Table 1. GHG Emission per Energy Unit Produced at Representative Reservoirs in Different Latitudes

Nation	Reservoirs	Latitude	Age (years)	Total GHG Emission (Tg CO_2eq yr−1)[a]	Annual Energy Generation (GWh yr−1)[b]	Plant GHG Emission Factor (g CO_2eq kWh−1)[c]	Reference
Brazil	Balbina	01°55'S	18	4.7–44.0	1,095	4,277.3–40,203.8	*Kemenes et al.* [2007, 2011]
Brazil	Tucuruí	03°45'S	6	7.0–10.1	21,000	333.3–481.0	*Fearnside* [2002]
French Guiana	Petit Saut Reservoir	05°04'N	1–10	0.7–3.6	560	1,307.6–6,451.9	*Abril et al.* [2005]
Brazil	Samuel	08°45'S	4–5	1.5–2.6	946	1,599.7–2,734.2	*dos Santos et al.* [2006]
Laos	Nam Leuk	18°27'N	10	0.01–0.03	263	49.2–107.8	*Chanudet et al.* [2011]
Brazil	Itaipu	25°26'S	7–8	0–0.86	90,000	0–9.6	*dos Santos et al.* [2006]
China	Wudongde	26°19'N	0	0.2–0.3	39,460	6.2–8.4	Estimation[d]
China	Baihetan	26°26'N	0	0.3–0.4	60,240	4.6–6.3	Estimation[d]
China	Ertan	26–28°N	10	0.03–1.0	17,000	1.82–58.8	*Zheng et al.* [2011]
China	Xiluodu	28°15'N	0	0.1–0.2	51,720	3.3–4.5	Estimation[d]
China	Xiangjiaba	28°38'N	0	0.1–0.2	30,747	4.0–5.4	Estimation[d]
China	Xin'anjiang	29°28'N	54	0.7–1.0	1,861	397.7–539.7	Estimation[d]
China	Three Gorges	30°51'N	7	1.4–1.9	84,700	16.4–22.6	*Yang et al.* [2013b]
Canada	Eastmain-1	51–52°N	1–4	0.3–0.5	2,700	238.3–671.0	*Teodoru et al.* [2012]

[a]Tg CO_2eq yr^{-1} is teragrams of CO_2 equivalents per year.
[b]GWh yr^{-1} is gigawatt hours per year.
[c]g CO_2eq kWh^{-1} is grams of CO_2 equivalents per kilowatt-hour.
[d]Based on flux values in the Three Gorges Reservoir, we estimated the total annual GHG emission and plant GHG emission factor in the four giant world-class reservoirs in Jinshajiang River and Xin'anjiang Reservoir because of their similarity in location latitude, valley topography, and flooded vegetation.