Table A.I.1: Tier 1 Default Emission Factors and Sources for All Emission Models and Regions, in Metric Tons of Carbon per Hectare [MtC/ha] *(with MtC per acre in ital., parentheses)*

	Caribbean (Jamaica, Lesser Antilles)	Chesapeake (Virginia, Maryland)	Lowcountry (South Carolina, Georgia)	Mid-Atlantic (Pennsylvania, New York, New Jersey, Delaware)	New England (Massachusetts, Connecticut, Rhode Island, New Hampshire)
Above-Ground Biomass Emission Factor in Natural Forest	**127.5 MtC/ha** *(51.6 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.7, p. 4.22, Caribbean classified as "tropical dry forest."	**84.5 MtC/ha** *(34.2 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.7, p. 4.23, Chesapeake classified as "subtropical humid forests."	**84.5 MtC/ha** *(34.2 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.7, p. 4.23, Lowcountry classified as "subtropical humid forests."	**60 MtC/ha** *(24.3 MtC/acre)* Source: *IPCC 2006, Vol. 4,* Ch. 4, Table 4.7, p. 4.54, Mid-Atlantic as "temperate continental forest." Due to wide range of values in *IPCC* for temperate forest, we chose the figure (60 MtC/ha) that hewed closest to value used by the USDA Forest Service, Forest Inventory and Analysis (FIA), updated in Woodall et al. "Data Sources for National Forest System Carbon Stocks," (2013) Table A-2, p. A-16 (Region 9, All), or 57.5 MtC/ha.	**60 MtC/ha** *(24.3 MtC/acre)* Source: *IPCC 2006, Vol. 4,* Ch. 4, Table 4.7, p. 4.54, New England as "temperate continental forest." Due to wide range of values in *IPCC* for temperate forest, we chose the figure (60 MtC/ha) that hewed closest to value used by the USDA Forest Service, FIA, updated in Woodall et al. "Data Sources for National Forest System Carbon Stocks," Table A-2, p. A-16 (Region 9, All), or 57.5 MtC/ha.
Below-Ground Biomass Emission Factor in Natural Forest	**48.3 MtC/ha** *(19.6 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.4, p. 4.18, Caribbean as "tropical dry" forest, calculated from ratio of 0.379 below-ground to above-ground forest biomass.	**14.8 MtC/ha** *(6.0 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.4, p. 4.19, Chesapeake as "sub-tropical humid" forest, calculated from ratio of 0.175 below-ground to above-ground forest biomass.	**14.8 MtC/ha** *(6.0 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.4, p. 4.19, Lowcountry as "subtropical humid" forest, calculated from ratio of 0.175 below-ground to above-ground forest biomass.	**28.8 MtC/ha** *(11.7 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.4, p. 4.19-20, Mid-Atlantic as "temperate continental" forest, calculated from ratio of 0.481 below-ground to above-ground forest biomass.	**28.8 MtC/ha** *(11.7 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 4, Table 4.4, p. 4.19-20, New England as "temperate continental" forest, calculated from ratio of 0.481 below-ground to above-ground forest biomass.
Dead Wood Emission Factor in Natural Forest	**8.3 MtC/ha** *(3.4 MtC/acre)* Source: USDA Forest Service, Forest Inventory and Analysis (FIA), updated in Woodall et al., "Data Sources for National Forest System Carbon Stocks," Table A-2, p. A-16 (Region 8, Dead Wood, All). Neither of the *IPCC* reports provide default values for dead wood emission factors in any kind of forest. The FIA/Woodall default values from the Southeast region are used instead, as the closest approximation to the Caribbean.	**8.3 MtC/ha** *(3.4 MtC/acre)* Source: USDA Forest Service, FIA, updated in Woodall et al. "Data Sources for National Forest System Carbon Stocks," Table A-2, p. A-16 (Region 8, Dead Wood, All). Neither of the *IPCC* reports provide default values for dead wood emissions factor in any kind of forest. The FIA/Woodall values are used instead.	**8.3 MtC/ha** *(3.4 MtC/acre)* Source: USDA Forest Service, FIA, updated in Woodall et al. "Data Sources for National Forest System Carbon Stocks," Table A-2, p. A-16 (Region 8, Dead Wood, All). Neither of the *IPCC* reports provide default values for dead wood emissions factor in any kind of forest. The FIA/Woodall values are used instead.	**8.9 MtC/ha** *(3.6 MtC/acre)* Source: USDA Forest Service, FIA, updated in Woodall et al. "Data Sources for National Forest System Carbon Stocks," Table A-2, p. A-16 (Region 9, Dead Wood, All). Neither of the *IPCC* reports provide default values for dead wood emissions factor in any kind of forest. The FIA/Woodall values are used instead.	**8.9 MtC/ha** *(3.6 MtC/acre)* Source: USDA Forest Service, FIA, updated in Woodall et al. "Data Sources for National Forest System Carbon Stocks," Table A-2, p. A-16 (Region 9, Dead Wood, All). Neither of the *IPCC* reports provide default values for dead wood emissions factor in any kind of forest. The FIA/Woodall values are used instead.
Litter Biomass Emission Factor in Natural Forest	**2.4 MtC/ha** *(1 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.2, p. 2.27, Caribbean classified as "tropical dry forest," all vegetation type mean.	**6.2 MtC/ha** *(2.5 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.2, p. 2.27, Chesapeake classified as "subtropical humid forest," average of broadleaf deciduous and needleleaf evergreen means.	**6.2 MtC/ha** *(2.5 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.2, p. 2.27, Lowcountry classified as "subtropical humid forest," average of broadleaf deciduous and needleleaf evergreen mean.	**23.9 MtC/ha** *(9.7 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.2, p. 2.27, Mid-Atlantic as "temperate continental forest," broadleaf deciduous mean. Due to wide range of values in *IPCC*, we chose value (23.9) that hewed closest to USDA FIA, updated in Woodall et al. (2013), Table A-2, p. A-16 (Region 9, All), or 18.6 MtC/ha.	**23.9 MtC/ha** *(9.7 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.2, p. 2.27, New England as "temperate continental forest," broadleaf deciduous mean. Due to wide range of values in *IPCC*, we chose value (23.9) that hewed closest to USDA FIA, updated in Woodall et al. (2013), Table A-2, p. A-16 (Region 9, All), or 18.6 MtC/ha.
Soil Organic Carbon Stock Emission Factor, *Applied Each Year*	**0.9 MtC/ha/year** *(0.4 MtC/acre/year)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.3, p. 2.35. Caribbean classified as "tropical dry" with high-activity clay soils (mollisols and inceptisols), giving a total figure of 21 MtC/ha. We assume 25% carbon loss over six-year period to arrive at 0.875 MtC/ha/year.	**2.3 MtC/ha/year** *(0.9 MtC/acre/year)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.3, p. 2.35, Chesapeake classified as "warm temperate moist," with low-activity clay soils (ultisols), giving 55 MtC/ha. We assume 25% carbon depletion over six years to arrive at 2.3 MtC/ha/year.	**2.7 MtC/ha/year** *(1.1 MtC/acre/year)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.3, p 2.35, Lowcountry classified as "warm temperate moist" with high-activity clay soils (alfisols) gives 64 MtC/ha. We assume 25% carbon loss over six years to arrive at 2.7 MtC/ha/year.	**3.3 MtC/ha/year** *(1.3 MtC/acre/year)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.3, p. 2.35, Mid-Atlantic as "cool temperate moist," with mix of 75% high-activity clay soils (inceptisols and alfisols) and 25% low-activity clay soils (ultisols), results in 79.75 MtC/ha. We assume 25% carbon loss over six years to arrive at 3.3 MtC/ha/year.	**5.3 MtC/ha/year** *(2.2 MtC/acre/year)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 2, Table 2.3, p. 2.35, New England as "cool temperate moist" with spodosols soils, giving 128 MtC/ha. We assume 25% of carbon loss over six years to arrive at 5.3 MtC/ha/year.
Cropland Drawdown Emission Factor for Land Converted to Cropland	**-4.7 MtC/ha** *(-1.9 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 5, Table 5.9, p. 5.41. Same value for all climate zones. Negative because this is amount of carbon sequestered in cropland when forest is converted to cropland.	**-4.7 MtC/ha** *(-1.9 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 5, Table 5.9, p. 5.41. Same value for all climate zones. Negative because this is amount of carbon sequestered in cropland when forest is converted to cropland.	**-4.7 MtC/ha** *(-1.9 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 5, Table 5.9, p. 5.41. Same value for all climate zones. Negative because this is amount of carbon sequestered in cropland when forest is converted to cropland.	**-4.7 MtC/ha** *(-1.9 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 5, Table 5.9, p. 5.41. Same value for all climate zones. Negative because this is amount of carbon sequestered in cropland when forest is converted to cropland.	**-4.7 MtC/ha** *(-1.9 MtC/acre)* Source: *IPCC 2019 Refinement, Vol. 4,* Ch. 5, Table 5.9, p. 5.41. Same value for all climate zones. Negative because this is amount of carbon sequestered in cropland when forest is converted to cropland.

	-8.7 MtC/ha *(-3.5 MtC/acre)*	-13.5 MtC/ha *(-5.5 MtC/acre)*	-13.5 MtC/ha *(-5.5 MtC/acre)*	-13.6 MtC/ha *(-5.5 MtC/acre)*	-13.6 MtC/ha *(-5.5 MtC/acre)*
Grassland Drawdown Emission Factor for Land Converted to Grassland (Above- and Below-Ground Biomass)	Source: *IPCC 2006, Vol. 4*, Ch. 6, Table 6.4, p. 6.27, Caribbean classified as "tropical—dry." Not updated in refinement. Negative because this is the amount of carbon sequestered in pasture/grassland when forest is converted to pastureland, or when cropfields are fallowed or abandoned and turned into grassland.	Source: *IPCC 2006, Vol. 4*, Ch. 6, Table 6.4, p. 6.27. Chesapeake classified as "warm temperate—wet" (no subtropical available). Not updated in refinement. Negative because this is the amount of carbon sequestered in pasture/grassland when forest is converted to pastureland, or when cropfields are fallowed or abandoned and turned into grassland.	Source: *IPCC 2006, Vol. 4*, Ch. 6, Table 6.4, p. 6.27. Lowcountry classified as "warm temperate—wet" (no subtropical available). Not updated in refinement. Negative because this is the amount of carbon sequestered in pasture/grassland when forest is converted to pastureland, or when cropfields are fallowed or abandoned and turned into grassland.	Source: *IPCC 2006, Vol. 4*, Ch. 6, Table 6.4, p. 6.27, Mid-Atlantic as "cold temperate—wet." Not updated in refinement. Negative because this is the amount of carbon sequestered in pasture/grassland when forest is converted to pastureland, or when cropfields are fallowed or abandoned and turned into grassland.	Source: *IPCC 2006, Vol. 4*, Ch. 6, Table 6.4, p. 6.27, New England as "cold temperate—wet." Not updated in refinement. Negative because this is the amount of carbon sequestered in pasture/grassland when forest is converted to pastureland, or when cropfields are fallowed or abandoned and turned into grassland.
Methane Emission Factor for Rice Fields Only, Converted to Carbon Equivalent, *Applied Each Year*	n/a	n/a	**0.07 MtC/ha/year** *(0.03 MtC/acre/year)* Source: *IPCC 2019 Refinement, Vol. 4*, Ch. 5, Table 5.11, p. 5.53. Uses North America values to get 0.65 kg CH4/ha/day, and 139 days cultivation per year, or 90.35 kg CH4/ha/year. Converted to metric tons of carbon, results in 0.07 MtC/ha/year.	n/a	n/a

Note: For full citations of the sources referenced in this table, see "Appendix I: Methods and Sources."