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## APPENDIX

Table 7.1. Raw Excel Data of Amount of Building Electricity GHG Emission (kg CO<sub>2</sub>e) Generated per Semester in i3L from Different Learning Models.

OFFLINE	Total KWH		ONLINE	Total KWH		HYBRID	Total KWH
July 2019	1.06E+05		April 2020	4.96E+04		January 2022	7.43E+04
August 2019	1.05E+05		May 2020	4.40E+04		February 2022	7.13E+04
September 2019	1.32E+05		July 2021	5.05E+04		March 2022	9.41E+04
October 2019	1.24E+05		August 2021	4.68E+04		April 2022	9.32E+04
November 2019	1.36E+05					May 2022	8.74E+04
December 2019	1.02E+05					June 2022	9.36E+04
TOTAL	7.05E+05		TOTAL	1.91E+05		TOTAL	5.14E+05
AVERAGE	1.18E+05		AVERAGE	4.77E+04		AVERAGE	8.57E+04
GHG EMISSIONS	2.50E+04		GHG EMISSIONS	1.01E+04		GHG EMISSIONS	1.82E+04

Table 7.2. Raw Excel Data of Amount of GHG Emission (g CO<sub>2</sub>e per km) Generated per Semester in i3L from 100% Bus Mode of Transportation.

	District	Amount of Staff & Student	Distance to i3L (km)	Distance to i3L x Amount of Staff & Student (km)	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	5 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
Jakarta Pusat	Cempaka Putih	2	3	6	306.81	613.62	1227.24	6136.2	24544.8	147268.8
	Gambir	5	12.3	61.5	1257.921	6289.605	12579.21	62896.05	251584.2	1509505.2
	Johar Baru	3	3.9	11.7	398.853	1196.559	2393.118	11965.59	47862.36	287174.16
	Kemayoran	8	5.5	44	562.485	4499.88	8999.76	44998.8	179995.2	1079971.2
	Pasar Baru	1	9.6	9.6	981.792	981.792	1963.584	9817.92	39271.68	235630.08
Jakarta Utara	Sawah Besar	13	9.3	120.9	951.111	12364.443	24728.886	123644.43	494577.72	2967466.32
	Senen	3	5.1	15.3	521.577	1564.731	3129.462	15647.31	62589.24	375535.44
	Cilincing	3	15.9	47.7	1626.093	4878.279	9756.558	48782.79	195131.16	1170786.96
	Koja	3	9.8	29.4	1002.246	3006.738	6013.476	30067.38	120269.52	721617.12
	Kapuk Muara	1	21.1	21.1	2157.897	2157.897	4315.794	21578.97	86315.88	517895.28
	Kelapa Gading	19	5.9	112.1	603.393	11464.467	22928.934	114644.67	458578.68	2751472.08
	Pademangan	10	10.2	102	1043.154	10431.54	20863.08	104315.4	417261.6	2503569.6
	Pejagalan	1	20.6	20.6	2106.762	2106.762	4213.524	21067.62	84270.48	505622.88
	Penjaringan	22	17.2	378.4	1759.044	38689.668	77397.936	386899.68	1547958.72	9287752.32
	Pluit	2	20.7	41.4	2116.989	4233.978	8467.956	42339.78	169359.12	1016154.72
Jakarta Selatan	Sunter	3	9.7	29.1	992.019	2976.057	5952.114	29760.57	119042.28	714253.68
	Tanjung Priok	29	10.6	307.4	1084.062	31437.798	62875.596	314377.98	1257511.92	7545071.52
	Cilandak	3	20.7	62.1	2116.989	6350.967	12701.934	63509.67	254038.68	1524232.08
	Jagakarsa	1	23.3	23.3	2382.891	2382.891	4765.782	23828.91	95315.64	571893.84
	Kebayoran Baru	5	16.4	82	1677.228	8386.14	16772.28	83861.4	334445.6	2012673.6
	Lebak Bulus	1	25.9	25.9	2648.793	2648.793	5297.586	26487.93	105951.72	635710.32
	Pancoran	1	13.1	13.1	1339.737	1339.737	2679.474	13397.37	53589.48	321536.88
	Pasar Minggu	1	17.6	17.6	1799.952	1799.952	3599.904	17999.52	71998.08	431988.48
	Pesanggrahan	3	20.3	60.9	2076.081	6228.243	12456.486	62282.43	249129.72	1494778.32
	Setabudi	3	10	30	3068.1	3068.1	6136.2	30681	122274	736344
Jakarta Barat	Tebet	3	9.4	28.2	961.338	2884.014	5768.028	28840.14	115360.56	692163.36
	Cengkareng	7	28.5	199.5	2914.695	20402.865	40805.73	204028.65	816114.6	4896687.6
	Grogol Petamburan	18	23.5	423	2403.345	43260.42	86520.84	432602.1	1730408.4	10382450.4
	Kalideres	15	31.5	472.5	3221.505	48322.575	96645.15	483225.75	1932903	11597418
	Kebon Jeruk	8	16.6	132.8	1697.882	13581.456	27162.912	135814.56	543258.24	3259549.44
	Kembangan	7	19.4	135.8	1984.038	13888.266	27776.532	138882.66	556530.64	3333183.84
	Palmerah	2	16	32	1636.32	3272.64	6545.28	32726.4	130905.6	785433.6
	Taman Sari	9	11.9	107.1	1217.013	10953.117	21906.234	109531.17	438124.68	2628748.08
	Tambora	4	13.2	52.8	1349.964	5399.856	10799.712	53998.56	215994.24	1295965.44
	Tanjung Duren	1	15.7	15.7	1605.639	1605.639	3211.278	16056.39	64225.56	385353.36
Jakarta Timur	Cakung	10	11.3	113	1155.851	11556.51	23113.02	115565.1	462260.4	2773562.4
	Cipayung	1	17.5	17.5	1789.725	1789.725	3579.45	17897.25	71589	429534
	Ciracas	1	16.9	16.9	1728.363	1728.363	3456.726	17283.63	69134.52	414807.12
	Duren Sawit	7	12	84	1227.24	8590.68	17181.36	85906.8	343627.2	2061763.2
	Jatinegara	7	8.2	57.4	838.614	5870.298	11740.596	58702.98	234811.92	1408871.52
	Kampung Melayu	1	6.7	6.7	685.209	685.209	1370.418	6852.09	27408.36	164450.16
	Kayu Manis	1	4.8	4.8	490.896	490.896	981.792	4908.96	19635.84	117815.04
	Matraman	3	4	12	409.08	1227.24	2454.48	12272.4	49089.6	294537.6
	Pulo Gadung	10	2.9	29	296.583	2965.83	5931.66	29658.3	118633.2	711799.2
	Rawamangun	2	3.1	6.2	317.037	634.074	1268.148	6340.74	25362.96	152177.76
Bogor	Cipenjo	1	39.4	39.4	4029.438	4029.438	8058.876	40294.38	161177.52	967065.12
	Gunung Putri	12	36.8	441.6	3763.536	45162.432	90324.864	451624.32	1806497.28	10838983.68
	Beji	1	35.8	35.8	3661.266	3661.266	7322.532	36612.66	146450.64	878703.84
	Cimanggis	4	36.2	144.8	14808.696	29617.392	59234.784	296173.92	1184886.96	7196779.36
	Cinere	1	33.8	33.8	3456.726	3456.726	6913.452	34567.26	138269.04	829614.24
Depok	Harjamukti	1	25	25	2556.75	2556.75	5113.5	25567.5	102270	613620
	Sukmajaya	1	32.5	32.5	3323.775	3323.775	6647.55	33237.75	132951	797706
	Tapos	2	33.2	66.4	3395.364	6790.728	13581.456	67907.28	271629.12	1629774.72
	Benda	1	37.5	37.5	3835.125	3835.125	7670.25	38351.25	153405	920430
	Ciputat Timur	2	33	66	3374.91	6749.82	13499.64	67498.2	269992.8	1619956.8
Tangerang	Karang Mulya	1	36.2	36.2	3702.174	3702.174	7404.348	37021.74	148086.96	888521.76
	Karang Tengah	2	36.6	73.2	3743.082	7486.164	14972.328	74861.64	299446.56	1796679.36
	Kosambi	1	31.7	31.7	3241.959	3241.959	6483.918	32419.59	129678.36	778070.16
	Pamulang	2	38.7	77.4	3957.849	7915.698	15831.396	79156.98	316627.92	1899767.52
	Aren Jaya	1	31.6	31.6	3231.732	3231.732	6463.464	32317.32	129269.28	775615.68
	Babelan	1	20.7	20.7	2116.989	2116.989	4233.978	21169.89	84679.56	508077.36
	Bekasi Selatan	1	20.6	20.6	2106.762	2106.762	4213.524	21067.62	84270.48	505622.88
	Duren Jaya	1	30.9	30.9	3160.143	3160.143	6320.286	31601.43	126405.72	758434.32
	Jatiasih	2	27.4	54.8	2802.198	5604.396	11208.792	56043.96	224175.84	1345055.04
	Jati Sampurna	3	26.7	80.1	2730.609	8191.827	16383.654	81918.27	327673.08	1966038.48
Bekasi	Margahayu	1	26.5	26.5	2710.155	2710.155	5420.31	27101.55	108406.2	650437.2
	Medan Satria	10	14.7	147	1503.369	15033.69	30067.38	150336.9	601347.6	3608085.6
	Mustika Jaya	2	32	64	3272.64	6545.28	13090.56	65452.8	261811.2	1570867.2
	Pervira	1	31.2	31.2	3190.824	3190.824	6381.648	31908.24	127632.96	765797.76
	Pondok Gede	4	18.1	72.4	1851.087	7404.348	14808.696	74043.48	296173.92	1777043.52
	Pondok Melati	1	23.2	23.2	2372.664	2372.664	4745.328	23726.64	94906.56	569439.36
	Rawalumbu	1	26.5	26.5	2710.155	2710.155	5420.31	27101.55	108406.2	650437.2
	Tambun	1	35.4	35.4	3620.358	3620.358	7240.716	36203.58	144814.32	868885.92
	Tambun Selatan	1	32	32	3272.64	3272.64	6545.28	32726.4	130905.6	785433.6
	Tambun Utara	1	34.1	34.1	3487.072	3487.072	6974.144	34870.72	139496.28	836977.68
TOTAL	100% Bus	329	1552.4	5539.5	158763.95	566.524.67	1,133,049.33	5,665,246.65	22,660,906.60	135,965,919.60
	50% Bus	164.5	776.2	2769.75	79,381.97	283,262.33	566,524.67	2,832,623.33	11,330,493.30	67,982,959.80

Table 7.3. Raw Excel Data of Amount of GHG Emission (g CO<sub>2</sub>e per km) Generated per Semester in i3L from 100% Car Mode of Transportation.

	District	Amount of Staff & Student	Distance to i3L (km)	Distance to i3L x Amount of Staff & Student (km)	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	5 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
Jakarta Pusat	Cempaka Putih	2	3	6	444.00	888.00	1,776.00	8,880.00	35,520.00	213,120.00
	Gambir	5	12.3	61.5	1,820.40	9,102.00	18,204.00	91,020.00	364,080.00	2,184,480.00
	Johar Baru	3	3.9	11.7	577.20	1,731.60	3,463.20	17,316.00	69,264.00	415,584.00
	Kemayoran	8	5.5	44	814.00	6,512.00	13,024.00	65,120.00	260,480.00	1,562,880.00
	Pasar Baru	1	9.6	9.6	1,420.80	1,420.80	2,841.60	14,208.00	56,832.00	340,992.00
	Sawah Besar	13	9.3	120.9	1,376.40	17,893.20	35,786.40	178,932.00	715,728.00	4,294,368.00
	Senen	3	5.1	15.3	754.80	2,264.40	4,528.80	22,644.00	90,576.00	543,456.00
Jakarta Utara	Cilincing	3	15.9	47.7	2,353.20	7,059.60	14,119.20	70,596.00	282,384.00	1,694,304.00
	Koja	3	9.8	29.4	1,450.40	4,351.20	8,702.40	43,512.00	174,048.00	1,044,288.00
	Kapuk Muara	1	21.1	21.1	3,122.80	3,122.80	6,245.60	31,228.00	124,912.00	749,472.00
	Kelapa Gading	19	5.9	112.1	873.20	16,590.80	33,181.60	165,908.00	663,632.00	3,981,792.00
	Pademangan	10	10.2	102	1,509.60	15,096.00	30,192.00	150,960.00	603,840.00	3,623,040.00
	Pejagalan	1	20.6	20.6	3,048.80	3,048.80	6,097.60	30,488.00	121,952.00	731,712.00
	Penjaringan	22	17.2	378.4	2,545.60	56,003.20	112,006.40	560,032.00	2,240,128.00	13,440,768.00
	Pluit	2	20.7	41.4	3,063.60	6,127.20	12,254.40	61,272.00	245,088.00	1,470,528.00
	Sunter	3	9.7	29.1	1,435.60	4,306.80	8,613.60	43,068.00	172,272.00	1,033,632.00
	Tanjung Priok	29	10.6	307.4	1,568.80	45,495.20	90,990.40	454,952.00	1,819,808.00	10,918,848.00
Jakarta Selatan	Cilandak	3	20.7	62.1	3,063.60	9,190.80	18,381.60	91,908.00	367,632.00	2,205,792.00
	Jagakarsa	1	23.3	23.3	3,448.40	3,448.40	6,896.80	34,484.00	137,936.00	827,616.00
	Kebayoran Baru	5	16.4	82	2,427.20	12,136.00	24,272.00	121,360.00	485,440.00	2,912,640.00
	Lebak Bulus	1	25.9	25.9	3,833.20	3,833.20	7,666.40	38,332.00	153,328.00	919,968.00
	Pancoran	1	13.1	13.1	1,938.80	1,938.80	3,877.60	19,388.00	77,552.00	465,312.00
	Pasar Minggu	1	17.6	17.6	2,604.80	2,604.80	5,209.60	26,048.00	104,192.00	625,152.00
	Pesanggrahan	3	20.3	60.9	3,004.40	9,013.20	18,026.40	90,132.00	360,528.00	2,163,168.00
	Setiabudi	3	10	30	1,480.00	4,440.00	8,880.00	44,400.00	177,600.00	1,065,600.00
Tebet	3	9.4	28.2	1,391.20	4,173.60	8,347.20	41,736.00	166,944.00	1,001,664.00	
Jakarta Barat	Cengkareng	7	28.5	199.5	4,218.00	29,526.00	59,052.00	295,260.00	1,181,040.00	7,086,240.00
	Grogol Petamburan	18	23.5	423	3,478.00	62,604.00	125,208.00	626,040.00	2,504,160.00	15,024,960.00
	Kalideres	15	31.5	472.5	4,862.00	69,930.00	139,860.00	699,300.00	2,797,200.00	16,783,200.00
	Kebon Jeruk	8	16.6	132.8	2,458.80	19,654.40	39,308.80	196,544.00	786,176.00	4,717,056.00
	Kembangan	7	19.4	135.8	2,871.20	20,098.40	40,196.80	200,984.00	803,936.00	4,823,616.00
	Palmerah	2	16	32	2,368.00	4,736.00	9,472.00	47,360.00	189,440.00	1,136,640.00
	Taman Sari	9	11.9	107.1	1,761.20	15,850.80	31,701.60	158,508.00	634,032.00	3,804,192.00
	Tambora	4	13.2	52.8	1,953.60	7,814.40	15,628.80	78,144.00	312,576.00	1,875,456.00
	Tanjung Duren	1	15.7	15.7	2,323.60	2,323.60	4,647.20	23,236.00	92,944.00	557,664.00
Jakarta Timur	Cakung	10	11.3	113	1,672.40	16,724.00	33,448.00	167,240.00	668,960.00	4,013,760.00
	Cipayang	1	17.5	17.5	2,590.00	2,590.00	5,180.00	25,900.00	103,600.00	621,600.00
	Ciracas	1	16.9	16.9	2,501.20	2,501.20	5,002.40	25,012.00	100,048.00	600,288.00
	Duren Sawit	7	12	84	1,776.00	12,432.00	24,864.00	124,320.00	497,280.00	2,983,680.00
	Jatinegara	7	8.2	57.4	1,213.60	8,495.20	16,990.40	84,952.00	339,808.00	2,038,848.00
	Kampung Melayu	1	6.7	6.7	991.60	991.60	1,983.20	9,916.00	39,664.00	237,984.00
	Kayu Manis	1	4.8	4.8	710.40	710.40	1,420.80	7,104.00	28,416.00	170,496.00
	Matraman	3	4	12	592.00	1,776.00	3,552.00	17,760.00	71,040.00	428,240.00
	Pulo Gadung	10	2.9	29	429.20	4,292.00	8,584.00	42,920.00	171,680.00	1,030,080.00
	Rawamangun	2	3.1	6.2	458.80	917.60	1,835.20	9,176.00	36,704.00	220,224.00
Bogor	Cipeno	1	39.4	39.4	5,831.20	5,831.20	11,662.40	58,312.00	233,248.00	1,399,488.00
	Gunung Putri	12	36.8	441.6	5,446.40	65,356.80	130,713.60	653,568.00	2,614,272.00	15,685,632.00
Depok	Beji	1	35.8	35.8	5,298.40	5,298.40	10,596.80	52,984.00	211,936.00	1,271,616.00
	Cimanggis	4	36.2	144.8	5,357.60	21,430.40	42,860.80	214,304.00	857,216.00	5,143,296.00
	Cinere	1	33.8	33.8	5,002.40	5,002.40	10,004.80	50,024.00	200,096.00	1,200,576.00
	Harjamukti	1	25	25	3,700.00	3,700.00	7,400.00	37,000.00	148,000.00	888,000.00
	Sukmajaya	1	32.5	32.5	4,810.00	4,810.00	9,620.00	48,100.00	192,400.00	1,154,400.00
	Tapos	2	33.2	66.4	4,913.60	9,827.20	19,654.40	98,272.00	393,088.00	2,358,528.00
Tangerang	Benda	1	37.5	37.5	5,550.00	5,550.00	11,100.00	55,500.00	222,000.00	1,332,000.00
	Ciputat Timur	2	33	66	4,884.00	9,768.00	19,536.00	97,680.00	390,720.00	2,344,320.00
	Karang Mulya	1	36.2	36.2	5,357.60	5,357.60	10,715.20	53,576.00	214,304.00	1,285,824.00
	Karang Tengah	2	36.6	73.2	5,416.80	10,833.60	21,667.20	108,336.00	433,344.00	2,600,964.00
	Kosambi	1	31.7	31.7	4,691.60	4,691.60	9,383.20	46,916.00	187,664.00	1,125,984.00
Bekasi	Pamulang	2	38.7	77.4	5,727.60	11,455.20	22,910.40	114,552.00	458,208.00	2,749,248.00
	Aren Jaya	1	31.6	31.6	4,676.80	4,676.80	9,353.60	46,768.00	187,072.00	1,122,432.00
	Babelan	1	20.7	20.7	3,063.60	3,063.60	6,127.20	30,636.00	122,544.00	735,264.00
	Bekasi Selatan	1	20.6	20.6	3,048.80	3,048.80	6,097.60	30,488.00	121,952.00	731,712.00
	Duren Jaya	1	30.9	30.9	4,573.20	4,573.20	9,146.40	45,732.00	182,928.00	1,097,568.00
	Jatiasih	2	27.4	54.8	4,055.20	8,110.40	16,220.80	81,104.00	324,416.00	1,946,496.00
	Jati Sampurna	3	26.7	80.1	3,951.60	11,854.80	23,709.60	118,548.00	474,192.00	2,845,152.00
	Margahayu	1	26.5	26.5	3,922.00	3,922.00	7,844.00	39,220.00	156,880.00	941,280.00
	Medan Satria	10	14.7	147	2,175.60	21,756.00	43,512.00	217,560.00	870,240.00	5,221,440.00
	Mustika Jaya	2	32	64	4,736.00	9,472.00	18,944.00	94,720.00	378,880.00	2,273,280.00
	Penvira	1	31.2	31.2	4,617.60	4,617.60	9,235.20	46,176.00	184,704.00	1,108,224.00
	Pondok Gede	4	18.1	72.4	2,678.80	10,715.20	21,430.40	107,152.00	428,608.00	2,571,648.00
	Pondok Melati	1	23.2	23.2	3,433.60	3,433.60	6,867.20	34,336.00	137,344.00	824,064.00
	Rawalumbu	1	26.5	26.5	3,922.00	3,922.00	7,844.00	39,220.00	156,880.00	941,280.00
	Tambun	1	35.4	35.4	5,239.20	5,239.20	10,478.40	52,392.00	209,568.00	1,257,408.00
	Tambun Selatan	1	32	32	4,736.00	4,736.00	9,472.00	47,360.00	189,440.00	1,136,640.00
	Tambun Utara	1	34.1	34.1	5,046.80	5,046.80	10,093.60	50,468.00	201,872.00	1,211,232.00
Taruma Jaya	2	23.6	47.2	3,492.80	6,985.60	13,971.20	69,856.00	279,424.00	1,676,544.00	
TOTAL	100% Car	329	1552.4	5539.5	229,755.20	819,846.00	1,639,692.00	8,198,460.00	32,793,840.00	196,763,040.00
	50% Car	164.5	776.2	2769.75	114,877.60	409,923.00	819,846.00	4,099,230.00	16,396,920.00	98,381,520.00

Table 7.4. Raw Excel Data of Amount of GHG Emission (g CO<sub>2</sub>e per km) Generated per Semester in i3L from 50% Car 50% Bus Mode of Transportation.

	Amount of Staff & Student	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	2 Day GHG Emission (kg CO <sub>2</sub> e)	3 Day GHG Emission (kg CO <sub>2</sub> e)	5 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	164.5	114,877.60	409,923.00	819,846.00	1,639,692.00	2,459,538.00	4,099,230.00	16,396,920.00	98,381,520.00
50% Bus	164.5	79,381.97	283,262.33	566,524.67	1,133,049.33	1,699,574.00	2,832,623.33	11,330,493.30	67,982,959.80
<b>TOTAL GHG Emissions</b>		<b>194,259.57</b>	<b>693,185.33</b>	<b>1,386,370.67</b>	<b>2,772,741.33</b>	<b>4,159,112.00</b>	<b>6,931,853.33</b>	<b>27,727,413.30</b>	<b>166,364,479.80</b>

  

	Staff Only	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	2 Day GHG Emission (kg CO <sub>2</sub> e)	3 Day GHG Emission (kg CO <sub>2</sub> e)	5 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	27.5	79,453.80	55,537.00	111,074.00	222,148.00	333,222.00	555,370.00	2,221,480.00	13,328,880.00
50% Bus	27.5	54,903.65	38,376.82	76,753.64	153,507.27	230,260.91	383,768.18	1,535,072.70	9,210,436.20
<b>TOTAL GHG Emissions</b>		<b>134,357.45</b>	<b>93,913.82</b>	<b>187,827.64</b>	<b>375,655.27</b>	<b>563,482.91</b>	<b>939,138.18</b>	<b>3,756,552.70</b>	<b>22,539,316.20</b>

  

	Student Only	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	2 Day GHG Emission (kg CO <sub>2</sub> e)	3 Day GHG Emission (kg CO <sub>2</sub> e)	5 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	137	35,423.80	354,386.00	708,772.00	1,417,544.00	2,126,316.00	3,543,860.00	14,175,440.00	85,052,640.00
50% Bus	137	24,478.32	244,885.52	489,771.03	979,542.06	1,469,313.09	2,448,855.15	9,795,420.60	58,772,523.60
<b>TOTAL GHG Emissions</b>		<b>59,902.12</b>	<b>599,271.52</b>	<b>1,198,543.03</b>	<b>2,397,086.06</b>	<b>3,595,629.09</b>	<b>5,992,715.15</b>	<b>23,970,860.60</b>	<b>143,825,163.60</b>

Table 7.5. Raw Excel Data of Amount of GHG Emission (kg CO<sub>2</sub>e) Generated per Semester in i3L from Appliances During Hybrid Learning.

Appliance	kWh	1 Day (9 hours)	1 Week (2 Days)	1 Month	1 Semester (6 Months)	x Amount of Students (488)	Appliance	kWh	1 Day (9 hours)	1 Week (3 Days)	1 Month	1 Semester (6 Months)	x Amount of Students (488)
In-room Lighting	0.06	0.54	1.08	4.32	25.92	12,648.96	In-room Lighting	0.06	0.54	1.62	6.48	38.88	18,973.44
Laptop	0.05	0.45	0.90	3.60	21.60	10,540.80	Laptop	0.05	0.45	1.35	5.4	32.4	15,811.20
Air Conditioner	0.35	3.15	6.30	25.20	151.20	73,785.60	Air Conditioner	0.35	3.15	9.45	37.8	226.8	110,678.40
<b>TOTAL kWh</b>		<b>4.14</b>	<b>8.28</b>	<b>33.12</b>	<b>198.72</b>	<b>96,975.36</b>	<b>TOTAL kWh</b>		<b>4.14</b>	<b>12.42</b>	<b>49.68</b>	<b>298.08</b>	<b>145,463.04</b>
<b>GHG Emissions kg CO<sub>2</sub>e</b>		<b>0.88</b>	<b>1.76</b>	<b>7.03</b>	<b>42.19</b>	<b>20,590.78</b>	<b>GHG Emissions kg CO<sub>2</sub>e</b>		<b>0.8790462</b>	<b>2.6371386</b>	<b>10.5485544</b>	<b>63.2913264</b>	<b>30,886.17</b>

  

Appliance	kWh	1 Day (9 hours)	1 Week (2 Days)	1 Month	1 Semester (6 Months)	x Amount of Students (488)	Appliance	kWh	1 Day (9 hours)	1 Week (3 Days)	1 Month	1 Semester (6 Months)	x Amount of Students (488)
In-room Lighting	0.06	0.54	1.08	4.32	25.92	12,648.96	In-room Lighting	0.06	0.54	1.62	6.48	38.88	18,973.44
Laptop	0.05	0.45	0.90	3.60	21.60	10,540.80	Laptop	0.05	0.45	1.35	5.40	32.40	15,811.20
<b>TOTAL kWh</b>		<b>0.99</b>	<b>1.98</b>	<b>7.92</b>	<b>47.52</b>	<b>23,189.76</b>	<b>TOTAL kWh</b>		<b>0.99</b>	<b>2.97</b>	<b>11.88</b>	<b>71.28</b>	<b>34,784.64</b>
<b>GHG Emissions kg CO<sub>2</sub>e</b>		<b>0.21</b>	<b>0.42</b>	<b>1.68</b>	<b>10.09</b>	<b>4,923.88</b>	<b>GHG Emissions kg CO<sub>2</sub>e</b>		<b>0.21</b>	<b>0.63</b>	<b>2.52</b>	<b>15.13</b>	<b>7,385.82</b>

Table 7.6 Raw Excel Data of Amount of GHG Emission (kg CO<sub>2</sub>e) Generated per Semester in i3L from Hybrid Learning Mode of Transportation.

	Amount of Staff & Student	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	2 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	164.5	114,877.60	409,923.00	819,846.00	1,639,692.00	6,558,768.00	39,352,608.00
50% Bus	164.5	79,381.97	283,262.33	566,524.67	1,133,049.33	4,532,197.32	27,193,183.92
<b>TOTAL g CO<sub>2</sub>e</b>		<b>194,259.57</b>	<b>693,185.33</b>	<b>1,386,370.67</b>	<b>2,772,741.33</b>	<b>11,090,965.32</b>	<b>66,545,791.92</b>
	Amount of Staff & Student	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff & Student (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	3 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	164.5	114,877.60	409,923.00	819,846.00	2,459,538.00	9,838,152.00	59,028,912.00
50% Bus	164.5	79,381.97	283,262.33	566,524.67	1,699,574.00	6,798,295.98	40,789,775.88
<b>TOTAL g CO<sub>2</sub>e</b>		<b>194,259.57</b>	<b>693,185.33</b>	<b>1,386,370.67</b>	<b>4,159,112.00</b>	<b>16,636,447.98</b>	<b>99,818,687.88</b>
	Amount of Staff	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	2 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	27.5	55,537.00	99,589.20	199,178.40	398,356.80	1,593,427.20	9,560,563.20
50% Bus	27.5	38,376.82	68,817.48	137,634.97	275,269.93	1,101,079.73	6,606,478.37
<b>TOTAL g CO<sub>2</sub>e</b>		<b>93,913.82</b>	<b>168,406.68</b>	<b>336,813.37</b>	<b>673,626.73</b>	<b>2,694,506.93</b>	<b>16,167,041.57</b>
bc staff full offline regardless							
	Amount of Staff	GHG Emissions (kg CO <sub>2</sub> e)	GHG Emission x Amount of Staff (kg CO <sub>2</sub> e)	1 Day GHG Emission (kg CO <sub>2</sub> e)	3 Day GHG Emission (kg CO <sub>2</sub> e)	1 Month GHG Emission (kg CO <sub>2</sub> e)	1 Semester (6 Months) GHG Emission (kg CO <sub>2</sub> e)
50% Car	27.5	55,537.00	99,589.20	199,178.40	597,535.20	2,390,140.80	14,340,844.80
50% Bus	27.5	38,376.82	68,817.48	137,634.97	412,904.90	1,651,619.59	9,909,717.55
<b>TOTAL g CO<sub>2</sub>e</b>		<b>93,913.82</b>	<b>168,406.68</b>	<b>336,813.37</b>	<b>1,010,440.10</b>	<b>4,041,760.39</b>	<b>24,250,562.35</b>

Table 7.7 Raw Excel Data of Amount of GHG Emission (kg CO<sub>2</sub>e) Generated per Semester in i3L from Hybrid Learning Model Scenarios.

2 Days Offline 3 Days Online	Carbon Emission Generated (kg CO <sub>2</sub> e)	3 Days Offline 2 Days Online	Carbon Emission Generated (kg CO <sub>2</sub> e)	2 Days Offline 3 Days Online (no AC)	Carbon Emission Generated (kg CO <sub>2</sub> e)	3 Days Offline 2 Days Online (no AC)	Carbon Emission Generated (kg CO <sub>2</sub> e)
Appliances	30,886.17	Appliances	2059077.82%	Appliances	7,385.82	Appliances	4,923.88
Staff Commute	24,250.56	Staff Commute	16,167.04	Staff Commute	24,250.56	Staff Commute	16,167.04
Full Commute	66,545.79	Full Commute	99,818.69	Full Commute	66,545.79	Full Commute	99,818.69
<b>Total CE in 1 Semester</b>	<b>121,682.52</b>	<b>Total CE in 1 Semester</b>	<b>136,576.51</b>	<b>Total CE in 1 Semester</b>	<b>98,182.18</b>	<b>Total CE in 1 Semester</b>	<b>120,909.61</b>

Table 7.8 Raw Excel Data of Amount of GHG Emission (kg CO<sub>2</sub>e) Generated per Semester in i3L from Different Learning Model Scenarios based on Different Aspects.

GHG EMISSION	SCENARIO						
	OFFLINE			HYBRID			
	100% CAR	100% BUS	50% CAR 50% BUS	2 DAYS OFFLINE 3 DAYS ONLINE		3 DAYS OFFLINE 2 DAYS ONLINE	
				IN-ROOM LIGHTING, LAPTOP AND AC	IN-ROOM LIGHTING, LAPTOP	IN-ROOM LIGHTING, LAPTOP AND AC	IN-ROOM LIGHTING, LAPTOP
BUILDING ELECTRICITY	25,000.00	25,000.00	25,000.00	18,200.00	18,200.00	18,200.00	18,200.00
TRAVEL/COMMUTE	196,763.04	135,965.92	166,364.48	90,796.35	90,796.35	115,985.73	115,985.73
APPLIANCES DURING ONLINE	0.00	0.00	0.00	30,886.17	7,385.82	20,590.78	4,923.88
TOTAL GHG EMISSION	221,763.04	160,965.92	191,364.48	139,882.52	116,382.18	154,776.51	139,109.61