Appendix C

GPC Supplemental Guidance for Forests and Trees

TENTATIVE JAPANESE TRANSLATION of

Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC)

Supplemental Guidance for Forests and Trees

自治体の温室効果ガス排出量算定方法の国際的プロトコル （GPC）

森林及び樹木についての追加ガイダンス

の仮訳

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Default fire emission and combustion factors

火災の排出及び燃焼係数ディフォルト値

Table C1 Fire emission factors (EF) for methane (CH$_4$) and nitrous oxide (N$_2$O) (g/kg dry matter)

Category	EF$_{CH4}$	EF$_{N2O}$
Savanna and grassland	2.3	0.21
Agricultural residues	2.7	0.07
Tropical forest	6.8	0.20
Nontropical forest	4.7	0.26
Biofuel burning	6.1	0.06

Source: Adapted from IPCC (2019b, vol. 4, chap. 2, table 2.5). For use in Chapter 7, Step 9.

Table C2 Fire combustion factors (proportion of prefire fuel biomass consumed, Cf)

Vegetation type	Subcategory	Mean
Primary tropical forest (slash and burn)	Primary tropical forest	0.32
	Primary open tropical forest	0.45
	Primary tropical moist forest	0.50
	Primary tropical dry forest	No data
ALL PRIMARY TROPICAL FORESTS		**0.36**
Secondary tropical forest (slash and burn)	Young secondary tropical forest (3–5 yrs.)	0.46
	Intermediate secondary tropical forest (6–10 yrs.)	0.67
	Advanced secondary tropical forest (14–17 yrs.)	0.50
ALL SECONDARY TROPICAL FORESTS		**0.55**
ALL TERTIARY TROPICAL FORESTS		**0.59**

Table C2 Fire combustion factors (proportion of prefire fuel biomass consumed, Cf), continued

Vegetation type	Subcategory	Mean
Boreal forest	Wildfire (general)	0.40
	Crown fire	0.43
	Surface fire	0.15
	Post logging slash burn	0.33
	Land clearing fire	0.59
ALL BOREAL FORESTS		**0.34**
Eucalyptus forests	Wildfire	No data
	Prescribed fire (surface)	0.61
	Post logging slash burn	0.68
	Felled and burned (land-clearing fire)	0.49
ALL EUCALYPTUS FORESTS		**0.63**
Other temperate forests	Post logging slash burn	0.62
	Felled and burned (land-clearing fire)	0.51
ALL "OTHER" TEMPERATE FORESTS		**0.45**
Shrubland	Shrubland (general)	0.95
	Calluna heath	0.71
	Fynbos	0.61
ALL SHRUBLANDS		**0.72**
Savanna woodlands (early dry season burns)	Savanna woodland	0.22
	Savanna parkland	0.73
	Other savanna woodlands	0.37
ALL SAVANNA WOODLANDS (EARLY DRY SEASON BURNS)		**0.40**

Table C2 Fire combustion factors (proportion of prefire fuel biomass consumed, Cf), continued

Vegetation type	Subcategory	Mean
Savanna woodlands (mid/late dry season burns)	Savanna woodland	0.72
	Savanna parkland	0.82
	Tropical savanna	0.73
	Other savanna woodlands	0.68
ALL SAVANNA WOODLANDS (MID/LATE DRY SEASON BURNS)		**0.74**
Savanna grasslands/pastures (early dry season burns)	Tropical/subtropical grassland	0.74
	Grassland	No data
SAVANNA GRASSLANDS/PASTURES (EARLY DRY SEASON BURNS)		**0.74**
Savanna grasslands/pastures (mid/late dry season burns	Tropical/subtropical grassland	0.92
	Tropical pasture	0.35
	Savanna	0.86
ALL SAVANNA GRASSLANDS/PASTURES (MID/LATE DRY SEASON BURNS)		**0.77**
Other vegetation types	Peatland	0.50
	Tropical wetlands	0.70
Agricultural residues (postharvest field burning)	Wheat residues	0.90
	Maize residues	0.80
	Rice residues	0.80
	Sugarcane	0.80
	Other crops	0.85

Source: Adapted from IPCC (2019b, vol. 4, chap. 2, table 2.5). For use in Chapter 7, Step 9.