 8,415            | 255          | 297                   | 1,853         |
| <b>Europe</b>          | <b>2018</b> | <b>1,566,011</b> | <b>1,807,845</b> | <b>1,932,102</b> | <b>5,305,958</b> | <b>7,097</b> | <b>385,808</b>        | <b>34,169</b> |
|                        | <b>2019</b> | <b>1,411,806</b> | <b>1,726,810</b> | <b>1,891,060</b> | <b>5,029,676</b> | <b>6,720</b> | <b>357,332</b>        | <b>43,049</b> |
|                        | <b>2020</b> | <b>1,225,871</b> | <b>1,591,292</b> | <b>1,833,127</b> | <b>4,650,290</b> | <b>6,212</b> | <b>252,951</b>        | <b>39,932</b> |
|                        | <b>2021</b> | <b>1,353,257</b> | <b>1,700,505</b> | <b>1,989,437</b> | <b>5,043,199</b> | <b>6,747</b> | <b>270,008</b>        | <b>52,494</b> |
| Albania                | 2018        | 491              | 3,391            | 76               | 3,957            | 1,375        | 117                   | ..            |
|                        | 2019        | 337              | 3,500            | 135              | 3,973            | 1,382        | 126                   | ..            |
|                        | 2020        | 597              | 2,750            | 104              | 3,451            | 1,204        | 149                   | ..            |
|                        | 2021        | 894              | 2,905            | 104              | 3,903            | 1,367        | 142                   | ..            |
| Andorra                | 2018        | 0                | 512              | 4                | 516              | 6,883        | *1                    | ..            |
|                        | 2019        | 0                | 500              | 5                | 505              | 6,614        | *1                    | ..            |
|                        | 2020        | 0                | 384              | 5                | 389              | 5,007        | 0                     | ..            |
|                        | 2021        | 0                | 418              | 7                | 425              | 5,383        | 0                     | ..            |
| Austria                | 2018        | 11,079           | 31,476           | 16,644           | 59,200           | 6,696        | 2,572                 | ..            |
|                        | 2019        | 11,462           | 31,693           | 17,197           | 60,352           | 6,796        | 2,972                 | ..            |
|                        | 2020        | 10,013           | 28,497           | 16,395           | 54,905           | 6,164        | 1,013                 | ..            |
|                        | 2021        | 10,350           | 30,040           | 17,387           | 57,778           | 6,476        | 1,290                 | ..            |
| Belarus                | 2018        | 3,429            | 17,714           | 36,871           | 58,015           | 5,984        | 454                   | ..            |
|                        | 2019        | 3,635            | 17,321           | 35,217           | 56,173           | 5,807        | 586                   | ..            |
|                        | 2020        | 3,357            | 17,382           | 32,452           | 53,192           | 5,521        | 334                   | ..            |
|                        | 2021        | 3,339            | 18,447           | 33,234           | 55,020           | 5,744        | 387                   | ..            |
| Belgium                | 2018        | 11,614           | 43,944           | 32,790           | 88,347           | 7,717        | 35,363                | ..            |
|                        | 2019        | 11,539           | 42,687           | 33,305           | 87,532           | 7,604        | 31,888                | ..            |
|                        | 2020        | 8,690            | 37,729           | 32,844           | 79,263           | 6,856        | 24,057                | ..            |
|                        | 2021        | 9,591            | 40,131           | 33,261           | 82,983           | 7,147        | 28,856                | ..            |
| Bosnia and Herzegovina | 2018        | 17,154           | 4,737            | 468              | 22,359           | 6,576        | 22                    | ..            |
|                        | 2019        | 15,797           | 4,822            | 442              | 21,061           | 6,267        | 28                    | ..            |
|                        | 2020        | 16,305           | 4,423            | 403              | 21,131           | 6,368        | 12                    | ..            |
|                        | 2021        | 16,103           | 4,966            | 485              | 21,554           | 6,590        | 43                    | ..            |
| Bulgaria               | 2018        | 23,099           | 12,701           | 5,647            | 41,447           | 5,823        | 1,046                 | ..            |
|                        | 2019        | 21,480           | 13,037           | 5,381            | 39,898           | 5,657        | 985                   | ..            |
|                        | 2020        | 17,368           | 11,973           | 5,556            | 34,898           | 5,000        | 695                   | ..            |
|                        | 2021        | 21,568           | 12,581           | 6,295            | 40,444           | 5,874        | 775                   | ..            |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|-----------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                 |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Croatia         | 2018 | 1,460        | 9,348   | 4,553       | 15,361  | 3,692      | 619                   | 44          |
|                 | 2019 | 1,682        | 9,001   | 4,678       | 15,362  | 3,720      | 678                   | 9           |
|                 | 2020 | 1,443        | 8,029   | 5,003       | 14,475  | 3,533      | 226                   | 13          |
|                 | 2021 | 1,656        | 8,339   | 5,085       | 15,081  | 3,714      | 370                   | 3           |
| Czechia         | 2018 | 63,387       | 21,070  | 15,807      | 100,264 | 9,518      | 1,249                 | ..          |
|                 | 2019 | 57,164       | 21,193  | 16,585      | 94,942  | 9,010      | 1,277                 | ..          |
|                 | 2020 | 49,276       | 19,708  | 16,866      | 85,850  | 8,152      | 347                   | ..          |
|                 | 2021 | 51,680       | 21,159  | 18,119      | 90,958  | 8,654      | 375                   | ..          |
| Denmark         | 2018 | 6,923        | 17,910  | 6,282       | 31,115  | 5,396      | 4,980                 | 193         |
|                 | 2019 | 3,604        | 17,612  | 5,941       | 27,157  | 4,686      | 5,520                 | 157         |
|                 | 2020 | 3,104        | 16,397  | 4,961       | 24,463  | 4,199      | 2,768                 | 92          |
|                 | 2021 | 4,365        | 16,616  | 4,541       | 25,522  | 4,360      | 2,793                 | 90          |
| Estonia         | 2018 | 18,672       | -84     | 971         | 19,559  | 14,793     | 1,151                 | ..          |
|                 | 2019 | 13,521       | -365    | 893         | 14,049  | 10,587     | 790                   | ..          |
|                 | 2020 | 10,895       | -589    | 818         | 11,124  | 8,367      | 1,010                 | ..          |
|                 | 2021 | 11,879       | -820    | 926         | 11,985  | 9,020      | 1,095                 | ..          |
| Faeroe Islands  | 2018 | ..           | *747    | ..          | *747    | *14,654    | 124                   | ..          |
|                 | 2019 | ..           | *762    | ..          | *762    | *14,752    | 143                   | ..          |
|                 | 2020 | ..           | *783    | ..          | *783    | *14,936    | 169                   | ..          |
|                 | 2021 | ..           | *810    | ..          | *810    | *15,312    | 179                   | ..          |
| Finland         | 2018 | 17,433       | 20,045  | 5,060       | 42,538  | 7,713      | 3,422                 | ..          |
|                 | 2019 | 14,589       | 19,172  | 4,957       | 38,718  | 7,012      | 3,638                 | ..          |
|                 | 2020 | 12,016       | 18,315  | 4,922       | 35,254  | 6,376      | 1,853                 | ..          |
|                 | 2021 | 12,582       | 17,188  | 4,892       | 34,662  | 6,261      | 1,739                 | ..          |
| France          | 2018 | 35,267       | 180,597 | 83,699      | 299,562 | 4,499      | 24,499                | ..          |
|                 | 2019 | 28,421       | 181,571 | 85,392      | 295,385 | 4,426      | 24,602                | ..          |
|                 | 2020 | 20,326       | 156,175 | 79,532      | 256,033 | 3,831      | 11,320                | ..          |
|                 | 2021 | 34,044       | 166,587 | 84,326      | 284,957 | 4,259      | 11,747                | ..          |
| Germany         | 2018 | 277,618      | 243,489 | 165,695     | 686,801 | 8,285      | 35,711                | 19          |
|                 | 2019 | 226,711      | 250,151 | 169,558     | 646,419 | 7,774      | 34,394                | 27          |
|                 | 2020 | 179,209      | 233,056 | 168,531     | 580,796 | 6,970      | 18,124                | 25          |
|                 | 2021 | 214,159      | 209,335 | 176,673     | 600,167 | 7,196      | 23,023                | 20          |
| Gibraltar       | 2018 | ..           | 695     | ..          | 695     | 21,295     | 13,092                | ..          |
|                 | 2019 | ..           | 686     | 37          | 723     | 22,113     | 13,444                | ..          |
|                 | 2020 | ..           | 535     | 108         | 643     | 19,670     | 13,644                | ..          |
|                 | 2021 | ..           | 533     | 118         | 651     | 19,915     | 13,317                | ..          |
| Greece          | 2018 | 18,778       | 29,993  | 8,531       | 57,303  | 5,389      | 10,447                | ..          |
|                 | 2019 | 13,149       | 30,790  | 9,539       | 53,478  | 5,058      | 11,656                | ..          |
|                 | 2020 | 7,525        | 26,576  | 10,695      | 44,796  | 4,261      | 6,364                 | ..          |
|                 | 2021 | 7,027        | 27,246  | 12,083      | 46,355  | 4,438      | 8,008                 | ..          |
| Hungary         | 2018 | 9,121        | 17,958  | 18,288      | 45,368  | 4,641      | 842                   | ..          |
|                 | 2019 | 7,390        | 18,656  | 18,716      | 44,763  | 4,581      | 851                   | ..          |
|                 | 2020 | 6,765        | 16,853  | 19,296      | 42,914  | 4,401      | 309                   | ..          |
|                 | 2021 | 5,481        | 18,115  | 20,575      | 44,171  | 4,549      | 375                   | ..          |
| Iceland         | 2018 | 11           | 1,625   | ..          | 1,636   | 4,636      | 1,526                 | ..          |
|                 | 2019 | -12          | 1,691   | ..          | 1,679   | 4,653      | 1,161                 | ..          |
|                 | 2020 | -34          | 1,507   | ..          | 1,473   | 4,017      | 339                   | ..          |
|                 | 2021 | 60           | 1,596   | ..          | 1,656   | 4,471      | 536                   | ..          |
| Ireland         | 2018 | 6,041        | 18,652  | 10,540      | 35,233  | 7,288      | 3,820                 | ..          |
|                 | 2019 | 4,463        | 18,710  | 10,711      | 33,884  | 6,921      | 3,763                 | ..          |
|                 | 2020 | 4,357        | 17,203  | 10,698      | 32,258  | 6,522      | 1,664                 | ..          |
|                 | 2021 | 5,198        | 18,215  | 10,280      | 33,693  | 6,757      | 1,858                 | ..          |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area             | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|-----------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                             |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Isle of Man                 | 2018 | ..           | ..      | 234         | 234     | 2,798      | ..                    | ..          |
|                             | 2019 | ..           | ..      | 275         | 275     | 3,281      | ..                    | ..          |
|                             | 2020 | ..           | ..      | 267         | 267     | 3,175      | ..                    | ..          |
|                             | 2021 | ..           | ..      | 183         | 183     | 2,175      | ..                    | ..          |
| Italy                       | 2018 | 33,936       | 135,376 | 138,338     | 307,650 | 5,135      | 20,600                | ..          |
|                             | 2019 | 25,777       | 133,037 | 141,647     | 300,461 | 5,028      | 20,786                | ..          |
|                             | 2020 | 20,271       | 112,808 | 135,367     | 268,446 | 4,509      | 12,484                | ..          |
|                             | 2021 | 22,077       | 134,428 | 145,077     | 301,582 | 5,088      | 12,708                | ..          |
| Kosovo                      | 2018 | 5,914        | 2,218   | ..          | 8,132   | 4,756      | 9                     | ..          |
|                             | 2019 | 6,205        | 2,301   | ..          | 8,507   | 5,043      | 8                     | ..          |
|                             | 2020 | 6,365        | 2,244   | ..          | 8,610   | 5,153      | 7                     | ..          |
|                             | 2021 | 6,461        | 2,515   | ..          | 8,976   | 5,401      | 7                     | ..          |
| Latvia                      | 2018 | 191          | 4,090   | 2,746       | 7,027   | 3,630      | 589                   | 0           |
|                             | 2019 | 161          | 3,983   | 2,591       | 6,735   | 3,514      | 1,401                 | 0           |
|                             | 2020 | 94           | 3,846   | 2,138       | 6,078   | 3,204      | 828                   | 0           |
|                             | 2021 | 73           | 3,951   | 2,265       | 6,288   | 3,356      | 891                   | 0           |
| Liechtenstein               | 2018 | ..           | ..      | 50          | 50      | 1,303      | ..                    | ..          |
|                             | 2019 | ..           | ..      | 50          | 50      | 1,310      | ..                    | ..          |
|                             | 2020 | ..           | ..      | 49          | 49      | 1,254      | ..                    | ..          |
|                             | 2021 | ..           | ..      | 54          | 54      | 1,388      | ..                    | ..          |
| Lithuania                   | 2018 | 829          | 8,134   | 2,156       | 11,120  | 3,866      | 1,032                 | ..          |
|                             | 2019 | 776          | 7,985   | 2,127       | 10,888  | 3,822      | 1,002                 | ..          |
|                             | 2020 | 605          | 7,717   | 2,504       | 10,827  | 3,839      | 750                   | ..          |
|                             | 2021 | 719          | 7,882   | 2,552       | 11,154  | 4,003      | 789                   | ..          |
| Luxembourg                  | 2018 | 166          | 7,125   | 1,606       | 8,897   | 14,635     | 1,880                 | ..          |
|                             | 2019 | 182          | 7,288   | 1,607       | 9,077   | 14,641     | 1,840                 | ..          |
|                             | 2020 | 153          | 5,763   | 1,459       | 7,375   | 11,699     | 1,674                 | ..          |
|                             | 2021 | 168          | 6,059   | 1,573       | 7,800   | 12,200     | 1,910                 | ..          |
| Malta                       | 2018 | ..           | 870     | 688         | 1,558   | 3,169      | 7,642                 | ..          |
|                             | 2019 | ..           | 945     | 719         | 1,664   | 3,304      | 7,844                 | ..          |
|                             | 2020 | ..           | 867     | 747         | 1,615   | 3,133      | 7,267                 | ..          |
|                             | 2021 | ..           | 873     | 750         | 1,623   | 3,081      | 6,518                 | ..          |
| Montenegro                  | 2018 | 1,487        | 1,008   | ..          | 2,494   | 3,950      | 83                    | ..          |
|                             | 2019 | 1,519        | 1,053   | ..          | 2,572   | 4,080      | 67                    | ..          |
|                             | 2020 | 1,579        | 916     | ..          | 2,496   | 3,968      | 15                    | ..          |
|                             | 2021 | 1,386        | 1,116   | ..          | 2,502   | 3,984      | 38                    | ..          |
| Netherlands (Kingd. of the) | 2018 | 32,602       | 49,140  | 66,568      | 148,310 | 8,580      | 47,817                | 50          |
|                             | 2019 | 25,250       | 49,232  | 69,066      | 143,548 | 8,267      | 48,124                | 40          |
|                             | 2020 | 16,073       | 43,020  | 68,011      | 127,104 | 7,290      | 43,708                | 35          |
|                             | 2021 | 22,384       | 45,789  | 64,563      | 132,736 | 7,584      | 43,117                | 153         |
| North Macedonia             | 2018 | 4,297        | 3,179   | 441         | 7,918   | 3,746      | 0                     | ..          |
|                             | 2019 | 4,229        | 3,185   | 516         | 7,930   | 3,751      | ..                    | ..          |
|                             | 2020 | 3,611        | 3,012   | 591         | 7,213   | 3,417      | ..                    | ..          |
|                             | 2021 | 2,661        | 3,297   | 750         | 6,709   | 3,190      | ..                    | ..          |
| Norway                      | 2018 | 3,155        | 23,038  | 11,881      | 38,074  | 7,167      | 2,819                 | 792         |
|                             | 2019 | 3,088        | 20,031  | 10,475      | 33,595  | 6,281      | 2,676                 | 707         |
|                             | 2020 | 3,183        | 20,819  | 9,509       | 33,511  | 6,229      | 1,451                 | 611         |
|                             | 2021 | 3,220        | 20,349  | 10,764      | 34,333  | 6,354      | 1,460                 | 547         |
| Poland                      | 2018 | 197,048      | 78,589  | 33,176      | 308,813 | 8,017      | 3,935                 | 60          |
|                             | 2019 | 175,594      | 79,544  | 33,721      | 288,859 | 7,504      | 4,168                 | 27          |
|                             | 2020 | 163,150      | 75,785  | 35,362      | 274,297 | 7,138      | 2,348                 | 44          |
|                             | 2021 | 181,177      | 82,431  | 38,223      | 301,831 | 7,879      | 2,823                 | 30          |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area                   | Year        | Type of fuel   |                |                | Total            | Per capita   | Additional sources    |               |
|-----------------------------------|-------------|----------------|----------------|----------------|------------------|--------------|-----------------------|---------------|
|                                   |             | Coal           | Oil            | Natural gas    |                  |              | International bunkers | Gas flaring   |
| Portugal                          | 2018        | 10,682         | 24,955         | 11,797         | 47,434           | 4,610        | 6,809                 | ..            |
|                                   | 2019        | 4,967          | 25,193         | 12,410         | 42,570           | 4,137        | 7,567                 | ..            |
|                                   | 2020        | 2,752          | 22,273         | 12,046         | 37,071           | 3,600        | 3,828                 | ..            |
|                                   | 2021        | 936            | 22,233         | 11,508         | 34,676           | 3,370        | 4,158                 | ..            |
| Republic of Moldova               | 2018        | 308            | 2,735          | 1,927          | 4,969            | 1,582        | 170                   | ..            |
|                                   | 2019        | 384            | 2,820          | 1,780          | 4,983            | 1,603        | 151                   | ..            |
|                                   | 2020        | 299            | 2,660          | 1,811          | 4,771            | 1,546        | 53                    | ..            |
|                                   | 2021        | 352            | 2,966          | 2,074          | 5,392            | 1,761        | 128                   | ..            |
| Romania                           | 2018        | 20,996         | 28,236         | 22,253         | 71,486           | 3,646        | 432                   | ..            |
|                                   | 2019        | 20,572         | 28,366         | 20,643         | 69,582           | 3,564        | 519                   | ..            |
|                                   | 2020        | 14,399         | 27,491         | 21,454         | 63,344           | 3,258        | 264                   | ..            |
|                                   | 2021        | 16,815         | 30,100         | 22,202         | 69,117           | 3,576        | 333                   | ..            |
| Russian Federation                | 2018        | 487,878        | 337,677        | 926,677        | 1,752,231        | 12,030       | *54,682               | 30,312        |
|                                   | 2019        | 507,963        | 264,488        | 875,130        | 1,647,581        | 11,305       | 25,375                | 39,513        |
|                                   | 2020        | 467,771        | 288,125        | 851,955        | 1,607,850        | 11,042       | 36,248                | 37,127        |
|                                   | 2021        | 517,033        | 332,419        | 961,713        | 1,811,166        | 12,482       | 36,619                | 50,052        |
| Serbia                            | 2018        | 31,196         | 8,939          | 4,638          | 44,773           | 6,023        | 481                   | ..            |
|                                   | 2019        | 31,168         | 9,224          | 4,364          | 44,756           | 6,047        | 485                   | ..            |
|                                   | 2020        | 32,568         | 8,572          | 4,321          | 45,461           | 6,178        | 292                   | ..            |
|                                   | 2021        | 28,871         | 9,605          | 5,375          | 43,851           | 6,010        | 385                   | 0             |
| Slovakia                          | 2018        | 13,336         | 9,233          | 8,517          | 31,086           | 5,707        | 145                   | 2             |
|                                   | 2019        | 10,714         | 9,116          | 8,746          | 28,576           | 5,240        | 139                   | 2             |
|                                   | 2020        | 9,080          | 8,514          | 8,690          | 26,284           | 4,817        | 88                    | 2             |
|                                   | 2021        | 11,130         | 8,910          | 9,735          | 29,775           | 5,466        | 69                    | 2             |
| Slovenia                          | 2018        | 4,640          | 7,046          | 1,689          | 13,375           | 6,351        | 826                   | ..            |
|                                   | 2019        | 4,399          | 6,784          | 1,715          | 12,897           | 6,104        | 689                   | ..            |
|                                   | 2020        | 4,226          | 5,789          | 1,715          | 11,731           | 5,539        | 403                   | ..            |
|                                   | 2021        | 3,747          | 6,334          | 1,807          | 11,888           | 5,609        | 309                   | ..            |
| Spain                             | 2018        | 43,860         | 146,196        | 62,518         | 252,575          | 5,398        | 36,801                | ..            |
|                                   | 2019        | 20,166         | 141,645        | 71,475         | 233,286          | 4,950        | 37,667                | ..            |
|                                   | 2020        | 12,082         | 117,276        | 64,552         | 193,910          | 4,094        | 25,017                | ..            |
|                                   | 2021        | 12,354         | 131,569        | 68,173         | 212,097          | 4,466        | 28,787                | ..            |
| Sweden                            | 2018        | 8,786          | 26,790         | 1,539          | 37,116           | 3,652        | 8,557                 | ..            |
|                                   | 2019        | 7,964          | 23,463         | 1,418          | 32,845           | 3,199        | 9,210                 | ..            |
|                                   | 2020        | 6,111          | 20,542         | 2,063          | 28,715           | 2,769        | 9,146                 | ..            |
|                                   | 2021        | 6,730          | 22,729         | 1,523          | 30,982           | 2,960        | 9,144                 | ..            |
| Switzerland                       | 2018        | 417            | 24,214         | 6,705          | 31,336           | 3,680        | 5,669                 | ..            |
|                                   | 2019        | 373            | 25,351         | 6,879          | 32,602           | 3,802        | 5,724                 | ..            |
|                                   | 2020        | 360            | 23,406         | 6,694          | 30,461           | 3,526        | 2,103                 | ..            |
|                                   | 2021        | 364            | 22,716         | 7,279          | 30,359           | 3,493        | 2,379                 | ..            |
| Ukraine                           | 2018        | 110,011        | 37,448         | 58,176         | 205,635          | 4,627        | ..                    | ..            |
|                                   | 2019        | 101,939        | 38,755         | 51,440         | 192,134          | 4,346        | ..                    | ..            |
|                                   | 2020        | 87,957         | 39,695         | 47,861         | 175,513          | 3,997        | ..                    | ..            |
|                                   | 2021        | 81,563         | 42,688         | 49,149         | 173,400          | 3,983        | ..                    | ..            |
| United Kingdom                    | 2018        | 32,697         | 165,089        | 155,857        | 353,643          | 5,323        | 43,772                | 2,698         |
|                                   | 2019        | 23,483         | 159,829        | 153,576        | 336,889          | 5,045        | 43,383                | 2,566         |
|                                   | 2020        | 21,966         | 132,465        | 144,772        | 299,203          | 4,462        | 20,577                | 1,983         |
|                                   | 2021        | 23,059         | 145,138        | 153,753        | 321,950          | 4,785        | 20,527                | 1,597         |
| <b>Latin America &amp; Carib.</b> | <b>2018</b> | <b>173,491</b> | <b>940,715</b> | <b>456,998</b> | <b>1,571,204</b> | <b>2,454</b> | <b>70,249</b>         | <b>30,670</b> |
|                                   | <b>2019</b> | <b>175,272</b> | <b>967,403</b> | <b>444,095</b> | <b>1,586,770</b> | <b>2,457</b> | <b>72,979</b>         | <b>36,929</b> |
|                                   | <b>2020</b> | <b>152,231</b> | <b>852,195</b> | <b>421,429</b> | <b>1,425,855</b> | <b>2,191</b> | <b>45,114</b>         | <b>34,274</b> |
|                                   | <b>2021</b> | <b>155,244</b> | <b>939,136</b> | <b>463,659</b> | <b>1,558,039</b> | <b>2,379</b> | <b>53,599</b>         | <b>22,982</b> |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area             | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|-----------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                             |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Anguilla                    | 2018 | ..           | 134     | ..          | 134     | 8,854      | *30                   | ..          |
|                             | 2019 | ..           | 147     | ..          | 147     | 9,566      | *36                   | ..          |
|                             | 2020 | ..           | 139     | ..          | 139     | 8,939      | *23                   | ..          |
|                             | 2021 | ..           | 143     | ..          | 143     | 9,083      | *38                   | ..          |
| Antigua and Barbuda         | 2018 | ..           | *626    | ..          | *626    | *6,837     | *373                  | ..          |
|                             | 2019 | ..           | *650    | ..          | *650    | *7,059     | *383                  | ..          |
|                             | 2020 | ..           | *628    | ..          | *628    | *6,778     | *367                  | ..          |
|                             | 2021 | ..           | *646    | ..          | *646    | *6,930     | *380                  | ..          |
| Argentina                   | 2018 | 4,553        | 71,337  | 96,374      | 172,264 | 3,879      | 5,091                 | 0           |
|                             | 2019 | 2,238        | 71,757  | 95,812      | 169,807 | 3,795      | 4,215                 | 0           |
|                             | 2020 | 3,371        | 63,080  | 91,432      | 157,882 | 3,506      | 2,277                 | 0           |
|                             | 2021 | 4,714        | 82,891  | 95,525      | 183,131 | 4,045      | 1,648                 | 0           |
| Aruba                       | 2018 | ..           | *883    | ..          | *883    | *8,332     | *316                  | ..          |
|                             | 2019 | ..           | *843    | ..          | *843    | *7,920     | *298                  | ..          |
|                             | 2020 | ..           | *834    | ..          | *834    | *7,825     | *284                  | ..          |
|                             | 2021 | ..           | *874    | ..          | *874    | *8,207     | *307                  | ..          |
| Bahamas                     | 2018 | *4           | 2,487   | ..          | 2,491   | 6,197      | *1,288                | ..          |
|                             | 2019 | *4           | 2,562   | ..          | 2,566   | 6,343      | *1,359                | ..          |
|                             | 2020 | *4           | 2,081   | ..          | 2,085   | 5,129      | *1,284                | ..          |
|                             | 2021 | *4           | 2,543   | ..          | 2,547   | 6,243      | *1,890                | ..          |
| Barbados                    | 2018 | ..           | 1,331   | 51          | 1,382   | 4,940      | *403                  | *20         |
|                             | 2019 | ..           | 1,288   | 45          | 1,333   | 4,757      | *400                  | *18         |
|                             | 2020 | ..           | 1,139   | 31          | 1,169   | 4,166      | *197                  | *10         |
|                             | 2021 | ..           | 1,052   | 27          | 1,079   | 3,838      | *219                  | *10         |
| Belize                      | 2018 | ..           | 608     | 2           | 610     | 1,597      | 45                    | ..          |
|                             | 2019 | ..           | 718     | 1           | 719     | 1,847      | 79                    | ..          |
|                             | 2020 | ..           | 586     | 1           | 587     | 1,487      | 77                    | ..          |
|                             | 2021 | ..           | 615     | 1           | 615     | 1,538      | 99                    | ..          |
| Bolivia (Plur. State of)    | 2018 | 19           | 12,225  | 8,315       | 20,559  | 1,771      | 201                   | 97          |
|                             | 2019 | 21           | 12,849  | 7,718       | 20,588  | 1,748      | 203                   | 109         |
|                             | 2020 | 9            | 10,285  | 6,720       | 17,014  | 1,425      | 82                    | 82          |
|                             | 2021 | 23           | 12,703  | 7,401       | 20,127  | 1,666      | 91                    | *118        |
| Bonaire, St Eustatius, Saba | 2018 | ..           | *102    | ..          | *102    | *4,102     | *167                  | ..          |
|                             | 2019 | ..           | *112    | ..          | *112    | *4,366     | *168                  | ..          |
|                             | 2020 | ..           | *115    | ..          | *115    | *4,412     | *115                  | ..          |
|                             | 2021 | ..           | *113    | ..          | *113    | *4,237     | *126                  | ..          |
| Brazil                      | 2018 | 65,729       | 283,979 | 66,914      | 416,622 | 1,982      | 16,848                | 2,984       |
|                             | 2019 | 61,640       | 287,603 | 67,064      | 416,307 | 1,966      | 18,106                | 3,438       |
|                             | 2020 | 55,823       | 275,652 | 61,774      | 393,248 | 1,845      | 15,105                | 2,724       |
|                             | 2021 | 68,288       | 292,720 | 85,778      | 446,786 | 2,085      | 12,758                | 2,364       |
| British Virgin Islands      | 2018 | ..           | *164    | ..          | *164    | *5,395     | ..                    | ..          |
|                             | 2019 | ..           | *187    | ..          | *187    | *6,115     | ..                    | ..          |
|                             | 2020 | ..           | *184    | ..          | *184    | *5,944     | ..                    | ..          |
|                             | 2021 | ..           | *187    | ..          | *187    | *6,025     | ..                    | ..          |
| Cayman Islands              | 2018 | ..           | 623     | ..          | 623     | 9,604      | 115                   | ..          |
|                             | 2019 | ..           | 706     | ..          | 706     | 10,680     | 106                   | ..          |
|                             | 2020 | ..           | 642     | ..          | 642     | 9,542      | 47                    | ..          |
|                             | 2021 | ..           | 651     | ..          | 651     | 9,561      | 24                    | ..          |
| Chile                       | 2018 | 28,256       | 48,595  | 9,153       | 86,005  | 4,599      | 2,430                 | *7          |
|                             | 2019 | 32,404       | 50,120  | 10,507      | 93,031  | 4,886      | 2,594                 | *1          |
|                             | 2020 | 26,288       | 44,835  | 9,946       | 81,069  | 4,200      | 1,318                 | 11          |
|                             | 2021 | 25,166       | 48,421  | 11,063      | 84,651  | 4,343      | 1,584                 | 8           |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area         | Year | Type of fuel |        |             | Total  | Per capita | Additional sources    |             |
|-------------------------|------|--------------|--------|-------------|--------|------------|-----------------------|-------------|
|                         |      | Coal         | Oil    | Natural gas |        |            | International bunkers | Gas flaring |
| Colombia                | 2018 | 13,562       | 43,626 | 23,816      | 81,005 | 1,644      | 287                   | 982         |
|                         | 2019 | 18,185       | 46,265 | 24,531      | 88,981 | 1,773      | 4,591                 | 947         |
|                         | 2020 | 16,696       | 43,424 | 24,301      | 84,422 | 1,658      | 2,238                 | 607         |
|                         | 2021 | 11,129       | 54,866 | 22,024      | 88,018 | 1,709      | 3,094                 | 645         |
| Costa Rica              | 2018 | 1            | 7,620  | ..          | 7,621  | 1,512      | 659                   | ..          |
|                         | 2019 | 1            | 7,343  | ..          | 7,344  | 1,444      | 706                   | ..          |
|                         | 2020 | 0            | 6,510  | ..          | 6,511  | 1,271      | 306                   | ..          |
|                         | 2021 | 51           | 7,347  | ..          | 7,398  | 1,435      | 542                   | ..          |
| Cuba                    | 2018 | 14           | 20,705 | 1,911       | 22,630 | 1,998      | *1,595                | 28          |
|                         | 2019 | 0            | 20,283 | 1,874       | 22,157 | 1,958      | *1,549                | 32          |
|                         | 2020 | 5            | 19,361 | 1,763       | 21,129 | 1,870      | *1,507                | 28          |
|                         | 2021 | 13           | 20,737 | 1,701       | 22,451 | 1,995      | *1,526                | 76          |
| Curaçao                 | 2018 | ..           | 4,237  | *106        | 4,343  | 23,511     | 6,666                 | ..          |
|                         | 2019 | ..           | 2,314  | 0           | 2,314  | 11,985     | 6,441                 | ..          |
|                         | 2020 | ..           | 1,870  | ..          | 1,870  | 9,882      | 5,180                 | ..          |
|                         | 2021 | ..           | 2,057  | ..          | 2,057  | 10,808     | 5,487                 | ..          |
| Dominica                | 2018 | ..           | *169   | ..          | *169   | *2,384     | *5                    | ..          |
|                         | 2019 | ..           | *177   | ..          | *177   | *2,485     | *5                    | ..          |
|                         | 2020 | ..           | *162   | ..          | *162   | *2,244     | *5                    | ..          |
|                         | 2021 | ..           | *163   | ..          | *163   | *2,257     | *5                    | ..          |
| Dominican Republic      | 2018 | 3,023        | 17,947 | 2,242       | 23,212 | 2,156      | 1,775                 | ..          |
|                         | 2019 | 3,002        | 20,271 | 2,535       | 25,809 | 2,372      | 1,521                 | ..          |
|                         | 2020 | 6,812        | 14,949 | 2,506       | 24,267 | 2,206      | 796                   | ..          |
|                         | 2021 | 6,425        | 17,522 | 3,707       | 27,654 | 2,487      | 1,232                 | ..          |
| Ecuador                 | 2018 | ..           | 33,558 | 1,393       | 34,952 | 2,054      | 3,064                 | 1,274       |
|                         | 2019 | ..           | 35,368 | 1,244       | 36,612 | 2,111      | 2,612                 | 1,298       |
|                         | 2020 | ..           | 28,323 | 1,057       | 29,380 | 1,670      | 899                   | 1,209       |
|                         | 2021 | ..           | 33,088 | 1,115       | 34,203 | 1,922      | 3,390                 | 1,173       |
| El Salvador             | 2018 | 2            | 5,911  | ..          | 5,913  | 942        | 549                   | ..          |
|                         | 2019 | 2            | 7,115  | ..          | 7,117  | 1,133      | 579                   | ..          |
|                         | 2020 | 1            | 6,249  | ..          | 6,250  | 993        | 215                   | ..          |
|                         | 2021 | 2            | 7,219  | 4           | 7,225  | 1,144      | 401                   | ..          |
| Falkland Is. (Malvinas) | 2018 | *5           | 36     | ..          | 41     | 11,100     | ..                    | ..          |
|                         | 2019 | *5           | 37     | ..          | 42     | 11,311     | ..                    | ..          |
|                         | 2020 | 3            | 39     | ..          | 42     | 11,080     | ..                    | ..          |
|                         | 2021 | 3            | 38     | ..          | 40     | 10,719     | ..                    | ..          |
| Grenada                 | 2018 | ..           | 317    | ..          | 317    | 2,603      | 24                    | ..          |
|                         | 2019 | ..           | 343    | ..          | 343    | 2,793      | 30                    | ..          |
|                         | 2020 | ..           | 296    | ..          | 296    | 2,390      | 26                    | ..          |
|                         | 2021 | ..           | 318    | ..          | 318    | 2,555      | 27                    | ..          |
| Guatemala               | 2018 | 4,827        | 12,794 | ..          | 17,621 | 1,046      | 1,678                 | ..          |
|                         | 2019 | 4,712        | 13,746 | ..          | 18,458 | 1,079      | 1,667                 | ..          |
|                         | 2020 | 3,043        | 13,068 | ..          | 16,110 | 928        | 1,393                 | ..          |
|                         | 2021 | 3,895        | 14,871 | ..          | 18,765 | 1,066      | 1,758                 | ..          |
| Guyana                  | 2018 | 5            | 2,373  | 0           | 2,379  | 3,028      | 54                    | ..          |
|                         | 2019 | 9            | 2,625  | 1           | 2,635  | 3,298      | 53                    | ..          |
|                         | 2020 | 5            | 2,734  | 2           | 2,741  | 3,438      | 15                    | ..          |
|                         | 2021 | *4           | 3,250  | 7           | 3,261  | 4,053      | *24                   | ..          |
| Haiti                   | 2018 | ..           | 3,370  | ..          | 3,370  | 306        | 71                    | ..          |
|                         | 2019 | ..           | 3,082  | ..          | 3,082  | 276        | 70                    | ..          |
|                         | 2020 | ..           | 3,192  | ..          | 3,192  | 282        | 68                    | ..          |
|                         | 2021 | ..           | 3,440  | ..          | 3,440  | 301        | 67                    | ..          |



Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area           | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|---------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                           |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Honduras                  | 2018 | ..           | 9,190   | ..          | 9,190   | 938        | ..                    | ..          |
|                           | 2019 | ..           | 10,634  | ..          | 10,634  | 1,068      | ..                    | ..          |
|                           | 2020 | ..           | 9,036   | ..          | 9,036   | 893        | ..                    | ..          |
|                           | 2021 | ..           | 9,631   | ..          | 9,631   | 937        | ..                    | ..          |
| Jamaica                   | 2018 | 212          | 7,443   | 191         | 7,846   | 2,790      | 802                   | ..          |
|                           | 2019 | 288          | 8,368   | 577         | 9,233   | 3,282      | 918                   | ..          |
|                           | 2020 | 288          | 4,871   | 1,420       | 6,579   | 2,333      | 474                   | ..          |
|                           | 2021 | 288          | 5,251   | 1,465       | 7,004   | 2,477      | 530                   | ..          |
| Mexico                    | 2018 | 49,674       | 227,627 | 169,196     | 446,497 | 3,600      | 14,558                | 0           |
|                           | 2019 | 47,561       | 236,994 | 160,540     | 445,095 | 3,558      | 14,974                | 0           |
|                           | 2020 | 35,383       | 202,828 | 164,587     | 402,798 | 3,197      | 6,070                 | 0           |
|                           | 2021 | 30,859       | 221,027 | 169,818     | 421,704 | 3,328      | 10,182                | 0           |
| Montserrat                | 2018 | ..           | 30      | ..          | 30      | 6,864      | *4                    | ..          |
|                           | 2019 | ..           | 25      | ..          | 25      | 5,516      | *3                    | ..          |
|                           | 2020 | ..           | 24      | ..          | 24      | 5,386      | *3                    | ..          |
|                           | 2021 | ..           | *25     | ..          | *25     | *5,715     | *3                    | ..          |
| Nicaragua                 | 2018 | ..           | 5,016   | ..          | 5,016   | 763        | 51                    | ..          |
|                           | 2019 | ..           | 5,076   | ..          | 5,076   | 762        | 50                    | ..          |
|                           | 2020 | ..           | 4,528   | ..          | 4,528   | 670        | 16                    | ..          |
|                           | 2021 | ..           | 5,015   | ..          | 5,015   | 732        | 29                    | ..          |
| Panama                    | 2018 | 534          | 7,882   | 549         | 8,965   | 2,152      | 1,868                 | ..          |
|                           | 2019 | 2,189        | 8,713   | 1,708       | 12,611  | 2,979      | 1,882                 | ..          |
|                           | 2020 | 2,355        | 3,539   | 921         | 6,815   | 1,587      | 656                   | ..          |
|                           | 2021 | 2,190        | 6,887   | 1,100       | 10,176  | 2,339      | 1,037                 | ..          |
| Paraguay                  | 2018 | 15           | 8,292   | ..          | 8,306   | 1,289      | 226                   | ..          |
|                           | 2019 | 5            | 8,023   | ..          | 8,028   | 1,229      | 224                   | ..          |
|                           | 2020 | 2            | 7,295   | ..          | 7,297   | 1,102      | 80                    | ..          |
|                           | 2021 | 2            | 8,038   | ..          | 8,040   | 1,199      | 107                   | ..          |
| Peru                      | 2018 | 2,644        | 33,182  | 15,345      | 51,171  | 1,589      | 3,617                 | 205         |
|                           | 2019 | 2,709        | 34,731  | 16,090      | 53,530  | 1,631      | 3,510                 | 226         |
|                           | 2020 | 1,934        | 27,054  | 13,520      | 42,508  | 1,276      | 1,528                 | 139         |
|                           | 2021 | 1,978        | 26,413  | 17,663      | 46,054  | 1,366      | 2,237                 | *128        |
| Puerto Rico               | 2018 | ..           | ..      | 3,349       | 3,349   | 1,009      | ..                    | ..          |
|                           | 2019 | ..           | ..      | 3,743       | 3,743   | 1,137      | ..                    | ..          |
|                           | 2020 | ..           | ..      | 2,758       | 2,758   | 843        | ..                    | ..          |
|                           | 2021 | ..           | ..      | 3,940       | 3,940   | 1,210      | ..                    | ..          |
| Sint Maarten (Dutch part) | 2018 | ..           | *702    | ..          | *702    | *16,624    | *730                  | ..          |
|                           | 2019 | ..           | *705    | ..          | *705    | *16,407    | *737                  | ..          |
|                           | 2020 | ..           | *670    | ..          | *670    | *15,366    | *686                  | ..          |
|                           | 2021 | ..           | *701    | ..          | *701    | *15,907    | *732                  | ..          |
| St. Kitts-Nevis           | 2018 | ..           | *251    | ..          | *251    | *5,264     | *16                   | ..          |
|                           | 2019 | ..           | *256    | ..          | *256    | *5,355     | *17                   | ..          |
|                           | 2020 | ..           | *239    | ..          | *239    | *5,018     | *16                   | ..          |
|                           | 2021 | ..           | *237    | ..          | *237    | *4,969     | *16                   | ..          |
| St. Lucia                 | 2018 | ..           | 521     | ..          | 521     | 2,931      | 103                   | ..          |
|                           | 2019 | ..           | 514     | ..          | 514     | 2,878      | *103                  | ..          |
|                           | 2020 | ..           | *499    | ..          | *499    | *2,786     | *87                   | ..          |
|                           | 2021 | ..           | *519    | ..          | *519    | *2,890     | *91                   | ..          |
| St. Vincent-Grenadines    | 2018 | ..           | 246     | ..          | 246     | 2,338      | 0                     | ..          |
|                           | 2019 | ..           | 225     | ..          | 225     | 2,149      | 0                     | ..          |
|                           | 2020 | ..           | 241     | ..          | 241     | 2,303      | 0                     | ..          |
|                           | 2021 | ..           | *240    | ..          | *240    | *2,296     | 0                     | ..          |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area           | Year        | Type of fuel     |                  |                  | Total            | Per capita    | Additional sources    |               |
|---------------------------|-------------|------------------|------------------|------------------|------------------|---------------|-----------------------|---------------|
|                           |             | Coal             | Oil              | Natural gas      |                  |               | International bunkers | Gas flaring   |
| Suriname                  | 2018        | ..               | 2,075            | 10               | 2,085            | 3,512         | *246                  | 2             |
|                           | 2019        | ..               | 2,617            | 12               | 2,628            | 4,378         | *243                  | 2             |
|                           | 2020        | ..               | 2,914            | 14               | 2,927            | 4,822         | *215                  | 2             |
|                           | 2021        | ..               | 2,635            | 13               | 2,648            | 4,320         | *241                  | 2             |
| Trinidad and Tobago       | 2018        | ..               | 3,735            | 15,159           | 18,894           | 12,557        | 1,895                 | 2,685         |
|                           | 2019        | ..               | 3,673            | 14,537           | 18,210           | 11,981        | 732                   | 2,876         |
|                           | 2020        | ..               | 3,374            | 12,157           | 15,530           | 10,230        | 506                   | 2,742         |
|                           | 2021        | ..               | 3,086            | 11,808           | 14,894           | 9,762         | 547                   | 2,323         |
| Turks and Caicos Islands  | 2018        | ..               | *369             | ..               | *369             | *8,891        | *77                   | ..            |
|                           | 2019        | ..               | *373             | ..               | *373             | *8,650        | *78                   | ..            |
|                           | 2020        | ..               | *366             | ..               | *366             | *8,275        | *77                   | ..            |
|                           | 2021        | ..               | *374             | ..               | *374             | *8,295        | *79                   | ..            |
| Uruguay                   | 2018        | 0                | 6,178            | 117              | 6,295            | 1,837         | 783                   | ..            |
|                           | 2019        | 0                | 5,991            | 171              | 6,162            | 1,797         | 801                   | ..            |
|                           | 2020        | 0                | 6,085            | 126              | 6,212            | 1,811         | 445                   | ..            |
|                           | 2021        | 0                | 7,428            | 145              | 7,573            | 2,210         | 417                   | ..            |
| Venezuela (Bolivar. Rep.) | 2018        | 411              | 52,217           | 42,803           | 95,432           | 3,200         | 1,538                 | 22,386        |
|                           | 2019        | 298              | 51,974           | 35,384           | 87,655           | 3,026         | 936                   | 27,982        |
|                           | 2020        | 208              | 38,255           | 26,393           | 64,857           | 2,276         | 433                   | 26,718        |
|                           | 2021        | 209              | 33,152           | 29,354           | 62,715           | 2,224         | 635                   | 16,133        |
| <b>Northern America</b>   | <b>2018</b> | <b>1,359,827</b> | <b>2,296,347</b> | <b>1,840,701</b> | <b>5,496,875</b> | <b>14,885</b> | <b>155,593</b>        | <b>28,982</b> |
|                           | <b>2019</b> | <b>1,165,129</b> | <b>2,254,451</b> | <b>1,957,626</b> | <b>5,377,206</b> | <b>14,456</b> | <b>164,419</b>        | <b>32,641</b> |
|                           | <b>2020</b> | <b>940,412</b>   | <b>1,961,469</b> | <b>1,923,037</b> | <b>4,824,919</b> | <b>12,902</b> | <b>103,626</b>        | <b>26,007</b> |
|                           | <b>2021</b> | <b>1,071,681</b> | <b>2,140,861</b> | <b>1,927,138</b> | <b>5,139,680</b> | <b>13,696</b> | <b>122,557</b>        | <b>19,131</b> |
| Bermuda                   | 2018        | 0                | 708              | ..               | 708              | 11,133        | *83                   | ..            |
|                           | 2019        | 0                | 604              | ..               | 604              | 9,460         | *78                   | ..            |
|                           | 2020        | 0                | 443              | ..               | 444              | 6,927         | *66                   | ..            |
|                           | 2021        | 0                | 526              | ..               | 526              | 8,190         | *73                   | ..            |
| Canada                    | 2018        | 58,618           | 253,489          | 267,594          | 579,701          | 15,653        | 16,169                | 3,022         |
|                           | 2019        | 49,973           | 258,015          | 270,086          | 578,074          | 15,406        | 15,747                | 2,882         |
|                           | 2020        | 39,804           | 231,536          | 256,675          | 528,015          | 13,936        | 7,372                 | 2,854         |
|                           | 2021        | 41,183           | 233,791          | 266,717          | 541,691          | 14,197        | 7,164                 | 3,078         |
| Greenland                 | 2018        | ..               | 567              | ..               | 567              | 10,138        | 68                    | ..            |
|                           | 2019        | ..               | 583              | ..               | 583              | 10,426        | 64                    | ..            |
|                           | 2020        | ..               | 559              | ..               | 559              | 9,969         | 64                    | ..            |
|                           | 2021        | ..               | 569              | ..               | 569              | 10,113        | 39                    | ..            |
| St. Pierre-Miquelon       | 2018        | ..               | *62              | ..               | *62              | *10,438       | *16                   | ..            |
|                           | 2019        | ..               | *67              | ..               | *67              | *11,382       | *17                   | ..            |
|                           | 2020        | ..               | *64              | ..               | *64              | *10,781       | *10                   | ..            |
|                           | 2021        | ..               | *57              | ..               | *57              | *9,694        | *5                    | ..            |
| United States             | 2018        | 1,301,209        | 2,041,522        | 1,573,106        | 4,915,837        | 14,800        | 139,257               | 25,960        |
|                           | 2019        | 1,115,155        | 1,995,182        | 1,687,540        | 4,797,877        | 14,351        | 148,513               | 29,760        |
|                           | 2020        | 900,609          | 1,728,867        | 1,666,362        | 4,295,838        | 12,787        | 96,114                | 23,153        |
|                           | 2021        | 1,030,498        | 1,905,919        | 1,660,421        | 4,596,838        | 13,641        | 115,276               | 16,053        |
| <b>Oceania</b>            | <b>2018</b> | <b>196,621</b>   | <b>155,702</b>   | <b>80,977</b>    | <b>433,300</b>   | <b>10,186</b> | <b>21,673</b>         | <b>7,528</b>  |
|                           | <b>2019</b> | <b>200,287</b>   | <b>156,490</b>   | <b>85,128</b>    | <b>441,905</b>   | <b>10,211</b> | <b>23,193</b>         | <b>8,861</b>  |
|                           | <b>2020</b> | <b>183,376</b>   | <b>154,475</b>   | <b>93,363</b>    | <b>431,214</b>   | <b>9,816</b>  | <b>16,390</b>         | <b>6,624</b>  |
|                           | <b>2021</b> | <b>173,633</b>   | <b>150,876</b>   | <b>90,733</b>    | <b>415,242</b>   | <b>9,333</b>  | <b>7,015</b>          | <b>5,360</b>  |
| American Samoa            | 2018        | ..               | *407             | ..               | *407             | *8,414        | *79                   | ..            |
|                           | 2019        | ..               | *407             | ..               | *407             | *8,610        | *79                   | ..            |
|                           | 2020        | ..               | *392             | ..               | *392             | *8,483        | *73                   | ..            |
|                           | 2021        | ..               | *392             | ..               | *392             | *8,701        | *73                   | ..            |

Table 4

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area             | Year | Type of fuel |         |             | Total   | Per capita | Additional sources    |             |
|-----------------------------|------|--------------|---------|-------------|---------|------------|-----------------------|-------------|
|                             |      | Coal         | Oil     | Natural gas |         |            | International bunkers | Gas flaring |
| Australia                   | 2018 | 189,488      | 122,672 | 73,445      | 385,606 | 15,437     | 15,824                | 7,158       |
|                             | 2019 | 191,764      | 122,726 | 77,262      | 391,752 | 15,449     | 17,337                | 8,653       |
|                             | 2020 | 174,774      | 124,083 | 84,600      | 383,458 | 14,938     | 13,593                | 6,463       |
|                             | 2021 | 165,678      | 118,270 | 82,865      | 366,813 | 14,151     | 5,010                 | 5,177       |
| Cook Islands                | 2018 | ..           | *81     | ..          | *81     | *4,674     | *31                   | ..          |
|                             | 2019 | ..           | *82     | ..          | *82     | *4,765     | *30                   | ..          |
|                             | 2020 | ..           | *69     | ..          | *69     | *4,058     | *8                    | ..          |
|                             | 2021 | ..           | *75     | ..          | *75     | *4,424     | *6                    | ..          |
| Fiji                        | 2018 | 0            | *1,381  | ..          | *1,381  | *1,503     | *303                  | ..          |
|                             | 2019 | ..           | *1,386  | ..          | *1,386  | *1,509     | *287                  | ..          |
|                             | 2020 | ..           | *1,022  | ..          | *1,022  | *1,110     | *105                  | ..          |
|                             | 2021 | ..           | *1,114  | ..          | *1,114  | *1,205     | *175                  | ..          |
| French Polynesia            | 2018 | ..           | 900     | ..          | 900     | 3,023      | ..                    | ..          |
|                             | 2019 | ..           | 911     | ..          | 911     | 3,038      | ..                    | ..          |
|                             | 2020 | ..           | 851     | ..          | 851     | 2,818      | ..                    | ..          |
|                             | 2021 | ..           | 894     | ..          | 894     | 2,940      | ..                    | ..          |
| Kiribati                    | 2018 | ..           | *73     | ..          | *73     | *596       | *2                    | ..          |
|                             | 2019 | ..           | *73     | ..          | *73     | *589       | *2                    | ..          |
|                             | 2020 | ..           | *72     | ..          | *72     | *569       | *2                    | ..          |
|                             | 2021 | ..           | *72     | ..          | *72     | *559       | *2                    | ..          |
| Marshall Islands            | 2018 | ..           | *152    | ..          | *152    | *3,302     | *7                    | ..          |
|                             | 2019 | ..           | *152    | ..          | *152    | *3,401     | *7                    | ..          |
|                             | 2020 | ..           | *150    | ..          | *150    | *3,461     | *6                    | ..          |
|                             | 2021 | ..           | *150    | ..          | *150    | *3,559     | *6                    | ..          |
| Micronesia (Fed. States of) | 2018 | ..           | *147    | ..          | *147    | *1,326     | *31                   | ..          |
|                             | 2019 | ..           | *147    | ..          | *147    | *1,324     | *32                   | ..          |
|                             | 2020 | ..           | *146    | ..          | *146    | *1,303     | *30                   | ..          |
|                             | 2021 | ..           | *144    | ..          | *144    | *1,276     | *30                   | ..          |
| Nauru                       | 2018 | ..           | *55     | ..          | *55     | *4,634     | *24                   | ..          |
|                             | 2019 | ..           | *54     | ..          | *54     | *4,471     | *24                   | ..          |
|                             | 2020 | ..           | *55     | ..          | *55     | *4,449     | *22                   | ..          |
|                             | 2021 | ..           | *58     | ..          | *58     | *4,617     | *23                   | ..          |
| New Caledonia               | 2018 | 2,294        | 2,878   | ..          | 5,172   | 18,156     | 122                   | ..          |
|                             | 2019 | 2,337        | 2,658   | ..          | 4,995   | 17,503     | 114                   | ..          |
|                             | 2020 | 2,115        | 2,419   | ..          | 4,535   | 15,833     | 65                    | ..          |
|                             | 2021 | 1,728        | 2,261   | ..          | 3,989   | 13,861     | 73                    | ..          |
| New Zealand                 | 2018 | 4,838        | 18,540  | 6,648       | 30,026  | 6,206      | 4,812                 | *278        |
|                             | 2019 | 6,186        | 19,153  | 6,835       | 32,174  | 6,488      | 4,859                 | 141         |
|                             | 2020 | 6,487        | 17,747  | 6,780       | 31,014  | 6,128      | 2,120                 | 52          |
|                             | 2021 | 6,227        | 19,679  | 5,884       | 31,790  | 6,197      | 1,250                 | 53          |
| Niue                        | 2018 | ..           | *6      | ..          | *6      | *3,167     | 2                     | ..          |
|                             | 2019 | ..           | *6      | ..          | *6      | *3,365     | 2                     | ..          |
|                             | 2020 | ..           | *6      | ..          | *6      | *3,306     | *2                    | ..          |
|                             | 2021 | ..           | *7      | ..          | *7      | *3,367     | *2                    | ..          |
| Northern Mariana Islands    | 2018 | ..           | *558    | ..          | *558    | *11,088    | *73                   | ..          |
|                             | 2019 | ..           | *561    | ..          | *561    | *11,251    | *73                   | ..          |
|                             | 2020 | ..           | *399    | ..          | *399    | *8,051     | *41                   | ..          |
|                             | 2021 | ..           | *434    | ..          | *434    | *8,777     | *51                   | ..          |
| Palau                       | 2018 | ..           | *219    | ..          | *219    | *12,253    | *20                   | ..          |
|                             | 2019 | ..           | *224    | ..          | *224    | *12,529    | *22                   | ..          |
|                             | 2020 | ..           | *215    | ..          | *215    | *11,986    | *19                   | ..          |
|                             | 2021 | ..           | *215    | ..          | *215    | *11,952    | *19                   | ..          |

CO<sub>2</sub> emissions from fossil fuel combustion

Thousand metric tons and kilograms per capita

| Country or area       | Year | Type of fuel |        |             | Total  | Per capita | Additional sources    |             |
|-----------------------|------|--------------|--------|-------------|--------|------------|-----------------------|-------------|
|                       |      | Coal         | Oil    | Natural gas |        |            | International bunkers | Gas flaring |
| Papua New Guinea      | 2018 | ..           | 6,734  | 883         | 7,617  | 816        | 209                   | 93          |
|                       | 2019 | ..           | 7,000  | 1,031       | 8,031  | 842        | *199                  | 67          |
|                       | 2020 | ..           | 5,862  | 1,982       | 7,844  | 805        | *208                  | 108         |
|                       | 2021 | ..           | *6,111 | *1,984      | *8,096 | *814       | *202                  | 130         |
| Samoa                 | 2018 | ..           | 245    | ..          | 245    | 1,167      | *38                   | ..          |
|                       | 2019 | ..           | 275    | ..          | 275    | 1,299      | *38                   | ..          |
|                       | 2020 | ..           | *246   | ..          | *246   | *1,144     | *16                   | ..          |
|                       | 2021 | ..           | *245   | ..          | *245   | *1,120     | *16                   | ..          |
| Solomon Islands       | 2018 | ..           | *303   | ..          | *303   | *460       | *30                   | ..          |
|                       | 2019 | ..           | *307   | ..          | *307   | *455       | *30                   | ..          |
|                       | 2020 | ..           | *302   | ..          | *302   | *437       | *25                   | ..          |
|                       | 2021 | ..           | *299   | ..          | *299   | *423       | *24                   | ..          |
| Tonga                 | 2018 | ..           | 136    | ..          | 136    | 1,289      | *13                   | ..          |
|                       | 2019 | ..           | 161    | ..          | 161    | 1,533      | *2                    | ..          |
|                       | 2020 | ..           | 190    | ..          | 190    | 1,806      | 1                     | ..          |
|                       | 2021 | ..           | 192    | ..          | 192    | 1,810      | *1                    | ..          |
| Tuvalu                | 2018 | ..           | *10    | ..          | *10    | *909       | *1                    | ..          |
|                       | 2019 | ..           | *10    | ..          | *10    | *903       | *1                    | ..          |
|                       | 2020 | ..           | *9     | ..          | *9     | *854       | *1                    | ..          |
|                       | 2021 | ..           | *10    | ..          | *10    | *859       | *1                    | ..          |
| Vanuatu               | 2018 | ..           | 181    | ..          | 181    | 609        | *50                   | ..          |
|                       | 2019 | ..           | 169    | ..          | 169    | 557        | *52                   | ..          |
|                       | 2020 | ..           | 210    | ..          | 210    | 675        | *49                   | ..          |
|                       | 2021 | ..           | 224    | ..          | 224    | 702        | *51                   | ..          |
| Wallis and Futuna Is. | 2018 | ..           | 26     | ..          | 26     | 2,189      | 4                     | ..          |
|                       | 2019 | ..           | 27     | ..          | 27     | 2,282      | 4                     | ..          |
|                       | 2020 | ..           | 28     | ..          | 28     | 2,437      | 3                     | ..          |
|                       | 2021 | ..           | 29     | ..          | 29     | 2,493      | 2                     | ..          |