

Table 2. Estimated annual change in C stock (Tg C year⁻¹) by biomes by country or region for the time periods of 1990 to 1999 and 2000 to 2007. Estimates include C stock changes on “forest land remaining forest land” and “new forest land” (afforested land). The uncertainty calculation refers to the supporting online material. ND, data not available; [1], litter is included in soils.

| Biome and country/region | 1990–1999 | | | | | | | | 2000–2007 | | | | | | | | | |
|--------------------------|----------------------------|------|--------|------|------------------------|------|--------------------|-----------------|---|---------|------|--------|------|------------------------|-----|--------------------|-----------------|---|
| | Dead | | | | Harvested wood product | | Total stock change | Uncertainty (±) | Stock change per area (Mg C ha ⁻¹ year ⁻¹) | Dead | | | | Harvested wood product | | Total stock change | Uncertainty (±) | Stock change per area (Mg C ha ⁻¹ year ⁻¹) |
| | Biomass | wood | Litter | Soil | | | | | | Biomass | wood | Litter | Soil | | | | | |
| | (Tg C year ⁻¹) | | | | | | | | (Tg C year ⁻¹) | | | | | | | | | |
| | <i>Boreal*</i> | | | | | | | | | | | | | | | | | |
| Asian | | | | | | | | | | | | | | | | | | |
| Russia | 61 | 66 | 63 | 45 | 19 | 255 | 64 | 0.39 | 69 | 97 | 43 | 42 | 13 | 264 | 66 | 0.39 | | |
| European | | | | | | | | | | | | | | | | | | |
| Russia | 37 | 10 | 22 | 36 | 41 | 146 | 37 | 0.93 | 84 | 19 | 35 | 35 | 26 | 199 | 50 | 1.21 | | |
| Canada | 6 | -24 | 14 | 6 | 23 | 26 | 7 | 0.11 | -53 | 16 | 19 | 7 | 21 | 10 | 3 | 0.04 | | |
| European boreal† | 13 | 0 | 3 | 38 | 11 | 65 | 16 | 1.12 | 21 | 0 | 4 | -10 | 13 | 27 | 7 | 0.45 | | |
| Subtotal | 117 | 53 | 103 | 125 | 94 | 493 | 76 | 0.45 | 120 | 132 | 101 | 74 | 73 | 499 | 83 | 0.44 | | |
| | <i>Temperate*</i> | | | | | | | | | | | | | | | | | |
| United States‡ | 118 | 6 | 13 | 9 | 33 | 179 | 34 | 0.72 | 147 | 9 | 18 | 37 | 28 | 239 | 45 | 0.94 | | |
| Europe | 117 | 2 | 8 | 81 | 24 | 232 | 58 | 1.71 | 137 | 2 | 9 | 65 | 27 | 239 | 60 | 1.68 | | |
| China | 60 | 22 | 15 | 31 | 7 | 135 | 34 | 0.96 | 115 | 24 | 8 | 28 | 7 | 182 | 45 | 1.22 | | |
| Japan | 24 | 9 | ND | 19 | 2 | 54 | 14 | 2.28 | 23 | 5 | ND | 8 | 2 | 37 | 9 | 1.59 | | |
| South Korea | 6 | 2 | ND | 5 | 0 | 14 | 4 | 2.14 | 12 | 2 | ND | 4 | 0 | 18 | 5 | 2.86 | | |
| Australia | 17 | ND | 10 | 15 | 8 | 50 | 13 | 0.33 | 17 | ND | 10 | 14 | 10 | 51 | 13 | 0.34 | | |
| New Zealand | 1 | 0 | 0 | 1 | 5 | 7 | 2 | 0.91 | 1 | 0 | 0 | 1 | 6 | 9 | 2 | 1.05 | | |
| Other countries | 1 | ND | ND | ND | 0 | 1 | 1 | 0.07 | 2 | 0 | 0 | 0 | 0 | 3 | 2 | 0.18 | | |
| Subtotal | 345 | 42 | 46 | 160 | 80 | 673 | 78 | 0.91 | 454 | 42 | 45 | 156 | 80 | 777 | 89 | 1.03 | | |
| | <i>Tropical intact</i> | | | | | | | | | | | | | | | | | |
| Asia | 125 | 13 | 2 | ND | 5 | 144 | 38 | 0.88 | 100 | 10 | 2 | ND | 6 | 117 | 30 | 0.90 | | |
| Africa | 469 | 48 | 7 | ND | 9 | 532 | 302 | 0.94 | 425 | 43 | 6 | ND | 8 | 482 | 274 | 0.94 | | |
| Americas | 573 | 48 | 9 | ND | 22 | 652 | 166 | 0.77 | 345 | 45 | 5 | ND | 23 | 418 | 386 | 0.53 | | |
| Subtotal | 1167 | 109 | 17 | ND | 35 | 1328 | 347 | 0.84 | 870 | 98 | 13 | ND | 36 | 1017 | 474 | 0.71 | | |
| Global subtotal§ | 1630 | 204 | 166 | 286 | 209 | 2494 | 363 | 0.73 | 1444 | 273 | 158 | 230 | 189 | 2294 | 489 | 0.69 | | |
| | <i>Tropical regrowth</i> | | | | | | | | | | | | | | | | | |
| Asia | 498 | ND | [1] | 27 | ND | 526 | 263 | 3.52 | 564 | ND | [1] | 30 | ND | 593 | 297 | 3.53 | | |
| Africa | 169 | ND | [1] | 73 | ND | 242 | 121 | 1.48 | 188 | ND | [1] | 83 | ND | 271 | 135 | 1.47 | | |
| Americas | 694 | ND | [1] | 113 | ND | 807 | 403 | 4.67 | 745 | ND | [1] | 113 | ND | 858 | 429 | 4.56 | | |
| Subtotal | 1361 | ND | [1] | 213 | ND | 1574 | 496 | 3.24 | 1497 | ND | [1] | 226 | ND | 1723 | 539 | 3.19 | | |
| | <i>All tropics </i> | | | | | | | | | | | | | | | | | |
| Asia | 623 | 13 | 2 | 27 | 5 | 670 | 266 | 2.14 | 664 | 10 | 2 | 30 | 6 | 711 | 298 | 2.38 | | |
| Africa | 638 | 48 | 7 | 73 | 9 | 774 | 325 | 1.06 | 613 | 43 | 6 | 83 | 8 | 753 | 305 | 1.08 | | |
| Americas | 1267 | 48 | 9 | 113 | 22 | 1458 | 436 | 1.42 | 1090 | 45 | 5 | 113 | 23 | 1276 | 577 | 1.30 | | |
| Subtotal | 2529 | 109 | 17 | 213 | 35 | 2903 | 605 | 1.40 | 2367 | 98 | 13 | 226 | 36 | 2740 | 718 | 1.38 | | |
| Global total¶ | 2991 | 204 | 166 | 498 | 209 | 4068 | 615 | 1.04 | 2941 | 273 | 158 | 456 | 189 | 4017 | 728 | 1.04 | | |

*Carbon outcomes of forest land-use changes (deforestation, reforestation, afforestation, and management practices) are included in the estimates in boreal and temperate forests. †Estimates for the area that includes Norway, Sweden, and Finland. ‡Estimates for the continental U.S. and a small area in southeast Alaska. §Estimates for global established forests. ||Estimates for all tropical forests including tropical intact and regrowth forests. ¶Areas excluded from this table include interior Alaska (51 Mha in 2007), northern Canada (118 Mha in 2007), and “other wooded land” reported to the Food and Agriculture Organization.