

## รายการอ้างอิง

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ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย





ภาคผนวก ก

คุณภาพของเชื้อเพลิงที่ใช้ในประเทศไทย

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย



## THAILAND PETROLEUM PRODUCT SPECIFICATION

TYPE		LIMIT	TEST METHOD
LPG			
LAPOUR PRESSURE AT 37.8 C (KG/CM)	MAX	14.06	ASTM D 1267
95% BOLING POINT AT 760 M.M.HG C	MAX	2.2	ASTM D 1837
PERTANE AND HEAVIERS VOL % (VAPORT)	MAX	2	ASTM D 2163
COPPER STRIP COPROSION	MAX	COPPER No.1	ASTM D 1838
TOTAL SULPHUR (BEFORE ADDING ODOROUS)	MAX	0.343	ASTM D 2784
AGENT TO GAS G/M (AT 15.6 C AND 1.03 KG/M)			
RESIDUE AFTER EVAPORATION 100 ML	MAX	0.05	ASTM D 2158
NO WATER		-	
ODOR		MAKETABLE	
REGULAR GASOLINE			
OCTANE NUMBER RESEARCH METHOD (F+1)	MIN	82.6	ASTM D 2699
LEAD CONTENT, GAL	MAX	0.4	ASTM D 3341
REID VAPOUR PRESSURE AT 37.8 C, KPA	MAX	62	ASTM D 323
EXISTENT GUM, G/100ML	MAX	0.005	ASTM D 381
SULPHUR CONTENT, % WT	MAX	0.2	ASTM D 1266
COPPER STRIP COPROSION (50 C, 3 HRS)			
	MAX	COPPER No.1	ASTM D 130
DISTILLATION			
			ASTM D 86
10% EVAPORATION, C	MAX	75	
50% EVAPORATION, C	MIN	75	
	MAX	125	
90% EVAPORATION, C	MAX	190	
END POINT, C	MAX	215	
RESIDUE, % VOL	MAX	2	
PREMIUM GASOLINE			
OCTANE NUMBER RESEARCH METHOD (F+1)	MIN	95	ASTM D 2699
LEAD CONTENT, GAL	MAX	0.4	ASTM D 3341
REID VAPOUR PRESSURE AT 37.8 C, KPA	MAX	62	ASTM D 323
EXISTENT GUM, G/100ML	MAX	0.005	ASTM D 381
SULPHUR CONTENT, % WT	MAX	0.2	ASTM D 1266
COPPER STRIP COPROSION (50 C, 3 HRS)			
	MAX	COPPER No.1	ASTM D 130
DISTILLATION			
			ASTM D 86
10% EVAPORATION, C	MAX	75	
50% EVAPORATION, C	MIN	75	
	MAX	125	
90% EVAPORATION, C	MAX	190	
END POINT, C	MAX	215	
RESIDUE, % VOL	MAX	2	

SOURCE: NATIONAL ENERGY ADMINISTRATION (NEA).

## THAILAND PETROLEUM PRODUCT SPECIFICATION (CONTINUED)

TYPE		LIMIT	TEST METHOD
HIGH SPEED DIESEL SPECIFIC GRAVITY AT 15.6/15.6 C	MIN	0.82	ASTM D 1298
	MAX	0.9	
CALCULATED CETANE INDEX OR CETANE NUMBER	MIN	47	ASTM D 976 ASTM D 613
KINEMATIC VISCOSITY AT 40 C, CST	MIN	1.8	ASTM D 445
		5	
POUR POINT, C	MAX	10	ASTM D 97
SULPHUR CONTENT, % WT	MAX	1	ASTM D 129
COPPER STRIP CORROSION (50 C, 3 HRS)	MAX	COPPER No 1	ASTM D 130
CONRADSON CARBON RESIDUE, % WT	MAX	0.05	ASTM D 189
WATER AND SEDIMENT, % VOL	MAX	0.05	ASTM D 2709
ASH, % WT	MAX	0.01	ASTM D 482
FLASH POINT, PENSKEY-MARTENS CLOSED TESTER, C	MIN	52	ASTM D 93
DISTILLATION 90% RECOVERED, C	MAX	370	ASTM D 86
COLOUR, ASTM	MAX	4	ASTM D 1500
LOW SPEED DIESEL SPECIFIC GRAVITY AT 15.6/15.6 C	MAX	0.92	ASTM D 1298
	MIN	45	ASTM D 976
CALCULATED CETANE INDEX OR CETANE NUMBER			ASTM D 613
KINEMATIC VISCOSITY AT 40 C, CST	MAX	8	ASTM D 445
	MAX	6	
POUR POINT, C	MAX	16	ASTM D 97
SULPHUR CONTENT, % WT	MAX	1.5	ASTM D 129
WATER AND SEDIMENT, % VOL	MAX	0.3	ASTM D 2709
ASH, % WT	MAX	0.02	ASTM D 482
FLASH POINT, PENSKEY-MARTENS CLOSED TESTER, C	MIN	52	ASTM D 93
COLOUR, ASTM	MIN	4.5	ASTM D 1500
	MAX	7.5	
KEROSENE SPECIFIC GRAVITY AT 15.6/15.6 C	MAX	0.84	ASTM D 1298
	MIN	22	ASTM D 1322
SMOKE POINT, MM	MIN	38	ASTM D 55
FLASH POINT, TAG CLOSED TESTER, C	MIN	38	ASTM D 55
SULPHUR CONTENT, % WT	MAX	0.2	ASTM D 1256
COPPER STRIP CORROSION (50 C, 3 HRS)	MAX	COPPER No.1	ASTM D 130
DISTILLATION			ASTM D 86
10% EVAPORATION, C	MAX	205	
END POINT, C	MAX	300	

SOURCE: NATIONAL ENERGY ADMINISTRATION (NEA).



## THAILAND PETROLEUM PRODUCT SPECIFICATION (CONTINUED)

FUEL OIL		TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TEST METHOD
SPECIFIC GRAVITY AT 15.6/15.6 C	MAX	0.985	0.99	0.995	0.995	0.995	ASTM D 1298
KINEMATIC VISCOSITY AT 50 C, CST	MIN	7	81	181	231	-	ASTM D 445
	MAX	80	180	230	280	-	
FLASH POINT, PENSKEY-MARTENS CLOSED TESTER, C	MIN	60	60	60	60	60	ASTM D 93
POUR POINT C	MAX	24	24	30	30	57	ASTM D 97
SULPHUR CONTENT, % WT.	MAX	3	3.5	3.5	3.5	3	ASTM D 129
GROSS HEAT OF COMBUSTION, C	MIN	10000	9900	9900	9900	9900	ASTM D 240
ASH, % WT.	MAX	0.1	0.1	0.1	0.1	0.1	ASTM D 482
WATER AND SEDIMENT, % VOL.	MAX	1	1	1	1	1	ASTM D 1796
COLOUR, ASTM	MIN	8	-	-	-	-	ASTM D 1500

SOURCE: NATIONAL ENERGY ADMINISTRATION (NEA).

## MAE MOH LIGNITE QUALITY

SULFUR CONTENT (PERCENT)	2.3-3.0
ASH CONTENT (PERCENT)	18-27
MOISTURE CONTENT (PERCENT)	30-34
CALORIFIC VALUE (KCAL/KG)	2400-2900

SOURCE: ELECTRICITY GENERATING AUTHORITY OF THAILAND.

## QUALITY OF INDUSTRIAL LIGNITE

SULFUR CONTENT (PERCENT)	0.6-2.25
ASH CONTENT (PERCENT)	2-37
MOISTURE CONTENT (PERCENT)	15-36
CALORIFIC VALUE (KCAL/KG)	2900-5700

SOURCE: NATIONAL ENERGY ADMINISTRATION.

## NATURAL GAS QUALITY

NATURAL GAS COMPOSITION	PERCENT BY VOLUME
CO <sub>2</sub>	15
C <sub>1</sub>	67
C <sub>2</sub>	0.9
C <sub>3</sub>	5
C <sub>4</sub>	2
C <sub>5</sub>	0.4
H <sub>2</sub> O	0.02
N <sub>2</sub>	1.4
S	0.05
CALORIFIC VALUE (BTU/SCF)	1000

SOURCE: PETROLEUM AUTHORITY OF THAILAND.





ภาคผนวก ข

ตารางการเปลี่ยนหน่วย

ศูนย์วิจัยทรัพยากรชีวภาพ  
จุฬาลงกรณ์มหาวิทยาลัย

## Conversion Factors

Type of Energy and Fuel	Unit	kcal/Unit	Density (kg/l)	toe/10 <sup>6</sup> Unit	MJ/Unit	10 <sup>3</sup> BTU/Unit
1. Crude Oil	lt.	8680	0.86	860	39.33	34.44
2. Condensate	lt.	7900		792.72	33.07	31.35
3. Natural Gas						
3.1 Wet	Scf	248		24.57	1.04	0.98
3.2 Dry	Scf	244		24.2	1.02	0.96
4. Petroleum Products						
4.1 LPG	lt.	6360	0.53	630.14	26.62	25.24
4.2 Gasoline	lt.	7520	0.72	745.07	31.46	29.84
4.3 Aviation Fuel	lt.	8250	0.8	817.4	34.53	32.74
4.4 Kerosene	lt.	8250	0.8	817.4	34.53	32.74
4.5 Diesel	lt.	8700	0.85	851.98	36.42	34.52
4.6 Fuel oil	lt.	9500	0.97	941.24	39.77	37.70
4.7 Bitumen	lt.	9840	1.03	974.93	41.19	39.05
4.8 Petroleum Coke	kg.	8400	1.35	832.26	35.16	33.33
5. Electricity	kWh.	860		85.21	3.60	3.41
6. Coal (Import)	kg.	6300		624.19	26.37	25.00
7. Coke	kg.	6600		653.92	27.63	26.19
8. Anthracite	kg.	7500		743.09	31.40	29.76
9. Lignite						
9.1 Li	kg.	4400		435.94	18.42	17.46
9.2 Krabi	kg.	2600		257.6	10.99	10.32
9.3 Mae Moh	kg.	2500		247.7	10.47	9.92
9.4 Chae Khon	kg.	3610		357.67	15.11	14.32
10. Fuel Wood	kg.	3820		378.48	15.99	15.16
11. Charcoal	kg.	6900		683.64	28.88	27.38
12. Paddy Husk	kg.	3440		340.83	14.40	13.65
13. Bagasse	kg.	1800		178.34	7.53	7.14
14. Hydroelectric	kWh.	2236		221.54	9.36	8.87
15. Oil Shale	kg.	1000		99.08	4.19	3.97
16. Solar Energy	sq.m/yr	58,133 t.coe		49994.4	2112.23	2002.23
17. Wind Energy	1 windmill/yr	100 t.coe		89000	3633.45	3444.22
18. Biogas	cu.m	4700		472.6	29.97	18.93
19. Garbage	kg.	1160		114.93	4.86	4.60
20. Saw Dust	kg.	2600		257.6	10.88	10.32
21. Agr. Waste	kg.	3030		300.21	12.68	12.02
22. Human Labor	hr.	65		6.44	0.27	0.26
23. Animal labor	hr.	320		31.71	1.34	1.27
24. Methanol	lt.	4065		402.75	17.02	16.13
25. Ethanol	lt.	5055		500.84	21.16	20.06
26. Calcium Carbide	kg.	4840		479.54	20.26	19.21

Source: National Energy Administration (NEA).

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



ภาคผนวก ค

จำนวนรถที่จดทะเบียนในปี 2532 เป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย



NO. OF PERSONNEL CARS AND TRUCKS 1999.

REGIONS	PROVINCES	MOTOR CYCLE	MOTOR TRICYCLE	CARS < 7 SEATS	CARS > 7 SEATS	TAXIS	SMALL TRUCKS	MEDIUM TRUCKS	HEAVY TRUCKS	OTHERS	TOTAL
BMR	1. BANGKOK	844,597	7,479	479,077	202,589	15,733	243,111	32,462	9,840	18,990	1,693,786
	2. SAMUT PRAKAN	27,589	0	4,227	6,532	0	5,640	673	136	105	48,662
	3. NONTHABURI	18,953	2,980	16,825	7,297	805	2,086	2,091	879	329	50,245
	4. PATHUM THANI	11,751	52	1,969	3,345	0	1,612	1,584	890	0	21,400
	5. NAKHON PATHOM	67,102	123	3,439	7,039	3	15,925	3,588	7,924	6	105,045
	6. SAMUT SAKHON	23,492	282	1,176	2,745	0	2,090	1,406	696	0	32,087
	SUBTOTAL	791,444	10,916	510,713	259,947	16,541	270,364	41,804	20,365	19,438	1,941,432
CENTRAL	7. PHRA NAKHON SI AYUTTHAYA	32,622	1,891	2,015	3,353	0	3,392	1,574	1,139	0	45,908
	8. ANG THONG	30,142	558	1,035	1,258	30	3,064	574	462	1	37,120
	9. SARABURI	27,089	19	2,423	2,929	0	6,303	1,350	3,143	55	43,310
	10. LOP BURI	46,135	0	3,926	3,219	17	6,695	1,721	1,573	0	65,286
	11. SING BURI	35,038	2	1,344	1,367	0	2,665	597	635	342	41,989
	12. CHAI NAT	32,960	27	819	786	10	3,592	722	390	0	39,285
	SUBTOTAL	203,983	2,495	11,561	12,890	57	27,711	6,538	7,343	398	272,978
WESTERN	13. SUPHAN BURI	76,760	73	1,823	2,429	52	10,671	15,845	4,487	57	112,197
	14. KANCHANABURI	68,984	1	2,391	2,909	0	14,517	1,374	5,708	7	95,891
	15. SAMUT SONGKHRAM	9,206	290	495	1,244	0	1,782	600	655	0	14,272
	16. RATCHABURI	77,270	449	3,914	3,385	0	13,017	2,185	2,608	2	102,830
	17. PHETCHABURI	44,637	76	2,018	1,501	45	9,677	1,107	2,060	0	61,121
	18. PHACHUAP KHIRI KHAN	49,691	0	871	1,070	1	7,707	1,577	1,110	0	62,027
	SUBTOTAL	326,548	889	11,512	12,538	98	57,371	22,688	16,628	66	448,338
EASTERN	19. TRAT	18,782	0	581	707	0	6,187	493	354	0	27,064
	20. CHANTHABURI	59,754	50	2,607	3,299	109	19,292	1,079	793	130	87,116
	21. RAYONG	75,697	34	2,256	3,509	19	16,269	2,270	1,832	4	101,990
	22. CHON BURI	130,483	259	9,875	9,001	34	32,824	4,099	7,207	202	193,994
	23. CHACHOENGSAO	19,733	148	2,208	3,129	6	8,039	1,524	463	7	34,048
	24. PRACHIN BURI	33,537	181	1,052	1,520	0	5,009	1,575	940	18	44,635
	25. NAKHON NAYOK	19,846	0	1,182	1,276	15	2,294	431	564	3	25,811
SUBTOTAL	357,832	572	19,741	22,444	183	89,505	11,471	12,153	367	514,368	
NORTHERN	26. LAMPANG	93,008	0	3,832	1,816	0	14,254	1,154	880	283	115,295
	27. PHARE	52,808	0	1,875	779	67	11,226	867	348	11	67,978
	28. UTTARADIT	39,862	3	1,560	1,320	193	5,403	630	505	97	49,573
	29. NAN	36,115	0	638	319	4	4,224	261	29	0	41,580
	30. PHAYAO	37,071	7	788	450	0	5,597	186	174	199	45,272
	31. CHIANG RAI	83,885	0	3,568	1,548	0	14,158	1,624	544	0	105,583
	32. MAE MONG SORN	5,108	0	46	72	0	451	69	31	1	5,778
	33. CHIANG MAI	237,765	1,071	14,583	7,082	0	30,923	2,928	718	99	295,172
	34. LUMPHUN	62,837	25	1,893	1,306	5	16,143	894	123	39	73,235
	35. NAKHON SAWAN	58,742	67	3,571	1,572	27	10,901	2,107	2,359	15	80,501
	36. PHETCHABUN	37,521	0	1,722	1,329	49	11,122	807	749	42	53,337
	37. PHECHIT	47,473	31	1,140	825	60	5,750	929	705	27	56,948
	38. PHITSANULOK	75,010	332	2,472	1,261	10	8,984	1,196	939	0	90,204
	39. SUKHOHAI	39,048	24	916	685	11	5,445	779	1,028	52	47,960
40. TAK	28,497	0	832	1,022	0	5,267	407	170	14	38,217	
41. KAMPHAENG PHET	37,720	0	844	615	5	7,197	997	2,196	60	49,634	
42. UTHAI THANI	40,687	0	868	631	13	3,839	457	338	0	46,834	
SUBTOTAL	1,004,955	1,583	41,064	22,711	451	181,182	15,282	11,860	539	1,261,037	

NO.OF PERSONNEL CARS AND TRUCKS 1989

REGIONS	PROVINCES	MOTOR CYCLE	MOTOR TRICYCLE	CARS < 7 SEATS	CARS > 7 SEATS	TAXIS	SMALL TRUCKS	MEDIUM TRUCKS	HEAVY TRUCKS	OTHERS	TOTAL	
NORTH - EASTERN	43.CHAIYAPHUM	29,166	0	676	651	0	4,411	1,755	1,053	3	37,715	
	44.NAKHON RATCHASIMA	105,578	928	6,804	6,754	11	22,678	5,179	2,119	29	150,080	
	45.BURI RUM	35,798	0	684	734	0	5,399	1,524	718	37	44,834	
	46.SURIIN	37,806	0	763	922	0	6,108	985	539	12	47,135	
	47.SI SA KET	43,054	1	615	864	1	5,301	1,083	353	22	51,294	
	48.UBON RATCHATHANI	75,640	334	2,816	1,803	110	14,394	1,938	3,558	61	100,654	
	49.YASOTHON	21,072	0	383	459	21	5,407	421	233	0	27,996	
	50.MUKDAHAN	8,998	0	140	149	0	1,272	169	233	1	10,962	
	51.KHON KAEN	77,714	453	4,340	2,350	10	19,332	2,859	1,382	1,558	109,998	
	52.MAHA SAKHAM	18,636	0	606	620	0	4,744	738	262	0	25,606	
	53.ROI ET	38,528	2	966	1,185	12	7,298	952	264	10	49,237	
	54.KALASIN	22,008	15	593	434	0	4,901	1,635	471	26	30,083	
	55.SAKHON NAKHON	36,568	0	1,041	734	0	7,583	762	387	36	47,111	
	56.NAKHON PHANOM	20,565	0	518	401	7	3,870	297	74	25	25,757	
	57.UDON THANI	68,547	439	2,717	1,951	1	15,507	2,512	2,151	16	93,841	
	58.NONG KHAI	27,096	99	566	238	1	3,517	799	506	66	32,888	
	59.LOEI	30,736	149	576	484	0	5,692	615	313	30	38,525	
		SUBTOTAL	697,510	2,420	24,754	20,733	174	137,354	24,223	14,616	1,932	923,716
	SOUTHERN	60.CHUMPHON	40,803	23	761	559	29	5,505	766	350	146	48,942
61.RANONG		13,703	1	484	502	13	2,299	284	294	0	17,580	
62.SURAT THANI		100,268	3	2,353	1,974	78	12,993	772	838	3	119,282	
63.PHANGNGA		13,985	0	600	459	0	2,689	294	195	20	18,442	
64.PHUKET		56,000	0	3,629	1,998	30	7,532	734	658	52	70,633	
65.KRABI		33,879	0	439	437	30	3,429	275	4	36	38,529	
66.NAKHON SI THAMMARAT		81,783	0	2,800	1,094	184	13,512	830	936	183	101,332	
67.TRANG		54,245	931	1,680	558	30	5,093	751	556	0	63,844	
68.PHATTHALUNG		31,428	0	508	255	18	3,221	503	266	16	36,215	
69.SONGKHLA		133,295	10	7,617	2,478	282	17,394	1,972	1,804	223	165,075	
70.SATUN		18,510	1	670	225	29	2,231	206	130	35	22,037	
71.PATTANI		44,438	9	1,888	550	269	7,556	677	590	95	56,071	
72.YALA		60,696	24	1,783	484	228	4,133	415	1,804	53	69,620	
73.NARATHIWAT		87,995	1	1,622	341	176	6,280	430	392	5	97,242	
	SUBTOTAL	771,028	1,002	26,834	11,914	1,396	94,097	6,909	8,817	847	924,844	
	TOTAL	4,153,900	19,957	646,199	363,077	18,900	837,584	131,895	91,782	23,987	5,286,681	

SOURCE: LAND TRANSPORT DEPARTMENT, 1989.



NO. OF PASSENGER CARS											
REGIONS	PROVINCES	SMALL BUSES				TOTAL	HEAVY BUSES				TOTAL
		FIXED	SMALL	NON-F	PERSON		FIXED	SMALL	NON-F	PERSON	
BMR	1. BANGKOK	1,803	0	328	447	2,579	11,331	0	2,881	2,757	16,949
	2. SAMUT PRAKAN	858	219	0	35	912	846	77	202	180	1,305
	3. NONTHABURI	134	179	2	13	328	373	2	142	175	651
	4. PATHUM THANI	161	17	0	10	188	221	4	76	60	361
	5. NAKHON PATHOM	80	228	0	25	333	665	98	21	106	890
	6. SAMUT SAKHON	33	228	0	20	281	344	203	34	77	659
	SUBTOTAL	2,869	672	331	550	4,422	13,780	384	3,336	3,355	20,655
CENTRAL	7. PHRA NAKHON SI AYUTTHAYA	108	33	0	5	146	377	159	65	70	671
	8. ANG THONG	52	7	0	1	60	390	40	3	0	441
	9. SARABURI	91	32	0	1	124	388	100	12	42	542
	10. LOP BURI	161	161	1	3	326	651	73	58	48	831
	11. SING BURI	22	21	2	2	47	302	99	8	7	416
	12. CHAINAT	79	71	2	1	153	158	80	9	7	247
	SUBTOTAL	513	325	5	13	856	2,286	538	158	182	3,143
WESTERN	13. SUPHAN BURI	82	90	0	5	177	508	88	0	18	694
	14. KANCHANABURI	266	70	2	3	341	586	21	15	41	683
	15. SAMUT SONGKHRAM	65	156	2	0	223	192	28	3	2	225
	16. RATCHABURI	50	172	0	1	223	673	10	19	20	722
	17. PHETCHABURI	30	0	165	2	197	482	0	4	15	501
	18. PHACHUAP KHIRI KHAN	2	39	0	2	43	148	18	1	9	178
	SUBTOTAL	495	527	169	13	1,204	2,659	165	42	105	2,981
EASTERN	19. TRAT	595	13	0	0	608	40	0	0	3	43
	20. CHANTHABURI	180	195	1	0	376	142	77	7	18	244
	21. RAYONG	206	151	3	0	359	67	1	10	16	94
	22. CHON BURI	477	1,418	17	14	1,926	548	18	31	122	719
	23. CHACHOENGSAO	25	43	0	13	81	388	23	19	27	437
	24. PRACHIN BURI	236	19	0	2	257	589	18	0	3	589
25. NAKHON NAYOK	30	14	0	1	45	255	1	1	4	261	
	SUBTOTAL	1,751	1,853	21	30	3,655	1,999	136	68	193	2,386
NORTHERN	26. LAMPANG	497	1,044	0	0	1,541	189	3	51	10	261
	27. PHARE	379	511	6	0	896	76	49	1	0	126
	28. UTTARADIT	100	0	0	0	102	256	0	4	12	272
	29. N/N	112	151	2	0	265	53	1	3	0	57
	30. PHAYAO	55	381	2	1	439	47	7	1	7	62
	31. CHIANG RAI	926	180	46	0	1,152	208	0	11	1	250
	32. MAE HONG SON	0	77	5	0	82	23	6	4	0	33
	33. CHIANG MAI	210	3,405	115	1	3,731	245	78	101	28	453
	34. LUMPHUN	248	215	9	0	461	141	1	0	0	142
	35. NAKHON SAWAN	271	304	0	4	579	1,058	154	25	11	1,259
	36. PHETCHABUN	179	303	0	0	482	231	22	6	5	264
	37. PHICHIT	282	72	0	1	355	232	15	3	14	264
	38. PHITSANULOK	214	30	8	0	260	514	20	3	8	545
	39. SUKHO THAI	95	34	7	1	137	807	77	9	2	895
	40. TAK	121	382	9	0	522	85	85	5	8	183
	41. KAMPHAENG PHET	295	408	0	1	614	147	84	0	6	217
	42. UTHAI THANI	133	147	0	1	281	138	25	7	7	177
		SUBTOTAL	4,037	7,645	200	10	11,892	4,451	618	234	127

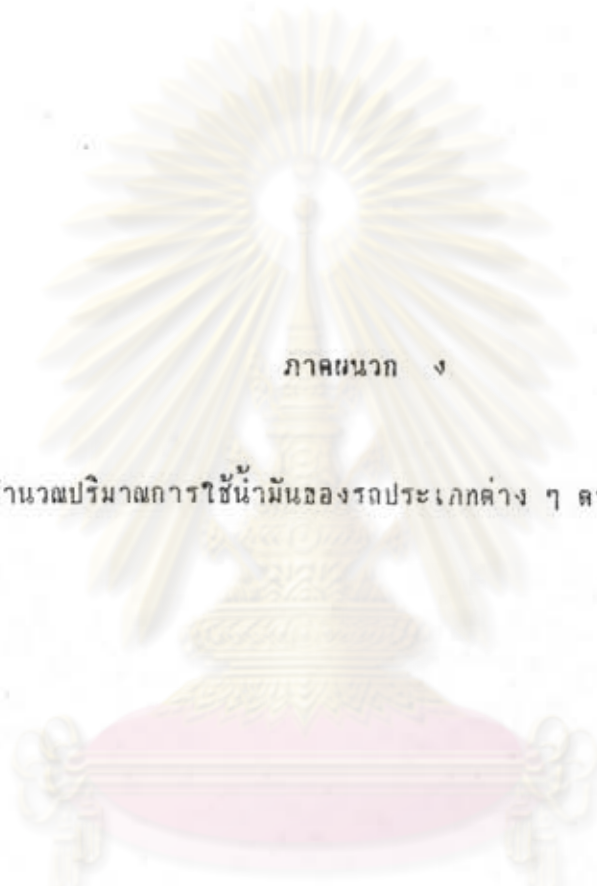


NO.OF PASSENGER CARS		SMALL BUSES				TOTAL	HEAVY BUSES				TOTAL	
REGIONS	PROVINCES	FIXED	SMALL	NON-F	PERSON		FIXED	SMALL	NON-F	PERSON		
NORTH - EASTERN	43.CHAIYAPHUM	160	13	6	1	180	675	0	3	4	682	
	44.NAKHON RATCHASIMA	75	211	16	4	306	1,532	442	55	56	2,095	
	45.BURI RUM	103	0	1	1	105	896	0	8	2	906	
	46.SURIN	515	69	0	0	584	643	74	1	5	723	
	47.SI SA KET	216	105	0	1	322	600	263	0	3	866	
	48.UBON RATCHATHANI	512	15	3	1	531	1,398	22	4	13	1,437	
	49.YASOTHON	290	63	0	0	353	228	9	0	0	237	
	50.MUKDAHAN	0	191	0	0	191	19	58	0	0	77	
	51.KHON KAEN	424	410	13	0	847	1,169	71	24	27	1,291	
	52.MAHA SARAKHAM	100	116	0	0	216	268	140	1	2	411	
	53.ROI ET	385	66	2	0	453	477	35	4	2	518	
	54.KALASIN	133	108	2	0	243	272	30	6	0	308	
	55.SAKHON NAKHON	551	14	2	0	577	554	36	1	4	535	
	56.NAKHON PHANOM	275	85	3	0	363	92	6	0	0	98	
	57.UDON THANI	560	428	12	2	1,002	1,063	60	4	16	1,143	
	58.NONG KHAI	111	19	0	0	130	215	0	0	2	217	
	59.LOEI	47	76	5	0	128	368	32	0	2	422	
		SUBTOTAL	4,467	1,989	65	10	6,531	10,489	1,278	111	138	12,016
	SOUTHERN	60.CHUMPHON	109	56	0	0	165	173	4	2	2	181
		61.RANONG	227	20	5	0	252	68	1	2	0	71
62.SURAT THANI		171	837	9	0	1,017	276	42	8	13	339	
63.PHANGNGA		358	70	0	0	428	97	4	0	3	104	
64.PHUKET		169	0	384	4	557	116	0	131	29	276	
65.KRABI		54	176	10	0	240	81	10	1	20	112	
66.NAKHON SI THAMMARAT		210	1,242	5	2	1,459	249	23	0	19	291	
67.TRANG		252	191	73	2	518	205	56	7	29	297	
68.PHATTHALUNG		386	447	1	0	834	79	2	5	2	88	
69.SONGKHLA		192	1,060	2,682	3	3,937	280	47	5	34	366	
70.SATUN		193	72	18	0	283	69	7	5	0	81	
71.PATTANI		98	566	0	0	664	97	27	2	6	132	
72.YALA		176	755	0	2	933	111	10	0	13	134	
73.NARATHIWAT		278	70	0	0	348	27	0	4	0	31	
	SUBTOTAL	2,873	5,562	3,187	13	11,635	1,928	233	172	170	2,503	
	TOTAL	17,005	18,773	3,978	639	40,395	37,572	3,353	4,113	4,270	49,314	

REMARK: SMALL BUSES WEIGHT NOT MORE THAN 2000 KG.

HEAVY BUSES WEIGHT EXCEED 2000 KG.

SOURCE: LAND TRANSPORT DEPARTMENT, 1989



ภาคผนวก ง

ตารางการคำนวณปริมาณการใช้น้ำมันของรถประเภทต่าง ๆ ตามชนิดของเครื่องยนต์

ศูนย์วิทยุตำรวจภูธร  
ศูนย์วิทยุตำรวจภูธร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

## Province : Bangkok

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km.)			Total Annual Mileage (Million Km.)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	644597	100	0	0	644597	0	0	18.0	0.0	0.0	11502.75	0.00	0.00	27.0	0.0	0.0	428.731	0.000	0.000
Motorcycle	7479	0	0	100	0	7479	0.0	0.0	70.0	0.00	0.00	522.53	0.0	0.0	12.0	0.000	0.000	43.626	
Cars < 7 Seats	479077	90	7	3	431869	33526	14372	16.5	26.0	23.0	7114.29	871.92	330.56	10.0	10.5	9.0	711.429	83.040	38.729
Cars > 7 Seats	232999	85	30	5	151248	69807	11634	21.0	31.0	24.0	3176.20	2164.01	279.23	9.5	10.0	8.5	334.307	218.401	32.850
Taxis	15733	5	0	95	797	0	14846	82.0	0.0	82.0	64.51	0.00	1225.60	10.0	0.0	9.0	5.451	0.000	136.178
Small Buses	2579	25	72	3	645	1957	77	22.0	32.0	24.0	14.18	58.42	1.66	10.5	11.0	9.0	1.351	5.402	0.205
Heavy Buses	16949	0	100	0	0	16949	0	0.0	75.0	0.0	0.00	1271.18	0.00	0.0	2.5	0.0	0.000	508.470	0.000
Small Trucks	243111	25	72	3	60778	175040	7293	22.0	32.0	24.0	1337.11	5801.28	175.04	10.5	11.0	9.0	127.344	508.207	19.448
Medium Trucks	32482	0	100	0	0	32482	0	0.0	40.0	0.0	0.00	1258.48	0.00	0.0	5.0	0.0	0.000	215.413	0.000
Heavy Trucks	9640	0	100	0	0	9640	0	0.0	80.0	0.0	0.00	771.20	0.00	0.0	4.0	0.0	0.000	192.300	0.000
Others	16698	25	75	0	4750	14248	0	10.0	10.0	0.0	47.50	142.48	0.00	10.0	10.0	0.0	4.749	14.248	0.000
Total	1703314				1293873	353538	5903				23056.54	12179.97	2505.92				1,615.393	1,745.961	299.040

## Province : Samut Prakan

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km.)			Total Annual Mileage (Million Km.)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	27548	100	0	0	27548	0	0	18.0	0.0	0.0	495.86	0.00	0.00	27.0	0.0	0.0	18.566	0.000	0.000
Motorcycle	0	0	0	100	0	0	0.0	0.0	70.0	0.00	0.00	0.00	0.0	0.0	12.0	0.000	0.000	0.000	
Cars < 7 Seats	8227	90	7	3	7404	578	247	16.5	26.0	23.0	122.17	14.97	5.69	10.0	10.5	9.0	12.217	1.456	0.631
Cars > 7 Seats	5532	85	30	5	4248	1960	327	21.0	31.0	24.0	99.18	60.75	7.84	9.5	10.0	8.5	9.385	6.075	0.922
Taxis	0	5	0	95	0	0	0	82.0	0.0	82.0	0.00	0.00	0.00	10.0	0.0	9.0	0.000	0.000	0.000
Small Buses	912	25	72	3	238	657	27	22.0	32.0	24.0	5.02	21.01	0.96	10.5	11.0	9.0	0.478	1.910	0.073
Heavy Buses	1305	0	100	0	0	1305	0	0.0	75.0	0.0	0.00	97.88	0.00	0.0	2.5	0.0	0.000	39.150	0.000
Small Trucks	5870	25	72	3	1410	4061	199	22.0	32.0	24.0	31.02	129.95	4.08	10.5	11.0	9.0	2.954	11.813	0.451
Medium Trucks	673	0	100	0	0	673	0	0.0	40.0	0.0	0.00	26.92	0.00	0.0	5.0	0.0	0.000	4.487	0.000
Heavy Trucks	136	0	100	0	0	136	0	0.0	80.0	0.0	0.00	10.88	0.00	0.0	4.0	0.0	0.000	2.720	0.000
Others	105	25	75	0	26	79	0	10.0	10.0	0.0	0.26	0.79	0.00	10.0	10.0	0.0	0.026	0.079	0.000
Total	51078				40663	9445	770				740.51	363.14	18.23				43.427	57.560	2.077

## Province : Nonthaburi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km.)			Total Annual Mileage (Million Km.)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	18653	100	0	0	18653	0	0	18.0	0.0	0.0	305.15	0.00	0.00	27.0	0.0	0.0	11.302	0.000	0.000
Motorcycle	2990	0	0	100	0	2990	0.0	0.0	70.0	0.00	0.00	208.80	0.0	0.0	12.0	0.000	0.000	17.383	
Cars < 7 Seats	18825	90	7	3	15143	1178	505	16.5	26.0	23.0	248.86	30.82	11.61	10.0	10.5	9.0	24.986	2.916	1.290
Cars > 7 Seats	7287	85	30	5	4743	2189	365	21.0	31.0	24.0	99.60	67.96	8.76	9.5	10.0	8.5	10.486	8.796	1.030
Taxis	805	5	0	95	40	0	766	82.0	0.0	82.0	3.30	0.00	82.71	10.0	0.0	9.0	0.330	0.000	6.968
Small Buses	328	25	72	3	82	236	10	22.0	32.0	24.0	1.80	7.56	0.24	10.5	11.0	9.0	0.172	0.687	0.026
Heavy Buses	692	0	100	0	0	692	0	0.0	75.0	0.0	0.00	51.90	0.00	0.0	2.5	0.0	0.000	20.780	0.000
Small Trucks	2085	25	72	3	522	1532	63	22.0	32.0	24.0	11.47	48.06	1.50	10.5	11.0	9.0	1.083	4.369	0.167
Medium Trucks	2081	0	100	0	0	2081	0	0.0	40.0	0.0	0.00	83.84	0.00	0.0	5.0	0.0	0.000	13.940	0.000
Heavy Trucks	879	0	100	0	0	879	0	0.0	80.0	0.0	0.00	70.32	0.00	0.0	4.0	0.0	0.000	17.580	0.000
Others	329	25	75	0	82	247	0	10.0	10.0	0.0	0.82	2.47	0.00	10.0	10.0	0.0	0.082	0.247	0.000
Total	51236				37565	9014	4887				672.01	382.43	293.41				48.446	67.296	26.664



## Province : Pathum Thani

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	11751	100	0	0	11751	0	0	18.0	0.0	0.0	211.52	0.00	0.00	27.0	0.0	0.0	7.894	0.000	0.000
Motorcycle	52	0	0	100	0	52	0.0	0.0	70.0	0.00	0.00	3.64	0.0	0.0	12.0	0.000	0.000	0.303	
Cars < 7 Seats	1969	80	7	3	1772	138	59	16.5	26.0	23.0	29.24	3.98	1.36	10.0	10.5	9.0	2.924	0.241	0.151
Cars > 7 Seats	3545	85	30	5	2304	1064	177	21.0	31.0	24.0	48.39	32.97	4.25	9.5	10.0	8.5	5.094	3.297	0.500
Taxis	0	5	0	95	0	0	0.0	0.0	82.0	0.00	0.00	0.00	10.0	0.0	9.0	0.000	0.000	0.000	
Small Buses	188	25	72	3	47	136	6	22.0	22.0	24.0	1.00	4.20	0.14	10.5	11.0	9.0	0.000	10.830	0.000
Heavy Buses	361	0	100	0	0	361	0	0.0	75.0	0.0	0.00	27.08	0.00	0.0	2.5	0.0	0.000	10.830	0.000
Small Trucks	1512	25	72	3	400	1161	48	22.0	22.0	24.0	3.97	37.14	1.16	10.5	11.0	9.0	0.844	3.275	0.129
Medium Trucks	1984	0	100	0	0	1984	0	0.0	40.0	0.0	0.00	63.26	0.00	0.0	6.0	6.0	0.000	10.590	0.000
Heavy Trucks	890	0	100	0	0	890	0	0.0	80.0	0.0	0.00	71.29	0.00	0.0	4.0	4.0	0.000	17.900	0.000
Others	0	25	75	0	0	0	0.0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	21952				18277	5022	342				298.05	238.96	10.55				16.794	46.590	1.099

## Province : Nakhon Pathom

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	87102	100	0	0	87102	0	0	8.0	0.0	0.0	576.22	0.00	0.00	32.0	0.0	0.0	16.773	0.000	0.000
Motorcycle	123	33	0	17	102	0	21	30.0	0.0	30.0	3.06	3.00	0.60	12.0	0.0	10.0	0.255	0.300	0.263
Cars < 7 Seats	3436	85	12	3	2923	413	100	16.5	28.0	23.0	48.23	10.73	2.37	11.0	11.5	10.0	4.395	0.503	0.237
Cars > 7 Seats	7039	85	30	5	4515	2112	352	21.0	31.0	24.0	95.08	65.48	8.55	10.5	11.0	9.0	9.151	5.951	0.609
Taxis	3	8	87	5	0	3	0	65.0	65.0	65.0	0.02	0.17	0.07	11.0	11.5	9.5	0.021	0.015	0.021
Small Buses	334	35	64	1	117	213	3	22.0	35.0	24.0	2.56	7.48	0.08	11.5	12.0	10.0	0.223	0.622	0.008
Heavy Buses	690	0	100	0	0	690	0	0.0	60.0	0.0	0.00	53.40	0.00	0.0	4.0	0.0	0.000	13.750	0.000
Small Trucks	15225	35	64	1	5339	10126	159	22.0	35.0	24.0	121.35	354.49	3.80	11.5	12.0	10.0	10.596	29.540	0.280
Medium Trucks	3598	0	100	0	0	3598	0	0.0	40.0	0.0	0.00	140.52	0.00	0.0	6.0	6.0	0.000	23.920	0.000
Heavy Trucks	7924	0	100	0	0	7924	0	0.0	80.0	0.0	0.00	630.92	0.00	0.0	4.0	4.0	0.000	150.400	0.000
Others	8	25	75	0	2	5	0	10.0	10.0	0.0	0.02	0.05	0.00	10.0	10.0	0.0	0.002	0.005	0.000
Total	106272				90090	25275	606				908.64	1259.19	15.30				41.388	222.915	1.627

## Province : Samut Sakhon

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	23492	100	0	0	23492	0	0	8.0	0.0	0.0	187.34	0.00	0.00	32.0	0.0	0.0	5.075	0.000	0.000
Motorcycle	292	83	0	17	234	0	48	30.0	0.0	30.0	7.02	0.00	1.44	12.0	0.0	10.0	0.265	0.300	0.144
Cars < 7 Seats	1176	85	12	3	1000	141	35	16.5	28.0	23.0	16.49	3.67	0.81	11.0	11.5	10.0	1.486	3.319	0.081
Cars > 7 Seats	2745	85	30	5	1764	824	137	21.0	31.0	24.0	37.47	25.53	3.29	10.5	11.0	9.0	3.569	2.321	0.266
Taxis	0	3	97	0	0	0	0	65.0	65.0	65.0	0.07	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	292	35	64	1	99	190	3	22.0	35.0	24.0	2.17	8.32	0.07	11.5	12.0	10.0	0.388	0.520	0.007
Heavy Buses	658	0	100	0	0	658	0	0.0	60.0	0.0	0.00	39.48	0.00	0.0	4.0	4.0	0.000	9.370	0.000
Small Trucks	2090	35	64	1	732	1328	21	22.0	35.0	24.0	16.09	45.82	0.50	11.5	12.0	10.0	1.389	3.901	0.050
Medium Trucks	1496	0	100	0	0	1496	0	0.0	40.0	0.0	0.00	55.24	0.00	0.0	6.0	6.0	0.000	9.370	0.000
Heavy Trucks	856	0	100	0	0	856	0	0.0	80.0	0.0	0.00	71.68	0.00	0.0	4.0	4.0	0.000	17.920	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	33027				27340	5443	244				267.18	248.73	6.11				13.114	44.231	0.948

Province : Lao Bund

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		100	0	0	46136	0	0	8.0	0.0	0.0	369.08	0.00	0.00	12.0	0.0	0.0	11.534	0.000	0.000
Motorcycle	46136	100	0	0	46136	0	0	8.0	0.0	0.0	369.08	0.00	0.00	12.0	0.0	0.0	11.534	0.000	0.000
Motorcycle	0	83	0	17	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000	
Cars < 7 Seats	3928	85	12	3	3307	471	118	16.5	26.0	23.0	55.06	1.5	2.71	11.0	11.5	10.0	5.036	1.065	0.271
Cars > 7 Seats	3219	85	30	5	2652	986	161	21.0	31.0	24.0	43.94	29.94	3.06	10.5	11.0	9.0	4.195	2.722	0.429
Taxis	17	8	87	5	1	15	1	65.0	65.0	65.0	0.09	0.96	0.06	11.0	11.5	9.5	0.008	0.084	0.006
Small Buses	226	35	64	1	114	209	3	22.0	35.0	24.0	2.51	7.20	3.08	11.5	12.0	10.0	0.218	0.609	0.008
Heavy Buses	931	0	100	0	0	931	0	0.0	60.0	0.0	0.00	49.66	0.00	0.0	4.0	0.0	3.000	12.496	0.000
Small Trucks	8895	35	64	1	3043	5565	97	22.0	35.0	24.0	66.95	194.77	2.09	11.5	12.0	10.0	5.922	16.201	0.209
Medium Trucks	1721	0	100	0	0	1721	0	0.0	40.0	0.0	0.00	68.84	0.00	0.0	5.0	0.0	0.000	11.473	0.000
Heavy Trucks	1573	0	100	0	0	1573	0	0.0	90.0	0.0	0.00	125.64	0.00	0.0	4.0	0.0	0.000	31.460	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	66443				54723	11030	370				537.60	489.76	8.79				26.772	76.108	0.922

Province : Sing Bund

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		100	0	0	35236	0	0	8.0	0.0	0.0	290.29	0.00	0.00	12.0	0.0	0.0	9.759	0.000	0.000
Motorcycle	35236	100	0	0	35236	0	0	8.0	0.0	0.0	290.29	0.00	0.00	12.0	0.0	0.0	9.759	0.000	0.000
Motorcycle	2	30	0	17	2	0	0	30.0	0.0	30.0	0.05	0.00	0.01	12.0	0.0	10.0	0.004	0.000	0.001
Cars < 7 Seats	1344	85	12	3	1142	161	40	16.5	26.0	23.0	18.05	4.9	0.99	11.0	11.5	10.0	1.714	0.365	0.093
Cars > 7 Seats	1367	85	30	5	968	410	66	21.0	31.0	24.0	18.66	12.71	1.64	10.5	11.0	9.0	1.777	1.156	0.182
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	47	35	64	1	16	30	0	22.0	35.0	24.0	0.36	1.05	0.01	11.5	12.0	10.0	0.001	0.089	0.001
Heavy Buses	418	0	100	0	0	418	0	0.0	60.0	0.0	0.00	24.96	0.00	0.0	4.0	0.0	0.000	6.240	0.000
Small Trucks	2965	35	64	1	930	1706	27	22.0	35.0	24.0	20.52	59.70	0.64	11.5	12.0	10.0	1.794	4.975	0.064
Medium Trucks	597	0	100	0	0	597	0	0.0	40.0	0.0	0.00	23.88	0.00	0.0	5.0	0.0	0.000	3.980	0.000
Heavy Trucks	606	0	100	0	0	606	0	0.0	90.0	0.0	0.00	50.89	0.00	0.0	4.0	0.0	0.000	12.720	0.000
Others	342	25	75	0	86	257	0	10.0	10.0	0.0	0.95	2.57	0.00	10.0	10.0	0.0	0.085	0.257	0.000
Total	42452				36100	4213	138				328.58	179.94	3.20				14.155	29.779	0.341

Province : Chal Nal

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		100	0	0	32980	0	0	8.0	0.0	0.0	260.88	0.00	0.00	12.0	0.0	0.0	8.240	0.000	0.000
Motorcycle	32980	100	0	0	32980	0	0	8.0	0.0	0.0	260.88	0.00	0.00	12.0	0.0	0.0	8.240	0.000	0.000
Motorcycle	27	83	0	17	22	0	5	30.0	0.0	30.0	0.87	0.00	0.14	12.0	0.0	10.0	0.055	0.000	0.014
Cars < 7 Seats	818	85	12	3	696	98	25	16.5	26.0	23.0	11.47	2.56	0.56	11.0	11.5	10.0	1.043	0.222	0.056
Cars > 7 Seats	786	85	30	5	498	230	38	21.0	31.0	24.0	10.46	7.12	0.92	10.5	11.0	9.0	0.966	0.948	0.102
Taxis	10	8	87	5	1	9	1	65.0	65.0	65.0	0.05	0.57	0.03	11.0	11.5	9.5	0.005	0.049	0.003
Small Buses	153	35	64	1	54	98	2	22.0	35.0	24.0	1.18	3.43	0.04	11.5	12.0	10.0	0.102	0.286	0.004
Heavy Buses	242	0	100	0	0	242	0	0.0	60.0	0.0	0.00	14.52	0.00	0.0	4.0	0.0	0.000	3.900	0.000
Small Trucks	3382	35	64	1	1257	2259	36	22.0	35.0	24.0	27.56	80.46	0.68	11.5	12.0	10.0	2.405	6.705	0.086
Medium Trucks	722	0	100	0	0	722	0	0.0	40.0	0.0	0.00	26.89	0.00	0.0	5.0	0.0	0.000	4.913	0.000
Heavy Trucks	390	0	100	0	0	390	0	0.0	90.0	0.0	0.00	31.20	0.00	0.0	4.0	0.0	0.000	7.800	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	39680				35487	4087	105				315.17	189.73	2.55				12.647	24.130	0.266



Province : Phra Nakhon Si Ayutthaya

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	32622	100	0	0	32622	0	0	8.0	0.0	0.0	260.99	0.00	0.00	32.0	0.0	0.0	8.158	0.000	0.000
Motorcycle	10971	83	0	17	1570	0	327	30.0	0.0	30.0	47.09	0.00	9.84	12.0	0.0	10.0	3.924	0.000	0.964
Car < 7 Seats	2015	85	12	3	1713	242	90	16.5	26.0	23.0	28.26	6.29	1.39	11.0	11.5	10.0	2.989	0.547	0.139
Car > 7 Seats	3353	65	30	5	2179	1006	199	21.0	31.0	24.0	45.77	31.18	4.02	10.5	11.0	9.0	4.359	2.805	0.447
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	146	35	64	1	51	53	1	22.0	35.0	24.0	1.12	3.27	0.04	11.5	12.0	10.0	0.098	0.273	0.004
Heavy Buses	671	0	100	0	0	671	0	0.0	60.0	0.0	0.00	40.26	0.00	0.0	4.0	0.0	0.000	10.095	0.000
Small Trucks	3382	35	64	1	1187	2171	24	22.0	35.0	24.0	26.12	75.98	0.81	11.5	12.0	10.0	2.271	6.332	0.091
Medium Trucks	1574	0	100	0	0	1574	0	0.0	40.0	0.0	0.00	62.96	0.00	0.0	6.0	0.0	0.000	10.453	0.000
Heavy Trucks	1139	0	100	0	0	1139	0	0.0	80.0	0.0	0.00	91.12	0.00	0.0	4.0	0.0	0.000	22.790	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	48903				39222	6366	585				409.33	311.06	15.91				21.376	53.324	1.655

Province : Ang Thong

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	30142	100	0	0	30142	0	0	8.0	0.0	0.0	241.14	0.00	0.00	32.0	0.0	0.0	7.526	0.000	0.000
Motorcycle	556	83	0	17	461	0	95	30.0	0.0	30.0	13.84	0.00	2.84	12.0	0.0	10.0	1.154	0.000	0.284
Car < 7 Seats	1035	85	12	3	890	124	31	16.5	26.0	23.0	14.52	3.23	0.71	11.0	11.5	10.0	1.320	0.291	0.071
Car > 7 Seats	1258	65	30	5	816	377	63	21.0	31.0	24.0	17.14	11.88	1.51	10.5	11.0	9.0	1.833	1.062	0.157
Taxis	30	8	87	5	2	26	2	65.0	65.0	65.0	0.85	1.70	0.40	11.0	11.5	9.5	0.011	0.148	0.010
Small Buses	60	35	64	1	21	39	1	22.0	35.0	24.0	0.46	1.34	0.01	11.5	12.0	10.0	0.040	0.112	0.001
Heavy Buses	441	0	100	0	0	441	0	0.0	60.0	0.0	0.00	26.45	0.00	0.0	4.0	0.0	0.000	6.515	0.000
Small Trucks	3084	35	64	1	1072	1961	31	22.0	35.0	24.0	23.59	68.83	0.74	11.5	12.0	10.0	2.762	5.719	0.174
Medium Trucks	574	0	100	0	0	574	0	0.0	40.0	0.0	0.00	22.96	0.00	0.0	6.0	0.0	0.000	3.070	0.000
Heavy Trucks	492	0	100	0	0	492	0	0.0	80.0	0.0	0.00	36.96	0.00	0.0	4.0	0.0	0.000	9.240	0.000
Others	1	25	75	0	0	1	0	10.0	10.0	0.0	3.00	0.01	0.00	10.0	10.0	3.0	0.000	0.001	0.000
Total	37621				22096	4064	221				310.66	172.97	5.40				13.746	27.004	0.809

Province : Saraburi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	27038	100	0	0	27038	0	0	8.0	0.0	0.0	216.70	0.00	0.00	32.0	0.0	0.0	6.772	0.000	0.000
Motorcycle	19	83	0	17	16	0	3	30.0	0.0	30.0	9.47	0.00	0.10	12.0	0.0	10.0	0.009	0.000	0.010
Car < 7 Seats	2423	85	12	3	2063	291	73	16.5	26.0	23.0	33.98	7.56	1.87	11.0	11.5	10.0	3.088	0.667	0.167
Car > 7 Seats	2929	65	30	5	1904	978	146	21.0	31.0	24.0	39.98	27.24	3.51	10.5	11.0	9.0	3.908	2.476	0.391
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	148	35	64	1	51	53	1	22.0	35.0	24.0	1.12	3.27	0.04	11.5	12.0	10.0	0.098	0.273	0.004
Heavy Buses	671	0	100	0	0	671	0	0.0	60.0	0.0	0.00	40.26	0.00	0.0	4.0	0.0	0.000	10.095	0.000
Small Trucks	6303	35	64	1	2256	4034	63	22.0	35.0	24.0	48.53	141.19	1.51	11.5	12.0	10.0	4.220	11.765	0.151
Medium Trucks	1360	0	100	0	0	1360	0	0.0	40.0	0.0	0.00	54.00	0.00	0.0	6.0	0.0	0.000	9.000	0.000
Heavy Trucks	3143	0	100	0	0	3143	0	0.0	80.0	0.0	0.00	25.44	0.00	0.0	4.0	0.0	0.000	62.860	0.000
Others	55	25	75	0	14	41	0	10.0	10.0	0.0	0.14	0.41	0.00	10.0	10.0	0.0	0.014	0.041	0.000
Total	44127				33636	10572	297				340.94	525.97	6.85				18.040	57.128	0.722



Province : Suvarnabhumi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	75760	100	0	0	75760	0	0	8.0	0.0	0.0	614.08	0.00	0.00	32.0	0.0	0.0	19.190	0.000	0.000
Motorcycle	73	83	0	17	61	0	12	30.0	0.0	30.0	1.82	0.00	0.37	12.0	3.0	10.0	0.151	0.000	0.037
Cars < 7 Seats	1823	85	12	3	1550	219	55	16.5	26.0	23.0	25.57	5.98	1.26	11.0	11.5	10.0	2.324	0.485	0.126
Cars > 7 Seats	2429	85	30	5	1509	729	121	21.0	31.0	24.0	33.18	22.59	2.91	10.5	11.3	9.0	3.158	2.054	0.324
Taxis	52	8	87	5	4	45	3	55.0	95.0	85.0	0.27	2.94	0.17	11.0	11.5	9.5	0.025	0.256	0.319
Small Buses	177	35	64	1	62	110	2	22.0	35.0	24.0	1.36	3.98	0.54	11.5	12.0	10.0	0.119	0.330	0.304
Heavy Buses	694	0	100	0	0	694	0	0.0	60.0	0.0	0.00	41.64	0.00	0.0	4.0	0.0	0.000	10.410	0.000
Small Trucks	10671	35	64	1	3705	6929	107	22.0	35.0	24.0	82.17	239.03	2.58	11.5	12.0	10.0	7.145	19.919	0.258
Medium Trucks	15845	0	100	0	0	15845	0	0.0	40.0	0.0	0.00	636.60	0.00	0.0	5.0	0.0	0.000	105.633	0.000
Heavy Trucks	4487	0	100	0	0	4487	0	0.0	80.0	0.0	0.00	359.96	0.00	0.0	4.0	0.0	0.000	39.740	0.000
Others	57	25	75	0	14	43	0	10.0	10.0	0.0	0.14	0.43	0.00	10.0	10.0	0.0	0.014	0.043	0.000
Total	110068				80764	29004	300				758.56	1009.04	7.32				32.125	228.980	0.765

Province : Krabi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	66694	100	0	0	66694	0	0	8.0	0.0	0.0	531.82	0.00	0.00	32.0	0.0	0.0	17.246	0.000	0.000
Motorcycle	7	83	0	17	7	0	0	30.0	0.0	30.0	0.82	0.00	0.01	12.0	3.0	10.0	0.002	0.000	0.001
Cars < 7 Seats	2381	85	12	3	2032	339	72	16.5	26.0	23.0	30.53	7.46	1.66	11.0	11.5	10.0	3.049	0.649	0.166
Cars > 7 Seats	2909	85	30	5	1981	870	145	21.0	31.0	24.0	29.71	27.03	3.48	10.5	11.0	9.0	3.392	2.459	0.389
Taxis	0	8	87	5	0	0	0	55.0	95.0	85.0	0.00	1.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	341	35	64	1	119	219	3	22.0	35.0	24.0	2.50	7.64	0.08	11.5	12.0	10.0	0.228	0.637	0.008
Heavy Buses	693	0	100	0	0	693	0	0.0	60.0	0.0	0.00	39.79	0.00	0.0	4.0	0.0	0.000	9.540	0.000
Small Trucks	14517	35	64	1	5081	9211	145	22.0	35.0	24.0	111.79	325.79	3.48	11.5	12.0	10.0	9.721	27.036	0.348
Medium Trucks	1374	0	100	0	0	1374	0	0.0	40.0	0.0	0.00	54.98	0.00	0.0	5.0	0.0	0.000	3.760	0.000
Heavy Trucks	5709	0	100	0	0	5709	0	0.0	80.0	0.0	0.00	458.64	0.00	0.0	4.0	0.0	0.000	114.160	0.000
Others	7	25	75	0	2	5	0	10.0	10.0	0.0	0.02	0.35	0.00	10.0	10.0	0.0	0.002	0.005	0.000
Total	96696				78110	16419	366				708.56	916.77	8.71				34.029	154.110	0.910

Province : Samut Songkhram

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	9208	100	0	0	9208	0	0	8.0	0.0	0.0	73.65	0.00	0.00	32.0	0.0	0.0	2.302	0.000	0.000
Motorcycle	290	83	0	17	241	0	49	30.0	0.0	30.0	7.22	0.00	1.48	12.0	3.0	10.0	0.802	0.000	0.148
Cars < 7 Seats	495	85	12	3	421	59	15	16.5	26.0	23.0	6.94	1.54	0.34	11.0	11.5	10.0	0.631	0.134	0.034
Cars > 7 Seats	1244	85	30	5	809	373	62	21.0	31.0	24.0	16.99	11.57	1.48	10.5	11.0	9.0	1.617	1.052	0.156
Taxis	0	8	87	5	0	0	0	55.0	95.0	85.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	223	35	64	1	78	143	2	22.0	35.0	24.0	1.72	5.00	0.05	11.5	12.0	10.0	0.149	0.416	0.005
Heavy Buses	225	0	100	0	0	225	0	0.0	60.0	0.0	0.00	13.50	0.00	0.0	4.0	0.0	0.000	3.375	0.000
Small Trucks	1782	35	64	1	624	1140	19	22.0	35.0	24.0	13.72	39.32	0.43	11.5	12.0	10.0	1.193	3.329	0.043
Medium Trucks	603	0	100	0	0	603	0	0.0	40.0	0.0	0.00	24.00	0.00	0.0	5.0	0.0	0.000	4.000	0.000
Heavy Trucks	655	0	100	0	0	655	0	0.0	80.0	0.0	0.00	22.40	0.00	0.0	4.0	0.0	0.000	13.100	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	14720				11076	5156	146				120.25	147.93	3.75				6.484	25.404	0.366

## Province : Ratchaburi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	7720	100	0	0	7720	0	0	8.0	0.0	0.0	618.16	0.00	0.00	32.0	0.0	0.0	19.318	0.000	0.000
Motorcycle	448	83	0	17	373	0	76	30.0	0.0	30.0	11.19	0.00	2.29	12.0	0.0	10.0	0.932	0.000	0.229
Cars < 7 Seats	3914	85	12	3	3227	470	117	16.5	26.0	23.0	54.89	12.21	2.70	11.0	11.5	10.0	4.960	1.062	0.270
Cars > 7 Seats	3385	85	30	5	2200	1016	169	21.0	31.0	24.0	46.21	31.43	4.08	10.5	11.0	9.0	4.401	2.062	0.451
Taxis	0	0	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	223	35	84	1	79	143	2	22.0	35.0	24.0	1.72	5.00	0.05	11.5	12.0	10.0	0.149	0.418	0.005
Heavy Buses	722	0	100	0	0	722	0	0.0	60.0	0.0	0.00	43.32	0.00	0.0	4.0	0.0	0.000	10.830	0.000
Small Trucks	13017	35	84	1	4556	8301	130	22.0	35.0	24.0	100.23	291.58	3.12	11.5	12.0	10.0	8.716	24.296	0.312
Medium Trucks	2185	0	100	0	0	2185	0	0.0	40.0	0.0	0.00	87.40	0.00	0.0	5.0	0.0	0.000	14.567	0.000
Heavy Trucks	2908	0	100	0	0	2908	0	0.0	90.0	0.0	0.00	308.54	0.00	0.0	4.0	0.0	0.000	52.150	0.000
Others	2	25	75	0	1	2	0	10.0	10.0	0.0	0.01	0.02	0.00	10.0	10.0	0.0	0.011	0.002	0.000
Total	103775				87604	15475	495				832.39	679.94	12.23				38.506	106.197	1.268

## Province : Phetchaburi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	44637	100	0	0	44637	0	0	8.0	0.0	0.0	357.10	0.00	0.00	32.0	0.0	0.0	11.159	0.000	0.000
Motorcycle	79	83	0	17	63	3	13	30.0	0.0	30.0	1.99	0.00	0.36	12.0	0.0	10.0	0.159	0.000	0.039
Cars < 7 Seats	2018	85	12	3	1715	242	61	16.5	26.0	23.0	28.30	6.30	1.36	11.0	11.5	10.0	2.573	0.547	0.139
Cars > 7 Seats	1501	85	30	5	976	490	75	21.0	31.0	24.0	23.49	13.95	1.90	10.5	11.0	9.0	1.951	1.289	0.200
Taxis	45	0	87	5	1	39	2	65.0	65.0	65.0	0.23	2.54	0.15	11.0	11.5	9.5	0.021	0.221	0.015
Small Buses	197	35	84	1	69	126	2	22.0	35.0	24.0	1.52	4.41	0.05	11.5	12.0	10.0	0.132	0.369	0.005
Heavy Buses	501	0	100	0	0	501	0	0.0	60.0	0.0	0.00	30.05	0.00	0.0	4.0	0.0	0.000	7.515	0.000
Small Trucks	9877	35	84	1	3337	6193	97	22.0	35.0	24.0	74.51	216.76	2.32	11.5	12.0	10.0	6.475	18.064	0.232
Medium Trucks	1107	0	100	0	0	1107	0	0.0	40.0	0.0	0.00	44.28	0.00	0.0	5.0	0.0	0.000	7.300	0.000
Heavy Trucks	2060	0	100	0	0	2060	0	0.0	80.0	0.0	0.00	164.60	0.00	0.0	4.0	0.0	0.000	41.200	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	61819				50851	10719	250				484.04	463.12	8.10				22.474	75.564	0.631

## Province : Pichuap Khiri Khen

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	49691	100	0	0	49691	0	0	8.0	0.0	0.0	397.53	0.00	0.00	32.0	0.0	0.0	12.423	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	871	85	12	3	740	105	26	16.5	26.0	23.0	12.22	2.72	0.80	11.0	11.5	10.0	1.111	0.236	0.060
Cars > 7 Seats	1070	85	30	5	696	321	54	21.0	31.0	24.0	14.61	9.95	1.28	10.5	11.0	9.0	1.381	0.905	0.143
Taxis	1	0	87	5	0	1	0	65.0	65.0	65.0	0.01	0.09	0.00	11.0	11.5	9.5	0.000	0.005	0.000
Small Buses	43	35	84	1	15	28	0	22.0	35.0	24.0	0.33	0.96	0.01	11.5	12.0	10.0	0.029	0.080	0.001
Heavy Buses	176	0	100	0	0	176	0	0.0	60.0	0.0	0.00	10.56	0.00	0.0	4.0	0.0	0.000	2.640	0.000
Small Trucks	7707	35	84	1	2697	4932	77	22.0	35.0	24.0	58.34	172.64	1.85	11.5	12.0	10.0	5.180	14.386	0.185
Medium Trucks	1577	0	100	0	0	1577	0	0.0	40.0	0.0	0.00	63.08	0.00	0.0	5.0	0.0	0.000	10.510	0.000
Heavy Trucks	1110	0	100	0	0	1110	0	0.0	80.0	0.0	0.00	88.80	0.00	0.0	4.0	0.0	0.000	22.200	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	62246				53336	8245	157				484.03	346.77	3.75				20.114	50.966	0.389



## Province : Trat

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	16782	100	0	0	16782	0	0	8.0	0.0	0.0	150.26	0.00	0.00	32.0	0.0	0.0	4.696	0.000	0.000
Motorcycle	0	83	3	17	0	0	0	30.0	0.0	30.0	3.00	0.00	0.00	12.0	3.0	10.0	0.000	0.000	0.000
Car < 7 Seats	561	85	12	3	477	67	17	16.5	26.0	23.0	7.97	1.75	0.39	11.0	11.5	10.0	0.715	0.752	0.039
Car > 7 Seats	707	85	30	5	580	212	35	21.0	31.0	24.0	9.65	6.59	0.85	10.5	11.0	9.0	0.919	0.598	0.094
Taxi	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	608	35	84	1	213	369	6	22.0	35.0	24.0	4.99	13.52	0.15	11.5	12.0	10.0	0.407	1.125	0.015
Heavy Buses	43	0	100	0	0	43	0	0.0	60.0	0.0	0.00	2.59	0.00	0.00	4.0	0.0	0.000	0.645	0.000
Small Trucks	6187	35	84	1	2185	3960	62	22.0	35.0	24.0	47.84	138.59	1.49	11.5	12.0	10.0	4.143	11.548	0.148
Medium Trucks	493	0	100	0	0	493	0	0.0	40.0	0.0	0.00	19.72	0.00	0.00	5.0	0.0	0.000	3.297	0.000
Heavy Trucks	354	0	100	0	0	354	0	0.0	90.0	0.0	0.00	29.32	0.00	0.00	4.0	0.0	0.000	7.080	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.300	0.000
Total	27735				22097	5518	120				220.10	211.15	2.97				10.890	24.446	0.296

## Province : Chantaburi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	59754	100	0	0	59754	0	0	8.0	0.0	0.0	476.00	0.00	0.00	32.0	0.0	0.0	14.526	0.000	0.000
Motorcycle	50	83	0	17	42	0	9	30.0	0.0	30.0	1.25	0.00	0.28	12.0	3.0	10.0	0.104	0.000	0.026
Car < 7 Seats	2607	85	12	3	2216	313	78	16.5	26.0	23.0	35.56	3.13	1.30	11.0	11.5	10.0	3.324	0.707	0.180
Car > 7 Seats	3299	85	30	5	2144	990	165	21.0	31.0	24.0	45.03	30.68	3.96	10.5	11.0	9.0	4.289	2.799	0.440
Taxi	109	8	87	5	9	35	3	65.0	65.0	65.0	0.57	2.16	0.35	11.0	11.5	9.5	0.052	0.326	0.037
Small Buses	376	35	84	1	132	241	4	22.0	35.0	24.0	2.90	8.42	0.08	11.5	12.0	10.0	0.252	0.702	0.009
Heavy Buses	244	0	100	0	0	244	0	0.0	60.0	0.0	0.00	14.61	0.00	0.00	4.0	0.0	0.000	3.660	0.000
Small Trucks	19282	35	84	1	6752	12347	193	22.0	35.0	24.0	148.95	432.14	4.63	11.5	12.0	10.0	12.917	36.012	0.463
Medium Trucks	1079	0	100	0	0	1079	0	0.0	40.0	0.0	0.00	43.16	0.00	0.00	5.0	0.0	0.000	7.150	0.000
Heavy Trucks	793	0	100	0	0	793	0	0.0	80.0	0.0	0.00	53.44	0.00	0.00	4.0	0.0	0.000	15.990	0.000
Others	123	25	75	0	33	100	0	10.0	10.0	0.0	0.33	1.00	0.00	10.0	10.0	0.0	0.033	0.100	0.000
Total	87736				71062	16201	454				710.21	507.78	11.09				35.908	67.539	1.155

## Province : Rayong

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	75697	100	0	0	75697	0	0	8.0	0.0	0.0	605.98	0.00	0.00	32.0	0.0	0.0	18.924	0.000	0.000
Motorcycle	34	83	0	17	28	0	6	30.0	0.0	30.0	0.85	0.00	0.17	12.0	3.0	10.0	0.071	0.000	0.017
Car < 7 Seats	2256	85	12	3	1919	271	68	16.5	26.0	23.0	31.64	7.04	1.56	11.0	11.5	10.0	2.876	0.612	0.156
Car > 7 Seats	3509	85	30	5	2281	1053	175	21.0	31.0	24.0	47.90	32.53	4.21	10.5	11.0	9.0	4.562	2.957	0.468
Taxi	19	8	87	5	2	17	1	65.0	65.0	65.0	0.10	1.07	0.06	11.0	11.5	9.5	0.009	0.053	0.007
Small Buses	359	35	84	1	128	230	4	22.0	35.0	24.0	2.78	9.04	0.09	11.5	12.0	10.0	0.240	0.570	0.009
Heavy Buses	94	0	100	0	0	94	0	0.0	60.0	0.0	0.00	5.64	0.00	0.00	4.0	0.0	0.000	1.410	0.000
Small Trucks	19289	35	84	1	5984	10412	163	22.0	35.0	24.0	125.27	364.43	3.90	11.5	12.0	10.0	10.893	30.269	0.390
Medium Trucks	2270	0	100	0	0	2270	0	0.0	40.0	0.0	0.00	90.80	0.00	0.00	5.0	0.0	0.000	15.133	0.000
Heavy Trucks	1832	0	100	0	0	1832	0	0.0	90.0	0.0	0.00	148.56	0.00	0.00	4.0	0.0	0.000	36.540	0.000
Others	4	25	75	0	1	3	0	10.0	10.0	0.0	0.01	0.00	0.00	10.0	10.0	0.0	0.001	0.003	0.000
Total	102342				85746	18181	416				814.11	656.24	9.96				37.576	87.357	1.046



## Province : Chon Buri

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/Li)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	130483	100	0	0	130483	0	0	8.0	0.0	0.0	1043.86	0.00	0.00	32.0	0.0	0.0	32521	0.000	0.000
Motorcycle	258	83	0	17	215	0	44	30.0	0.0	30.0	6.45	0.00	1.32	12.0	0.0	10.0	0.537	0.000	0.322
Cars < 7 Seats	9875	85	12	3	8094	1195	296	16.5	26.0	23.0	138.50	30.81	6.31	11.0	11.5	10.0	12591	2.675	0.461
Cars > 7 Seats	9001	85	30	5	5951	2700	450	21.0	31.0	24.0	122.06	40.71	10.80	10.5	11.0	9.0	11701	7.610	1.200
Taxis	34	8	87	5	3	30	2	65.0	65.0	65.0	0.78	1.92	0.11	11.0	11.5	9.5	0.016	0.167	0.012
Small Buses	1926	35	64	1	674	1233	19	22.0	35.0	24.0	14.23	43.14	0.46	11.5	12.0	10.0	1.290	3.585	0.048
Heavy Buses	719	0	100	0	0	719	0	0.0	60.0	0.0	0.00	43.14	0.00	0.0	4.0	0.0	0.000	10.716	0.000
Small Trucks	32624	35	64	1	11488	21007	228	22.0	35.0	24.0	252.74	735.26	7.38	11.5	12.0	10.0	21978	51.271	0.788
Medium Trucks	4056	0	100	0	0	4056	0	0.0	40.0	0.0	0.00	160.56	0.00	0.0	6.0	0.0	0.000	27.327	0.000
Heavy Trucks	7207	0	100	0	0	7207	0	0.0	80.0	0.0	0.00	576.56	0.00	0.0	4.0	0.0	0.000	144.140	0.000
Others	202	25	75	0	51	152	0	10.0	10.0	0.0	0.51	1.52	0.00	10.0	10.0	0.0	0.051	0.152	0.000
Total	196629				157158	38031	1140				1579.93	1680.02	27.29				80.784	257.725	2.359

## Province : Chachoengsao

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/Li)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	19730	100	0	0	19730	0	0	8.0	0.0	0.0	157.66	0.00	0.00	32.0	0.0	0.0	4.903	0.000	0.000
Motorcycle	148	83	0	17	120	0	28	30.0	0.0	30.0	3.69	0.00	0.75	12.0	0.0	10.0	0.207	0.000	0.075
Cars < 7 Seats	2208	85	12	3	1877	295	26	16.5	26.0	23.0	30.97	6.68	1.52	11.0	11.5	10.0	2.815	0.599	0.152
Cars > 7 Seats	3129	85	30	5	2034	909	156	21.0	31.0	24.0	42.71	29.10	3.75	10.5	11.0	9.0	4.369	2.545	0.417
Taxis	6	8	87	5	0	5	0	65.0	65.0	65.0	0.05	0.24	0.02	11.0	11.5	9.5	0.003	0.030	0.002
Small Buses	91	35	64	1	28	52	1	22.0	35.0	24.0	0.82	1.91	0.02	11.5	12.0	10.0	0.054	0.151	0.002
Heavy Buses	437	0	100	0	0	437	0	0.0	60.0	0.0	0.00	26.22	0.00	0.0	4.0	0.0	0.000	6.553	0.000
Small Trucks	8000	35	64	1	2061	4371	58	22.0	35.0	24.0	52.59	152.94	1.54	11.5	12.0	10.0	4.573	12.746	0.164
Medium Trucks	1524	0	100	0	0	1524	0	0.0	40.0	0.0	0.00	60.96	0.00	0.0	6.0	0.0	0.000	10.160	0.000
Heavy Trucks	463	0	100	0	0	463	0	0.0	30.0	0.0	0.00	37.04	0.00	0.0	4.0	0.0	0.000	5.260	0.000
Others	7	25	75	0	2	5	0	10.0	10.0	0.0	0.12	0.05	0.00	10.0	10.0	0.0	0.002	0.005	0.000
Total	34556				26188	6061	317				246.46	315.41	7.71				16.755	42.155	0.910

## Province : Pechin Buri

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/Li)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	33637	100	0	0	33637	0	0	8.0	0.0	0.0	288.30	0.00	0.00	32.0	0.0	0.0	0.384	0.000	0.000
Motorcycle	181	83	0	17	150	0	31	30.0	0.0	30.0	4.51	0.00	0.92	12.0	0.0	10.0	0.378	0.000	0.092
Cars < 7 Seats	1052	85	12	3	894	126	32	16.5	26.0	23.0	14.75	3.28	0.73	11.0	11.5	10.0	1.241	0.265	0.073
Cars > 7 Seats	1523	85	30	5	990	457	76	21.0	31.0	24.0	20.79	14.16	1.83	10.5	11.0	9.0	1.980	1.288	0.203
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	257	35	64	1	90	164	3	22.0	35.0	24.0	1.99	5.76	0.06	11.5	12.0	10.0	0.172	0.480	0.006
Heavy Buses	588	0	100	0	0	588	0	0.0	60.0	0.0	0.00	35.28	0.00	0.0	4.0	0.0	0.000	8.820	0.000
Small Trucks	5809	35	64	1	2033	3718	58	22.0	35.0	24.0	44.73	130.12	1.36	11.5	12.0	10.0	3.890	10.843	0.139
Medium Trucks	1575	0	100	0	0	1575	0	0.0	40.0	0.0	0.00	63.00	0.00	0.0	6.0	0.0	0.000	10.500	0.000
Heavy Trucks	940	0	100	0	0	940	0	0.0	30.0	0.0	0.00	75.20	0.00	0.0	4.0	0.0	0.000	18.800	0.000
Others	18	25	75	0	5	14	0	10.0	10.0	0.0	0.05	0.14	0.00	10.0	10.0	0.0	0.005	0.014	0.000
Total	45480				37696	7362	198				355.10	326.54	4.93				16.147	51.030	0.514

Province : Lampung		Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
Type of Vehicle	no. of Vehicle	Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	9006	100	0	0	9006	0	0	9.0	0.0	0.0	744.05	0.00	0.00	32.0	0.0	0.0	23.252	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	3.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	3832	85	12	3	3257	490	115	16.5	26.0	23.0	53.74	11.96	2.64	11.0	11.5	10.0	4.886	1.040	0.264
Cars > 7 Seats	1816	65	30	5	1180	545	91	21.0	31.0	24.0	24.79	18.89	2.18	10.5	11.0	9.5	0.000	0.000	0.000
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	1541	35	64	1	538	966	15	22.0	35.0	24.0	11.97	34.52	0.37	11.5	12.0	10.0	1.032	2.377	0.237
Heavy Buses	261	0	100	0	0	261	0	0.0	60.0	0.0	0.00	15.68	0.00	0.0	4.0	0.0	0.000	3.915	0.000
Small Trucks	14254	35	64	1	4969	9123	143	22.0	35.0	24.0	108.78	379.29	3.42	11.5	12.0	10.0	9.544	23.007	0.342
Medium Trucks	1154	0	100	0	0	1154	0	0.0	40.0	0.0	0.00	48.16	0.00	0.0	4.0	0.0	0.000	7.363	0.000
Heavy Trucks	990	0	100	0	0	990	0	0.0	80.0	0.0	0.00	88.20	0.00	0.0	4.0	0.0	0.000	17.200	0.000
Others	280	25	75	0	71	212	0	10.0	10.0	0.0	0.71	2.12	0.00	10.0	10.0	0.0	0.071	0.212	0.000
Total	11707				10243	12621	264				944.91	515.40	8.51				41.145	61.080	0.986

Province : Phnom Penh		Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
Type of Vehicle	no. of Vehicle	Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	52909	100	0	0	52909	0	0	8.0	0.0	0.0	422.46	0.00	0.00	32.0	0.0	0.0	15.202	0.000	0.000
Motorcycle	0	80	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	1875	85	12	3	1594	225	56	16.5	26.0	23.0	28.30	5.36	1.29	11.0	11.5	10.0	2.391	0.509	0.129
Cars > 7 Seats	778	65	30	5	508	233	39	21.0	31.0	24.0	10.62	7.24	0.93	10.5	11.0	9.0	1.011	0.358	0.104
Taxis	37	8	87	5	3	56	3	65.0	65.0	65.0	0.36	3.79	0.22	11.0	11.5	9.5	0.032	0.229	0.023
Small Buses	896	35	64	1	314	573	9	22.0	35.0	24.0	5.90	20.07	0.22	11.5	12.0	10.0	0.900	1.673	0.222
Heavy Buses	126	0	100	0	0	126	0	0.0	60.0	0.0	0.00	7.36	0.00	0.0	4.0	0.0	0.000	1.460	0.000
Small Trucks	11226	35	64	1	3829	7395	112	22.0	35.0	24.0	95.44	251.48	2.69	11.5	12.0	10.0	7.517	20.556	0.269
Medium Trucks	387	0	100	0	0	387	0	0.0	40.0	0.0	0.00	34.63	0.00	0.0	4.0	0.0	0.000	5.790	0.000
Heavy Trucks	348	0	100	0	0	348	0	0.0	80.0	0.0	0.00	27.69	0.00	0.0	4.0	0.0	0.000	5.920	0.000
Others	11	25	75	0	3	3	0	10.0	10.0	0.0	0.00	0.08	0.00	10.0	10.0	0.0	0.000	0.308	0.000
Total	69000				55135	9822	220				553.10	596.41	5.36				24.736	38.722	0.547

Province : Uthai Thani		Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
Type of Vehicle	no. of Vehicle	Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	39882	100	0	0	39882	0	0	9.0	0.0	0.0	378.90	0.00	0.00	32.0	0.0	0.0	9.966	0.000	0.000
Motorcycle	3	80	0	17	2	0	1	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.008	0.000	0.002
Cars < 7 Seats	1560	85	12	3	1328	187	47	16.5	26.0	23.0	21.38	4.87	1.08	11.0	11.5	10.0	1.999	0.423	0.108
Cars > 7 Seats	1320	65	30	5	858	398	66	21.0	31.0	24.0	18.62	12.28	1.98	10.5	11.0	9.0	1.716	1.116	0.176
Taxis	150	8	87	5	15	139	10	65.0	65.0	65.0	1.00	10.91	0.67	11.0	11.5	9.5	0.091	0.949	0.089
Small Buses	102	35	64	1	38	65	1	22.0	35.0	24.0	0.79	2.29	0.02	11.5	12.0	10.0	0.068	0.190	0.022
Heavy Buses	272	0	100	0	0	272	0	0.0	60.0	0.0	0.00	16.32	0.00	0.0	4.0	0.0	0.000	4.030	0.000
Small Trucks	5403	35	64	1	1861	3456	54	22.0	35.0	24.0	41.80	121.03	1.30	11.5	12.0	10.0	2.618	10.066	0.130
Medium Trucks	630	0	100	0	0	630	0	0.0	40.0	0.0	0.00	25.20	0.00	0.0	4.0	0.0	0.000	4.200	0.000
Heavy Trucks	505	0	100	0	0	505	0	0.0	80.0	0.0	0.00	40.40	0.00	0.0	4.0	0.0	0.000	10.100	0.000
Others	97	25	75	0	24	73	0	10.0	10.0	0.0	0.24	0.73	0.00	10.0	10.0	0.0	0.024	0.073	0.000
Total	49647				44015	5754	178				402.50	234.02	4.82				17.478	31.217	0.463



Province : Nakhon Nayok

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	19846	100	0	0	19846	0	0	8.0	0.0	0.0	158.77	0.00	0.00	32.0	0.0	0.0	4.962	0.000	0.000
Motorcycle	0	33	0	17	0	0	30.0	0.0	0.0	0.00	0.00	0.00	12.0	0.0	0.0	0.000	0.000	0.000	
Car < 7 Seats	1182	65	12	3	1005	142	35	16.5	26.0	23.0	16.58	3.66	0.32	11.0	11.5	10.0	1.507	0.321	0.082
Car > 7 Seats	1276	65	30	5	829	383	64	21.0	31.0	24.0	17.42	11.87	1.53	10.5	11.0	9.0	1.659	1.079	0.170
Taxis	15	9	37	5	1	13	1	65.0	65.0	65.0	0.08	0.85	0.05	11.0	11.5	9.5	0.007	0.074	0.005
Small Buses	48	35	64	1	17	31	0	22.0	35.0	24.0	0.37	1.06	0.01	11.5	12.0	10.0	0.032	0.090	0.001
Heavy Buses	261	0	100	0	0	261	0	0.0	60.0	0.0	0.00	15.66	0.00	0.0	4.0	0.0	0.000	3.915	0.000
Small Trucks	2294	35	54	1	803	1468	23	22.0	25.0	24.0	17.96	51.39	0.55	11.5	12.0	10.0	1.526	4.282	0.055
Medium Trucks	4	0	100	0	0	431	0	0.0	40.0	0.0	0.00	17.24	0.00	0.0	6.0	0.0	0.000	2.673	0.000
Heavy Trucks	564	0	100	0	0	564	0	0.0	60.0	0.0	0.00	45.12	0.00	0.0	4.0	0.0	0.000	11.280	0.000
Others	3	25	75	0	1	2	0	10.0	10.0	0.0	0.01	0.32	0.00	10.0	10.0	0.0	0.001	0.002	0.000
Total	23620				22502	3295	123				210.08	146.91	2.96				9.703	23.916	0.313

ศูนย์วิทยุโทรพัฯกร  
 ศูนย์วิทยุโทรพัฯกร  
 จุฬาลงกรณ์มหาวิทยาลัย  
 จุฬาลงกรณ์มหาวิทยาลัย



Province : Nan

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	36115	100	0	0	36115	0	0	9.0	0.0	0.0	298.92	0.00	0.00	32.0	0.0	0.0	9.029	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	636	85	12	3	541	76	19	16.5	26.0	23.0	8.92	1.98	0.44	11.0	11.5	10.0	0.811	0.173	0.044
Cars > 7 Seats	319	85	30	5	207	96	16	21.0	31.0	24.0	4.35	2.97	0.38	10.5	11.0	9.0	0.415	0.270	0.043
Taxis	4	8	87	5	0	3	0	55.0	55.0	55.0	0.02	0.25	0.01	11.0	11.5	9.5	0.002	0.020	0.001
Small Buses	248	35	84	1	87	159	2	22.0	35.0	24.0	1.91	5.58	0.06	11.5	12.0	10.0	0.188	0.483	0.008
Heavy Buses	57	0	100	0	0	57	0	0.0	60.0	0.0	0.00	3.42	0.00	0.0	4.0	0.0	0.000	0.355	0.000
Small Trucks	4224	35	84	1	1478	2703	42	22.0	35.0	24.0	32.52	94.62	1.01	11.5	12.0	10.0	2.828	7.395	0.101
Medium Trucks	261	0	100	0	0	261	0	0.0	40.0	0.0	0.00	10.44	0.00	0.0	6.0	0.0	0.000	1.740	0.000
Heavy Trucks	29	0	100	0	0	29	0	0.0	80.0	0.0	0.00	2.32	0.00	0.0	4.0	0.0	0.000	0.990	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.300	0.000
Total	41980				38428	3085	80				306.95	121.50	1.91				13.251	11.995	0.195

Province : Phayao

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	37871	100	0	0	37871	0	0	8.0	0.0	0.0	302.97	0.00	0.00	32.0	0.0	0.0	9.486	0.000	0.000
Motorcycle	7	83	0	17	0	0	0	30.0	0.0	30.0	7.17	0.00	0.04	12.0	0.0	10.0	0.015	0.000	0.004
Cars < 7 Seats	718	85	12	3	670	55	24	15.5	26.0	23.0	11.05	2.46	0.54	11.0	11.5	10.0	1.005	0.214	0.054
Cars > 7 Seats	450	85	30	5	283	136	23	21.0	31.0	24.0	6.14	4.9	0.54	10.5	11.0	9.0	0.585	0.380	0.060
Taxis	0	8	87	5	0	0	0	55.0	55.0	55.0	0.00	0.25	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	439	35	84	1	154	281	4	22.0	35.0	24.0	3.36	9.93	0.11	11.5	12.0	10.0	0.284	0.819	0.011
Heavy Buses	52	0	100	0	0	52	0	0.0	60.0	0.0	0.00	3.72	0.00	0.0	4.0	0.0	0.000	1.930	0.000
Small Trucks	5697	35	84	1	1959	3592	56	22.0	35.0	24.0	43.10	125.27	1.54	11.5	12.0	10.0	3.748	10.448	0.134
Medium Trucks	106	0	100	0	0	106	0	0.0	40.0	0.0	0.00	7.44	0.00	0.0	6.0	0.0	0.000	1.240	0.000
Heavy Trucks	174	0	100	0	0	174	0	0.0	80.0	0.0	0.00	13.92	0.00	0.0	4.0	0.0	0.000	2.460	0.000
Others	38	25	75	0	50	149	0	10.0	10.0	0.0	0.50	1.38	0.00	10.0	10.0	0.0	0.050	0.145	0.000
Total	45773				41001	4864	109				357.31	196.42	2.57				15.160	17.561	0.263

Province : Chiang Rai

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	83895	100	0	0	83895	0	0	8.0	0.0	0.0	671.08	0.00	0.00	32.0	0.0	0.0	20.971	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	3506	85	12	3	2900	421	105	16.5	26.0	23.0	49.17	10.94	2.42	11.0	11.5	10.0	4.470	0.951	0.242
Cars > 7 Seats	1548	85	30	5	1006	484	77	21.0	31.0	24.0	21.13	14.40	1.86	10.5	11.0	9.0	2.012	1.309	0.206
Taxis	0	8	87	5	0	0	0	55.0	55.0	55.0	0.00	0.25	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	1152	35	84	1	400	737	12	22.0	35.0	24.0	8.87	25.80	0.28	11.5	12.0	10.0	0.771	2.150	0.028
Heavy Buses	220	0	100	0	0	220	0	0.0	60.0	0.0	0.00	13.20	0.00	0.0	4.0	0.0	0.000	3.300	0.000
Small Trucks	14436	35	84	1	5050	9252	145	22.0	35.0	24.0	111.31	323.81	3.47	11.5	12.0	10.0	9.679	28.396	0.347
Medium Trucks	1824	0	100	0	0	1824	0	0.0	40.0	0.0	0.00	64.56	0.00	0.0	6.0	0.0	0.000	10.827	0.000
Heavy Trucks	544	0	100	0	0	544	0	0.0	80.0	0.0	0.00	43.52	0.00	0.0	4.0	0.0	0.000	10.890	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	109835				93104	13292	339				861.56	496.63	8.02				37.904	56.402	0.823

## Province : Mae Hong Song

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	5108	100	0	0	5108	0	0	8.0	0.0	0.0	40.86	0.00	0.00	32.0	0.0	0.0	1.277	0.000	0.000
Motorcycle	0	83	0	17	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000	
Cars < 7 Seats	48	85	12	3	39	5	1	16.5	28.0	23.0	0.95	0.14	0.09	11.0	11.5	10.0	0.059	0.012	0.003
Cars > 7 Seats	72	65	30	5	47	22	4	21.0	31.0	24.0	0.98	0.67	0.09	10.5	11.0	9.0	0.094	0.061	0.010
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	82	35	64	1	29	52	1	22.0	25.0	24.0	0.82	1.84	0.02	11.5	12.0	10.0	0.055	0.153	0.002
Heavy Buses	33	0	100	0	0	33	0	0.0	60.0	0.0	0.00	1.99	0.00	0.0	4.0	0.0	0.000	0.495	0.000
Small Trucks	451	35	64	1	158	299	5	22.0	25.0	24.0	3.47	10.10	0.11	11.5	12.0	10.0	0.202	0.242	0.011
Medium Trucks	59	0	100	0	0	59	0	0.0	40.0	0.0	0.00	2.76	0.00	0.0	6.0	0.0	0.000	0.450	0.000
Heavy Trucks	31	0	100	0	0	31	0	0.0	60.0	0.0	0.00	2.48	0.00	0.0	4.0	0.0	0.000	0.820	0.000
Others	1	25	75	0	0	1	0	10.0	10.0	0.0	0.00	0.01	0.00	10.0	10.0	0.0	0.000	0.001	0.000
Total	5953				5391	502	10				46.60	19.98	0.25				1.786	2.944	0.026

## Province : Chiang Mai

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	237765	100	0	0	237765	0	0	8.0	0.0	0.0	1902.12	0.00	0.00	32.0	0.0	0.0	59.441	0.000	0.000
Motorcycle	1074	80	0	17	891	0	130	30.0	0.0	30.0	29.74	0.00	5.48	12.0	0.0	10.0	2.229	0.000	0.548
Cars < 7 Seats	14523	95	12	3	12896	1750	437	16.5	28.0	23.0	204.53	45.50	10.06	11.0	11.5	10.0	18.593	3.956	1.009
Cars > 7 Seats	7082	65	30	5	4803	2125	354	21.0	31.0	24.0	96.67	85.88	8.50	10.5	11.0	9.0	9.207	5.988	0.944
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	3761	35	64	1	1316	2407	39	22.0	25.0	24.0	28.96	84.25	0.80	11.5	12.0	10.0	2.519	7.321	0.090
Heavy Buses	453	0	100	0	0	453	0	0.0	60.0	0.0	0.00	27.18	0.00	0.0	4.0	0.0	0.000	6.795	0.000
Small Trucks	30823	35	64	1	10823	19791	309	22.0	25.0	24.0	238.11	692.89	7.42	11.5	12.0	10.0	20.705	57.725	0.742
Medium Trucks	2929	0	100	0	0	2929	0	0.0	40.0	0.0	0.00	117.12	0.00	0.0	6.0	0.0	0.000	19.520	0.000
Heavy Trucks	718	0	100	0	0	718	0	0.0	60.0	0.0	0.00	57.44	0.00	0.0	4.0	0.0	0.000	14.060	0.000
Others	99	25	75	0	25	74	0	10.0	10.0	0.0	0.25	0.74	0.00	10.0	10.0	0.0	0.025	0.074	0.000
Total	266366				267919	30246	121				2497.37	1090.77	32.36				12.719	115.407	3.231

## Province : Lamphun

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	52837	100	0	0	52837	0	0	8.0	0.0	0.0	422.70	0.00	0.00	32.0	0.0	0.0	13.208	0.000	0.000
Motorcycle	25	83	0	17	21	0	4	30.0	0.0	30.0	0.82	0.00	0.13	12.0	0.0	10.0	0.052	0.000	0.013
Cars < 7 Seats	1993	85	12	3	1605	227	57	16.5	28.0	23.0	26.55	5.91	1.31	11.0	11.5	10.0	2.414	0.514	0.131
Cars > 7 Seats	1305	65	30	5	849	382	65	21.0	31.0	24.0	17.33	12.15	1.57	10.5	11.0	9.0	1.889	1.104	0.174
Taxis	5	8	87	5	0	4	0	65.0	65.0	65.0	0.00	0.00	0.02	11.0	11.5	9.5	0.002	0.025	0.002
Small Buses	481	35	64	1	161	296	3	22.0	25.0	24.0	3.35	10.33	0.11	11.5	12.0	10.0	0.309	0.861	0.011
Heavy Buses	142	0	100	0	0	142	0	0.0	60.0	0.0	0.00	8.52	0.00	0.0	4.0	0.0	0.000	2.130	0.000
Small Trucks	16142	35	64	1	5950	10332	151	22.0	25.0	24.0	124.07	381.69	3.97	11.5	12.0	10.0	10.909	30.134	0.397
Medium Trucks	894	0	100	0	0	894	0	0.0	40.0	0.0	0.00	34.55	0.00	0.0	6.0	0.0	0.000	5.760	0.000
Heavy Trucks	129	0	100	0	0	129	0	0.0	60.0	0.0	0.00	9.84	0.00	0.0	4.0	0.0	0.000	2.460	0.000
Others	39	25	75	0	19	25	0	10.0	10.0	0.0	0.10	0.29	0.00	10.0	10.0	0.0	0.010	0.029	0.000
Total	73838				61137	12416	291				550.87	443.43	7.00				26.502	43.016	0.713



## Province : Nakhon Sawan

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	59742	100	0	0	59742	0	0	8.0	0.0	0.0	477.94	0.00	0.00	32.0	0.0	0.0	14.936	0.000	0.000
Motorcycle	67	83	0	17	56	0	11	30.0	0.0	30.0	1.67	0.00	0.34	12.0	0.0	10.0	0.139	0.000	0.034
Cars < 7 Seats	3571	85	12	3	3035	429	107	16.5	26.0	23.0	50.08	11.14	2.46	11.0	11.5	10.0	4.553	0.969	0.245
Cars > 7 Seats	1672	65	30	5	1067	502	94	21.0	31.0	24.0	22.82	15.55	2.01	10.5	11.0	9.0	2.174	1.414	0.223
Taxis	27	8	87	5	2	23	1	65.0	65.0	65.0	0.14	1.33	0.09	11.0	11.5	9.5	0.013	0.133	0.009
Small Buses	578	35	64	1	203	371	8	22.0	35.0	24.0	4.46	12.97	0.14	11.5	12.0	10.0	0.398	1.081	0.014
Heavy Buses	1259	0	100	0	0	1259	0	0.0	60.0	0.0	0.00	75.54	0.00	0.0	4.0	0.0	0.000	18.886	0.000
Small Trucks	10901	35	64	1	3815	6977	109	22.0	35.0	24.0	83.94	244.18	2.62	11.5	12.0	10.0	7.299	20.349	0.262
Medium Trucks	210	0	100	0	0	210	0	0.0	40.0	0.0	0.00	84.28	0.00	0.0	6.0	0.0	0.000	14.047	0.000
Heavy Trucks	2289	0	100	0	0	2289	0	0.0	80.0	0.0	0.00	191.92	0.00	0.0	4.0	0.0	0.000	47.990	0.000
Others	15	25	75	0	4	11	0	10.0	10.0	0.0	0.04	0.11	0.00	10.0	10.0	0.0	0.004	0.011	0.000
Total	62339				67944	14077	318				641.08	637.22	7.96				29.504	104.667	0.798

## Province : Phetchabun

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	37521	100	0	0	37521	0	0	8.0	0.0	0.0	300.17	0.00	0.00	32.0	0.0	0.0	9.360	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	1722	85	12	3	1464	207	52	16.5	26.0	23.0	24.15	5.37	1.19	11.0	11.5	10.0	2.196	0.467	0.119
Cars > 7 Seats	1329	65	30	5	864	399	66	21.0	31.0	24.0	18.14	12.36	1.58	10.5	11.0	9.0	1.728	1.224	0.177
Taxis	48	8	87	5	4	42	2	65.0	65.0	65.0	0.26	2.71	0.16	11.0	11.5	9.5	0.023	0.236	0.016
Small Buses	578	35	64	1	203	371	8	22.0	35.0	24.0	4.46	12.97	0.14	11.5	12.0	10.0	0.398	1.081	0.014
Heavy Buses	1259	0	100	0	0	1259	0	0.0	60.0	0.0	0.00	75.54	0.00	0.0	4.0	0.0	0.000	18.886	0.000
Small Trucks	11122	35	64	1	3893	7118	111	22.0	35.0	24.0	85.64	248.13	2.67	11.5	12.0	10.0	7.447	20.751	0.267
Medium Trucks	807	0	100	0	0	807	0	0.0	40.0	0.0	0.00	32.29	0.00	0.0	6.0	0.0	0.000	5.380	0.000
Heavy Trucks	748	0	100	0	0	748	0	0.0	80.0	0.0	0.00	59.89	0.00	0.0	4.0	0.0	0.000	14.920	0.000
Others	42	25	75	0	11	32	0	10.0	10.0	0.0	0.11	0.32	0.00	10.0	10.0	0.0	0.010	0.032	0.000
Total	55175				43650	10979	236				432.91	450.36	5.75				21.171	62.666	0.593

## Province : Phichit

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	47473	100	0	0	47473	0	0	8.0	0.0	0.0	379.78	0.00	0.00	32.0	0.0	0.0	11.688	0.000	0.000
Motorcycle	31	83	0	17	26	0	5	30.0	0.0	30.0	0.77	0.00	0.16	12.0	0.0	10.0	0.064	0.000	0.016
Cars < 7 Seats	1140	65	12	3	968	137	34	16.5	26.0	23.0	15.99	3.56	0.79	11.0	11.5	10.0	1.454	0.309	0.079
Cars > 7 Seats	825	65	30	5	536	249	41	21.0	31.0	24.0	11.26	7.87	0.96	10.5	11.0	9.0	1.073	0.968	0.110
Taxis	68	8	87	5	5	59	3	65.0	65.0	65.0	0.26	3.86	0.22	11.0	11.5	9.5	0.022	0.234	0.023
Small Buses	335	35	64	1	117	214	3	22.0	35.0	24.0	2.59	7.50	0.08	11.5	12.0	10.0	0.224	0.625	0.008
Heavy Buses	264	0	100	0	0	264	0	0.0	60.0	0.0	0.00	15.84	0.00	0.0	4.0	0.0	0.000	3.960	0.000
Small Trucks	5750	35	64	1	2073	3680	58	22.0	35.0	24.0	44.29	128.80	1.38	11.5	12.0	10.0	3.860	10.735	0.138
Medium Trucks	828	0	100	0	0	828	0	0.0	40.0	0.0	0.00	37.16	0.00	0.0	6.0	0.0	0.000	6.193	0.000
Heavy Trucks	705	0	100	0	0	705	0	0.0	80.0	0.0	0.00	56.40	0.00	0.0	4.0	0.0	0.000	14.100	0.000
Others	27	25	75	0	7	20	0	10.0	10.0	0.0	0.07	0.20	0.00	10.0	10.0	0.0	0.007	0.020	0.000
Total	57547				51143	6256	145				455.08	280.98	3.62				18.572	36.973	0.374

## Province : Phitsanulok

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	75010	100	0	0	75010	0	0	8.0	0.0	0.0	600.08	0.00	0.00	32.0	0.0	0.0	18.753	0.000	0.000
Motorcycle	332	83	0	17	276	0	56	30.0	0.0	30.0	8.27	0.00	1.69	12.0	0.0	10.0	0.489	0.000	0.169
Cars < 7 Seats	2472	85	12	3	2101	297	74	16.5	26.0	23.0	34.67	7.71	1.71	11.0	11.5	10.0	3.152	0.671	0.171
Cars > 7 Seats	1261	85	30	5	620	379	63	21.0	31.0	24.0	17.21	11.73	1.51	10.5	11.0	9.0	1.629	1.066	0.168
Taxis	10	8	87	5	1	9	1	65.0	65.0	65.0	0.06	0.57	0.03	11.0	11.5	9.5	0.005	0.049	0.003
Small Buses	260	35	84	1	91	166	3	22.0	35.0	24.0	2.00	5.92	3.06	11.5	12.0	10.0	0.174	0.465	0.000
Heavy Buses	545	0	100	0	0	545	0	0.0	60.0	0.0	0.00	32.70	0.00	0.0	4.0	0.0	0.000	8.175	0.000
Small Trucks	8964	35	84	1	3144	5750	30	22.0	35.0	24.0	69.18	201.24	2.16	11.5	12.0	10.0	6.015	15.770	0.216
Medium Trucks	1166	0	100	0	0	1166	0	0.0	40.0	0.0	0.00	47.84	0.00	0.0	6.0	0.0	0.000	7.973	0.000
Heavy Trucks	939	0	100	0	0	939	0	0.0	60.0	0.0	0.00	75.12	0.00	0.0	4.0	0.0	0.000	19.790	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
<b>Total</b>	<b>91009</b>				<b>91443</b>	<b>9290</b>	<b>297</b>				<b>731.46</b>	<b>382.70</b>	<b>7.16</b>				<b>30.427</b>	<b>53.970</b>	<b>0.733</b>

## Province : Sukhothai

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	39048	100	0	0	39048	0	0	8.0	0.0	0.0	312.38	0.00	0.00	32.0	0.0	0.0	9.752	0.000	0.000
Motorcycle	24	83	0	17	20	0	4	30.0	0.0	30.0	0.60	0.00	0.12	12.0	0.0	10.0	0.050	0.000	0.012
Cars < 7 Seats	916	85	12	3	779	110	27	16.5	26.0	23.0	12.85	2.66	0.63	11.0	11.5	10.0	1.168	0.249	0.063
Cars > 7 Seats	665	85	30	5	432	200	33	21.0	31.0	24.0	9.08	6.18	0.80	10.5	11.0	9.0	0.664	0.562	0.069
Taxis	11	8	87	5	1	10	1	65.0	65.0	65.0	0.06	0.62	0.04	11.0	11.5	9.5	0.005	0.054	0.004
Small Buses	137	35	84	1	48	89	1	22.0	35.0	24.0	1.05	3.07	0.03	11.5	12.0	10.0	0.092	0.256	0.003
Heavy Buses	895	0	100	0	0	895	0	0.0	60.0	0.0	0.00	53.70	0.00	0.0	4.0	0.0	0.000	13.426	0.000
Small Trucks	5445	35	84	1	1906	3495	54	22.0	35.0	24.0	41.93	121.97	1.31	11.5	12.0	10.0	3.646	10.164	0.131
Medium Trucks	778	0	100	0	0	778	0	0.0	40.0	0.0	0.00	31.16	0.00	0.0	6.0	0.0	0.000	5.193	0.000
Heavy Trucks	1020	0	100	0	0	1020	0	0.0	60.0	0.0	0.00	82.24	0.00	0.0	4.0	0.0	0.000	20.560	0.000
Others	52	25	75	0	13	39	0	10.0	10.0	0.0	0.13	0.39	0.00	10.0	10.0	0.0	0.013	0.039	0.000
<b>Total</b>	<b>43000</b>				<b>42245</b>	<b>6632</b>	<b>121</b>				<b>376.07</b>	<b>302.13</b>	<b>2.50</b>				<b>15.600</b>	<b>50.502</b>	<b>0.302</b>

## Province : Tak

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	26497	100	0	0	26497	0	0	8.0	0.0	0.0	227.98	0.00	0.00	32.0	0.0	0.0	7.124	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	632	85	12	3	707	100	25	16.5	26.0	23.0	11.67	2.60	0.57	11.0	11.5	10.0	1.061	0.226	0.067
Cars > 7 Seats	1022	85	30	5	664	307	51	21.0	31.0	24.0	13.95	9.50	1.20	10.5	11.0	9.0	1.329	0.664	0.136
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	522	35	84	1	183	334	5	22.0	35.0	24.0	4.02	11.69	0.13	11.5	12.0	10.0	0.350	0.974	0.013
Heavy Buses	18	0	100	0	0	18	0	0.0	60.0	0.0	0.00	10.98	0.00	0.0	4.0	0.0	0.000	2.145	0.000
Small Trucks	5267	35	84	1	1843	3371	53	22.0	35.0	24.0	40.58	117.98	1.26	11.5	12.0	10.0	3.527	9.832	0.126
Medium Trucks	407	0	100	0	0	407	0	0.0	40.0	0.0	0.00	16.26	0.00	0.0	6.0	0.0	0.000	2.713	0.000
Heavy Trucks	178	0	100	0	0	178	0	0.0	60.0	0.0	0.00	14.24	0.00	0.0	4.0	0.0	0.000	3.560	0.000
Others	14	25	75	0	4	11	0	10.0	10.0	0.0	0.04	0.11	0.00	10.0	10.0	0.0	0.004	0.010	0.000
<b>Total</b>	<b>36922</b>				<b>31898</b>	<b>4950</b>	<b>134</b>				<b>298.21</b>	<b>183.36</b>	<b>3.19</b>				<b>13.390</b>	<b>20.525</b>	<b>0.333</b>



Province : Yamphang Phat

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	37720	100	0	0	37720	0	0	8.0	0.0	0.0	301.76	0.00	0.00	32.0	0.0	0.0	9.430	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Car < 7 Seats	844	85	12	3	717	101	25	16.5	26.0	23.0	11.84	2.63	0.36	11.0	11.5	10.0	1.076	0.229	0.058
Car > 7 Seats	815	85	30	5	400	186	31	21.0	31.0	24.0	8.09	5.72	0.74	10.5	11.0	9.0	0.000	0.520	0.082
Taxi	5	8	87	5	0	4	0	65.0	65.0	65.0	0.03	0.38	0.02	11.0	11.5	9.5	0.002	0.025	0.002
Small Buses	514	35	84	1	215	393	8	22.0	35.0	24.0	4.73	13.75	0.15	11.5	12.0	10.0	0.411	1.146	0.015
Heavy Buses	217	0	100	0	0	217	0	0.0	60.0	0.0	0.00	13.02	0.00	0.0	4.0	0.0	0.000	3.255	0.000
Small Trucks	7597	35	84	1	2519	4806	72	22.0	35.0	24.0	55.42	161.21	1.73	11.5	12.0	10.0	4.919	13.434	0.172
Medium Trucks	967	0	100	0	0	967	0	0.0	40.0	0.0	0.00	39.88	0.00	0.0	6.0	0.0	0.000	6.647	0.000
Heavy Trucks	2196	0	100	0	0	2196	0	0.0	80.0	0.0	0.00	15.89	0.00	0.0	4.0	0.0	0.000	43.920	0.000
Others	80	25	74	0	15	45	0	10.0	10.0	0.0	0.15	0.45	0.00	10.0	10.0	0.0	0.015	0.045	0.000
<b>Total</b>	<b>50485</b>				<b>41506</b>	<b>3744</b>	<b>134</b>				<b>382.31</b>	<b>412.63</b>	<b>3.21</b>				<b>16.553</b>	<b>59.221</b>	<b>0.229</b>

Province : Uthai Thani

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	40687	100	0	0	40687	0	0	8.0	0.0	0.0	325.50	0.00	0.00	32.0	0.0	0.0	10.172	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Car < 7 Seats	899	85	12	3	739	104	26	16.5	26.0	23.0	12.17	2.71	0.60	11.0	11.5	10.0	1.107	0.235	0.060
Car > 7 Seats	831	85	30	5	410	189	32	21.0	31.0	24.0	9.61	5.87	0.76	10.5	11.0	9.0	0.020	0.533	0.094
Taxi	13	8	87	5	1	11	1	65.0	65.0	65.0	0.07	0.74	0.04	11.0	11.5	9.5	0.006	0.064	0.004
Small Buses	281	35	84	1	98	160	3	22.0	35.0	24.0	2.46	6.26	0.07	11.5	12.0	10.0	0.188	0.525	0.007
Heavy Buses	177	0	100	0	0	177	0	0.0	60.0	0.0	0.00	10.62	0.00	0.0	4.0	0.0	0.000	2.565	0.000
Small Trucks	3939	35	84	1	1314	2457	58	22.0	35.0	24.0	29.55	85.99	0.92	11.5	12.0	10.0	2.570	7.186	0.092
Medium Trucks	457	0	100	0	0	457	0	0.0	40.0	0.0	1.03	18.29	0.00	0.0	6.0	0.0	0.000	3.047	0.000
Heavy Trucks	336	0	100	0	0	336	0	0.0	80.0	0.0	0.00	27.12	0.00	0.0	4.0	0.0	0.000	6.760	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
<b>Total</b>	<b>47282</b>				<b>43276</b>	<b>3915</b>	<b>99</b>				<b>391.07</b>	<b>151.62</b>	<b>2.28</b>				<b>14.684</b>	<b>21.005</b>	<b>0.247</b>

ศูนย์วิทยุโทรคมนาคม  
 จุฬาลงกรณ์มหาวิทยาลัย  
 จุฬาลงกรณ์มหาวิทยาลัย

## Province : Chaiyaphum

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	29166	100	0	0	29166	0	0	8.0	0.0	0.0	233.33	0.00	0.00	32.0	0.0	0.0	7.292	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	678	85	12	3	575	81	20	16.5	25.0	23.0	9.48	2.11	0.47	11.0	11.5	10.0	0.862	0.723	0.047
Cars > 7 Seats	651	85	30	5	473	195	33	21.0	31.0	24.0	8.88	8.55	0.78	10.5	11.0	9.0	0.846	0.550	0.087
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	180	35	64	1	63	115	2	22.0	35.0	24.0	1.36	4.33	0.64	11.5	12.0	10.0	0.121	0.356	0.064
Heavy Buses	882	0	100	0	0	882	0	0.0	60.0	0.0	0.00	40.52	0.00	0.0	4.0	0.0	0.000	10.230	0.000
Small Trucks	4411	35	64	1	1544	2623	44	22.0	35.0	24.0	33.96	98.81	1.08	11.5	12.0	10.0	2.953	8.254	0.106
Medium Trucks	1755	0	100	0	0	1755	0	0.0	40.0	0.0	0.00	70.20	0.00	0.0	6.0	0.0	0.000	11.700	0.000
Heavy Trucks	1053	0	100	0	0	1053	0	0.0	80.0	0.0	0.00	84.24	0.00	0.0	4.0	0.0	0.000	21.060	0.000
Others	3	25	75	0	1	2	0	10.0	10.0	0.0	0.01	0.12	0.00	10.0	10.0	0.0	0.001	0.002	0.000
Total	38577				31771	6707	99				287.05	306.58	2.35				12.074	52.296	0.244

## Province : Nakhon Ratchasima

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	105578	100	0	0	105578	0	0	8.0	0.0	0.0	844.62	0.00	0.00	32.0	0.0	0.0	26.255	0.000	0.000
Motorcycle	928	83	0	17	770	0	158	30.0	0.0	30.0	23.11	0.00	4.73	12.0	0.0	10.0	1.826	0.000	0.473
Cars < 7 Seats	6604	85	12	3	5700	318	204	16.5	25.0	23.0	95.43	21.23	4.98	11.0	11.5	10.0	2.675	1.646	0.489
Cars > 7 Seats	6754	85	30	5	4390	2026	338	21.0	31.0	24.0	92.15	62.81	8.10	10.5	11.0	9.0	8.780	5.710	0.901
Taxis	11	8	87	5	1	10	1	65.0	65.0	65.0	0.06	0.62	0.04	11.0	11.5	9.5	0.005	0.054	0.004
Small Buses	308	35	64	1	107	196	3	22.0	35.0	24.0	2.38	5.85	0.07	11.5	12.0	10.0	0.205	0.571	0.007
Heavy Buses	2035	0	100	0	0	2035	0	0.0	60.0	0.0	0.00	125.10	0.00	0.0	4.0	0.0	0.000	31.275	0.000
Small Trucks	22578	35	64	1	7937	14514	227	22.0	35.0	24.0	174.62	507.99	5.44	11.5	12.0	10.0	15.184	42.532	0.544
Medium Trucks	5175	0	100	0	0	5175	0	0.0	40.0	0.0	0.00	207.18	0.00	0.0	6.0	0.0	0.000	24.527	0.000
Heavy Trucks	2118	0	100	0	0	2118	0	0.0	80.0	0.0	0.00	189.52	0.00	0.0	4.0	0.0	0.000	42.380	0.000
Others	29	25	75	0	7	22	0	10.0	10.0	0.0	0.07	0.22	0.00	10.0	10.0	0.0	0.007	0.022	0.000
Total	152471				124574	29967	930				1232.46	1101.50	23.08				61.177	158.717	2.369

## Province : Buriram

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	35786	100	0	0	35786	0	0	8.0	0.0	0.0	286.38	0.00	0.00	32.0	0.0	0.0	8.960	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	604	81	12	3	501	82	21	16.5	25.0	23.0	9.29	2.13	0.47	11.0	11.5	10.0	0.872	0.766	0.047
Cars > 7 Seats	754	85	30	5	477	220	37	21.0	31.0	24.0	10.02	8.90	0.88	10.5	11.0	9.0	0.954	0.671	0.089
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	105	35	64	1	37	67	1	22.0	35.0	24.0	0.81	2.35	0.03	11.5	12.0	10.0	0.070	0.196	0.003
Heavy Buses	906	0	100	0	0	906	0	0.0	60.0	0.0	0.00	54.36	0.00	0.0	4.0	0.0	0.000	15.550	0.000
Small Trucks	5338	35	64	1	1989	3417	50	22.0	35.0	24.0	4.11	11.958	1.29	11.5	12.0	10.0	3.575	9.566	0.129
Medium Trucks	1524	0	100	0	0	1524	0	0.0	40.0	0.0	0.00	60.96	0.00	0.0	6.0	0.0	0.000	10.160	0.000
Heavy Trucks	716	0	100	0	0	716	0	0.0	80.0	0.0	0.00	57.44	0.00	0.0	4.0	0.0	0.000	14.360	0.000
Others	37	25	75	0	9	28	0	10.0	10.0	0.0	0.09	0.28	0.00	10.0	10.0	0.0	0.009	0.028	0.000
Total	45845				38771	6992	112				348.01	303.54	2.95				14.430	49.106	0.278



## Province : Saitn

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/Lt)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	37808	100	0	0	37808	0	0	8.0	0.0	0.0	302.45	0.00	0.00	32.0	0.0	0.0	9.452	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	763	85	12	3	649	92	23	16.5	26.0	23.0	10.70	2.38	0.53	11.0	11.5	10.0	0.973	0.207	0.053
Cars > 7 Seats	922	65	30	5	599	277	46	21.0	31.0	24.0	12.59	8.57	1.11	10.5	11.0	9.0	1.199	0.780	0.223
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	584	35	64	1	204	374	6	22.0	35.0	24.0	4.50	13.08	0.14	11.5	12.0	10.0	0.391	1.060	0.014
Heavy Buses	723	0	100	0	0	723	0	0.0	60.0	0.0	0.00	43.38	0.00	0.0	4.0	0.0	0.000	10.845	0.000
Small Trucks	6108	35	64	1	2138	3938	51	22.0	35.0	24.0	47.03	136.92	1.47	11.5	12.0	10.0	4.090	11.402	0.147
Medium Trucks	985	0	100	0	0	985	0	0.0	40.0	0.0	0.00	39.40	0.00	0.0	6.0	0.0	0.000	6.567	0.000
Heavy Trucks	538	0	100	0	0	538	0	0.0	60.0	0.0	0.00	43.12	0.00	0.0	4.0	0.0	0.000	10.750	0.000
Others	12	25	75	0	3	9	0	10.0	10.0	0.0	0.03	0.09	0.00	10.0	10.0	0.0	0.003	0.009	0.000
Total	48442				41369	6907	136				377.29	295.85	3.24				16.107	41.679	0.326

## Province : Si Sa Ket

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/Lt)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	43054	100	0	0	43054	0	0	8.0	0.0	0.0	344.43	0.00	0.00	32.0	0.0	0.0	10.754	0.000	0.000
Motorcycle	1	83	0	17	1	0	0	30.0	0.0	30.0	0.02	0.00	0.01	12.0	0.0	10.0	0.002	0.000	0.001
Cars < 7 Seats	815	85	12	3	523	74	18	16.5	26.0	23.0	8.63	1.92	0.42	11.0	11.5	10.0	0.794	0.167	0.042
Cars > 7 Seats	864	65	30	5	562	259	43	21.0	31.0	24.0	11.79	8.04	1.04	10.5	11.0	9.0	1.123	0.730	0.115
Taxis	1	8	87	5	0	1	0	65.0	65.0	65.0	0.01	0.06	0.00	11.0	11.5	9.5	0.000	0.005	0.000
Small Buses	322	35	64	1	113	206	3	22.0	35.0	24.0	2.48	7.21	0.08	11.5	12.0	10.0	0.216	0.901	0.008
Heavy Buses	888	0	100	0	0	888	0	0.0	60.0	0.0	0.00	51.96	0.00	0.0	4.0	0.0	0.000	12.590	0.000
Small Trucks	5301	35	64	1	1855	3383	53	22.0	35.0	24.0	40.82	118.74	1.27	11.5	12.0	10.0	3.549	9.965	0.127
Medium Trucks	1088	0	100	0	0	1088	0	0.0	40.0	0.0	0.00	43.32	0.00	0.0	6.0	0.0	0.000	7.220	0.000
Heavy Trucks	353	0	100	0	0	353	0	0.0	60.0	0.0	0.00	28.24	0.00	0.0	4.0	0.0	0.000	7.060	0.000
Others	22	25	75	0	6	17	0	10.0	10.0	0.0	0.06	0.17	0.00	10.0	10.0	0.0	0.006	0.017	0.000
Total	52482				46113	6251	116				408.23	259.95	2.92				16.444	38.685	0.293

## Province : Ubon Ratchathani

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/Lt)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	75640	100	0	0	75640	0	0	8.0	0.0	0.0	605.12	0.00	0.00	32.0	0.0	0.0	18.910	0.000	0.000
Motorcycle	334	83	0	17	277	0	57	30.0	0.0	30.0	8.32	0.00	1.70	12.0	0.0	10.0	0.663	0.000	0.170
Cars < 7 Seats	2916	85	12	3	2394	338	84	16.5	26.0	23.0	38.49	8.79	1.94	11.0	11.5	10.0	3.590	0.764	0.194
Cars > 7 Seats	1903	65	30	5	1172	511	90	21.0	31.0	24.0	24.61	16.77	2.16	10.5	11.0	9.0	2.344	1.524	0.240
Taxis	110	8	87	5	9	96	6	65.0	65.0	65.0	0.57	6.22	0.36	11.0	11.5	9.5	0.052	0.541	0.036
Small Buses	531	35	64	1	185	340	5	22.0	35.0	24.0	4.08	11.89	0.13	11.5	12.0	10.0	0.256	0.991	0.013
Heavy Buses	1437	0	100	0	0	1437	0	0.0	60.0	0.0	0.00	66.22	0.00	0.0	4.0	0.0	0.000	21.555	0.000
Small Trucks	14384	35	64	1	5028	9212	144	22.0	35.0	24.0	110.83	322.43	3.45	11.5	12.0	10.0	9.808	26.869	0.245
Medium Trucks	1933	0	100	0	0	1933	0	0.0	40.0	0.0	0.00	77.52	0.00	0.0	6.0	0.0	0.000	12.920	0.000
Heavy Trucks	3559	0	100	0	0	3559	0	0.0	60.0	0.0	0.00	284.84	0.00	0.0	4.0	0.0	0.000	71.160	0.000
Others	61	25	75	0	15	45	0	10.0	10.0	0.0	0.15	0.46	0.00	10.0	10.0	0.0	0.015	0.046	0.000
Total	102822				84731	17535	369				793.19	814.93	9.75				35.598	136.370	1.001

Province : Yasothon

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	21072	100	0	0	21072	0	0	8.0	0.0	0.0	168.58	0.00	0.00	32.0	0.0	0.0	5.268	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	393	85	12	3	326	46	11	16.5	26.0	23.0	5.27	1.9	0.26	11.0	11.5	10.0	0.468	0.104	0.026
Cars > 7 Seats	459	65	30	5	298	138	23	21.0	31.0	24.0	6.27	4.27	0.55	10.5	11.0	9.0	0.597	0.388	0.061
Taxis	21	8	87	5	2	18	1	65.0	65.0	65.0	0.11	1.9	0.07	11.0	11.5	9.5	0.010	0.103	0.007
Small Buses	353	35	64	1	124	226	4	22.0	35.0	24.0	2.72	7.91	0.08	11.5	12.0	10.0	0.236	0.359	0.008
Heavy Buses	237	0	100	0	0	237	0	0.0	60.0	0.0	0.00	14.22	0.00	0.0	4.0	0.0	0.000	3.565	0.000
Small Trucks	5407	35	64	1	1882	3480	54	22.0	35.0	24.0	41.63	121.12	1.20	11.5	12.0	10.0	3.620	10.093	0.100
Medium Trucks	421	0	100	0	0	421	0	0.0	40.0	0.0	0.00	16.94	0.00	0.0	5.0	0.0	0.000	2.307	0.000
Heavy Trucks	233	0	100	0	0	233	0	0.0	60.0	0.0	0.00	16.64	0.00	0.0	4.0	0.0	0.000	4.960	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	28566				23714	4779	50				224.57	195.38	2.27				10.220	22.369	0.233

Province : Mukdahan

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	8998	100	0	0	8998	0	0	8.0	0.0	0.0	71.98	0.00	0.00	32.0	0.0	0.0	2.250	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	140	85	12	3	119	17	4	16.5	26.0	23.0	1.96	0.44	0.10	11.0	11.5	10.0	0.179	0.038	0.010
Cars > 7 Seats	149	65	30	5	97	45	7	21.0	31.0	24.0	2.03	1.26	0.16	10.5	11.0	9.0	0.194	0.126	0.020
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	191	35	64	1	67	122	2	22.0	35.0	24.0	1.47	4.28	0.05	11.5	12.0	10.0	0.128	0.267	0.005
Heavy Buses	77	0	100	0	0	77	0	0.0	60.0	0.0	0.00	4.22	0.00	0.0	4.0	0.0	0.000	1.155	0.000
Small Trucks	1272	35	64	1	445	814	13	22.0	35.0	24.0	9.79	28.49	0.31	11.5	12.0	10.0	0.652	2.274	0.011
Medium Trucks	168	0	100	0	0	168	0	0.0	40.0	0.0	0.00	6.76	0.00	0.0	5.0	0.0	0.000	1.127	0.000
Heavy Trucks	233	0	100	0	0	233	0	0.0	60.0	0.0	0.00	16.64	0.00	0.0	4.0	0.0	0.000	4.960	0.000
Others	1	25	75	0	0	1	0	10.0	10.0	0.0	0.00	0.01	0.00	10.0	10.0	0.0	0.000	0.001	0.000
Total	11230				9725	1479	26				87.25	84.62	0.63				3.602	9.607	0.065

Province : Khon Kaen

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	77714	100	0	0	77714	0	0	8.0	0.0	0.0	621.71	0.00	0.00	32.0	0.0	0.0	19.429	0.000	0.000
Motorcycle	453	83	0	17	378	0	77	30.0	0.0	30.0	11.28	0.00	2.31	12.0	0.0	10.0	0.940	0.000	0.231
Cars < 7 Seats	4340	85	12	3	3699	521	130	16.5	26.0	23.0	60.87	13.54	2.99	11.0	11.5	10.0	5.534	1.177	0.299
Cars > 7 Seats	2250	65	30	5	1528	705	118	21.0	31.0	24.0	32.08	21.96	2.82	10.5	11.0	9.0	3.055	1.967	0.310
Taxis	10	8	87	5	1	9	1	65.0	65.0	65.0	0.05	0.57	0.03	11.0	11.5	9.5	0.005	0.049	0.003
Small Buses	847	35	64	1	295	542	8	22.0	35.0	24.0	6.52	16.97	0.20	11.5	12.0	10.0	0.567	1.581	0.020
Heavy Buses	1251	0	100	0	0	1251	0	0.0	60.0	0.0	0.00	77.46	0.00	0.0	4.0	0.0	0.000	15.365	0.000
Small Trucks	18332	35	64	1	6766	12372	193	22.0	35.0	24.0	148.05	433.04	4.64	11.5	12.0	10.0	12.544	38.068	0.484
Medium Trucks	2650	0	100	0	0	2650	0	0.0	40.0	0.0	0.00	114.36	0.00	0.0	5.0	0.0	0.000	19.060	0.000
Heavy Trucks	1582	0	100	0	0	1582	0	0.0	60.0	0.0	0.00	113.56	0.00	0.0	4.0	0.0	0.000	27.540	0.000
Others	1553	25	75	0	390	1163	0	10.0	10.0	0.0	3.90	11.26	0.00	10.0	10.0	0.0	0.390	1.169	0.000
Total	112136				90754	20960	527				963.26	602.04	13.00				42.862	109.114	1.332



Province : Maha Sarakham

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	18608	100	0	0	18608	0	0	9.0	0.0	0.0	149.09	0.00	0.00	32.0	0.0	0.0	4.859	0.000	0.000
Motorcycle	0	83	0	17	0	0	30.0	0.0	0.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000	
Cars < 7 Seats	696	85	12	3	515	73	18	16.5	26.0	23.0	8.50	1.98	0.42	11.0	11.5	10.0	0.773	0.354	0.042
Cars > 7 Seats	620	65	30	5	400	186	31	21.0	31.0	24.0	3.48	5.77	0.74	10.5	11.0	9.0	0.306	0.524	0.060
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	218	35	64	1	78	138	2	22.0	35.0	24.0	1.86	4.34	0.05	11.5	12.0	10.0	0.145	0.403	0.005
Heavy Buses	411	0	100	0	0	411	0	0.0	60.0	0.0	0.00	24.66	0.00	0.0	4.0	0.0	0.000	8.185	0.114
Small Trucks	4744	35	64	1	1680	3036	47	22.0	35.0	24.0	36.53	106.27	1.14	11.5	12.0	10.0	3.178	8.255	0.114
Medium Trucks	738	0	100	0	0	738	0	0.0	40.0	0.0	0.00	29.52	0.00	0.0	6.0	0.0	0.000	4.920	0.000
Heavy Trucks	262	0	100	0	0	262	0	0.0	60.0	0.0	0.00	29.56	0.00	0.0	4.0	0.0	0.000	5.240	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
<b>Total</b>	<b>26233</b>				<b>21290</b>	<b>4844</b>	<b>99</b>				<b>204.24</b>	<b>190.90</b>	<b>2.35</b>				<b>9.559</b>	<b>26.272</b>	<b>0.244</b>

Province : Roi Et

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	38528	100	0	0	38528	0	0	9.0	0.0	0.0	308.22	0.00	0.00	32.0	0.0	0.0	9.532	0.000	0.000
Motorcycle	2	83	0	17	2	0	0	30.0	0.0	0.0	0.05	0.00	0.01	12.0	0.0	10.0	0.004	0.000	0.001
Cars < 7 Seats	986	85	12	3	838	118	30	16.5	26.0	23.0	13.83	3.08	0.88	11.0	11.5	10.0	1.267	0.268	0.068
Cars > 7 Seats	1186	65	30	5	770	356	59	21.0	31.0	24.0	18.18	11.02	1.42	10.5	11.0	9.0	1.540	1.002	0.158
Taxis	12	8	87	5	1	10	1	65.0	65.0	65.0	0.06	3.86	0.04	11.0	11.5	9.5	0.006	0.059	0.004
Small Buses	453	35	64	1	159	290	5	22.0	35.0	24.0	3.48	10.15	0.11	11.5	12.0	10.0	0.203	0.845	0.011
Heavy Buses	519	0	100	0	0	519	0	0.0	60.0	0.0	0.00	31.59	0.00	0.0	4.0	0.0	0.000	7.770	0.000
Small Trucks	7288	35	64	1	2554	4671	73	22.0	35.0	24.0	58.19	163.48	1.75	11.5	12.0	10.0	4.098	10.623	0.175
Medium Trucks	952	0	100	0	0	952	0	0.0	40.0	0.0	0.00	38.08	0.00	0.0	6.0	0.0	0.000	6.347	0.000
Heavy Trucks	264	0	100	0	0	264	0	0.0	60.0	0.0	0.00	21.12	0.00	0.0	4.0	0.0	0.000	5.280	0.000
Others	10	25	75	0	3	8	0	10.0	10.0	0.0	0.00	3.08	0.00	10.0	10.0	0.0	0.000	0.008	0.000
<b>Total</b>	<b>50208</b>				<b>42064</b>	<b>7106</b>	<b>187</b>				<b>398.05</b>	<b>278.75</b>	<b>4.01</b>				<b>17.632</b>	<b>35.201</b>	<b>0.417</b>

Province : Kalasin

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	22008	100	0	0	22008	0	0	9.0	0.0	0.0	178.06	0.00	0.00	32.0	0.0	0.0	5.502	0.000	0.000
Motorcycle	15	83	0	17	12	0	3	30.0	0.0	0.0	0.27	0.00	0.08	12.0	0.0	10.0	0.031	0.000	0.006
Cars < 7 Seats	503	85	12	3	414	71	18	16.5	26.0	23.0	8.32	1.85	0.41	11.0	11.5	10.0	0.756	0.161	0.041
Cars > 7 Seats	434	65	30	5	282	130	22	21.0	31.0	24.0	5.92	4.04	0.52	10.5	11.0	9.0	0.564	0.367	0.058
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	243	35	64	1	85	158	2	22.0	35.0	24.0	1.87	5.41	0.06	11.5	12.0	10.0	0.163	0.454	0.006
Heavy Buses	308	0	100	0	0	308	0	0.0	60.0	0.0	0.00	18.48	0.00	0.0	4.0	0.0	0.000	4.620	0.000
Small Trucks	4901	35	64	1	1715	3107	49	22.0	35.0	24.0	37.74	109.78	1.18	11.5	12.0	10.0	3.282	9.149	0.118
Medium Trucks	1895	0	100	0	0	1895	0	0.0	40.0	0.0	0.00	65.00	0.00	0.0	6.0	0.0	0.000	10.300	0.000
Heavy Trucks	471	0	100	0	0	471	0	0.0	60.0	0.0	0.00	37.88	0.00	0.0	4.0	0.0	0.000	9.420	0.000
Others	26	25	75	0	7	20	3	10.0	10.0	0.0	0.17	0.20	0.00	10.0	10.0	0.0	0.000	2.000	0.000
<b>Total</b>	<b>30824</b>				<b>24614</b>	<b>5607</b>	<b>93</b>				<b>230.05</b>	<b>242.97</b>	<b>2.24</b>				<b>10.304</b>	<b>31.049</b>	<b>1.250</b>

Province : Sakon Nakhon

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	36568	100	0	0	36568	0	0	8.0	0.0	0.0	292.54	0.00	0.00	32.0	0.0	0.0	9.142	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	1041	85	12	3	885	125	31	16.5	25.0	23.0	14.60	3.25	0.72	11.0	11.5	10.0	1.227	0.282	0.072
Cars > 7 Seats	734	85	30	5	477	220	37	21.0	31.0	24.0	10.02	6.80	0.88	10.5	11.0	9.0	0.954	0.821	0.098
Taxis	0	8	87	5	0	0	0	65.0	95.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	577	35	64	1	202	369	6	22.0	35.0	24.0	4.44	12.92	0.14	11.5	12.0	10.0	0.366	1.077	0.014
Heavy Buses	585	0	100	0	0	585	0	0.0	80.0	0.0	0.00	35.70	0.00	0.0	4.0	0.0	0.000	8.925	0.000
Small Trucks	7583	35	64	1	2654	4833	76	22.0	35.0	24.0	58.39	169.66	1.22	11.5	12.0	10.0	5.077	14.155	0.192
Medium Trucks	762	0	100	0	0	762	0	0.0	40.0	0.0	0.00	30.43	0.00	0.0	5.0	0.0	0.000	5.090	0.000
Heavy Trucks	367	0	100	0	0	367	0	0.0	80.0	0.0	0.00	30.96	0.00	0.0	4.0	0.0	0.000	7.740	0.000
Others	36	25	75	0	9	27	0	10.0	10.0	0.0	0.09	0.27	0.00	10.0	10.0	0.0	0.009	0.027	0.000
Total	48253				40795	7338	150				360.09	250.27	3.56				16.896	37.507	0.366

Province : Nakhon Phanom

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	20565	100	0	0	20565	0	0	8.0	0.0	0.0	164.52	0.00	0.00	32.0	0.0	0.0	5.141	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	518	85	12	3	440	62	16	16.5	26.0	23.0	7.26	1.62	0.26	11.0	11.5	10.0	0.860	0.141	0.026
Cars > 7 Seats	401	85	30	5	261	120	20	21.0	31.0	24.0	5.47	3.73	0.48	10.5	11.0	9.0	0.921	0.239	0.053
Taxis	7	8	87	5	1	6	0	65.0	95.0	65.0	0.04	0.40	0.02	11.0	11.5	9.5	0.003	0.004	0.002
Small Buses	383	35	64	1	127	232	4	22.0	35.0	24.0	2.00	9.13	0.08	11.5	12.0	10.0	0.243	0.678	0.009
Heavy Buses	69	0	100	0	0	69	0	0.0	80.0	0.0	0.00	5.38	0.00	0.0	4.0	0.0	0.000	1.470	0.000
Small Trucks	3870	35	64	1	1355	2477	38	22.0	35.0	24.0	28.80	66.69	0.90	11.5	12.0	10.0	2.591	7.224	0.063
Medium Trucks	297	0	100	0	0	297	0	0.0	40.0	0.0	0.00	11.88	0.00	0.0	5.0	0.0	0.000	1.960	0.000
Heavy Trucks	74	0	100	0	0	74	0	0.0	80.0	0.0	0.00	5.32	0.00	0.0	4.0	0.0	0.000	1.480	0.000
Others	25	25	75	0	5	19	0	10.0	10.0	0.0	0.26	0.19	0.00	10.0	10.0	0.0	0.005	0.019	0.000
Total	26218				22754	3365	78				209.51	124.43	1.88				9.167	10.364	0.153

Province : Udon Thani

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	68547	100	0	0	68547	0	0	8.0	0.0	0.0	548.38	0.00	0.00	32.0	0.0	0.0	17.137	0.000	0.000
Motorcycle	439	83	0	17	384	0	75	30.0	0.0	30.0	10.93	0.00	2.24	12.0	0.0	10.0	0.911	0.000	0.224
Cars < 7 Seats	2717	85	12	3	2310	326	82	16.5	26.0	23.0	38.11	6.48	1.87	11.0	11.5	10.0	3.484	0.737	0.187
Cars > 7 Seats	1951	85	30	5	1293	585	98	21.0	31.0	24.0	25.53	18.14	2.34	10.5	11.0	9.0	2.526	1.649	0.250
Taxis	1	8	87	5	0	1	0	65.0	95.0	65.0	0.01	0.06	0.00	11.0	11.5	9.5	0.000	0.005	0.000
Small Buses	1002	35	64	1	351	641	10	22.0	35.0	24.0	7.72	22.44	0.24	11.5	12.0	10.0	0.571	1.870	0.024
Heavy Buses	1143	0	100	0	0	1143	0	0.0	80.0	0.0	0.00	58.58	0.00	0.0	4.0	0.0	0.000	17.145	0.000
Small Trucks	15307	35	64	1	5427	9824	155	22.0	35.0	24.0	118.40	347.36	3.72	11.5	12.0	10.0	10.383	26.946	0.372
Medium Trucks	2512	0	100	0	0	2512	0	0.0	40.0	0.0	0.00	100.48	0.00	0.0	5.0	0.0	0.000	16.747	0.000
Heavy Trucks	2151	0	100	0	0	2151	0	0.0	80.0	0.0	0.00	172.08	0.00	0.0	4.0	0.0	0.000	43.020	0.000
Others	16	25	75	0	4	12	0	10.0	10.0	0.0	0.24	0.12	0.00	10.0	10.0	0.0	0.004	0.012	0.000
Total	65896				78271	17295	419				751.21	737.74	10.42				35.106	110.132	1.058



## Province : Nong Khai

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	27088	100	0	0	27088	0	0	8.0	0.0	0.0	216.77	0.00	0.00	32.0	0.0	0.0	5.774	0.000	0.000
Motorcycle	99	83	0	17	82	0	17	30.0	0.0	30.0	2.47	0.00	0.50	12.0	0.0	10.0	0.205	0.000	0.050
Cars < 7 Seats	568	85	12	3	481	68	17	16.5	26.0	23.0	7.94	1.77	0.38	11.0	11.5	10.0	0.722	0.154	0.039
Cars > 7 Seats	238	65	30	5	155	71	12	21.0	31.0	24.0	3.25	2.21	0.29	10.5	11.0	9.0	0.309	0.201	0.032
Taxis	1	8	87	5	0	1	0	65.0	65.0	65.0	0.01	0.06	0.00	11.0	11.5	9.5	0.000	0.005	0.000
Small Buses	130	35	64	1	46	80	1	22.0	35.0	24.0	1.00	2.91	0.03	11.5	12.0	10.0	0.087	0.243	0.003
Heavy Buses	217	0	100	0	0	217	0	0.0	60.0	0.0	0.00	13.02	0.00	0.0	4.0	0.0	0.000	3.255	0.000
Small Trucks	3517	35	64	1	1231	2251	35	22.0	35.0	24.0	27.08	78.78	0.64	11.5	12.0	10.0	2.355	6.585	0.084
Medium Trucks	799	0	100	0	0	799	0	0.0	40.0	0.0	0.00	31.96	0.00	0.0	5.0	0.0	0.000	5.327	0.000
Heavy Trucks	536	0	100	0	0	536	0	0.0	60.0	0.0	0.00	40.48	0.00	0.0	4.0	0.0	0.000	10.120	0.000
Others	66	25	75	0	17	50	0	10.0	10.0	0.0	0.17	0.50	0.00	10.0	10.0	0.0	0.017	0.050	0.000
Total	33235				29107	4046	32				258.67	171.68	2.06				10.459	25.519	0.262

## Province : Loei

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	30736	100	0	0	30736	0	0	8.0	0.0	0.0	245.89	0.00	0.00	32.0	0.0	0.0	7.984	0.000	0.000
Motorcycle	149	83	0	17	124	0	25	30.0	0.0	30.0	3.71	0.00	0.75	12.0	0.0	10.0	0.309	0.000	0.075
Cars < 7 Seats	556	85	12	3	430	81	15	16.5	26.0	23.0	7.10	1.98	0.35	11.0	11.5	10.0	0.645	0.137	0.035
Cars > 7 Seats	484	65	30	5	315	145	24	21.0	31.0	24.0	6.81	4.30	0.56	10.5	11.0	9.0	0.629	0.409	0.065
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	128	35	64	1	45	82	1	22.0	35.0	24.0	0.99	2.87	0.03	11.5	12.0	10.0	0.066	0.209	0.003
Heavy Buses	422	0	100	0	0	422	0	0.0	60.0	0.0	0.00	25.32	0.00	0.0	4.0	0.0	0.000	6.330	0.000
Small Trucks	5682	35	64	1	1992	3643	57	22.0	35.0	24.0	43.83	127.50	1.37	11.5	12.0	10.0	3.611	10.625	0.137
Medium Trucks	615	0	100	0	0	615	0	0.0	40.0	0.0	0.00	24.60	0.00	0.0	5.0	0.0	0.000	4.100	0.000
Heavy Trucks	313	0	100	0	0	313	0	0.0	60.0	0.0	0.00	25.04	0.00	0.0	4.0	0.0	0.000	6.260	0.000
Others	30	25	75	0	8	23	0	10.0	10.0	0.0	0.08	0.23	0.00	10.0	10.0	0.0	0.008	0.023	0.000
Total	39075				30649	5300	123				308.19	211.63	3.08				13.172	28.123	0.315

ศูนย์วิทยุโทรคมนาคม  
ศูนย์วิทยุโทรคมนาคม  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

Province : Chumphon

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	40803	100	0	0	40803	0	0	8.0	0.0	0.0	226.42	0.00	0.00	32.0	0.0	0.0	10.201	0.000	0.000
Motorcycle	33	83	0	17	19	0	4	30.0	0.0	30.0	0.57	0.00	0.12	12.0	0.0	10.0	0.048	0.000	0.012
Cars < 7 Seats	761	85	12	3	647	91	23	15.5	26.0	23.0	10.67	2.37	0.53	11.0	11.5	10.0	0.970	0.255	0.053
Cars > 7 Seats	359	85	30	5	353	188	28	21.0	31.0	24.0	7.60	5.20	0.67	10.5	11.0	9.0	0.727	0.473	0.075
Taxis	28	8	87	5	2	25	1	65.0	65.0	65.0	0.5	1.94	0.08	11.0	11.5	9.5	0.014	0.143	0.010
Small Buses	185	35	84	1	58	106	2	22.0	35.0	24.0	1.27	3.70	0.04	11.5	12.0	10.0	0.110	0.208	0.004
Heavy Buses	181	0	100	0	0	181	0	0.0	80.0	0.0	0.00	10.86	0.00	0.0	4.0	0.0	0.000	2.715	0.000
Small Trucks	5505	35	84	1	1927	3523	55	22.0	35.0	24.0	42.35	123.51	1.32	11.5	12.0	10.0	0.000	5.107	0.000
Medium Trucks	766	0	100	0	0	766	0	0.0	80.0	0.0	0.00	30.64	0.00	0.0	6.0	0.0	0.000	7.000	0.000
Heavy Trucks	350	0	100	0	0	350	0	0.0	80.0	0.0	0.00	28.00	0.00	0.0	4.0	0.0	0.000	7.000	0.000
Others	148	25	75	0	37	110	0	10.0	10.0	0.0	0.37	1.10	0.00	10.0	10.0	0.0	0.007	0.110	0.000
Total	49268				4386	5320	110				389.47	206.32	2.77				15.792	26.337	0.285

Province : Ranong

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	13703	100	0	0	13703	0	0	8.0	0.0	0.0	106.62	0.00	0.00	32.0	0.0	0.0	3.426	0.000	0.000
Motorcycle	1	83	0	17	1	0	0	30.0	0.0	30.0	0.02	0.00	0.01	12.0	0.0	10.0	0.002	0.000	0.001
Cars < 7 Seats	484	85	12	3	411	58	15	16.5	26.0	23.0	6.79	1.51	0.33	11.0	11.5	10.0	0.817	0.331	0.033
Cars > 7 Seats	502	85	30	5	326	151	25	21.0	31.0	24.0	5.95	4.67	0.30	10.5	11.0	9.0	0.663	0.424	0.067
Taxis	13	8	87	5	1	11	1	65.0	65.0	65.0	0.07	0.74	0.04	11.0	11.5	9.5	0.008	0.084	0.004
Small Buses	252	35	84	1	88	161	3	22.0	35.0	24.0	1.94	5.64	0.06	11.5	12.0	10.0	0.169	0.470	0.008
Heavy Buses	77	0	100	0	0	77	0	0.0	80.0	0.0	0.00	4.26	0.00	0.0	4.0	0.0	0.000	1.085	0.000
Small Trucks	2298	35	84	1	905	1471	23	22.0	35.0	24.0	17.70	51.50	0.55	11.5	12.0	10.0	0.000	1.363	0.000
Medium Trucks	284	0	100	0	0	284	0	0.0	80.0	0.0	0.00	11.36	0.00	0.0	6.0	0.0	0.000	5.880	0.000
Heavy Trucks	294	0	100	0	0	294	0	0.0	80.0	0.0	0.00	23.52	0.00	0.0	4.0	0.0	0.000	5.880	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	17013				1535	2502	66				143.00	103.20	1.80				6.412	14.220	0.167

Province : Surat Thani

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
		Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	100268	100	0	0	100268	0	0	8.0	0.0	0.0	802.14	0.00	0.00	32.0	0.0	0.0	25.767	0.000	0.000
Motorcycle	3	83	0	17	2	0	1	30.0	0.0	30.0	0.07	0.00	0.02	12.0	0.0	10.0	0.006	0.000	0.002
Cars < 7 Seats	2353	85	12	3	2000	292	71	16.5	26.0	23.0	33.00	7.34	1.82	11.0	11.5	10.0	3.000	0.828	0.162
Cars > 7 Seats	1974	85	30	5	1283	592	89	21.0	31.0	24.0	26.95	18.36	2.37	10.5	11.0	9.0	2.568	1.969	0.263
Taxis	78	8	87	5	8	68	4	65.0	65.0	65.0	0.41	4.41	0.25	11.0	11.5	9.5	0.037	0.384	0.027
Small Buses	1017	35	84	1	356	651	10	22.0	35.0	24.0	7.33	22.73	0.24	11.5	12.0	10.0	0.091	1.086	0.024
Heavy Buses	339	0	100	0	0	339	0	0.0	80.0	0.0	0.00	20.34	0.00	0.0	4.0	0.0	0.000	5.085	0.000
Small Trucks	12963	35	84	1	4546	8316	130	22.1	35.0	24.0	100.05	291.04	3.12	11.5	12.0	10.0	0.000	24.254	0.312
Medium Trucks	772	0	100	0	0	772	0	0.0	80.0	0.0	0.00	30.88	0.00	0.0	6.0	0.0	0.000	5.167	0.000
Heavy Trucks	838	0	100	0	0	838	0	0.0	80.0	0.0	0.00	67.04	0.00	0.0	4.0	0.0	0.000	16.780	0.000
Others	3	25	75	0	1	2	0	10.0	10.0	0.0	0.01	0.02	0.00	10.0	10.0	0.0	0.001	0.002	0.000
Total	120638				10844	11960	314				970.45	452.22	7.82				40.058	55.837	0.790



## Province : Phangnga

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	13955	100	0	0	13955	0	0	8.0	0.0	0.0	111.88	0.00	0.00	32.0	0.0	0.0	3.498	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	600	85	12	3	510	72	18	16.5	26.0	23.0	8.42	1.87	0.41	11.0	11.5	10.0	0.765	0.793	0.041
Cars > 7 Seats	456	65	30	5	298	138	23	21.0	31.0	24.0	5.27	4.27	0.55	10.5	11.0	9.0	0.587	0.388	0.061
Taxis	0	8	87	5	0	0	0	65.0	65.0	65.0	0.00	0.00	0.00	11.0	11.5	9.5	0.000	0.000	0.000
Small Buses	428	35	64	1	150	274	4	22.0	35.0	24.0	3.30	9.59	0.10	11.5	12.0	10.0	0.287	0.755	0.010
Heavy Buses	104	0	100	0	0	104	0	0.0	80.0	0.0	0.00	6.24	0.00	0.0	4.0	0.0	0.000	1.580	0.000
Small Trucks	2888	35	64	1	1011	1848	29	22.0	35.0	24.0	22.25	64.71	0.69	11.5	12.0	10.0	1.394	5.390	0.069
Medium Trucks	294	0	100	0	0	294	0	0.0	40.0	0.0	0.00	11.76	0.00	0.0	6.0	0.0	0.000	1.960	0.000
Heavy Trucks	195	0	100	0	0	195	0	0.0	80.0	0.0	0.00	15.60	0.00	0.0	4.0	0.0	0.000	3.900	0.000
Others	20	25	75	0	5	15	0	10.0	10.0	0.0	0.05	0.15	0.00	10.0	10.0	0.0	0.005	0.015	0.000
Total	18974				15959	2941	74				152.15	114.19	1.76				7.084	14.176	0.182

## Province : Phuket

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	56000	100	0	0	56000	0	0	8.0	0.0	0.0	448.00	0.00	0.00	32.0	0.0	0.0	14.000	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	3829	85	12	3	3066	435	109	16.5	26.0	23.0	50.90	11.32	2.30	11.0	11.5	10.0	4.827	0.985	0.250
Cars > 7 Seats	1898	65	30	5	1299	599	100	21.0	31.0	24.0	27.27	18.58	2.40	10.5	11.0	9.0	2.597	1.989	0.266
Taxis	30	8	87	5	2	26	2	65.0	65.0	65.0	0.18	1.70	0.10	11.0	11.5	9.5	0.014	0.148	0.010
Small Buses	557	35	64	1	195	356	6	22.0	35.0	24.0	4.29	12.48	0.13	11.5	12.0	10.0	0.273	1.540	0.013
Heavy Buses	278	0	100	0	0	278	0	0.0	80.0	0.0	0.00	8.56	0.00	0.0	4.0	0.0	0.000	4.140	0.000
Small Trucks	7532	35	64	1	2636	4920	75	22.0	35.0	24.0	59.00	169.72	1.81	11.5	12.0	10.0	5.043	14.050	0.181
Medium Trucks	734	0	100	0	0	734	0	0.0	40.0	0.0	0.00	29.36	0.00	0.0	6.0	0.0	0.000	4.363	0.000
Heavy Trucks	659	0	100	0	0	659	0	0.0	80.0	0.0	0.00	52.54	0.00	0.0	4.0	0.0	0.000	13.180	0.000
Others	52	25	75	0	13	38	0	10.0	10.0	0.0	0.13	0.38	0.00	10.0	10.0	0.0	0.013	0.038	0.000
Total	71468				63230	7945	291				588.74	311.74	6.94				26.668	40.153	0.721

## Province : Krabi

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	33879	100	0	0	33879	0	0	8.0	0.0	0.0	271.03	0.00	0.00	32.0	0.0	0.0	8.470	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	438	85	12	3	373	53	13	16.5	26.0	23.0	6.16	1.37	0.30	11.0	11.5	10.0	0.560	0.119	0.030
Cars > 7 Seats	437	65	30	5	284	131	22	21.0	31.0	24.0	5.97	4.06	0.52	10.5	11.0	9.0	0.588	0.388	0.058
Taxis	30	8	87	5	2	26	2	65.0	65.0	65.0	0.16	1.70	0.10	11.0	11.5	9.5	0.014	0.148	0.010
Small Buses	240	35	64	1	84	154	2	22.0	35.0	24.0	1.95	5.78	0.06	11.5	12.0	10.0	0.161	0.448	0.006
Heavy Buses	112	0	100	0	0	112	0	0.0	80.0	0.0	0.00	6.72	0.00	0.0	4.0	0.0	0.000	1.660	0.000
Small Trucks	3429	35	64	1	1200	2196	34	22.0	35.0	24.0	26.40	78.91	0.82	11.5	12.0	10.0	2.295	6.401	0.082
Medium Trucks	275	0	100	0	0	275	0	0.0	40.0	0.0	0.00	11.00	0.00	0.0	6.0	0.0	0.000	1.330	0.000
Heavy Trucks	4	0	100	0	0	4	0	0.0	80.0	0.0	0.00	0.22	0.00	0.0	4.0	0.0	0.000	0.080	0.000
Others	36	25	75	0	9	27	0	10.0	10.0	0.0	0.08	0.27	0.00	10.0	10.0	0.0	0.008	0.027	0.000
Total	38881				35822	2976	73				311.65	107.50	1.81				12.077	11.105	0.187

## Province : Nakhon Si Thammarat

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	81783	100	0	0	81783	0	0	8.0	0.0	0.0	654.26	0.00	0.00	32.0	0.0	0.0	20.446	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	2800	85	12	3	2380	326	64	16.5	26.0	23.0	29.27	8.74	1.93	11.0	11.5	10.0	3.570	0.160	0.193
Cars > 7 Seats	1094	65	30	5	711	328	55	21.0	31.0	24.0	14.93	10.17	1.31	10.5	11.0	9.0	1.422	0.925	0.146
Taxis	184	8	87	5	15	160	9	65.0	65.0	65.0	0.56	10.41	0.60	11.0	11.5	9.5	0.067	0.905	0.063
Small Buses	1459	35	64	1	511	934	15	22.0	35.0	24.0	11.23	32.69	0.35	11.5	12.0	10.0	0.977	2.723	0.335
Heavy Buses	291	0	100	0	0	291	0	0.0	60.0	0.0	0.00	17.46	0.00	0.0	4.0	0.0	0.000	4.065	0.000
Small Trucks	13542	35	64	1	4740	8667	135	22.0	35.0	24.0	104.27	303.34	3.25	11.5	12.0	10.0	9.067	25.275	0.225
Medium Trucks	830	0	100	0	0	830	0	0.0	40.0	0.0	0.00	33.20	0.00	0.0	6.0	0.0	0.000	5.520	0.000
Heavy Trucks	936	0	100	0	0	936	0	0.0	80.0	0.0	0.00	74.66	0.00	0.0	4.0	0.0	0.000	18.720	0.000
Others	163	25	75	0	41	122	0	10.0	10.0	0.0	0.41	1.22	0.00	10.0	10.0	0.0	0.041	0.122	0.000
Total	103082				90180	12904	268				625.34	492.10	7.44				35.610	59.332	0.752

## Province : Trang

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	54245	100	0	0	54245	0	0	8.0	0.0	0.0	433.56	0.00	0.00	32.0	0.0	0.0	13.581	0.000	0.000
Motorcycle	931	83	0	17	773	0	158	30.0	0.0	30.0	23.18	0.00	4.75	12.0	0.0	10.0	1.932	0.000	0.475
Cars < 7 Seats	1880	85	12	3	1428	202	50	16.5	26.0	23.0	23.56	5.24	1.16	11.0	11.5	10.0	2.142	0.456	0.116
Cars > 7 Seats	558	65	30	5	363	187	28	21.0	31.0	24.0	7.62	5.19	0.87	10.5	11.0	9.0	0.725	0.472	0.074
Taxis	30	8	87	5	2	26	2	65.0	65.0	65.0	0.16	1.70	0.70	11.0	11.5	9.5	0.014	0.148	0.010
Small Buses	518	35	64	1	181	332	5	22.0	35.0	24.0	3.98	11.60	0.12	11.5	12.0	10.0	0.347	0.967	0.012
Heavy Buses	297	0	100	0	0	297	0	0.0	60.0	0.0	0.00	17.32	0.00	0.0	4.0	0.0	0.000	4.455	0.000
Small Trucks	5080	35	64	1	1783	3260	51	22.0	35.0	24.0	59.22	114.08	1.22	11.5	12.0	10.0	3.410	9.507	0.122
Medium Trucks	751	0	100	0	0	751	0	0.0	40.0	0.0	0.00	30.04	0.00	0.0	6.0	0.0	0.000	5.007	0.000
Heavy Trucks	566	0	100	0	0	566	0	0.0	80.0	0.0	0.00	44.48	0.00	0.0	4.0	0.0	0.000	11.120	0.000
Others	0	25	75	0	0	0	0	10.0	10.0	0.0	0.00	0.00	0.00	10.0	10.0	0.0	0.000	0.000	0.000
Total	64659				56775	5590	294				531.68	230.15	9.02				22.132	32.131	0.810

## Province : Phthalung

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Litre)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	31428	100	0	0	31428	0	0	8.0	0.0	0.0	251.42	0.00	0.00	32.0	0.0	0.0	7.857	0.000	0.000
Motorcycle	0	83	0	17	0	0	0	30.0	0.0	30.0	0.00	0.00	0.00	12.0	0.0	10.0	0.000	0.000	0.000
Cars < 7 Seats	538	85	12	3	432	61	15	16.5	26.0	23.0	7.12	1.58	0.35	11.0	11.5	10.0	0.848	0.338	0.035
Cars > 7 Seats	255	65	30	5	166	77	13	21.0	31.0	24.0	3.48	2.37	0.31	10.5	11.0	9.0	0.332	0.216	0.034
Taxis	18	8	87	5	1	16	1	65.0	65.0	65.0	0.09	1.02	0.06	11.0	11.5	9.5	0.009	0.085	0.006
Small Buses	834	35	64	1	292	534	8	22.0	35.0	24.0	6.42	18.66	0.20	11.5	12.0	10.0	0.558	1.557	0.020
Heavy Buses	88	0	100	0	0	88	0	0.0	60.0	0.0	0.00	5.26	0.00	0.0	4.0	0.0	0.000	1.220	0.000
Small Trucks	3221	35	64	1	1127	2061	32	22.0	35.0	24.0	24.80	72.15	0.77	11.5	12.0	10.0	2.157	6.013	0.077
Medium Trucks	503	0	100	0	0	503	0	0.0	40.0	0.0	0.00	20.12	0.00	0.0	6.0	0.0	0.000	3.353	0.000
Heavy Trucks	266	0	100	0	0	266	0	0.0	80.0	0.0	0.00	21.28	0.00	0.0	4.0	0.0	0.000	5.320	0.000
Others	15	25	75	0	4	12	0	10.0	10.0	0.0	0.04	0.12	0.00	10.0	10.0	0.0	0.004	0.012	0.000
Total	37137				33450	3617	68				280.38	142.51	1.69				11.564	18.017	0.173



## Province : Songkhla

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	133295	100	0	0	133295	0	0	9.0	0.0	0.0	1096.36	0.00	0.00	32.0	0.0	0.0	33.324	0.000	0.000
Motorcycle	10	83	0	17	8	0	2	30.0	0.0	30.0	0.25	0.00	0.05	12.0	0.0	10.0	0.321	0.000	0.005
Cars < 7 Seats	7817	85	12	3	6474	914	229	16.5	26.0	23.0	106.83	23.77	5.26	11.0	11.5	10.0	9.712	2.067	0.325
Cars > 7 Seats	2478	85	30	5	1611	743	124	21.0	31.0	24.0	33.82	23.05	2.97	10.5	11.0	9.0	3.221	2.095	0.330
Taxis	282	8	87	5	23	245	14	65.0	65.0	65.0	1.47	15.95	0.92	11.0	11.5	9.5	0.133	1.397	0.096
Small Buses	3637	35	84	1	1378	2520	39	22.0	35.0	24.0	30.31	88.19	0.54	11.5	12.0	10.0	0.000	5.460	0.000
Heavy Buses	368	0	100	0	0	368	0	0.0	80.0	0.0	0.00	21.56	0.00	0.0	4.0	0.0	0.000	11.646	32.469
Small Trucks	17364	35	84	1	6088	11132	174	22.0	35.0	24.0	133.93	369.53	4.17	11.5	12.0	10.0	0.000	13.147	0.000
Medium Trucks	1972	0	100	0	0	1972	0	0.0	40.0	0.0	0.00	78.98	0.00	0.0	5.0	0.0	0.000	36.090	0.000
Heavy Trucks	1604	0	100	0	0	1604	0	0.0	80.0	0.0	0.00	144.32	0.00	0.0	4.0	0.0	0.000	0.167	0.000
Others	223	25	75	0	58	167	0	10.0	10.0	0.0	0.58	1.67	0.00	10.0	10.0	0.0	0.056	0.167	0.000
Total	169078				149533	19064	562				1373.53	787.40	14.32				60.749	100.250	1.469

## Province : Satun

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	18510	100	0	0	18510	0	0	8.0	0.0	0.0	148.08	0.00	0.00	32.0	0.0	0.0	4.828	0.000	0.000
Motorcycle	1	83	0	17	1	0	0	30.0	0.0	30.0	0.02	0.00	0.01	12.0	0.0	10.0	0.002	0.000	0.001
Cars < 7 Seats	870	85	12	3	570	90	20	16.5	26.0	23.0	9.40	2.08	0.48	11.0	11.5	10.0	0.264	0.392	0.048
Cars > 7 Seats	225	85	30	5	146	59	11	21.0	31.0	24.0	3.07	2.09	0.27	10.5	11.0	9.0	0.293	0.190	0.030
Taxis	29	8	87	5	2	25	1	65.0	65.0	65.0	0.15	1.64	0.09	11.0	11.5	9.5	0.014	0.140	0.010
Small Buses	263	35	84	1	99	181	3	22.0	35.0	24.0	2.18	6.24	0.07	11.5	12.0	10.0	0.000	1.215	0.000
Heavy Buses	91	0	100	0	0	91	0	0.0	80.0	0.0	0.00	4.06	0.00	0.0	4.0	0.0	0.000	1.464	1.165
Small Trucks	2231	35	84	1	791	1420	22	22.0	35.0	24.0	17.78	49.97	0.34	11.5	12.0	10.0	0.000	1.073	0.000
Medium Trucks	206	0	100	0	0	206	0	0.0	40.0	0.0	0.00	8.24	0.00	0.0	5.0	0.0	0.000	1.073	0.000
Heavy Trucks	130	0	100	0	0	130	0	0.0	80.0	0.0	0.00	10.40	0.00	0.0	4.0	0.0	0.000	2.900	0.000
Others	35	25	75	0	9	26	0	10.0	10.0	0.0	0.08	0.26	0.00	10.0	10.0	0.0	0.009	0.026	0.000
Total	22401				20118	2225	59				180.17	85.90	1.44				7.482	10.422	0.147

## Province : Pattani

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	44406	100	0	0	44406	0	0	8.0	0.0	0.0	355.50	0.00	0.00	32.0	0.0	0.0	11.110	0.000	0.000
Motorcycle	8	83	0	17	7	0	1	30.0	0.0	30.0	0.20	0.00	0.04	12.0	0.0	10.0	0.017	0.000	0.004
Cars < 7 Seats	1888	85	12	3	1605	227	57	16.5	26.0	23.0	26.48	5.09	1.30	11.0	11.5	10.0	2.407	0.512	0.130
Cars > 7 Seats	550	85	30	5	358	185	28	21.0	31.0	24.0	7.51	5.12	0.66	10.5	11.0	9.0	0.715	0.465	0.073
Taxis	269	8	87	5	22	234	13	65.0	65.0	65.0	1.40	15.21	0.87	11.0	11.5	9.5	0.127	1.323	0.092
Small Buses	664	35	84	1	232	425	7	22.0	35.0	24.0	5.11	14.87	0.16	11.5	12.0	10.0	0.445	1.229	0.018
Heavy Buses	132	0	100	0	0	132	0	0.0	80.0	0.0	0.00	7.92	0.00	0.0	4.0	0.0	0.000	1.980	0.000
Small Trucks	7506	35	84	1	2645	4806	78	22.0	35.0	24.0	58.18	189.25	1.81	11.5	12.0	10.0	5.059	14.105	0.181
Medium Trucks	677	0	100	0	0	677	0	0.0	40.0	0.0	0.00	27.08	0.00	0.0	5.0	0.0	0.000	4.510	0.000
Heavy Trucks	590	0	100	0	0	590	0	0.0	80.0	0.0	0.00	47.20	0.00	0.0	4.0	0.0	0.000	11.800	0.000
Others	85	25	75	0	24	71	0	10.0	10.0	0.0	0.24	0.71	0.00	10.0	10.0	0.0	0.024	0.071	0.000
Total	56667				49029	7357	131				451.62	290.25	4.85				19.903	36.009	0.487

## Province : Yala

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	60968	100	0	0	60968	0	0	3.0	0.0	0.0	485.57	0.00	0.00	32.0	0.0	0.0	15.174	0.000	0.000
Motorcycle	24	83	0	17	20	0	4	30.0	0.0	30.0	0.60	0.00	0.12	12.0	0.0	10.0	0.050	0.000	0.012
Cars < 7 Seats	1783	85	12	3	1576	214	53	16.5	26.0	23.0	25.01	5.56	1.23	11.0	11.5	10.0	2.273	0.484	0.123
Cars > 7 Seats	484	85	30	5	315	145	24	21.0	31.0	24.0	6.61	4.50	0.58	10.5	11.0	9.0	0.429	0.409	0.065
Taxis	228	8	87	5	18	198	11	65.0	65.0	65.0	1.19	12.89	0.74	11.0	11.5	9.5	0.108	1.121	0.073
Small Buses	933	35	64	1	327	587	9	22.0	35.0	24.0	7.18	20.90	0.22	11.5	12.0	10.0	0.825	1.742	0.022
Heavy Buses	134	0	100	0	0	134	0	0.0	60.0	0.0	0.00	9.04	0.00	0.0	4.0	0.0	0.000	2.010	0.000
Small Trucks	4133	35	64	1	1447	2645	41	22.0	35.0	24.0	31.82	92.58	0.96	11.5	12.0	10.0	2.767	7.715	0.099
Medium Trucks	415	0	100	0	0	415	0	0.0	40.0	0.0	0.00	16.60	0.00	0.0	6.0	0.0	0.000	2.767	0.000
Heavy Trucks	1804	0	100	0	0	1804	0	0.0	60.0	0.0	0.00	144.32	0.00	0.0	4.0	0.0	0.000	36.080	0.000
Others	53	25	75	0	13	40	0	10.0	10.0	0.0	0.13	0.40	0.00	10.0	10.0	0.0	0.013	0.040	0.000
Total	70887				64351	6193	144				558.11	305.79	3.68				21.638	52.367	0.369

## Province : Narathiwat

Type of Vehicle	no. of Vehicle	Fuel Share			no. of Vehicle by Type of Fuel			Average Annual Mileage (Thousand Km)			Total Annual Mileage (Million Km)			Specific Fuel Consumption (Km/L)			Total Consumption per Year (Million Liter)		
		Gas	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG	Gasoline	HSD	LPG
Motorcycle	87965	100	0	0	87965	0	0	8.0	0.0	0.0	703.96	0.00	0.00	32.0	0.0	0.0	21.999	0.000	0.000
Motorcycle	83	0	17		1	0	0	30.0	0.0	30.0	0.02	0.00	0.01	12.0	0.0	10.0	0.002	0.000	0.001
Cars < 7 Seats	1622	85	12	3	1379	195	49	16.5	26.0	23.0	22.75	5.06	1.12	11.0	11.5	10.0	2.068	0.440	0.112
Cars > 7 Seats	341	85	30	5	222	102	17	21.0	31.0	24.0	4.85	3.17	0.41	10.5	11.0	9.0	0.443	0.298	0.045
Taxis	178	8	87	5	14	153	9	65.0	65.0	65.0	0.92	9.95	0.57	11.0	11.5	9.5	0.063	0.665	0.060
Small Buses	346	35	64	1	122	223	3	22.0	35.0	24.0	2.66	7.60	0.06	11.5	12.0	10.0	0.233	0.650	0.006
Heavy Buses	31	0	100	0	0	31	0	0.0	60.0	0.0	0.00	1.96	0.00	0.0	4.0	0.0	0.000	0.465	0.000
Small Trucks	6200	35	64	1	2190	4019	63	22.0	35.0	24.0	48.38	140.67	1.51	11.5	12.0	10.0	4.205	11.723	0.151
Medium Trucks	430	0	100	0	0	430	0	0.0	40.0	0.0	0.00	17.20	0.00	0.0	6.0	0.0	0.000	2.667	0.000
Heavy Trucks	392	0	100	0	0	392	0	0.0	60.0	0.0	0.00	31.36	0.00	0.0	4.0	0.0	0.000	7.940	0.000
Others	5	25	75	0	1	4	0	10.0	10.0	0.0	0.01	0.04	0.00	10.0	10.0	0.0	0.001	0.004	0.000
Total	97821				91931	5548	141				793.35	217.11	3.70				29.035	25.141	0.377

ศูนย์วิทยุโทรคมนาคม  
 จุฬาลงกรณ์มหาวิทยาลัย  
 จุฬาลงกรณ์มหาวิทยาลัย





ภาคผนวก จ

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามสาขาเกษตรกรรมเป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

BANGHOK		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	18.031	0.823	14.940	2.940	53.011	11.800	212.795	19.450	350.703	492.000	8871.252	
DIESEL	10 <sup>-3</sup> LT	537.199	8.180	3308.099	18.950	9104.845	38.800	19787.451	8.850	3879.539	18.700	8870.555	
TOTAL				3323.739		9157.856		19900.217		4030.242		1784.1807	

SAMLU PRAKAN		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.834	0.823	0.522	2.940	1.884	11.800	7.481	19.450	12.301	492.000	311.929	
DIESEL	10 <sup>-3</sup> LT	49.409	8.180	304.369	18.950	837.493	38.800	1818.251	8.850	316.492	18.700	825.130	
TOTAL				304.891		839.347		1825.732		360.793		1137.059	

NOTHABURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.529	0.823	0.435	2.940	1.565	11.800	8.242	19.450	10.299	492.000	280.399	
DIESEL	10 <sup>-3</sup> LT	14.865	8.180	91.598	18.950	251.982	38.800	547.032	8.850	101.825	18.700	248.248	
TOTAL				92.004		253.517		555.274		112.114		508.514	

PATHUM THANI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.527	0.823	0.442	2.940	1.579	11.800	8.307	19.450	10.445	492.000	284.207	
DIESEL	10 <sup>-3</sup> LT	32.056	8.180	197.485	18.950	543.349	38.800	1179.051	8.850	219.594	18.700	535.337	
TOTAL				197.907		544.928		1185.997		230.039		799.536	

NAH-NON PATHOM		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.837	0.823	0.524	2.940	1.873	11.800	7.517	19.450	12.350	492.000	313.404	
DIESEL	10 <sup>-3</sup> LT	30.264	8.180	136.426	18.950	512.975	38.800	1113.715	8.850	267.308	18.700	505.408	
TOTAL				136.950		514.948		1121.232		219.668		818.813	

SAMUT SAHON		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.540	0.823	0.444	2.940	1.588	11.800	8.307	19.450	10.500	492.000	285.880	
DIESEL	10 <sup>-3</sup> LT	22.824	8.180	140.598	18.950	388.867	38.800	839.923	8.850	198.544	18.700	381.181	
TOTAL				141.040		388.454		848.235		188.047		649.841	

PHRA NAKHON SI AYUTTHAYA		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	1.274	0.823	1.018	2.940	3.748	11.800	15.033	19.450	24.779	492.000	628.808	
DIESEL	10 <sup>-3</sup> LT	28.714	8.180	178.878	18.950	486.702	38.800	1098.875	8.850	196.861	18.700	479.524	
TOTAL				177.897		490.448		1071.708		221.470		1108.332	

ANG THONG		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.184	0.823	0.180	2.940	0.570	11.800	2.268	19.450	3.773	492.000	85.448	
DIESEL	10 <sup>-3</sup> LT	4.089	8.180	25.250	18.950	68.478	38.800	150.843	8.850	28.078	18.700	88.333	
TOTAL				25.410		70.048		153.132		31.851		163.901	

SARABURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.565	0.823	0.465	2.940	1.881	11.800	8.887	19.450	10.989	492.000	277.890	
DIESEL	10 <sup>-3</sup> LT	18.977	8.180	123.058	18.950	338.810	38.800	735.154	8.850	136.842	18.700	331.818	
TOTAL				123.523		340.271		741.821		147.832		611.968	

LOP BURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.410	0.823	0.340	2.940	1.214	11.800	4.893	19.450	8.033	492.000	230.198	
DIESEL	10 <sup>-3</sup> LT	9.215	8.180	68.784	18.950	158.194	38.800	339.112	8.850	83.123	18.700	151.081	
TOTAL				67.104		157.408		343.985		71.156		267.387	

SING BURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.278	0.823	0.227	2.940	0.811	11.800	3.257	19.450	5.388	492.000	135.782	
DIESEL	10 <sup>-3</sup> LT	7.471	8.180	48.021	18.950	128.823	38.800	274.933	8.850	51.178	18.700	124.785	
TOTAL				48.248		127.445		278.190		56.546		260.569	

CHAI NAT		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.410	0.823	0.337	2.940	1.205	11.800	4.838	19.450	7.874	492.000	201.720	
DIESEL	10 <sup>-3</sup> LT	7.523	8.180	48.042	18.950	127.515	38.800	278.948	8.850	51.533	18.700	125.837	
TOTAL				48.879		128.720		281.894		59.507		327.357	



SUKHAMBURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.824	0.823	0.878	2.940	2.423	11.800	8.721	19.450	16.027	492.000	405.403	
DIESEL	10 <sup>-3</sup> L/l	17.738	8.180	108.266	16.950	300.859	38.800	862.759	8.850	121.505	18.700	256.225	
TOTAL				109.144		303.282		882.482		137.532		701.623	

KANCHANABURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	1.255	0.823	1.098	2.940	3.807	11.800	15.291	19.450	25.189	492.000	837.140	
DIESEL	10 <sup>-3</sup> L/l	28.402	8.180	182.838	16.950	447.514	38.800	871.594	8.850	180.854	18.700	440.913	
TOTAL				183.702		451.321		906.873		206.043		1078.053	

SAMUT SONGKHRAM		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.448	0.823	0.370	2.940	1.320	11.800	5.250	19.450	8.733	492.000	220.908	
DIESEL	10 <sup>-3</sup> L/l	83.968	8.180	394.228	16.950	1084.788	38.800	2335.128	8.850	438.368	18.700	1089.787	
TOTAL				394.597		1086.098		2340.378		447.119		1299.675	

RATCHABURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.829	0.823	0.882	2.940	2.437	11.800	8.782	19.450	16.124	492.000	407.888	
DIESEL	10 <sup>-3</sup> L/l	18.879	8.180	102.743	16.950	252.709	38.800	613.787	8.850	114.251	18.700	278.539	
TOTAL				103.425		255.148		622.569		130.375		686.407	

PHETCHABURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.431	0.823	0.355	2.940	1.287	11.800	5.098	19.450	8.383	492.000	212.022	
DIESEL	10 <sup>-3</sup> L/l	13.131	8.180	80.887	16.950	222.570	38.800	483.221	8.850	88.947	18.700	219.288	
TOTAL				81.242		223.856		488.307		97.330		431.310	

PHACHULAP KHAMPHAN		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.957	0.823	0.481	2.940	1.755	11.800	7.045	19.450	11.812	492.000	283.224	
DIESEL	10 <sup>-3</sup> L/l	13.909	8.180	85.864	16.950	236.268	38.800	512.958	8.850	95.402	18.700	232.781	
TOTAL				86.348		238.021		520.003		107.094		516.005	

TRAT		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.428	0.823	0.351	2.940	1.252	11.800	5.027	19.450	8.288	492.000	208.582	
DIESEL	10 <sup>-3</sup> L/l	27.345	8.180	189.445	16.950	483.488	38.800	1008.298	8.850	187.313	18.700	456.882	
TOTAL				189.796		486.738		1013.325		195.599		665.464	

CHANTHABURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.865	0.823	0.788	2.940	2.808	11.800	11.289	19.450	31.575	492.000	488.880	
DIESEL	10 <sup>-3</sup> L/l	44.485	8.180	274.025	16.950	754.012	38.800	1807.030	8.850	304.719	18.700	742.891	
TOTAL				274.810		756.820		1818.319		323.294		1231.771	

RAYONG		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	1.003	0.823	0.825	2.940	2.948	11.800	11.835	19.450	19.508	492.000	483.478	
DIESEL	10 <sup>-3</sup> L/l	48.804	8.180	305.561	16.950	640.781	38.800	1625.427	8.850	339.787	18.700	828.387	
TOTAL				306.386		643.729		1637.263		359.296		1311.865	

CHONBURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	1.841	0.823	1.515	2.940	5.413	11.800	21.724	19.450	35.807	492.000	905.772	
DIESEL	10 <sup>-3</sup> L/l	88.828	8.180	535.483	16.950	1473.447	38.800	3198.987	8.850	585.484	18.700	1461.714	
TOTAL				536.998		1476.360		3220.711		601.271		2367.486	

CHACHOENGSAO		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.475	0.823	0.391	2.940	1.368	11.800	5.805	19.450	9.239	492.000	233.700	
DIESEL	10 <sup>-3</sup> L/l	18.537	8.180	101.888	16.950	230.332	38.800	608.592	8.850	113.278	18.700	278.189	
TOTAL				102.279		231.699		614.397		122.517		509.889	

PRACHIN BURI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> L/l	0.833	0.823	0.521	2.940	1.881	11.800	7.489	19.450	12.312	492.000	311.428	
DIESEL	10 <sup>-3</sup> L/l	13.940	8.180	85.254	16.950	294.588	38.800	598.312	8.850	94.804	18.700	231.181	
TOTAL				85.775		296.469		605.801		107.116		542.609	



		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.191	0.823	0.157	2.940	0.562	11.800	2.254	19.450	3.715	492.000	93.972
DIESEL	10 <sup>-3</sup> LT	4.598	8.190	29.139	18.950	77.429	36.800	186.102	8.850	31.291	18.700	76.298
TOTAL				29.296		77.989		170.358		35.008		170.270

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.879	0.823	0.554	2.940	1.979	11.800	7.941	19.450	13.090	492.000	301.138
DIESEL	10 <sup>-3</sup> LT	13.156	8.190	81.041	18.950	222.894	36.800	494.141	8.850	90.118	18.700	218.705
TOTAL				81.595		224.873		482.082		103.208		550.821

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.595	0.823	0.490	2.940	1.749	11.800	7.021	19.450	11.573	492.000	292.740
DIESEL	10 <sup>-3</sup> LT	7.035	8.190	43.644	18.950	120.091	36.800	289.728	8.850	49.502	18.700	118.319
TOTAL				44.133		121.840		287.749		60.105		411.060

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.270	0.823	0.173	2.940	0.817	11.800	2.478	19.450	4.084	492.000	100.360
DIESEL	10 <sup>-3</sup> LT	5.577	8.190	34.351	18.950	94.522	36.800	205.215	8.850	38.199	18.700	93.123
TOTAL				34.524		85.138		207.693		42.284		198.483

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.465	0.823	0.303	2.940	1.367	11.800	5.467	19.450	8.044	492.000	228.780
DIESEL	10 <sup>-3</sup> LT	3.825	8.190	24.178	18.950	86.529	36.800	144.440	8.850	28.008	18.700	95.543
TOTAL				24.481		87.896		149.907		36.930		224.323

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.478	0.823	0.342	2.940	1.220	11.800	4.908	19.450	8.081	492.000	234.802
DIESEL	10 <sup>-3</sup> LT	5.649	8.190	34.798	18.950	95.751	36.800	207.833	8.850	38.696	18.700	94.308
TOTAL				35.140		96.974		212.742		46.777		229.110

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.870	0.823	0.715	2.940	2.599	11.800	10.286	19.450	18.921	492.000	420.040
DIESEL	10 <sup>-3</sup> LT	13.098	8.190	85.818	18.950	236.996	36.800	511.483	8.850	95.203	18.700	232.113
TOTAL				86.534		239.146		521.769		112.130		660.153

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.008	0.823	0.031	2.940	0.112	11.800	0.448	19.450	0.709	492.000	18.898
DIESEL	10 <sup>-3</sup> LT	0.597	8.190	3.515	18.950	9.950	36.800	21.802	8.850	4.021	18.700	8.903
TOTAL				3.547		10.061		22.250		4.730		27.801

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	1.144	0.823	0.942	2.940	3.383	11.800	13.489	19.450	22.251	492.000	582.548
DIESEL	10 <sup>-3</sup> LT	29.644	8.190	192.807	18.950	502.498	36.800	1080.898	8.850	203.061	18.700	495.055
TOTAL				193.749		505.881		1104.388		225.312		1077.603

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.557	0.823	0.468	2.940	1.808	11.800	6.573	19.450	10.804	492.000	274.014
DIESEL	10 <sup>-3</sup> LT	7.815	8.190	48.140	18.950	132.464	36.800	287.542	8.850	53.530	18.700	120.511
TOTAL				48.608		134.272		294.115		64.334		494.525

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	1.100	0.823	0.905	2.940	3.204	11.800	12.980	19.450	21.365	492.000	511.200
DIESEL	10 <sup>-3</sup> LT	35.185	8.190	218.740	18.950	598.396	36.800	1294.808	8.850	241.017	18.700	587.351
TOTAL				219.645		601.600		1307.788		262.412		1098.551

		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE	10 <sup>-3</sup> LT	0.478	0.823	0.383	2.940	1.405	11.800	5.640	19.450	9.287	492.000	215.178
DIESEL	10 <sup>-3</sup> LT	8.926	8.190	54.994	18.950	151.298	36.800	328.477	8.850	81.143	18.700	118.084
TOTAL				55.378		152.701		334.117		90.430		233.262



PHICHIT		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.824	0.823	0.514	2.940	1.835	11.800	7.353	19.450	12.137	492.000	307.016	
DIESEL	10 <sup>-3</sup> LT	14.008	8.180	68.277	16.950	237.402	36.800	515.421	8.860	95.941	16.700	233.900	
TOTAL				68.791		239.236		522.794		108.078		540.900	

PHITSANULOK		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.737	0.823	0.802	2.940	2.749	11.800	8.826	19.450	14.239	492.000	369.352	
DIESEL	10 <sup>-3</sup> LT	16.017	8.180	98.695	16.950	271.468	36.800	669.428	8.860	108.718	16.700	237.402	
TOTAL				99.266		273.827		598.051		123.034		327.138	

SUKHOTHAI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.379	0.823	0.312	2.940	1.114	11.800	4.472	19.450	7.372	492.000	108.781	
DIESEL	10 <sup>-3</sup> LT	8.850	8.180	54.516	16.950	150.008	36.800	325.830	8.860	80.822	16.700	147.795	
TOTAL				54.828		151.122		330.182		87.994		304.263	

TAK		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.400	0.823	0.332	2.940	1.185	11.800	4.795	19.450	7.808	492.000	138.218	
DIESEL	10 <sup>-3</sup> LT	8.192	8.180	50.213	16.950	138.188	36.800	299.975	8.860	85.138	16.700	138.130	
TOTAL				50.545		139.373		304.731		83.876		234.408	

KAMPHAENG PHET		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.800	0.823	0.599	2.940	1.999	11.800	8.019	19.450	13.216	492.000	334.314	
DIESEL	10 <sup>-3</sup> LT	20.805	8.180	128.200	16.950	362.904	36.800	795.380	8.860	142.851	16.700	347.778	
TOTAL				128.841		364.981		774.378		155.838		692.082	

UTHAI THANI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.099	0.823	0.081	2.940	1.999	11.800	1.789	19.450	7.829	492.000	48.706	
DIESEL	10 <sup>-3</sup> LT	1.481	8.180	9.123	16.950	25.103	36.800	54.501	8.860	10.145	16.700	24.733	
TOTAL				9.204		25.394		55.889		12.070		73.441	

CHAYAPHUM		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.332	0.823	0.273	2.940	0.975	11.800	3.918	19.450	6.457	492.000	183.344	
DIESEL	10 <sup>-3</sup> LT	6.866	8.180	42.276	16.950	116.333	36.800	252.563	8.860	47.072	16.700	114.810	
TOTAL				42.549		117.304		258.475		53.469		277.958	

NAKHON RATCHASIMA		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	1.262	0.823	1.146	2.940	4.062	11.800	18.426	19.450	27.074	492.000	874.264	
DIESEL	10 <sup>-3</sup> LT	48.332	8.180	303.866	16.950	808.177	36.800	1815.418	8.860	337.824	16.700	823.514	
TOTAL				305.011		840.270		1833.843		364.898		1507.778	

BURI BUM		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.579	0.823	0.477	2.940	1.702	11.800	8.822	19.450	11.252	492.000	264.089	
DIESEL	10 <sup>-3</sup> LT	10.808	8.180	68.595	16.950	183.182	36.800	397.661	8.860	74.611	16.700	180.493	
TOTAL				67.041		184.984		404.483		85.863		444.582	

SURIN		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.354	0.823	0.291	2.940	1.041	11.800	4.177	19.450	8.935	492.000	174.189	
DIESEL	10 <sup>-3</sup> LT	8.389	8.180	38.233	16.950	107.965	36.800	234.319	8.860	43.821	16.700	108.382	
TOTAL				38.524		108.965		238.558		52.756		282.571	

SISAKET		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.597	0.823	0.499	2.940	1.838	11.800	6.573	19.450	10.894	492.000	271.044	
DIESEL	10 <sup>-3</sup> LT	6.846	8.180	42.761	16.950	117.718	36.800	295.578	8.860	47.573	16.700	135.982	
TOTAL				43.240		119.365		262.149		58.467		307.026	

UBON RATCHATHANI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.966	0.823	0.811	2.940	2.189	11.800	11.835	19.450	19.178	492.000	485.112	
DIESEL	10 <sup>-3</sup> LT	14.113	8.180	88.908	16.950	219.215	36.800	518.358	8.860	88.674	16.700	235.687	
TOTAL				87.745		242.114		530.993		115.852		720.799	



YASOTHON		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.225	0.823	0.185	2.940	0.962	11.800	2.535	19.450	4.378	492.000	110.700	
DIESEL	10 <sup>-3</sup> LT	2.890	8.180	17.371	16.960	47.769	36.800	103.775	8.990	19.317	16.700	47.094	
TOTAL				17.556		49.480		108.411		23.693		157.794	

MUKDAHAN		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.151	0.823	0.124	2.940	0.444	11.800	1.722	19.450	2.307	492.000	74.292	
DIESEL	10 <sup>-3</sup> LT	1.173	8.180	11.538	16.960	31.747	36.800	81.528	8.990	12.800	16.700	31.279	
TOTAL				11.662		34.191		70.709		15.767		105.571	

KHON KAEN		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	1.185	0.823	0.970	2.940	3.513	11.800	14.101	19.450	23.243	492.000	597.910	
DIESEL	10 <sup>-3</sup> LT	26.778	8.180	164.940	16.960	453.930	36.800	995.357	8.990	163.478	16.700	447.199	
TOTAL				165.924		457.367		999.459		206.659		1005.069	

MAHA SARAKHAM		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.221	0.823	0.182	2.940	0.850	11.800	2.808	19.450	4.289	492.000	108.730	
DIESEL	10 <sup>-3</sup> LT	3.477	8.180	21.415	16.960	59.827	36.800	127.925	8.990	23.814	16.700	59.059	
TOTAL				21.597		59.576		130.543		28.112		168.790	

ROI ET		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.808	0.823	0.811	2.940	2.493	11.800	5.866	19.450	18.260	492.000	411.312	
DIESEL	10 <sup>-3</sup> LT	13.076	8.180	80.543	16.960	221.839	36.800	461.797	8.990	99.571	16.700	218.399	
TOTAL				81.236		224.096		467.662		106.831		629.691	

KALASIN		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.330	0.823	0.271	2.940	0.999	11.800	3.099	19.450	6.409	492.000	182.114	
DIESEL	10 <sup>-3</sup> LT	6.095	8.180	37.357	16.960	102.793	36.800	223.174	8.990	41.542	16.700	101.277	
TOTAL				37.628		103.792		227.062		47.951		283.391	

SAKHON NAKHON		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.826	0.823	0.515	2.940	1.940	11.800	7.397	19.450	12.176	492.000	307.862	
DIESEL	10 <sup>-3</sup> LT	8.860	8.180	42.293	16.960	116.277	36.800	252.448	8.990	48.991	16.700	114.952	
TOTAL				42.773		118.117		259.835		59.167		422.554	

NAKHON PHANOM		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.297	0.823	0.276	2.940	0.844	11.800	3.797	19.450	5.392	492.000	141.204	
DIESEL	10 <sup>-3</sup> LT	2.682	8.180	16.521	16.960	45.480	36.800	99.998	8.990	18.372	16.700	44.799	
TOTAL				16.797		48.304		102.034		23.954		165.993	

UDON THANI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	1.137	0.823	0.908	2.940	3.343	11.800	13.417	19.450	22.115	492.000	599.404	
DIESEL	10 <sup>-3</sup> LT	20.793	8.180	129.176	16.960	392.326	36.800	795.395	8.990	142.469	16.700	347.327	
TOTAL				129.051		395.669		778.734		164.591		908.731	

NONG KHAI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.410	0.823	0.337	2.940	1.205	11.800	4.838	19.450	7.974	492.000	201.720	
DIESEL	10 <sup>-3</sup> LT	5.205	8.180	32.069	16.960	89.242	36.800	191.591	8.990	35.051	16.700	95.940	
TOTAL				32.408		89.447		196.419		43.026		299.660	

LOEI		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.409	0.823	0.338	2.940	1.200	11.800	4.817	19.450	7.909	492.000	200.739	
DIESEL	10 <sup>-3</sup> LT	5.404	8.180	33.299	16.960	81.998	36.800	193.687	8.990	37.017	16.700	93.247	
TOTAL				33.624		82.797		213.822		44.923		293.983	

CHUMPHON		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>-3</sup> LT	0.640	0.823	0.530	2.940	1.905	11.800	7.848	19.450	12.804	492.000	319.918	
DIESEL	10 <sup>-3</sup> LT	19.665	8.180	122.307	16.960	338.542	36.800	730.864	8.990	138.007	16.700	331.578	
TOTAL				122.940		339.447		738.310		149.810		650.395	



RANGKING		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.314	0.823	0.259	2.940	0.923	11.800	3.705	19.450	8.107	482.000	154.488
DIESEL	10 <sup>-3</sup> L/l	13.209	8.180	81.361	16.950	223.878	36.800	466.054	8.850	80.475	16.700	220.574
TOTAL				81.620		224.798		469.760		88.582		375.062

BURAT THANI		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	1.805	0.823	1.466	2.940	5.307	11.800	21.253	19.450	35.107	482.000	898.080
DIESEL	10 <sup>-3</sup> L/l	53.378	8.180	328.008	16.950	804.757	36.800	1964.310	8.850	365.539	16.700	661.413
TOTAL				330.294		910.064		1985.563		400.747		1779.473

PHANGNGA		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.354	0.823	0.291	2.940	1.041	11.800	4.177	19.450	8.885	482.000	174.168
DIESEL	10 <sup>-3</sup> L/l	8.472	8.180	39.999	16.950	109.700	36.800	238.170	8.850	44.330	16.700	108.082
TOTAL				40.199		110.741		242.347		51.219		282.250

PHUKET		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.434	0.823	0.357	2.940	1.276	11.800	5.121	19.450	8.441	482.000	213.528
DIESEL	10 <sup>-3</sup> L/l	24.978	8.180	153.064	16.950	423.377	36.800	919.180	8.850	171.098	16.700	417.133
TOTAL				154.222		424.653		924.312		179.541		630.661

KRABI		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.378	0.823	0.311	2.940	1.111	11.800	4.460	19.450	7.332	482.000	195.976
DIESEL	10 <sup>-3</sup> L/l	5.542	8.180	24.136	16.950	83.937	36.800	203.948	8.850	37.963	16.700	92.551
TOTAL				24.450		85.048		208.408		45.315		278.527

NAH-NON-SI THAMMARAT		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	1.831	0.823	1.342	2.940	4.755	11.800	18.248	19.450	31.720	482.000	802.482
DIESEL	10 <sup>-3</sup> L/l	37.806	8.180	231.863	16.950	637.422	36.800	1,363.901	8.850	257.901	16.700	829.020
TOTAL				232.965		642.177		1,403.147		289.344		1,430.472

TRANG		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.702	0.823	0.578	2.940	2.054	11.800	8.254	19.450	13.554	482.000	345.394
DIESEL	10 <sup>-3</sup> L/l	12.904	8.180	79.468	16.950	218.723	36.800	474.867	8.850	88.382	16.700	215.487
TOTAL				80.066		220.787		483.151		102.048		560.881

PHATTHALUNG		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.486	0.823	0.400	2.940	1.429	11.800	5.736	19.450	9.453	482.000	248.112
DIESEL	10 <sup>-3</sup> L/l	3.792	8.180	23.359	16.950	64.274	36.800	139.548	8.850	25.975	16.700	83.328
TOTAL				23.759		65.700		145.280		35.428		332.439

SONGKHLA		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	1.721	0.823	1.418	2.940	5.070	11.800	20.308	19.450	33.473	482.000	845.732
DIESEL	10 <sup>-3</sup> L/l	68.291	8.180	408.353	16.950	1,123.812	36.800	2,439.508	8.850	464.083	16.700	1,107.080
TOTAL				409.769		1,129.882		2,459.817		487.557		1,953.782

SATUN		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.328	0.823	0.288	2.940	0.888	11.800	3.947	19.450	6.941	482.000	180.382
DIESEL	10 <sup>-3</sup> L/l	8.660	8.180	41.207	16.950	113.357	36.800	348.174	8.850	45.823	16.700	111.715
TOTAL				41.478		114.245		232.120		52.764		272.107

PAITANI		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.889	0.823	0.740	2.940	2.843	11.800	10.808	19.450	17.498	482.000	442.308
DIESEL	10 <sup>-3</sup> L/l	18.461	8.180	120.085	16.950	330.312	36.800	717.288	8.850	133.513	16.700	325.500
TOTAL				120.804		333.018		727.877		150.998		767.808

YALA		SECTOR: AGRICULTURE										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE	10 <sup>-3</sup> L/l	0.887	0.823	0.595	2.940	2.018	11.800	8.101	19.450	13.352	482.000	337.758
DIESEL	10 <sup>-3</sup> L/l	5.512	8.180	33.854	16.950	81.428	36.800	232.542	8.850	37.757	16.700	82.050
TOTAL				34.519		85.447		210.642		51.110		429.808

NARATHIWAT		SECTOR: AGRICULTURE											
type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
GASOLINE	10 <sup>3</sup> LI	0.800	0.823	0.494	2.940	1.764	11.800	7.079	19.450	11.661	492.000	256.151	
DIESEL	10 <sup>3</sup> LI	2.809	6.180	17.485	18.960	48.113	38.900	104.457	6.890	19.444	18.700	47.403	
TOTAL				17.979		49.876		111.538		31.112		342.554	



ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย



ภาคผนวก ฉ

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามสาขาเหมืองแร่เป็นรายจังหวัด

ศูนย์วิจัยทรัพยากรธรณี  
จุฬาลงกรณ์มหาวิทยาลัย

## BANGKOK SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT	0.213	0.100	0.021	2.930	0.624	2.300	0.490	0.400	0.085	0.800	0.128
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	4.485	4.010	17.985	17.000	76.245	56.200	252.057	4.490	20.138	12.200	54.717
FUEL OIL	10 <sup>-3</sup> LT	3.774	3.020	11.397	57.000	215.118	6.800	24.908	0.080	0.302	0.800	2.284
TOTAL				29.404		291.987		277.455		20.525		57.108

## SAMUT PRAKAN SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.313	0.030	0.009	0.003	0.001	1.250	0.392	0.050	0.016	0.300	0.091
KEROSENE	10 <sup>-3</sup> LT	0.101	0.100	0.010	2.930	0.296	2.300	0.232	0.400	0.040	0.600	0.081
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.048	4.010	0.192	17.000	0.816	56.200	2.699	4.490	0.219	12.200	0.566
FUEL OIL	10 <sup>-3</sup> LT	8.333	3.020	25.168	57.000	474.991	6.600	54.999	0.080	0.867	0.800	5.000
TOTAL				25.368		478.093		57.928		0.923		5.640

## NONTHABURI SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.024	4.010	0.096	17.000	0.408	56.200	1.349	4.490	0.108	12.200	0.293
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.096		0.408		1.349		0.108		0.293

## PATHUM THANI SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	56.200	0.000	4.490	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT	0.039	3.020	0.115	57.000	2.188	6.800	0.251	0.080	0.003	0.800	0.023
TOTAL				0.115		2.188		0.251		0.003		0.023

## SAMUT SAKHON SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT	0.015	0.100	0.002	2.930	0.044	2.300	0.034	0.400	0.008	0.800	0.009
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.444	4.010	1.730	17.000	7.548	56.200	24.953	4.490	1.994	12.200	5.417
FUEL OIL	10 <sup>-3</sup> LT	2.066	3.020	8.209	57.000	117.762	6.800	13.808	0.080	0.185	0.800	1.240
TOTAL				8.021		125.354		38.823		2.185		6.965

## SARABURI SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.276	4.010	1.107	17.000	4.892	56.200	15.511	4.490	1.239	12.200	3.387
FUEL OIL	10 <sup>-3</sup> LT	0.381	3.020	1.181	57.000	22.287	6.800	2.581	0.080	0.031	0.800	0.205
TOTAL				2.288		28.979		18.082		1.271		3.802

## KANCHANABURI SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.814	4.010	7.875	17.000	32.538	56.200	197.567	4.490	8.594	12.200	23.351
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				7.875		32.538		107.567		8.594		23.351



RATCHABURI												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.624	4.010	2.502	17.000	10.606	58.200	35.089	4.490	2.802	12.200	7.613
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				2.502		10.606		35.089		2.802		7.613

PHACHUAP KHIRI KHAN												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.384	4.010	1.540	17.000	6.526	58.200	21.581	4.490	1.724	12.200	4.835
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				1.540		6.526		21.581		1.724		4.835

TRAT												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	2.968	4.010	11.501	17.000	48.758	58.200	181.182	4.490	12.877	12.200	34.390
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				11.501		48.758		181.182		12.877		34.390

CHANTHABURI												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.688	4.010	6.689	17.000	28.358	58.200	93.742	4.490	7.489	12.200	20.350
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				6.689		28.358		93.742		7.489		20.350

RAYONG												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.327	4.010	1.311	17.000	5.559	58.200	18.377	4.490	1.468	12.200	3.989
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				1.311		5.559		18.377		1.468		3.989

CHON BURI												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.003	4.010	0.012	17.000	0.051	58.200	0.189	4.490	0.013	12.200	0.037
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				0.012		0.051		0.189		0.013		0.037

LAMPANG												
SECTOR: MINING & QUARRY												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.400	4.010	1.604	17.000	6.900	58.200	22.480	4.490	1.796	12.200	4.880
FUEL OIL	10 <sup>-3</sup> LT	0.340	3.020	1.027	57.000	19.380	6.800	2.244	0.080	0.027	0.600	0.204
TOTAL				2.631		26.180		24.724		1.823		5.084



## CHIANG RAI

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.012	4.010	0.048	17.000	0.204	58.200	0.874	4.490	0.054	12.200	0.148
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.048		0.204		0.874		0.054		0.148

## MAE HONG SORN

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.050	4.010	0.201	17.000	0.850	58.200	2.910	4.490	0.225	12.200	0.610
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.201		0.850		2.910		0.225		0.610

## CHIANG MAI

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.524	4.010	2.101	17.000	8.908	58.200	29.449	4.490	2.353	12.200	8.393
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				2.101		8.908		29.449		2.353		8.393

## LUMPHUN

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.850	4.010	2.807	17.000	11.050	58.200	36.530	4.490	2.919	12.200	7.930
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				2.807		11.050		36.530		2.919		7.930

## PHITSANULOK

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	4.164	4.010	18.898	17.000	70.788	58.200	234.017	4.490	18.898	12.200	50.801
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				18.898		70.788		234.017		18.898		50.801

## SUKHOTHAI

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.150	4.010	0.801	17.000	2.550	58.200	8.430	4.490	0.874	12.200	1.830
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.801		2.550		8.430		0.874		1.830

## TAK

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.408	4.010	1.838	17.000	8.938	58.200	22.930	4.490	1.832	12.200	4.978
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				1.838		8.938		22.930		1.832		4.978



## KHON KAEN

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.036	4.010	0.144	17.000	0.612	58.200	2.023	4.490	0.162	12.200	0.439
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.144		0.612		2.023		0.162		0.439

## PHANGNGA

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.432	4.010	1.732	17.000	7.344	58.200	24.278	4.490	1.940	12.200	5.270
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.600	0.000	0.080	0.000	0.600	0.000
TOTAL				1.732		7.344		24.278		1.940		5.270

## PHUKET

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT	0.184	0.100	0.018	2.930	0.539	2.300	0.423	0.400	0.074	0.600	0.110
GASOLINE	10 <sup>-3</sup> LT	0.955	0.775	0.693	2.960	2.531	12.200	10.431	15.800	13.509	472.000	403.580
DIESEL	10 <sup>-3</sup> LT	19.612	4.010	78.844	17.000	333.404	58.200	1102.194	4.490	99.050	12.200	239.268
FUEL OIL	10 <sup>-3</sup> LT	3.445	3.020	10.404	57.000	196.365	8.600	22.737	0.080	0.278	0.600	2.087
TOTAL				89.729		532.839		1135.788		101.916		845.004

## NAKHON SI THAMMARAT

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.044	4.010	4.188	17.000	17.748	58.200	58.873	4.490	4.688	12.200	12.337
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.600	0.000	0.080	0.000	0.600	0.000
TOTAL				4.188		17.748		58.873		4.688		12.337

## TRANG

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.278	4.010	1.119	17.000	4.743	58.200	15.890	4.490	1.253	12.200	3.404
FUEL OIL	10 <sup>-3</sup> LT	0.527	3.020	1.592	57.000	30.038	8.600	3.478	0.080	0.042	0.600	0.219
TOTAL				2.710		34.782		19.158		1.295		3.720

## SONGKHLA

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.772	4.010	3.098	17.000	13.124	58.200	43.388	4.490	3.466	12.200	8.418
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.600	0.000	0.080	0.000	0.600	0.000
TOTAL				3.098		13.124		43.388		3.466		8.418

## YALA

## SECTOR: MINING &amp; QUARRY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.320	4.010	5.293	17.000	22.440	58.200	74.184	4.490	5.927	12.200	16.104
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	8.600	0.000	0.080	0.000	0.600	0.000
TOTAL				5.293		22.440		74.184		5.927		16.104



ภาคผนวก ๕

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามสาขาอุตสาหกรรมเป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย



**BANGKOK** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	57.522	0.030	1.738	0.000	0.174	1.250	72.403	0.050	2.998	0.300	17.377
PEROSENE	10 <sup>-3</sup> LT	15.730	0.100	1.573	2.900	48.059	2.300	36.179	0.400	8.282	0.800	9.439
GASOLINE	10 <sup>-3</sup> LT	8.178	0.775	4.769	2.900	18.267	12.200	75.372	15.800	97.812	472.000	2918.016
DIESEL	10 <sup>-3</sup> LT	58.031	4.010	224.965	17.000	953.377	56.200	3151.752	4.480	251.804	12.200	894.198
FUEL OIL	10 <sup>-3</sup> LT	532.022	3.020	1808.648	57.000	33224.114	8.800	3511.213	0.090	42.580	0.800	319.201
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				1839.829		31342.041		8948.919		401.364		3948.220

**SAMUT PRAKAN** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	43.247	0.030	1.287	0.000	0.130	1.250	54.051	0.050	2.182	0.300	12.822
PEROSENE	10 <sup>-3</sup> LT	5.367	0.100	0.537	2.900	15.725	2.300	12.344	0.400	2.147	0.800	3.220
GASOLINE	10 <sup>-3</sup> LT	1.758	0.775	1.381	2.900	5.166	12.200	21.423	15.800	27.745	472.000	868.832
DIESEL	10 <sup>-3</sup> LT	28.264	4.010	113.328	17.000	40.418	56.200	3288.417	4.480	26.905	12.200	244.821
FUEL OIL	10 <sup>-3</sup> LT	344.588	3.020	1840.566	57.000	19542.143	8.800	2274.353	0.090	27.583	0.800	205.759
NATURAL GAS	10 <sup>-3</sup> SCF	189.280	0.0015	0.252	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	2.524
LIGNITE	TON	40.210	80.000	24.12.800	26.800	1069.566	10.000	402.100	0.100	4.021	3.000	120.830
TOTAL				3570.075		21213.279		4368.169		180.694		1518.759

**NONTHABURI** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.563	0.030	0.047	0.000	0.005	1.250	1.954	0.050	0.079	0.300	0.469
PEROSENE	10 <sup>-3</sup> LT	0.499	0.100	0.047	2.900	1.374	2.300	1.079	0.400	0.166	0.800	0.261
GASOLINE	10 <sup>-3</sup> LT	0.293	0.775	0.281	2.900	0.882	12.200	3.838	15.800	4.709	472.000	140.658
DIESEL	10 <sup>-3</sup> LT	2.848	4.010	11.420	17.000	48.418	56.200	160.059	4.480	12.789	12.200	34.746
FUEL OIL	10 <sup>-3</sup> LT	20.859	3.020	82.994	57.000	1169.567	8.800	137.869	0.090	1.869	0.800	12.515
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				74.739		1209.840		304.388		84.420		186.687

**PATHUM THANI** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	24.254	0.030	0.729	0.000	0.073	1.250	30.389	0.050	1.215	0.300	7.289
PEROSENE	10 <sup>-3</sup> LT	1.995	0.100	0.200	2.900	5.845	2.300	4.958	0.400	1.145	0.800	1.197
GASOLINE	10 <sup>-3</sup> LT	0.737	0.775	0.571	2.900	2.892	12.200	8.951	15.800	0.799	0.800	1.197
DIESEL	10 <sup>-3</sup> LT	15.419	4.010	81.830	17.000	282.120	56.200	868.548	4.480	11.845	472.000	347.864
FUEL OIL	10 <sup>-3</sup> LT	188.783	3.020	594.035	57.000	10948.831	8.800	1232.788	0.090	14.943	0.800	112.070
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	30.840	80.000	1856.400	26.800	823.004	10.000	308.400	0.100	3.094	3.000	82.820
TOTAL				2433.914		11739.668		2452.663		100.925		749.351

**NAKHON PATHOM** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	3.120	0.030	0.094	0.000	0.009	1.250	3.099	0.050	0.158	0.300	0.908
PEROSENE	10 <sup>-3</sup> LT	0.371	0.100	0.037	2.900	1.097	2.300	0.853	0.400	0.148	0.800	0.223
GASOLINE	10 <sup>-3</sup> LT	0.040	0.775	0.031	2.900	0.118	12.200	0.498	15.800	0.832	472.000	18.990
DIESEL	10 <sup>-3</sup> LT	1.218	4.010	5.004	17.000	212.216	56.200	70.138	4.480	5.804	12.200	15.225
FUEL OIL	10 <sup>-3</sup> LT	70.624	3.020	213.294	57.000	4025.599	8.800	466.118	0.090	5.650	0.800	42.374
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	17.900	80.000	1069.000	26.800	473.480	10.000	178.000	0.100	1.780	3.000	53.400
TOTAL				1268.451		4521.478		718.487		13.970		131.038

**SAMUT SAHKON** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	10.803	0.030	0.319	0.000	0.022	1.250	13.254	0.050	0.500	0.300	3.381
PEROSENE	10 <sup>-3</sup> LT	7.514	0.100	0.751	2.900	22.018	2.300	17.242	0.400	3.008	0.800	4.908
GASOLINE	10 <sup>-3</sup> LT	0.007	0.775	0.005	2.900	0.019	12.200	0.019	15.800	0.103	472.000	3.088
DIESEL	10 <sup>-3</sup> LT	3.865	4.010	14.897	17.000	80.305	56.200	205.973	4.480	26.459	12.200	44.713
FUEL OIL	10 <sup>-3</sup> LT	113.871	3.020	344.192	57.000	8498.347	8.800	752.208	0.090	8.118	0.800	89.383
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	26.850	80.000	1811.000	26.800	714.210	10.000	289.500	0.100	2.895	3.000	80.550
TOTAL				1970.964		7294.929		1257.297		31.897		204.403

**PHRANAKHON SI AYUTTHAYA** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.239	0.030	0.007	0.000	0.001	1.250	0.289	0.050	0.012	0.300	0.072
PEROSENE	10 <sup>-3</sup> LT	0.974	0.100	0.067	2.900	1.975	2.300	1.560	0.400	0.270	0.800	0.404
GASOLINE	10 <sup>-3</sup> LT	0.091	0.775	0.071	2.900	0.289	12.200	1.110	15.800	1.439	472.000	42.992
DIESEL	10 <sup>-3</sup> LT	0.999	4.010	3.948	17.000	18.303	56.200	53.866	4.480	4.306	12.200	11.700
FUEL OIL	10 <sup>-3</sup> LT	11.050	3.020	33.401	57.000	630.420	8.800	72.996	0.090	0.895	0.800	6.636
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	59.900	80.000	3594.000	26.800	1933.340	10.000	598.000	0.100	5.980	3.000	179.700
TOTAL				3631.382		2242.308		726.651		12.900		241.464

**ANG THONG** **SECTOR: MANUFACTURING**

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT	0.612	0.100	0.061	2.900	1.793	2.300	1.403	0.400	0.246	0.800	0.367
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	56.200	0.000	4.480	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT	17.122	3.020	51.708	57.000	975.954	8.800	113.005	0.090	1.370	0.800	10.273
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.000	0.000	3.000	0.000
TOTAL				51.770		977.747		114.413		1.615		10.640



SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.443	0.000	0.040	0.000	0.004	1.250	1.804	0.050	0.072	0.300	0.420
PEROSENE	10 <sup>-3</sup> LT	2.495	0.100	0.250	2.900	7.319	2.300	5.745	0.400	0.999	0.800	1.498
GASOLINE	10 <sup>-3</sup> LT	1.200	0.775	0.950	2.990	3.511	12.200	15.005	15.800	19.434	472.000	590.590
DIESEL	10 <sup>-3</sup> LT	13.541	4.010	54.294	17.000	220.187	56.200	761.004	4.400	80.799	12.200	165.200
FUEL OIL	10 <sup>-3</sup> LT	343.876	3.020	1009.506	57.000	19000.802	6.800	2299.992	0.000	27.510	0.800	206.326
NATURAL GAS	10 <sup>-3</sup> SCF	2713.120	0.0015	4.077	0.000048	0.130	0.090	217.450	0.002	5.436	0.015	40.772
LIGNITE	TON	1519.140	80.000	91039.400	26.800	40042.524	10.000	15191.400	0.100	151.914	3.000	4594.420
TOTAL				92166.528		60224.748		16951.991		266.065		5549.208

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT	0.007	0.775	0.000	2.990	0.019	12.200	0.079	15.800	0.103	472.000	3.068
DIESEL	10 <sup>-3</sup> LT	0.678	4.010	2.719	17.000	11.526	56.200	76.104	4.490	3.044	12.200	8.272
FUEL OIL	10 <sup>-3</sup> LT	0.370	3.020	1.117	57.000	21.090	6.800	2.442	0.000	0.000	0.800	0.222
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				3.041		22.805		40.825		3.177		11.562

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.099	0.000	0.003	0.000	0.000	1.250	0.123	0.050	0.005	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT	0.099	0.100	0.007	2.900	0.201	2.300	0.156	0.400	0.027	0.800	0.041
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.990	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.325	4.010	1.301	17.000	5.517	56.200	16.237	4.490	1.457	12.200	3.959
FUEL OIL	10 <sup>-3</sup> LT	0.050	3.020	0.191	57.000	3.440	6.800	0.356	0.090	0.005	0.800	0.006
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				1.492		9.139		19.914		1.494		4.056

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.990	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.646	4.010	2.936	17.000	10.965	56.200	26.246	4.490	2.866	12.200	7.669
FUEL OIL	10 <sup>-3</sup> LT	0.144	3.020	0.435	57.000	8.209	6.800	0.350	0.090	0.012	0.800	0.016
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				3.021		19.173		37.199		2.903		7.956

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT	0.051	0.775	0.000	2.990	0.180	12.200	0.743	15.800	0.162	472.000	28.745
DIESEL	10 <sup>-3</sup> LT	14.478	4.010	59.057	17.000	248.126	56.200	813.854	4.490	85.008	12.210	175.032
FUEL OIL	10 <sup>-3</sup> LT	9.174	3.020	27.705	57.000	522.919	6.800	60.546	0.090	0.734	0.800	5.924
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				65.839		769.224		674.655		66.702		210.661

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.577	0.000	0.017	0.000	0.002	1.250	0.722	0.050	0.029	0.300	0.173
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.990	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	56.200	0.000	4.490	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT	4.499	3.020	13.554	57.000	255.816	6.800	29.821	0.090	0.369	0.800	2.893
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	17.550	80.000	1053.000	26.800	468.500	10.000	175.500	0.100	1.755	3.000	52.950
TOTAL				1099.571		722.646		205.642		2.143		55.518

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.014	0.000	0.001	1.250	0.599	0.050	0.024	0.300	0.144
PEROSENE	10 <sup>-3</sup> LT		0.100	0.015	2.900	0.451	2.300	0.354	0.400	0.082	0.800	0.092
GASOLINE	10 <sup>-3</sup> LT	0.074	0.775	0.007	2.990	0.219	12.200	0.099	15.800	1.164	472.000	34.767
DIESEL	10 <sup>-3</sup> LT	8.195	4.010	24.892	17.000	104.805	56.200	345.911	4.490	27.836	12.200	75.091
FUEL OIL	10 <sup>-3</sup> LT	8.964	3.020	27.071	57.000	510.949	6.800	59.162	0.090	0.717	0.800	5.378
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	19.200	80.000	1152.000	26.800	510.720	10.000	192.000	0.100	1.920	3.000	57.600
TOTAL				1203.640		1126.974		568.926		31.522		173.072

SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.099	0.000	0.002	0.000	0.000	1.250	0.068	0.050	0.000	0.300	0.021
PEROSENE	10 <sup>-3</sup> LT	0.267	0.100	0.007	2.900	0.792	2.300	0.814	0.400	0.107	0.800	0.160
GASOLINE	10 <sup>-3</sup> LT	0.091	0.775	0.071	2.990	0.269	12.200	1.170	15.800	1.430	472.000	42.962
DIESEL	10 <sup>-3</sup> LT	1.305	4.010	5.357	17.000	22.965	56.200	75.027	4.490	5.964	12.200	16.267
FUEL OIL	10 <sup>-3</sup> LT	24.200	3.020	73.094	57.000	1379.400	6.800	159.720	0.090	1.906	0.800	14.520
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.090	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				78.537		1403.147		236.557		9.478		73.940



## PHACH LAMP H-IFI KHAN

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.000	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT	0.014	0.100	0.001	2.900	0.041	2.300	0.002	0.400	0.008	0.800	0.008
GASOLINE	10 <sup>-3</sup> LT	0.180	0.775	0.109	2.980	0.500	12.200	2.196	15.800	2.944	472.000	84.960
DIESEL	10 <sup>-3</sup> LT	2.540	4.010	10.197	17.000	43.201	59.200	142.917	4.480	11.418	12.200	31.025
FUEL OIL	10 <sup>-3</sup> LT	13.384	3.020	40.359	57.000	781.748	8.800	83.202	0.000	1.088	0.800	8.018
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	28.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				50.898		805.563		223.347		15.337		124.011

## TRAT

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.000	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.101	4.010	0.405	17.000	1.717	59.200	5.878	4.480	0.450	12.200	1.222
FUEL OIL	10 <sup>-3</sup> LT	0.204	3.020	0.615	57.000	11.829	8.800	1.346	0.000	0.016	0.800	0.122
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	28.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				1.021		13.345		7.023		0.470		1.355

## CHANTHABURI

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.080	0.000	0.000	0.000	1.250	0.116	0.000	0.000	0.005	0.300	0.003
PEROSENE	10 <sup>-3</sup> LT	0.002	0.100	0.003	2.900	0.095	2.300	0.074	0.400	0.013	0.800	0.019
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.449	4.010	1.799	17.000	7.825	59.200	25.207	4.480	2.014	12.200	5.472
FUEL OIL	10 <sup>-3</sup> LT	1.191	3.020	3.591	57.000	67.897	8.800	7.061	0.000	0.006	0.800	0.715
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	28.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				5.401		75.807		33.256		2.127		8.234

## RAYONG

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.050	0.000	0.000	0.000	1.250	0.118	0.000	0.000	0.005	0.300	0.003
PEROSENE	10 <sup>-3</sup> LT	0.208	0.100	0.021	2.900	0.803	2.300	0.473	0.400	0.002	0.800	0.123
GASOLINE	10 <sup>-3</sup> LT	0.138	0.775	0.107	2.980	0.409	12.200	1.894	15.800	2.190	472.000	85.135
DIESEL	10 <sup>-3</sup> LT	4.188	4.010	16.794	17.000	71.188	59.200	206.389	4.480	18.804	12.200	51.084
FUEL OIL	10 <sup>-3</sup> LT	15.642	3.020	47.249	57.000	191.594	8.800	103.737	0.000	1.251	0.800	9.395
NATURAL GAS	10 <sup>-3</sup> SCF	1483.260	0.0015	2.195	0.000048	0.070	0.000	117.052	0.002	2.927	0.015	21.949
LIGNITE	TON	72.870	80.000	4380.200	28.800	1803.022	10.000	728.700	0.100	7.257	3.000	281.010
TOTAL				4428.559		2898.084		1194.808		32.518		385.725

## CHON BURI

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	4.769	0.000	0.144	0.000	0.014	1.250	5.906	0.000	0.229	0.300	1.437
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT	0.257	0.775	0.199	2.980	0.781	12.200	3.135	15.800	4.051	472.000	121.304
DIESEL	10 <sup>-3</sup> LT	8.192	4.010	32.810	17.000	139.094	59.200	459.828	4.480	38.737	12.200	99.820
FUEL OIL	10 <sup>-3</sup> LT	21.220	3.020	64.356	57.000	1215.240	8.800	140.712	0.000	1.251	0.800	12.782
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	100.470	80.000	8028.200	28.800	2672.902	10.000	1004.700	0.100	10.047	3.000	301.410
TOTAL				8125.728		4027.811		1614.382		52.790		536.783

## CHAOICHOASAO

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.984	0.000	0.029	0.000	0.000	1.250	1.205	0.000	0.049	0.300	0.289
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.042	4.010	4.178	17.000	17.714	59.200	59.580	4.480	4.679	12.200	12.712
FUEL OIL	10 <sup>-3</sup> LT	12.769	3.020	39.823	57.000	728.973	8.800	94.407	0.000	1.023	0.800	7.873
NATURAL GAS	10 <sup>-3</sup> SCF	375.340	0.0015	0.563	0.000048	0.018	0.000	30.027	0.002	0.751	0.015	5.530
LIGNITE	TON		80.000	0.000	28.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				43.380		746.708		174.200		8.501		28.305

## PRAO-IN BURI

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.000	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.763	4.010	3.080	17.000	12.971	59.200	42.881	4.480	3.428	12.200	9.309
FUEL OIL	10 <sup>-3</sup> LT	2.412	3.020	7.284	57.000	157.484	8.800	15.819	0.000	0.800	0.800	1.447
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	28.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				10.344		160.465		69.800		3.619		10.756

## NAH-NONAYOK

## SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.000	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	59.200	0.000	4.480	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT	2.284	3.020	8.837	57.000	128.048	8.800	14.542	0.000	0.800	0.800	1.359
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	28.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				8.837		128.048		14.542		0.800		1.359



LAMPANG												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT	1.528	0.100	0.152	2.930	4.403	2.300	3.517	0.400	0.612	0.800	0.917
GASOLINE	10 <sup>-3</sup> LT	0.026	0.775	0.020	2.960	0.076	12.200	0.313	15.800	0.405	472.000	12.102
DIESEL	10 <sup>-3</sup> LT	0.873	4.010	3.501	17.000	14.811	58.200	49.063	4.480	3.920	12.200	10.851
FUEL OIL	10 <sup>-3</sup> LT	1.176	3.026	3.562	57.000	67.032	8.800	7.782	0.080	0.084	0.800	0.708
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	33.100	80.000	1998.000	26.800	880.480	10.000	331.000	0.100	3.310	3.000	88.300
TOTAL				1993.225	26.800	888.888		381.854		8.341		123.675

PHARE												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	5.883	4.010	22.709	17.000	98.289	58.200	318.248	4.480	25.426	12.200	69.036
FUEL OIL	10 <sup>-3</sup> LT	1.121	3.026	3.385	57.000	63.997	8.800	7.398	0.080	0.080	0.800	0.873
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				26.080	26.800	180.166		325.648		25.516		89.759

UTTARADIT												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.480	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT	1.591	3.026	4.705	57.000	68.808	8.800	10.283	0.080	0.125	0.800	0.905
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				4.705	88.808		10.283		0.125		0.905	

NAN												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.001	0.000	0.000	1.250	0.000	0.050	0.002	0.300	0.014
PEROSENE	10 <sup>-3</sup> LT	0.048	0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.480	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.026	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	13.200	80.000	782.071	26.800	351.120	10.000	132.080	0.100	1.320	3.000	36.571
TOTAL				782.071	26.800	351.120		132.080		1.322		36.614

PHAYAO												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.077	4.010	0.308	17.000	1.308	58.200	4.327	4.480	0.348	12.200	0.508
FUEL OIL	10 <sup>-3</sup> LT		3.026	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				0.308	26.800	1.308		4.327		0.348		0.508

CHANG RAI												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.011	0.000	0.000	0.000	1.250	0.013	0.050	0.001	0.300	0.003
PEROSENE	10 <sup>-3</sup> LT	0.069	0.100	0.008	2.930	0.170	2.300	0.133	0.400	0.023	0.800	0.006
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.065	4.010	0.221	17.000	0.926	58.200	3.881	4.480	0.247	12.200	0.871
FUEL OIL	10 <sup>-3</sup> LT		3.026	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF	0.259	0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	3.200	80.000	132.000	26.800	85.120	10.000	32.000	0.100	0.320	3.000	9.800
TOTAL				132.009	26.800	100.998		36.947		0.611		10.444

MAE HONG SON												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.480	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LT	0.072	3.026	0.036	57.000	0.894	8.800	0.078	0.080	0.001	0.800	0.007
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				0.076	26.800	0.894		0.078		0.001		0.007

CHANG MAI												
SECTOR: MANUFACTURING												
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT		0.367	0.000	0.011	0.000	1.250	0.447	0.050	0.018	0.300	0.107
PEROSENE	10 <sup>-3</sup> LT		0.004	0.100	0.000	2.930	0.012	2.300	0.009	0.400	0.002	0.800
GASOLINE	10 <sup>-3</sup> LT		0.074	0.775	0.057	2.960	0.219	12.200	0.903	15.800	1.189	472.000
DIESEL	10 <sup>-3</sup> LT	1.226	4.010	4.928	17.000	20.893	58.200	68.070	4.480	5.518	12.200	14.981
FUEL OIL	10 <sup>-3</sup> LT	5.426	3.026	16.477	57.000	310.952	8.800	36.010	0.080	0.408	0.800	3.274
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON	82.400	80.000	3144.000	26.800	1283.940	10.000	824.000	0.100	5.240	3.000	157.200
TOTAL				3185.474	26.800	1725.957		600.439		12.383		210.505



SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT	0.042	0.030	0.001	0.003	0.000	1.250	0.052	0.050	0.002	0.300	0.013	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.480	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> LT	0.578	3.020	2.048	57.000	38.848	8.800	4.475	0.050	0.054	0.800	0.407	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON	27.300	80.000	1638.000	26.800	725.180	10.000	273.000	0.100	2.730	3.000	81.900	
TOTAL				1640.048		764.805		277.527		2.788		82.319	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT	0.111	0.100	0.011	2.900	0.327	2.300	0.256	0.400	0.045	0.800	0.067	
GASOLINE	10 <sup>-3</sup> LT	0.110	0.775	0.095	2.980	0.326	12.200	1.342	15.800	1.738	472.000	51.917	
DIESEL	10 <sup>-3</sup> LT	2.148	4.010	8.617	17.000	26.520	58.200	120.774	4.480	9.648	12.200	26.218	
FUEL OIL	10 <sup>-3</sup> LT	54.232	3.020	163.761	57.000	309.1224	8.800	367.931	0.050	4.335	0.800	32.539	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON	160.400	80.000	1638.000	26.800	4789.438	10.000	1834.300	0.100	18.043	3.000	54.1250	
TOTAL				1699.295		7627.847		2284.903		33.813		652.031	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.120	4.010	0.481	17.000	2.040	58.200	6.744	4.480	0.539	12.200	1.464	
FUEL OIL	10 <sup>-3</sup> LT	0.122	3.020	0.389	57.000	7.321	8.800	0.871	0.050	0.071	0.800	0.079	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				0.930		9.594		7.815		0.548		1.543	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.480	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> LT	0.422	3.020	1.274	57.000	24.054	8.800	2.785	0.050	0.071	0.800	0.253	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				1.274		24.054		2.785		0.074		0.253	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.030	0.000	0.003	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.305	4.010	1.222	17.000	5.165	58.200	17.141	4.480	1.388	12.200	3.721	
FUEL OIL	10 <sup>-3</sup> LT	1.299	3.020	3.820	57.000	73.965	8.800	8.567	0.050	0.104	0.800	0.779	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				5.143		79.171		25.708		1.473		4.500	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.547	4.010	2.189	17.000	9.289	58.200	30.747	4.480	2.466	12.200	8.673	
FUEL OIL	10 <sup>-3</sup> LT	0.120	3.020	0.382	57.000	6.940	8.800	0.792	0.050	0.110	0.800	0.072	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				2.555		18.138		31.533		2.468		8.746	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.770	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.480	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> LT	0.245	3.020	0.740	57.000	13.995	8.800	1.617	0.050	0.080	0.800	0.147	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				0.740		13.995		1.617		0.080		0.147	

SECTOR: MANUFACTURING													
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.175	4.010	0.702	17.000	2.975	58.200	9.605	4.480	0.788	12.200	2.165	
FUEL OIL	10 <sup>-3</sup> LT	0.612	3.020	1.945	57.000	34.894	8.800	4.038	0.050	0.049	0.800	0.367	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				2.550		37.889		13.874		0.825		2.502	



CHAIYAPHUM

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	4.361	4.010	17.469	17.000	74.137	56.200	245.031	4.490	19.591	12.200	53.294
FUEL OIL	10 <sup>-3</sup> LI	0.098	3.020	0.290	57.000	5.472	6.800	0.804	0.090	0.008	0.800	0.008
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				17.778		79.808		245.722		19.599		53.292

NAKHON RATCHASIMA

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI	0.010	0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI	0.028	0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	2.339	4.010	9.295	17.000	39.408	56.200	130.272	4.490	19.409	12.200	29.293
FUEL OIL	10 <sup>-3</sup> LI	13.992	3.020	41.049	57.000	774.744	6.800	89.707	0.090	1.097	0.800	8.155
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON	5.760	60.000	345.800	26.800	1532.18	10.000	57.800	0.100	0.576	3.000	17.280
TOTAL				366.965		967.492		277.927		12.467		65.965

BURI RUM

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	0.109	4.010	0.437	17.000	1.863	56.200	6.126	4.490	0.429	12.200	1.300
FUEL OIL	10 <sup>-3</sup> LI	2.490	3.020	7.520	57.000	141.930	6.800	16.434	0.090	0.999	0.800	1.494
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				7.967		143.783		22.580		0.698		2.824

SURIN

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	0.338	4.010	1.359	17.000	5.793	56.200	19.052	4.490	1.522	12.200	4.106
FUEL OIL	10 <sup>-3</sup> LI		3.020	0.000	57.000	0.000	6.800	0.000	0.090	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				1.359		5.793		19.052		1.522		4.106

SISAKET

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI		4.010	0.000	17.000	0.000	56.200	0.000	4.490	0.000	12.200	0.000
FUEL OIL	10 <sup>-3</sup> LI	0.409	3.020	1.232	57.000	23.256	6.800	2.993	0.090	0.003	0.800	0.245
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				1.232		23.256		2.993		0.003		0.245

UBON RATCHATHAN

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	0.615	4.010	2.496	17.000	10.455	56.200	34.593	4.490	2.761	12.200	7.933
FUEL OIL	10 <sup>-3</sup> LI	1.761	3.020	5.318	57.000	100.377	6.800	11.823	0.090	0.141	0.800	1.067
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				7.794		110.822		46.166		2.922		8.560

YASOTHORN

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	0.120	4.010	0.491	17.000	2.040	56.200	6.744	4.490	0.539	12.200	1.464
FUEL OIL	10 <sup>-3</sup> LI	0.759	3.020	0.471	57.000	8.892	6.800	1.030	0.090	0.072	0.800	0.094
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				0.962		10.302		7.774		0.551		1.598

MUKDAHAN

SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LI		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PEROSBENE	10 <sup>-3</sup> LI		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LI		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>-3</sup> LI	0.088	4.010	0.276	17.000	1.156	56.200	3.922	4.490	0.305	12.200	0.930
FUEL OIL	10 <sup>-3</sup> LI		3.020	0.000	57.000	0.000	6.800	0.000	0.090	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000049	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				0.273		1.156		3.922		0.305		0.930



KHON KHAEN		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT	0.008	0.100	0.000	2.900	0.017	2.300	0.013	0.400	0.002	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT	0.008	0.775	0.000	2.900	0.004	12.200	0.345	15.800	0.000	472.000	13.342	
DIESEL	10 <sup>-3</sup> LT	4.100	4.010	18.794	17.000	71.195	58.200	235.395	4.490	19.804	12.200	51.094	
FUEL OIL	10 <sup>-3</sup> LT	20.997	3.020	63.397	57.000	1186.259	8.800	139.514	0.000	7.8.9	0.800	12.982	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON	2.480	60.000	149.800	26.800	65.969	10.000	24.800	0.100	0.248	3.000	7.440	
TOTAL				229.997		1303.520		399.039		21.160		84.471	

MAHA SARAKHAM		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT		4.010	0.000	17.000	0.000	58.200	0.000	4.490	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> LT	0.012	3.020	0.037	57.000	0.695	8.800	0.061	0.000	0.001	0.800	0.007	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				0.817		0.695		0.081		0.001		0.007	

ROIET		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.273	4.010	1.095	17.000	4.811	58.200	15.943	4.490	1.228	12.200	3.311	
FUEL OIL	10 <sup>-3</sup> LT	1.360	3.020	4.199	57.000	78.862	8.800	9.108	0.000	0.110	0.800	0.689	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				5.282		60.301		24.451		1.328		4.199	

KALASIN		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.022	4.010	0.089	17.000	0.374	58.200	1.238	4.490	0.000	12.200	0.289	
FUEL OIL	10 <sup>-3</sup> LT	3.360	3.020	10.147	57.000	191.520	6.800	22.175	0.000	0.269	0.800	2.018	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				10.235		191.894		23.412		0.269		2.294	

SAM OUN NAI ON		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT	0.005	0.775	0.000	2.900	0.000	12.200	0.317	15.800	0.000	472.000	2.272	
DIESEL	10 <sup>-3</sup> LT	0.250	4.010	1.403	17.000	5.950	58.200	19.570	4.490	15.72	12.200	4.207	
FUEL OIL	10 <sup>-3</sup> LT	0.345	3.020	1.042	57.000	19.665	6.800	2.277	0.000	0.289	0.800	0.207	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				2.498		25.862		22.281		2.010		16.749	

UDON THANI		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT	0.001	0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.001	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	1.920	4.010	7.989	17.000	32.540	58.200	107.904	4.490	8.621	12.200	23.424	
FUEL OIL	10 <sup>-3</sup> LT	1.175	3.020	3.952	57.000	67.022	8.800	7.782	0.000	0.094	0.800	0.708	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				11.251		96.875		115.869		8.715		24.130	

NONG KHAI		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.372	4.010	1.482	17.000	8.324	58.200	20.905	4.490	1.670	12.200	4.538	
FUEL OIL	10 <sup>-3</sup> LT	2.675	3.020	8.663	57.000	163.675	6.800	18.975	0.000	0.230	0.800	1.725	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				10.174		170.199		39.881		1.900		6.263	

CHUMPHON		SECTOR: MANUFACTURING											
type of fuel	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000	
GASOLINE	10 <sup>-3</sup> LT		0.775	0.000	2.900	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> LT	0.175	4.010	0.702	17.000	2.975	58.200	9.935	4.490	0.798	12.200	2.135	
FUEL OIL	10 <sup>-3</sup> LT	0.420	3.020	1.289	57.000	23.940	8.800	2.772	0.000	0.034	0.800	0.252	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LGNITE	TON		60.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL				1.970		26.915		12.907		0.818		2.367	



## PANDANG SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PETROLENE	10 <sup>3</sup> L		0.700	0.000	2.900	0.000	2.500	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>3</sup> L		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>3</sup> L	0.256	4.010	1.147	17.000	4.882	56.200	16.073	4.490	1.254	12.200	3.489
FUEL OIL	10 <sup>3</sup> L	1.915	3.020	5.754	57.000	108.156	8.800	12.838	0.080	0.153	0.800	1.148
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				6.930		114.017		26.712		1.431		4.639

## SURAT THANI SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L	0.822	0.000	0.000	0.000	0.000	1.250	1.153	0.050	0.049	0.300	0.277
PETROLENE	10 <sup>3</sup> L	0.900	0.700	0.000	2.900	2.646	2.300	2.077	0.400	0.361	0.800	0.542
GASOLINE	10 <sup>3</sup> L		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>3</sup> L	0.521	4.010	2.099	17.000	8.057	56.200	29.200	4.490	2.309	12.200	6.356
FUEL OIL	10 <sup>3</sup> L	10.789	3.020	32.522	57.000	613.828	8.800	71.075	0.080	0.882	0.800	6.461
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				34.729		625.320		103.956		3.609		13.636

## PHANGNGA SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PETROLENE	10 <sup>3</sup> L		0.700	0.000	2.900	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>3</sup> L		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>3</sup> L	0.000	4.010	0.132	17.000	0.561	56.200	1.855	4.490	0.148	12.200	0.403
FUEL OIL	10 <sup>3</sup> L	0.120	3.020	0.362	57.000	6.980	8.800	0.792	0.080	0.010	0.800	0.072
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				0.465		7.401		2.647		0.198		0.475

## PHUKET SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L	0.852	0.000	0.000	0.000	0.000	1.250	0.815	0.050	0.033	0.300	0.195
PETROLENE	10 <sup>3</sup> L	0.234	0.700	0.000	2.900	0.996	2.300	0.539	0.400	0.064	0.800	0.140
GASOLINE	10 <sup>3</sup> L	0.313	0.775	0.000	2.980	0.927	12.200	3.022	15.800	4.950	472.000	147.884
DIESEL	10 <sup>3</sup> L	3.361	4.010	13.478	17.000	57.137	56.200	189.888	4.491	15.091	12.200	41.054
FUEL OIL	10 <sup>3</sup> L	0.800	3.020	2.425	57.000	45.771	8.800	5.300	0.080	0.064	0.800	0.482
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				16.199		104.523		189.364		20.231		189.688

## PHUAI SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PETROLENE	10 <sup>3</sup> L	0.120	0.700	0.012	2.900	0.380	2.300	0.293	0.400	0.048	0.800	0.074
GASOLINE	10 <sup>3</sup> L		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>3</sup> L	1.009	4.010	4.046	17.000	17.153	56.200	56.706	4.490	4.530	12.200	12.310
FUEL OIL	10 <sup>3</sup> L	0.024	3.020	0.072	57.000	1.368	8.800	0.198	0.080	0.002	0.800	0.014
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				4.131		16.891		57.147		4.992		12.381

## NAHON SI THAMMARAT SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PETROLENE	10 <sup>3</sup> L	1.375	0.700	0.139	2.900	4.029	2.300	3.182	0.400	0.560	0.800	0.825
GASOLINE	10 <sup>3</sup> L		0.775	0.124	2.980	0.473	12.200	1.960	15.800	0.000	472.000	75.434
DIESEL	10 <sup>3</sup> L	1.519	4.010	6.080	17.000	25.818	56.200	85.352	4.480	6.818	12.200	18.528
FUEL OIL	10 <sup>3</sup> L	14.309	3.020	43.210	57.000	815.813	8.800	94.439	0.080	1.145	0.800	8.585
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				49.555		845.920		184.900		11.039		103.373

## TRANG SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000
PETROLENE	10 <sup>3</sup> L	2.382	0.700	0.239	2.900	7.009	2.300	5.502	0.400	0.957	0.800	1.435
GASOLINE	10 <sup>3</sup> L		0.775	0.000	2.980	0.000	12.200	0.000	15.800	0.000	472.000	0.000
DIESEL	10 <sup>3</sup> L	0.041	4.010	0.164	17.000	0.697	56.200	2.304	4.480	0.164	12.200	0.500
FUEL OIL	10 <sup>3</sup> L	0.143	3.020	0.432	57.000	8.151	8.800	0.944	0.080	0.011	0.800	0.068
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				0.806		15.867		8.790		1.922		2.021

## SONGKHLA SECTOR: MANUFACTURING

type of fuel	unit	consumption 10 <sup>3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> L	1.330	0.000	0.041	0.000	0.004	1.250	1.725	0.050	0.089	0.300	0.414
PETROLENE	10 <sup>3</sup> L	2.355	0.700	0.208	2.900	8.900	2.300	5.416	0.400	0.542	0.800	1.413
GASOLINE	10 <sup>3</sup> L		0.928	0.775	0.715	2.980	2.748	12.200	11.324	15.800	14.886	472.000
DIESEL	10 <sup>3</sup> L	1.410	4.010	5.854	17.000	23.970	56.200	79.242	4.480	6.231	12.200	17.202
FUEL OIL	10 <sup>3</sup> L	0.836	3.020	2.125	57.000	47.882	8.800	5.518	0.080	0.087	0.800	0.502
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.000	0.000	0.002	0.000	0.015	0.000
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000
TOTAL				8.175		81.274		103.225		22.075		457.851



PATTANI SECTOR: MANUFACTURING

Type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> L	0.218	0.100	0.022	2.800	0.830	2.300	0.497	0.400	0.096	0.900	0.130	
GASOLINE	10 <sup>-3</sup> L		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> L		4.010	0.000	17.000	0.000	56.200	0.000	4.490	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> L	0.690	3.020	2.054	57.000	39.300	8.800	4.554	0.050	0.055	0.800	0.474	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00098	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL					2.105		39.960		5.051		0.742		0.544

YALA SECTOR: MANUFACTURING

Type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> L	0.846	0.100	0.026	2.800	2.479	2.300	1.946	0.400	0.339	0.900	0.509	
GASOLINE	10 <sup>-3</sup> L		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> L		4.010	0.000	17.000	0.000	56.200	0.000	4.490	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> L		3.020	0.000	57.000	0.000	8.800	0.000	0.050	0.000	0.800	0.000	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00098	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL					0.065		2.479		1.946		0.339		0.509

NARATHIWAT SECTOR: MANUFACTURING

Type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> L		0.000	0.000	0.000	0.000	1.250	0.000	0.050	0.000	0.300	0.000	
PETROLENE	10 <sup>-3</sup> L	0.959	0.100	0.026	2.800	2.970	2.300	2.206	0.400	0.354	0.900	0.575	
GASOLINE	10 <sup>-3</sup> L		0.775	0.000	2.960	0.000	12.200	0.000	15.800	0.000	472.000	0.000	
DIESEL	10 <sup>-3</sup> L		4.010	0.000	17.000	0.000	56.200	0.000	4.490	0.000	12.200	0.000	
FUEL OIL	10 <sup>-3</sup> L	0.125	3.020	0.400	57.000	7.995	8.800	0.991	0.000	0.011	0.800	0.091	
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.00098	0.000	0.000	0.000	0.002	0.000	0.015	0.000	
LIGNITE	TON		80.000	0.000	26.800	0.000	10.000	0.000	0.100	0.000	3.000	0.000	
TOTAL					0.504		10.925		3.997		0.394		0.669

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก ช

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามสาขาการผลิตไฟฟ้าเป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



## SAMUT PRAKAN

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.759	4.010	3.044	17.000	12.905	58.200	42.652	4.490	3.408	12.200	9.281
FUEL OIL	10 <sup>-3</sup> LT	827.865	4.130	2993.082	57.000	35789.302	8.000	5022.920	0.100	82.786	0.800	376.719
NATURAL GAS	10 <sup>-3</sup> SCF	47677.000	0.0015	7.1516	0.000048	2.268	0.120	5721.240	0.001	47.677	0.018	899.956
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				2667.842		39503.496		10786.822		113.872		1244.166

## NONTABURI

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.127	4.010	0.508	17.000	2.154	58.200	7.122	4.490	0.569	12.200	1.548
FUEL OIL	10 <sup>-3</sup> LT	358.789	4.130	1481.797	57.000	20450.857	8.000	2970.310	0.100	35.879	0.800	215.273
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				1482.305		20453.111		2977.432		38.448		216.819

## CHACHOENGSAO

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.167	4.010	0.872	17.000	2.947	58.200	9.412	4.490	0.752	12.200	2.043
FUEL OIL	10 <sup>-3</sup> LT	20.508	4.130	85.119	57.000	1174.722	8.000	184.973	0.100	2.061	0.800	12.395
NATURAL GAS	10 <sup>-3</sup> SCF	121562.000	0.0015	182.343	0.000048	5.605	0.120	14587.440	0.001	121.562	0.018	2188.118
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				289.130		1183.404		14781.728		124.375		2202.525

## LAMPANG

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	7.815	4.010	31.340	17.000	132.862	58.200	439.227	4.490	35.091	12.200	95.343
FUEL OIL	10 <sup>-3</sup> LT		4.130	0.000	57.000	0.000	8.000	0.000	0.100	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON	6954.150	0.375	2457.808	37.500	245780.825	4.000	28216.800	0.040	282.168	0.300	1968.245
TOTAL				2489.146		245913.487		28656.827		297.257		2081.593

## CHIANG MAI

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.0003	4.010	0.001	17.000	0.004	58.200	0.014	4.490	0.001	12.200	0.003
FUEL OIL	10 <sup>-3</sup> LT		4.130	0.000	57.000	0.000	8.000	0.000	0.100	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				0.001		0.004		0.014		0.001		0.003

## KAMPHAENG PHET

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.288	4.010	1.193	17.000	5.059	58.200	16.725	4.490	1.336	12.200	3.631
FUEL OIL	10 <sup>-3</sup> LT		4.130	0.000	57.000	0.000	8.000	0.000	0.100	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF	8150.000	0.0015	12.225	0.000048	0.391	0.120	978.000	0.001	8.150	0.018	146.700
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				13.418		5.450		994.725		9.488		150.331

## NAKHON RATCHASIMA

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.866	4.010	2.749	17.000	11.895	58.200	38.528	4.490	3.078	12.200	8.364
FUEL OIL	10 <sup>-3</sup> LT		4.130	0.000	57.000	0.000	8.000	0.000	0.100	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				2.749		11.895		38.528		3.078		8.364

## UDON THANI

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	0.535	4.010	2.148	17.000	8.098	58.200	30.078	4.490	2.403	12.200	8.529
FUEL OIL	10 <sup>-3</sup> LT		4.130	0.000	57.000	0.000	8.000	0.000	0.100	0.000	0.800	0.000
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				2.148		8.098		30.078		2.403		8.529

## SURAT THANI

## SECTOR: ELECTRICITY

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>-3</sup> LT	2.517	4.010	10.091	17.000	42.781	58.200	141.428	4.490	11.259	12.200	30.701
FUEL OIL	10 <sup>-3</sup> LT	48.177	4.130	198.970	57.000	2748.081	8.000	385.415	0.100	4.818	0.800	28.908
NATURAL GAS	10 <sup>-3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				209.052		2788.862		526.842		16.117		59.607

## PHUPET SECTOR: ELECTRICITY

Type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>3</sup> LT	0.870	4.030	3.408	17.000	14.788	56.200	48.009	4.490	3.906	12.200	10.613
FUEL OIL	10 <sup>3</sup> LT		4.130	0.000	57.000	0.000	0.000	0.100	0.000	0.800	0.000	
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				3.408		14.788		48.009		3.906		10.613

## KHA BI SECTOR: ELECTRICITY

Type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>3</sup> LT	0.002	4.030	0.009	17.000	0.027	56.200	0.090	4.490	0.007	12.200	0.019
FUEL OIL	10 <sup>3</sup> LT	1.239	4.130	5.117	57.000	70.820	0.000	0.000	0.100	0.124	0.800	0.743
NATURAL GAS	10 <sup>3</sup> SCF	0.000	0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON	225.538	75.000	16915.200	37.500	8457.800	4.000	902.144	0.040	9.021	0.300	67.661
TOTAL				16920.320		8528.250		912.148		9.153		68.424

## NANGHON SI THAMMA RAT SECTOR: ELECTRICITY

Type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>3</sup> LT	0.467	4.030	1.874	17.000	7.945	56.200	26.266	4.490	2.090	12.200	5.702
FUEL OIL	10 <sup>3</sup> LT	199.064	4.130	890.233	57.000	9838.800	0.000	1352.510	0.100	18.906	0.800	101.430
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				700.107		9614.575		1378.775		19.005		107.140

## SONGHLA SECTOR: ELECTRICITY

Type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>3</sup> LT	2.922	4.030	11.719	17.000	49.890	56.200	184.236	4.490	13.121	12.200	35.893
FUEL OIL	10 <sup>3</sup> LT		4.130	0.000	57.000	0.000	0.000	0.100	0.000	0.800	0.000	
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				11.719		49.890		184.236		13.121		35.893

## YALA SECTOR: ELECTRICITY

Type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
DIESEL	10 <sup>3</sup> LT	0.018	4.030	0.095	17.000	0.275	56.200	0.910	4.490	0.070	12.200	0.198
FUEL OIL	10 <sup>3</sup> LT		4.130	0.000	57.000	0.000	0.000	0.100	0.000	0.800	0.000	
NATURAL GAS	10 <sup>3</sup> SCF		0.0015	0.000	0.000048	0.000	0.120	0.000	0.001	0.000	0.018	0.000
LIGNITE	TON		75.000	0.000	37.500	0.000	4.000	0.000	0.040	0.000	0.300	0.000
TOTAL				0.095		0.275		0.910		0.070		0.198

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย





ภาคผนวก ๗

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามสาขาก่อสร้างเป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

## BANGKOK

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT	0.040	0.100	0.004	2.930	0.119	2.300	0.093	0.400	0.016	0.800	0.024
GASOLINE	10 <sup>-3</sup> LT	0.135	0.726	0.098	2.940	0.399	11.500	1.555	15.600	2.111	475.000	84.265
DIESEL	10 <sup>-3</sup> LT	32.398	3.810	118.948	17.000	550.727	59.200	1917.825	4.180	134.768	11.300	388.071
FUEL OIL	10 <sup>-3</sup> LT	4.588	3.020	13.798	57.000	260.384	8.800	30.150	0.080	0.385	0.800	2.741
TOTAL				130.847		811.627		1948.624		137.258		433.122

## SAMUT PRAKAN

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	2.002	3.810	7.229	17.000	31.041	59.200	118.541	4.180	8.330	11.300	22.827
FUEL OIL	10 <sup>-3</sup> LT	0.450	3.020	1.359	57.000	25.650	8.800	2.970	0.080	0.038	0.800	0.270
TOTAL				8.588		59.691		121.511		8.368		22.897

## NONGHABURI

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.580	3.810	5.703	17.000	28.856	59.200	93.524	4.180	8.572	11.300	17.852
FUEL OIL	10 <sup>-3</sup> LT	1.452	3.020	4.385	57.000	82.784	6.800	9.583	0.080	0.116	0.800	0.871
TOTAL				10.088		109.820		103.107		8.888		18.720

## PATHUM THAN

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT	0.004	0.100	0.000	2.930	0.012	2.300	0.009	0.400	0.002	0.800	0.002
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.374	3.810	4.982	17.000	23.365	59.200	81.366	4.180	5.718	11.300	15.531
FUEL OIL	10 <sup>-3</sup> LT	0.072	3.020	0.217	57.000	4.104	8.800	0.475	0.080	0.008	0.800	0.043
TOTAL				5.179		27.481		81.850		5.725		15.577

## NAKHON PATHOM

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.983	3.810	3.550	17.000	16.718	59.200	58.218	4.180	4.081	11.300	11.113
FUEL OIL	10 <sup>-3</sup> LT	0.800	3.020	1.812	57.000	34.200	6.800	3.980	0.080	0.048	0.800	0.360
TOTAL				5.382		50.918		82.178		4.139		11.473

## SAMUT SAKHON

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.899	3.810	2.524	17.000	11.884	59.200	41.384	4.180	2.908	11.300	7.899
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				2.524		11.884		41.384		2.908		7.899

## PHRA NAKHON SI AYUTTHAYA

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	2.133	3.810	7.889	17.000	38.258	59.200	128.257	4.180	8.872	11.300	21.100
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				7.399		38.258		128.257		8.872		24.100

## ANG THONG

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.587	3.810	2.121	17.000	9.987	59.200	34.779	4.180	2.444	11.300	6.839
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				2.121		9.987		34.779		2.444		6.839

## SARABURI

## SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	8.987	3.810	25.150	17.000	118.434	59.200	412.428	4.180	28.981	11.300	78.724
FUEL OIL	10 <sup>-3</sup> LT	0.048	3.020	0.145	57.000	2.738	6.800	0.317	0.080	0.004	0.800	0.029
TOTAL				25.295		121.170		412.744		28.985		78.752



## LOP BURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.071	3.810	0.257	17.000	1.209	59.200	4.209	4.160	0.298	11.300	0.803
FUEL OIL	10 <sup>-3</sup> LT	0.048	3.020	0.145	57.000	2.736	6.600	0.317	0.080	0.004	0.600	0.029
TOTAL				0.402		3.845		4.525		0.300		0.832

## SUPHAN BURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.529	3.810	5.881	17.000	27.858	59.200	96.448	4.160	6.777	11.300	18.410
FUEL OIL	10 <sup>-3</sup> LT	0.528	3.020	1.595	57.000	30.096	6.600	3.465	0.000	0.042	0.600	0.317
TOTAL				7.476		57.792		99.931		6.820		18.728

## KANCHANABURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.183	3.810	0.659	17.000	3.105	59.200	10.814	4.160	0.760	11.300	2.064
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.859		3.105		10.814		0.760		2.064

## RATCHABURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.452	3.810	1.668	17.000	7.858	59.200	27.356	4.160	1.922	11.300	5.222
FUEL OIL	10 <sup>-3</sup> LT	0.252	3.020	0.761	57.000	14.364	6.600	1.663	0.080	0.020	0.600	0.151
TOTAL				2.429		22.220		29.019		1.942		5.373

## PHETCHABURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	2.058	3.810	7.428	17.000	34.981	59.200	121.915	4.160	8.580	11.300	23.252
FUEL OIL	10 <sup>-3</sup> LT	0.064	3.020	0.254	57.000	4.766	6.600	0.554	0.080	0.007	0.600	0.050
TOTAL				7.682		39.789		122.369		6.567		23.302

## PHACHAUP KHRI KHAN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.474	3.810	1.711	17.000	8.057	59.200	28.057	4.160	1.972	11.300	5.355
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.900	0.000
TOTAL				1.711		8.057		28.057		1.972		5.355

## TRAT SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.092	3.810	0.331	17.000	1.561	59.200	5.436	4.160	0.382	11.300	1.038
FUEL OIL	10 <sup>-3</sup> LT	0.084	3.020	0.254	57.000	4.768	6.600	0.554	0.080	0.007	0.600	0.050
TOTAL				0.585		6.349		5.990		0.389		1.088

## CHANTHABURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.110	3.810	0.396	17.000	1.863	59.200	6.488	4.160	0.456	11.300	1.238
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.396		1.863		6.488		0.456		1.238

## RAYONG SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.877	3.810	3.185	17.000	14.905	59.200	51.906	4.160	3.847	11.300	9.906
FUEL OIL	10 <sup>-3</sup> LT	0.204	3.020	0.818	57.000	11.829	6.600	1.346	0.080	0.018	0.600	0.122
TOTAL				3.781		26.533		53.252		3.664		10.030



## CHON BURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT	0.079	0.728	0.058	2.940	0.233	11.500	0.913	15.800	1.239	475.000	37.698
DIESEL	10 <sup>-3</sup> LT	8.835	3.610	31.895	17.000	150.196	59.200	523.037	4.180	38.754	11.300	99.836
FUEL OIL	10 <sup>-3</sup> LT	7.524	3.020	22.724	57.000	428.891	8.800	49.651	0.080	0.902	0.800	4.515
TOTAL				54.878		579.221		573.611		38.584		142.048

## CHACHOENGSAO SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.723	3.610	2.609	17.000	12.287	59.107	42.787	4.180	3.007	11.300	8.187
FUEL OIL	10 <sup>-3</sup> LT	0.299	3.020	0.870	57.000	16.416	6.800	1.901	0.080	0.023	0.800	0.173
TOTAL				3.479		26.703		44.698		3.030		8.340

## PRACHIN BURI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.931	3.610	6.972	17.000	32.832	59.200	114.333	4.180	8.034	11.300	21.824
FUEL OIL	10 <sup>-3</sup> LT	0.252	3.020	0.761	57.000	14.364	6.800	1.663	0.080	0.020	0.800	0.151
TOTAL				7.733		47.196		115.996		8.054		21.975

## LAMPANG SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT	0.024	0.100	0.002	2.930	0.009	2.300	0.054	0.400	0.009	0.800	0.014
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	3.961	3.610	14.300	17.000	67.343	59.200	234.511	4.180	16.479	11.300	44.763
FUEL OIL	10 <sup>-3</sup> LT	0.030	3.020	0.091	57.000	1.710	6.800	0.199	0.080	0.002	0.800	0.018
TOTAL				14.393		79.122		234.763		16.491		44.795

## PHAYAO SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.450	3.610	1.825	17.000	7.854	59.200	26.654	4.180	1.873	11.300	5.089
FUEL OIL	10 <sup>-3</sup> LT	0.024	3.020	0.072	57.000	1.368	6.800	0.158	0.080	0.002	0.800	0.014
TOTAL				1.898		9.022		26.813		1.875		5.102

## CHANG RAI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.599	3.610	2.524	17.000	11.894	59.200	41.394	4.180	2.909	11.300	7.899
FUEL OIL	10 <sup>-3</sup> LT	0.360	3.020	1.017	57.000	20.520	6.800	2.378	0.080	0.029	0.800	0.218
TOTAL				3.611		32.404		43.760		2.937		8.115

## MAE HONG SON SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.300	3.610	1.034	17.000	6.100	59.200	17.769	4.180	1.249	11.300	3.392
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				1.084		5.103		17.769		1.249		3.392

## CHANG MAI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	4.091	3.610	14.768	17.000	69.545	59.200	242.180	4.180	17.018	11.300	8.227
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				14.768		69.545		242.180		17.018		46.227

## NAKHON SAWAN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.728	0.000	2.940	0.000	11.500	0.000	15.800	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.931	3.610	6.972	17.000	32.832	59.200	114.333	4.180	8.034	11.300	21.824
FUEL OIL	10 <sup>-3</sup> LT	0.372	3.020	1.123	57.000	21.204	6.800	2.455	0.080	0.030	0.800	0.223
TOTAL				8.095		54.036		116.788		8.084		22.047



## PHETCHABUN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.063	3.810	0.299	17.000	1.410	59.200	4.910	4.160	0.345	11.300	0.937
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.600	0.000
TOTAL				0.299		1.410		4.910		0.345		0.937

## PHICHIT SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.047	3.810	0.171	17.000	0.806	59.200	2.805	4.160	0.197	11.300	0.538
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.600	0.000
TOTAL				0.171		0.806		2.805		0.197		0.538

## PHITSANULOK SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.825	3.810	2.980	17.000	14.032	59.200	48.866	4.160	3.434	11.300	9.327
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.600	0.000
TOTAL				2.980		14.032		48.866		3.434		9.327

## SUKHOTHAI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT		3.810	0.000	17.000	0.000	59.200	0.000	4.160	0.000	11.300	0.000
FUEL OIL	10 <sup>-3</sup> LT	0.072	3.020	0.217	57.000	4.104	6.600	0.475	0.060	0.006	0.600	0.043
TOTAL				0.217		4.104		0.475		0.006		0.043

## TAK SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT	0.168	0.726	0.122	2.940	0.493	11.500	1.929	15.600	2.817	475.000	79.891
DIESEL	10 <sup>-3</sup> LT	1.143	3.810	4.128	17.000	19.437	59.200	67.888	4.160	4.756	11.300	12.920
FUEL OIL	10 <sup>-3</sup> LT	0.156	3.020	0.471	57.000	6.692	6.600	1.030	0.060	0.012	0.600	0.094
TOTAL				4.721		28.823		70.547		7.366		92.704

## UTHAI THAN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.059	3.810	0.214	17.000	1.007	59.200	3.507	4.160	0.246	11.300	0.669
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.600	0.000
TOTAL				0.214		1.007		3.507		0.246		0.669

## CHAIYAPHUM SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.723	3.810	2.809	17.000	12.287	59.200	42.787	4.160	3.007	11.300	8.187
FUEL OIL	10 <sup>-3</sup> LT	0.156	3.020	0.471	57.000	6.692	6.600	1.030	0.060	0.012	0.600	0.094
TOTAL				3.680		21.179		43.817		3.019		8.281

## NAKHON RATCHASIMA SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.300	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.024	3.810	0.086	17.000	0.403	59.200	1.403	4.160	0.089	11.300	0.268
FUEL OIL	10 <sup>-3</sup> LT	0.204	3.020	0.616	57.000	11.628	6.600	1.346	0.060	0.018	0.600	0.122
TOTAL				0.702		12.031		2.749		0.115		0.390

## BURI RUM SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.059	3.810	0.212	17.000	0.999	59.200	3.478	4.160	0.244	11.300	0.664
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.600	0.000
TOTAL				0.212		0.999		3.478		0.244		0.664



## SURIN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.233	3.610	0.841	17.000	3.961	59.200	13.795	4.160	0.969	11.300	2.633
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.800	0.000
TOTAL				0.841		3.961		13.795		0.969		2.633

## MUKDAHAN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.065	3.610	0.235	17.000	1.106	59.200	3.856	4.160	0.271	11.300	0.736
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.800	0.000
TOTAL				0.235		1.106		3.856		0.271		0.736

## KHON KAEN SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.169	3.610	0.681	17.000	3.208	59.200	11.164	4.160	0.785	11.300	2.131
FUEL OIL	10 <sup>-3</sup> LT	0.204	3.020	0.616	57.000	11.620	6.600	1.346	0.060	0.016	0.800	0.122
TOTAL				1.297		14.834		12.511		0.801		2.253

## MAHA SARAKHAM SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT	0.002	0.100	0.000	2.930	0.008	2.300	0.005	0.400	0.001	0.800	0.001
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	4.271	3.610	15.420	17.000	72.813	59.200	252.985	4.160	17.769	11.300	48.268
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.800	0.000
TOTAL				15.420		72.819		252.869		17.770		48.268

## ROI ET SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT		3.610	0.000	17.000	0.000	59.200	0.000	4.160	0.000	11.300	0.000
FUEL OIL	10 <sup>-3</sup> LT	0.336	3.020	1.015	57.000	19.152	6.600	2.218	0.060	0.027	0.800	0.202
TOTAL				1.015		19.152		2.218		0.027		0.202

## SAKHON NAKHON SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.499	3.610	1.796	17.000	8.460	59.200	29.460	4.160	2.070	11.300	5.823
FUEL OIL	10 <sup>-3</sup> LT	0.108	3.020	0.326	57.000	6.156	6.600	0.716	0.060	0.009	0.800	0.065
TOTAL				2.123		14.616		30.173		2.079		5.696

## NAKHON PHANOM SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.274	3.610	4.598	17.000	21.653	59.200	75.403	4.160	5.299	11.300	14.383
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.800	0.000
TOTAL				4.598		21.653		75.403		5.299		14.383

## UDON THANI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	2.419	3.610	8.733	17.000	41.124	59.200	143.206	4.160	10.063	11.300	27.335
FUEL OIL	10 <sup>-3</sup> LT	0.240	3.020	1.831	57.000	30.780	6.600	3.584	0.060	0.043	0.800	0.324
TOTAL				10.364		71.904		146.772		10.108		27.659

## NONG KHAI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.782	3.610	2.623	17.000	13.294	59.200	48.294	4.160	3.253	11.300	8.837
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.060	0.000	0.800	0.000
TOTAL				2.623		13.294		48.294		3.253		8.837



## LOEI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.012	3.810	0.043	17.000	0.201	59.200	0.701	4.160	0.049	11.300	0.134
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.043		0.201		0.701		0.049		0.134

## CHUMPHON SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.958	3.810	3.457	17.000	18.282	59.200	56.699	4.160	3.934	11.300	10.823
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				3.457		18.282		56.699		3.934		10.823

## SUART THANI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.450	3.810	1.825	17.000	7.854	59.200	26.654	4.160	1.873	11.300	5.098
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				1.825		7.854		26.654		1.873		5.098

## PHANGNGA SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.012	3.810	0.043	17.000	0.201	59.200	0.701	4.160	0.049	11.300	0.134
FUEL OIL	10 <sup>-3</sup> LT	0.024	3.020	0.072	57.000	1.368	6.600	0.158	0.080	0.002	0.600	0.014
TOTAL				0.115		1.569		0.860		0.051		0.146

## PHUKET SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.813	3.810	6.544	17.000	30.818	59.200	107.318	4.160	7.541	11.300	20.465
FUEL OIL	10 <sup>-3</sup> LT	0.080	3.020	0.181	57.000	3.420	6.600	0.396	0.080	0.005	0.600	0.036
TOTAL				6.725		34.238		107.714		7.548		20.521

## KRABI SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.800	3.810	2.867	17.000	13.586	59.200	47.346	4.160	3.327	11.300	9.037
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				2.867		13.586		47.346		3.327		9.037

## NAKHON SI THAMMARAT SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.561	3.810	5.535	17.000	26.538	59.200	92.413	4.160	8.494	11.300	17.840
FUEL OIL	10 <sup>-3</sup> LT	0.360	3.020	1.087	57.000	20.520	6.600	2.376	0.080	0.029	0.600	0.218
TOTAL				6.723		47.058		94.789		8.523		17.858

## TRANG SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.385	3.810	5.037	17.000	23.718	59.200	82.593	4.160	5.804	11.300	15.765
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				5.037		23.718		82.593		5.804		15.765

## PHATHALLING SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.071	3.810	0.257	17.000	1.209	59.200	4.209	4.160	0.258	11.300	0.903
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.257		1.209		4.209		0.258		0.903

SONGKHLA

SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT	0.007	0.726	0.005	2.940	0.019	11.500	0.075	15.600	0.102	475.000	3.101
DIESEL	10 <sup>-3</sup> LT	3.000	3.610	14.008	17.000	65.968	59.200	229.717	4.160	16.142	11.300	43.848
FUEL OIL	10 <sup>-3</sup> LT	0.492	3.020	1.498	57.000	28.044	6.600	3.247	0.080	0.039	0.800	0.295
TOTAL					15.499		84.029		233.040		16.284	47.245

PATTAN

SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	0.071	3.610	0.257	17.000	1.205	59.200	4.209	4.160	0.296	11.300	0.803
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.800	0.000
TOTAL				0.257		1.209		4.209		0.296		0.803

YALA

SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.623	3.610	5.860	17.000	27.595	59.200	96.096	4.160	6.753	11.300	18.343
FUEL OIL	10 <sup>-3</sup> LT	0.600	3.020	1.812	57.000	34.200	6.600	3.950	0.080	0.048	0.600	0.360
TOTAL				7.672		61.795		100.056		6.801		18.703

NARATHWAT

SECTOR: CONSTRUCTION

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
GASOLINE	10 <sup>-3</sup> LT		0.726	0.000	2.940	0.000	11.500	0.000	15.600	0.000	475.000	0.000
DIESEL	10 <sup>-3</sup> LT	1.244	3.610	4.491	17.000	21.149	59.200	73.650	4.160	5.175	11.300	14.058
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.800	0.000
TOTAL				4.491		21.149		73.650		5.175		14.058

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย



ภาคผนวก ๗

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามสาขาบ้านที่อยู่อาศัยเป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

## BANGKOK

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	398.237	0.030	11.947	0.0034	1.354	1.800	718.828	0.200	79.847	0.500	199.118
KEROSENE	10 <sup>3</sup> LT	19.373	0.100	1.937	2.930	56.784	2.300	44.559	0.400	7.749	0.800	11.824
DIESEL	10 <sup>3</sup> LT	1.245	0.500	0.823	17.000	21.185	3.800	4.731	0.040	0.050	0.800	0.747
FUEL OIL	10 <sup>3</sup> LT	36.952	3.020	111.598	57.000	2108.290	8.800	243.898	0.080	2.958	0.800	22.171
TOTAL				128.103		2185.573		1013.002		90.403		233.861

## SAMUT PRAKAN

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	67.206	0.030	2.015	0.0034	0.229	1.800	120.971	0.200	13.441	0.500	33.803
KEROSENE	10 <sup>3</sup> LT	0.374	0.100	0.037	2.930	1.095	2.300	0.860	0.400	0.150	0.800	0.224
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT	4.508	3.020	13.815	57.000	258.974	8.800	29.755	0.080	0.381	0.800	2.705
TOTAL				15.869		258.298		151.586		13.951		38.532

## NONTHABURI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	24.338	0.030	0.730	0.0034	0.083	1.800	43.808	0.200	4.888	0.500	12.169
KEROSENE	10 <sup>3</sup> LT	0.089	0.100	0.009	2.930	0.281	2.300	0.205	0.400	0.036	0.800	0.053
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT	0.052	3.020	0.158	57.000	2.941	8.800	0.341	0.080	0.004	0.800	0.031
TOTAL				0.895		3.285		44.354		4.907		12.253

## PATHUM THANI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	24.055	0.030	0.722	0.0034	0.082	1.800	43.299	0.200	4.811	0.500	12.028
KEROSENE	10 <sup>3</sup> LT	2.985	0.100	0.298	2.930	8.747	2.300	8.888	0.400	1.194	0.800	1.781
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT	0.115	3.020	0.348	57.000	8.538	8.800	0.757	0.080	0.009	0.800	0.089
TOTAL				1.368		15.365		60.922		6.014		13.987

## NAKHON PATHOM

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	42.858	0.030	1.284	0.0034	0.148	1.800	77.141	0.200	8.571	0.500	21.428
KEROSENE	10 <sup>3</sup> LT	0.115	0.100	0.011	2.930	8.838	2.300	0.284	0.400	0.048	0.800	0.089
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT	0.015	3.020	0.048	57.000	0.871	8.800	0.101	0.080	0.001	0.800	0.009
TOTAL				1.343		1.353		77.506		8.818		21.508

## SAMUT SAKHON

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	39.379	0.030	1.181	0.0034	0.134	1.800	70.893	0.200	7.878	0.500	18.890
KEROSENE	10 <sup>3</sup> LT	2.285	0.100	0.227	2.930	8.838	2.300	5.211	0.400	0.908	0.800	1.359
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				1.400		8.772		76.094		8.762		21.049

## PHRA NAKHON SI AYUTTHAYA

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	11.323	0.030	0.340	0.0034	0.038	1.800	20.381	0.200	2.265	0.500	6.861
KEROSENE	10 <sup>3</sup> LT	1.875	0.100	0.188	2.930	5.495	2.300	4.313	0.400	0.750	0.800	1.125
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT	0.149	3.020	0.450	57.000	8.497	8.800	0.984	0.080	0.012	0.800	0.089
TOTAL				0.977		14.030		25.878		3.027		8.876

## ANG THONG

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	15.453	0.030	0.484	0.0034	0.053	1.800	27.918	0.200	3.091	0.500	7.727
KEROSENE	10 <sup>3</sup> LT	0.234	0.100	0.023	2.930	0.685	2.300	0.538	0.400	0.094	0.800	0.140
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>3</sup> LT		3.020	0.000	57.000	0.000	8.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.487		0.738		28.354		3.184		7.867



## SARABURI SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	27.975	0.030	0.839	0.0034	0.095	1.800	50.354	0.200	5.565	0.500	13.987
KEROSENE	10 <sup>-3</sup> LT	0.307	0.100	0.031	2.930	0.899	2.300	0.709	0.400	0.123	0.600	0.184
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.870		0.994		51.060		5.718		14.171

## LOP BURI SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	12.310	0.030	0.389	0.0034	0.042	1.800	22.159	0.200	2.462	0.500	6.155
KEROSENE	10 <sup>-3</sup> LT	0.194	0.100	0.019	2.930	0.569	2.300	0.447	0.400	0.078	0.600	0.117
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.389		0.611		22.609		2.540		6.272

## SING BURI SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	38.846	0.030	1.165	0.0034	0.132	1.800	69.923	0.200	7.769	0.500	10.123
KEROSENE	10 <sup>-3</sup> LT	0.164	0.100	0.016	2.930	0.481	2.300	0.377	0.400	0.068	0.600	0.086
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				1.182		0.613		70.300		7.935		19.521

## CHAINAT SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.216	0.030	0.038	0.0034	0.004	1.800	2.188	0.200	0.243	0.500	0.509
KEROSENE	10 <sup>-3</sup> LT	0.242	0.100	0.024	2.930	0.708	2.300	0.555	0.400	0.097	0.600	0.145
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.061		0.712		2.744		0.340		0.753

## SUPHAN BURI SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	14.704	0.030	0.441	0.0034	0.050	1.800	26.469	0.200	2.941	0.500	7.352
KEROSENE	10 <sup>-3</sup> LT	0.202	0.100	0.020	2.930	0.591	2.300	0.464	0.400	0.081	0.600	0.121
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.461		0.641		26.931		3.021		7.473

## KANCHANABURI SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	5.428	0.030	0.163	0.0034	0.018	1.800	9.771	0.200	1.089	0.500	2.714
KEROSENE	10 <sup>-3</sup> LT	0.435	0.100	0.043	2.930	1.273	2.300	0.999	0.400	0.174	0.600	0.261
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.206		1.292		10.771		1.259		2.975

## SAMUT SONGKHAM SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	14.442	0.030	0.433	0.0034	0.049	1.800	25.996	0.200	2.898	0.500	7.221
KEROSENE	10 <sup>-3</sup> LT	0.692	0.100	0.069	2.930	2.028	2.300	1.592	0.400	0.277	0.600	0.415
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.502		2.077		27.589		3.165		7.638

## RATCHABURI SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	18.527	0.030	0.559	0.0034	0.063	1.800	33.348	0.200	3.705	0.500	9.253
KEROSENE	10 <sup>-3</sup> LT	0.328	0.100	0.033	2.930	0.955	2.300	0.750	0.400	0.130	0.600	0.186
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.569		1.018		34.098		3.836		9.459



## PHETCHABURI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	16.737	0.030	0.562	0.0034	0.064	1.800	33.727	0.200	3.747	0.500	8.069
KEROSENE	10 <sup>-3</sup> LT	0.100	0.100	0.010	2.930	0.294	2.300	0.231	0.400	0.040	0.600	0.080
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.900	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.572		0.357		33.958		3.798		9.429

## PHACHUAP KHIRI KHAN

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	8.876	0.030	0.266	0.0034	0.050	1.800	15.977	0.200	1.775	0.500	4.439
KEROSENE	10 <sup>-3</sup> LT	0.061	0.100	0.006	2.930	0.178	2.300	0.140	0.400	0.024	0.600	0.037
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.500	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.272		0.208		16.117		1.800		4.475

## TRAT

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	5.003	0.030	0.150	0.0034	0.017	1.800	9.005	0.200	1.001	0.500	2.501
KEROSENE	10 <sup>-3</sup> LT	0.282	0.100	0.028	2.930	0.828	2.300	0.849	0.400	0.113	0.600	0.169
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.178		0.843		9.654		1.113		2.671

## CHANTHABURI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	16.512	0.030	0.495	0.0034	0.055	1.800	29.776	0.200	3.308	0.500	8.271
KEROSENE	10 <sup>-3</sup> LT	1.097	0.100	0.110	2.930	3.213	2.300	2.522	0.400	0.439	0.600	0.659
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.608		3.269		32.298		3.747		8.929

## RAYONG

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	11.787	0.030	0.253	0.0034	0.040	1.700	21.181	0.200	2.353	0.500	5.884
KEROSENE	10 <sup>-3</sup> LT	0.404	0.100	0.040	2.930	1.184	2.300	0.930	0.400	0.162	0.600	0.242
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.393		1.224		22.110		2.515		6.126

## CHON BURI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	49.325	0.030	1.480	0.0034	0.188	1.800	89.786	0.200	9.855	0.500	24.563
KEROSENE	10 <sup>-3</sup> LT	1.571	0.100	0.157	2.930	4.303	2.300	3.813	0.400	0.829	0.600	0.943
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				1.637		4.771		92.399		10.494		25.605

## CHACHOENSAO

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	17.288	0.030	0.518	0.0034	0.059	1.800	31.119	0.200	3.458	0.500	8.844
KEROSENE	10 <sup>-3</sup> LT	0.403	0.100	0.040	2.930	1.190	2.300	0.928	0.400	0.181	0.600	0.242
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.559		1.209		32.045		3.819		8.880

## PRACHIN BURI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	11.192	0.030	0.338	0.0034	0.038	1.800	20.146	0.200	2.238	0.500	5.596
KEROSENE	10 <sup>-3</sup> LT	0.738	0.100	0.074	2.930	2.163	2.300	1.898	0.400	0.295	0.600	0.443
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.410		2.201		21.844		2.534		6.039



## NAKHON NAYOK

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	2.297	0.030	0.089	0.0034	0.008	1.800	4.134	0.200	0.459	0.500	1.148	
KEROSENE	10 <sup>-3</sup> LT	0.251	0.100	0.025	2.930	0.736	2.300	0.578	0.400	0.100	0.800	0.151	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.094		0.744		4.712		0.560		1.299	

## LAMPANG

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	13.517	0.030	0.406	0.0034	0.048	1.800	24.331	0.200	2.703	0.500	8.759	
KEROSENE	10 <sup>-3</sup> LT	0.922	0.100	0.092	2.930	2.702	2.300	2.121	0.400	0.389	0.800	0.553	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.499		2.748		28.452		3.072		7.312	

## PHARE

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	2.518	0.030	0.078	0.0034	0.008	1.800	4.535	0.200	0.504	0.500	1.260	
KEROSENE	10 <sup>-3</sup> LT	0.221	0.100	0.022	2.930	0.847	2.300	0.508	0.400	0.088	0.800	0.132	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.099		0.655		5.043		0.592		1.392	

## UTTARADIT

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	7.871	0.030	0.238	0.0034	0.027	1.800	14.168	0.200	1.574	0.500	3.938	
KEROSENE	10 <sup>-3</sup> LT	0.157	0.100	0.016	2.930	0.480	2.300	0.361	0.400	0.063	0.600	0.094	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.252		0.487		14.529		1.637		4.030	

## NAN

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	1.538	0.030	0.048	0.0034	0.005	1.800	2.771	0.200	0.208	0.500	0.770	
KEROSENE	10 <sup>-3</sup> LT	0.093	0.100	0.009	2.930	0.274	2.300	0.215	0.400	0.037	0.800	0.058	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.056		0.279		2.986		0.345		0.828	

## PHAYAO

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	2.407	0.030	0.072	0.0034	0.008	1.800	4.333	0.200	0.481	0.500	1.204	
KEROSENE	10 <sup>-3</sup> LT	0.189	0.100	0.019	2.930	0.553	2.300	0.434	0.400	0.075	0.800	0.113	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.091		0.591		4.767		0.557		1.317	

## CHIANG RAI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	8.473	0.030	0.254	0.0034	0.029	1.800	15.251	0.200	1.695	0.500	4.238	
KEROSENE	10 <sup>-3</sup> LT	0.398	0.100	0.040	2.930	1.181	2.300	0.911	0.400	0.158	0.800	0.238	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.294		1.190		18.182		1.853		4.474	

## MAE HONG SORN

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit
LPG	10 <sup>-3</sup> LT	1.048	0.030	0.031	0.0034	0.004	1.800	1.883	0.200	0.209	0.500	0.523	
KEROSENE	10 <sup>-3</sup> LT	0.088	0.100	0.009	2.930	0.258	2.300	0.203	0.400	0.035	0.800	0.053	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000	
TOTAL				0.040		0.262		2.086		0.245		0.576	



CHIANG MAI		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	38.746	0.030	1.102	0.0034	0.125	1.800	66.143	0.200	7.349	0.500	18.373
KEROSENE	10 <sup>-3</sup> LT	1.667	0.100	0.167	2.530	4.683	2.300	3.833	0.400	0.887	0.800	1.000
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT	0.610	3.020	1.841	57.000	34.750	6.800	4.024	0.080	0.049	0.800	0.368
TOTAL				3.110		39.758		73.999		8.065		19.739

LUMPHUN		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	3.399	0.030	0.102	0.0034	0.12	1.800	6.118	0.200	0.680	0.500	1.700
KEROSENE	10 <sup>-3</sup> LT	0.119	0.100	0.12	2.930	0.348	2.300	0.273	0.400	0.048	0.600	0.071
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.114		0.360		6.392		0.727		1.771

NAKHON SAWAN		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	31.361	0.030	0.941	0.0034	0.107	1.800	55.450	0.200	6.272	0.500	15.631
KEROSENE	10 <sup>-3</sup> LT	4.848	0.100	0.485	2.930	14.206	2.300	11.151	0.400	1.939	0.800	2.905
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT	0.010	3.020	0.031	57.000	0.563	6.800	0.067	0.080	0.001	0.800	0.006
TOTAL				1.457		14.895		67.669		8.212		18.598

PHETCHABUN		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	2.959	0.030	0.089	0.0034	0.010	1.800	5.327	0.200	0.592	0.500	1.480
KEROSENE	10 <sup>-3</sup> LT	0.226	0.100	0.023	2.930	0.662	2.300	0.520	0.400	0.090	0.600	0.136
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.111		0.672		5.847		0.662		1.615

PHICHIT		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	3.665	0.030	0.107	0.0034	0.12	1.800	6.418	0.200	0.713	0.500	1.783
KEROSENE	10 <sup>-3</sup> LT	0.969	0.100	0.097	2.930	2.838	2.300	2.229	0.400	0.387	0.800	0.581
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.204		2.951		6.546		1.101		2.364

PHITSANULOK		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	20.217	0.030	0.607	0.0034	0.059	1.800	36.390	0.200	4.043	0.500	10.108
KEROSENE	10 <sup>-3</sup> LT	2.481	0.100	0.243	2.930	7.270	2.300	5.707	0.400	0.993	0.800	1.489
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.855		7.339		42.097		5.036		11.597

SUKHOTHAI		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.839	0.030	0.040	0.0034	0.006	1.800	2.950	0.200	0.328	0.500	0.919
KEROSENE	10 <sup>-3</sup> LT	0.371	0.100	0.037	2.930	1.067	2.300	0.853	0.400	0.148	0.800	0.223
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.098		1.093		3.803		0.476		1.042

TAK		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.411	0.030	0.042	0.0034	0.005	1.800	2.540	0.200	0.282	0.500	0.708
KEROSENE	10 <sup>-3</sup> LT	0.341	0.100	0.034	2.930	0.999	2.300	0.783	0.400	0.138	0.800	0.204
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.076		1.003		3.324		0.419		0.910



## KAMPHAENG PHET

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.357	0.030	0.041	0.0034	0.005	1.800	2.443	0.200	0.271	0.500	0.679
KEROSENE	10 <sup>-3</sup> LT	0.549	0.100	0.055	2.930	1.607	2.300	1.262	0.400	0.219	0.800	0.329
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.036		1.612		3.705		0.491		1.008

## UTHAI THANI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.063	0.030	0.032	0.0034	0.004	1.800	1.913	0.200	0.213	0.500	0.531
KEROSENE	10 <sup>-3</sup> LT	0.119	0.100	0.012	2.930	0.349	2.300	0.271	0.400	0.043	0.800	0.072
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.044		0.353		2.187		0.260		0.603

## CHAIYAPHUM

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.944	0.030	0.028	0.0034	0.003	1.800	1.700	0.200	0.189	0.500	0.472
KEROSENE	10 <sup>-3</sup> LT	0.066	0.100	0.007	2.930	0.190	2.300	0.152	0.400	0.028	0.800	0.040
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.035		0.197		1.852		0.215		0.512

## NAKHON RATCHASIMA

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	58.799	0.030	1.764	0.0034	0.200	1.900	105.838	0.200	11.760	0.500	29.399
KEROSENE	10 <sup>-3</sup> LT	2.499	0.100	0.250	2.930	7.312	2.300	5.740	0.400	0.999	0.800	1.497
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				2.013		7.512		111.576		12.759		30.896

## BURI RUM

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.774	0.030	0.053	0.0034	0.008	1.800	3.193	0.200	0.355	0.500	0.897
KEROSENE	10 <sup>-3</sup> LT	1.071	0.100	0.107	2.930	3.107	2.300	2.463	0.400	0.428	0.800	0.842
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.160		3.143		5.555		0.783		1.529

## SURIN

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.554	0.030	0.047	0.0034	0.005	1.800	2.797	0.200	0.311	0.500	0.777
KEROSENE	10 <sup>-3</sup> LT	0.745	0.100	0.075	2.930	2.196	2.300	1.718	0.400	0.298	0.800	0.448
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.121		2.191		4.513		0.609		1.225

## SI SA KET

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	2.082	0.030	0.082	0.0034	0.007	1.800	3.747	0.200	0.418	0.500	1.041
KEROSENE	10 <sup>-3</sup> LT	1.347	0.100	0.135	2.930	3.947	2.300	3.098	0.400	0.539	0.800	0.808
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.197		3.554		6.845		0.955		1.849

## UBON RATCHATHANI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	5.826	0.030	0.175	0.0034	0.020	1.800	10.487	0.200	1.165	0.500	2.913
KEROSENE	10 <sup>-3</sup> LT	1.051	0.100	0.108	2.930	3.107	2.300	2.439	0.400	0.424	0.800	0.836
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.281		3.127		12.926		1.589		3.549



## UDON THANI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	11.701	0.030	0.351	0.0034	0.040	1.800	21.061	0.200	2.340	0.500	5.850
KEROSENE	10 <sup>-3</sup> LT	0.863	0.100	0.086	2.930	2.529	2.300	1.985	0.400	0.345	0.800	0.518
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.600	0.000
TOTAL				0.437		2.569		23.047		2.885		6.368

## NONG KHAI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.387	0.030	0.012	0.0034	0.001	1.800	0.897	0.200	0.077	0.500	0.194
KEROSENE	10 <sup>-3</sup> LT	0.390	0.100	0.039	2.930	1.144	2.300	0.898	0.400	0.158	0.800	0.234
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.051		1.145		1.595		0.234		0.428

## LOEI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.898	0.030	0.021	0.0034	0.002	1.800	1.238	0.200	0.138	0.500	0.344
KEROSENE	10 <sup>-3</sup> LT	0.138	0.100	0.014	2.930	0.405	2.300	0.318	0.400	0.055	0.800	0.083
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.034		0.407		1.555		0.193		0.427

## CHUMPHON

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	5.905	0.030	0.177	0.0034	0.020	1.800	10.630	0.200	1.181	0.500	2.953
KEROSENE	10 <sup>-3</sup> LT	0.415	0.100	0.041	2.930	1.216	2.300	0.954	0.400	0.186	0.800	0.249
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.219		1.236		11.584		1.347		3.202

## RANONG

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	3.317	0.030	0.100	0.0034	0.011	1.800	5.970	0.200	0.863	0.500	1.658
KEROSENE	10 <sup>-3</sup> LT	0.008	0.100	0.001	2.930	0.018	2.300	0.014	0.400	0.002	0.800	0.004
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.100		0.029		5.984		0.868		1.662

## SURAT THANI

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	22.320	0.030	0.670	0.0034	0.078	1.800	40.178	0.200	4.464	0.500	11.180
KEROSENE	10 <sup>-3</sup> LT	3.763	0.100	0.378	2.930	11.026	2.300	9.658	0.400	1.505	0.800	2.258
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				1.046		11.102		48.831		5.969		13.418

## PHANGNGA

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	3.979	0.030	0.119	0.0034	0.014	1.800	7.182	0.200	0.796	0.500	1.989
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.800	0.000
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.119		0.014		7.182		0.796		1.989

## PHUKET

## SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	9.460	0.030	0.284	0.0034	0.032	1.800	17.029	0.200	1.892	0.500	4.730
KEROSENE	10 <sup>-3</sup> LT	0.015	0.100	0.001	2.930	0.044	2.300	0.034	0.400	0.006	0.800	0.009
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.800	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.800	0.000	0.080	0.000	0.800	0.000
TOTAL				0.285		0.078		17.063		1.898		4.739



## KRABI SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	3.861	0.030	0.110	0.0034	0.013	1.600	6.826	0.200	0.738	0.500	1.841	
KEROSENE	10 <sup>-3</sup> LT	0.018	0.100	0.002	2.930	0.053	2.300	0.042	0.400	0.007	0.600	0.011	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				0.112		0.066		6.668		0.743		1.851	

## NAKHON SI THAMMARAT SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	14.200	0.030	0.426	0.0034	0.048	1.800	25.559	0.200	2.840	0.500	7.100	
KEROSENE	10 <sup>-3</sup> LT	4.279	0.100	0.426	2.930	12.537	2.300	9.842	0.400	1.712	0.600	2.567	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT	0.135	3.020	0.407	57.000	7.880	6.600	0.889	0.080	0.011	0.600	0.081	
TOTAL				1.261		20.255		36.290		4.562		8.748	

## TRANG SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	6.963	0.030	0.208	0.0034	0.024	1.800	12.533	0.200	1.383	0.500	3.481	
KEROSENE	10 <sup>-3</sup> LT	0.348	0.100	0.036	2.930	1.020	2.300	0.801	0.400	0.139	0.600	0.209	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				0.244		1.044		13.334		1.532		3.690	

## PHATTHALUNG SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	1.792	0.030	0.054	0.0034	0.006	1.800	3.226	0.200	0.358	0.500	0.896	
KEROSENE	10 <sup>-3</sup> LT	0.381	0.100	0.036	2.930	1.116	2.300	0.878	0.400	0.152	0.600	0.228	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				0.092		1.122		4.102		0.511		1.125	

## SONGKHLA SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	30.603	0.030	0.918	0.0034	0.104	1.800	55.065	0.200	6.121	0.500	15.301	
KEROSENE	10 <sup>-3</sup> LT	2.983	0.100	0.288	2.930	8.739	2.300	6.860	0.400	1.193	0.600	1.790	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				1.216		8.843		61.945		7.314		17.091	

## SATUN SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	1.028	0.030	0.031	0.0034	0.003	1.800	1.851	0.200	0.208	0.500	0.514	
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				0.031		0.003		1.851		0.208		0.514	

## PATTANI SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	6.147	0.030	0.184	0.0034	0.021	1.800	11.064	0.200	1.229	0.500	3.073	
KEROSENE	10 <sup>-3</sup> LT	0.044	0.100	0.004	2.930	0.128	2.300	0.101	0.400	0.018	0.600	0.026	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.600	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				0.189		0.149		11.165		1.247		3.100	

## YALA SECTOR: RESIDENTIAL

type of fuel	unit	consumption		SPM		SOx		NOx		HC		CO	
		10 <sup>-3</sup> unit/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
LPG	10 <sup>-3</sup> LT	6.196	0.030	0.186	0.0034	0.021	1.800	11.154	0.200	1.239	0.500	3.098	
KEROSENE	10 <sup>-3</sup> LT	0.110	0.100	0.011	2.930	0.323	2.300	0.253	0.400	0.044	0.600	0.066	
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000	
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000	
TOTAL				0.197		0.344		11.407		1.283		3.164	

NARATHIWAT		SECTOR: RESIDENTIAL										
type of fuel	unit	consumption 10 <sup>3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>3</sup> LT	5.467	0.030	0.165	0.0034	0.019	1.800	9.676	0.200	1.097	0.500	2.743
KEROSENE	10 <sup>3</sup> LT	0.149	0.100	0.015	2.930	0.437	2.300	0.343	0.400	0.080	0.800	0.090
DIESEL	10 <sup>3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.180		0.456		10.219		1.157		2.833



ศูนย์วิจัยทรัพยากรธรรมชาติและสิ่งแวดล้อม  
จุฬาลงกรณ์มหาวิทยาลัย





ภาคผนวก ก

ตารางการคำนวณปริมาณการปล่อยสารมลพิษ แยกตามขนาดเครื่องยนต์เป็นรายจังหวัด

ศูนย์วิจัยทรัพยากร  
จตุหาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

BANGKOK

SECTOR: TRANSPORTATION

AVG. SPEED = 8 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	1195.551	22.54	26724.795	4.02	4786.357	8.55	10149.229	64.17	76093.066	750.54	086936.007
Motorcycle	10 <sup>-3</sup> L	429.731	88.96	36228.870	3.02	1297.799	1.53	657.489	286.30	122636.833	527.91	226959.262
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	829.298	21.39	17717.294	10.99	8929.657	8.34	5251.409	4.01	33214.75	12.99	10237.763
HD Trucks & Buses	10 <sup>-3</sup> L	917.963	13.09	12312.470	7.86	7212.908	44.51	40873.601	9.19	6433.507	40.42	37092.747
LPG												
Samlor	10 <sup>-3</sup> L	43.629	22.45	677.267	6.02	282.611	7.53	320.519	64.20	2904.403	46.91	2046.518
Taxi	10 <sup>-3</sup> L	225.413	19.96	4499.243	6.04	1361.495	8.58	1929.535	35.39	7977.396	56.00	12923.123
TOTAL				10016.944		23730.926		5919.811		221257.265		1178746.527

SAMUT PRAKAN

SECTOR: TRANSPORTATION

AVG. SPEED = 16 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	25.081	22.55	595.129	4.03	100.996	12.89	317.773	65.94	1662.522	539.87	14777.720
Motorcycle	10 <sup>-3</sup> L	18.366	89.01	1634.758	3.03	55.648	2.47	45.364	308.30	5621.833	458.68	8387.385
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	21.309	21.37	455.215	10.65	226.677	6.66	164.484	4.87	103.746	13.53	2891.230
HD Trucks & Buses	10 <sup>-3</sup> L	46.357	13.11	607.740	7.93	395.293	44.32	2054.542	8.75	405.824	37.30	1534.417
LPG												
Samlor	10 <sup>-3</sup> L	0.000	22.24	0.000	5.99	0.000	11.21	0.000	57.92	0.000	60.72	0.000
Taxi	10 <sup>-3</sup> L	2.077	19.97	414.478	6.04	12.546	12.89	26.336	36.15	75.094	58.96	122.901
TOTAL				3304.346		761.360		2529.500		7889.838		25110.253

NONHABURI

SECTOR: TRANSPORTATION

AVG. SPEED = 24 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	37.147	22.49	635.436	4.02	149.331	16.06	596.991	66.66	2476.219	497.94	16496.977
Motorcycle	10 <sup>-3</sup> L	11.302	89.09	1006.782	3.03	34.245	3.19	36.053	298.11	3350.026	414.33	4822.739
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	15.006	21.43	321.578	10.60	160.294	9.43	141.507	4.92	72.329	13.09	199.429
HD Trucks & Buses	10 <sup>-3</sup> L	52.260	13.12	696.914	7.86	411.965	41.38	2163.348	7.82	406.830	29.21	1376.259
LPG												
Samlor	10 <sup>-3</sup> L	17.353	22.33	366.162	6.00	104.298	18.13	316.154	54.02	939.030	58.42	690.749
Taxi	10 <sup>-3</sup> L	9.481	19.92	138.662	6.02	57.076	19.26	182.604	36.94	350.228	49.79	472.059
TOTAL				3428.734		917.190		3435.245		7996.661		26199.230

PATHUM THAN

SECTOR: TRANSPORTATION

AVG. SPEED = 24 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	8.960	22.49	201.510	4.02	36.319	16.06	143.098	66.66	597.274	497.94	4461.542
Motorcycle	10 <sup>-3</sup> L	7.834	89.09	897.853	3.03	23.737	3.19	24.990	298.11	2322.076	414.33	3245.661
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	7.409	21.43	168.753	10.60	79.117	9.43	69.867	4.92	35.707	13.09	96.971
HD Trucks & Buses	10 <sup>-3</sup> L	39.190	13.12	514.173	7.86	309.817	41.38	1621.692	7.82	306.466	29.21	1027.170
LPG												
Samlor	10 <sup>-3</sup> L	0.303	22.33	6.766	6.00	1.818	18.13	5.493	54.02	16.303	58.42	17.093
Taxi	10 <sup>-3</sup> L	0.795	19.92	15.836	6.02	4.706	19.26	15.312	36.94	29.367	49.79	35.333
TOTAL				1594.692		454.295		1851.233		3307.257		6693.223

NAKHONPATHOM

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	24.367	22.49	590.468	4.04	98.432	19.26	495.116	67.69	1653.353	497.93	1117.0851
Motorcycle	10 <sup>-3</sup> L	17.031	89.77	1511.842	3.02	51.434	3.74	63.896	299.99	4632.007	382.35	6492.113
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	37.095	21.52	797.839	10.72	397.307	9.43	348.323	4.72	174.947	9.43	349.523
HD Trucks & Buses	10 <sup>-3</sup> L	195.750	13.14	2572.195	7.89	1544.466	41.38	8100.135	8.97	1354.376	21.62	4232.115
LPG												
Samlor	10 <sup>-3</sup> L	0.060	22.31	14.76	6.00	0.378	18.13	1.142	53.01	3.340	51.81	3.251
Taxi	10 <sup>-3</sup> L	1.566	20.02	31.261	6.05	9.499	19.26	30.142	37.81	58.660	45.86	71.771
TOTAL				5764.841		2101.466		9033.764		8186.864		22206.624

SAMUTSAKON

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	6.656	22.60	150.426	4.04	26.890	19.26	128.195	67.69	451.809	497.93	3032.841
Motorcycle	10 <sup>-3</sup> L	6.436	88.77	573.277	3.02	19.503	3.74	24.193	299.99	1870.172	382.35	2333.796
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	7.096	21.52	182.103	10.72	75.799	9.43	68.661	4.72	33.361	9.43	68.851
HD Trucks & Buses	10 <sup>-3</sup> L	37.163	13.14	498.222	7.89	293.216	41.38	1537.905	6.97	299.026	21.62	603.464
LPG												
Samlor	10 <sup>-3</sup> L	0.144	22.31	3.219	6.00	0.894	18.13	2.811	53.01	7.830	51.81	7.410
Taxi	10 <sup>-3</sup> L	0.504	20.02	10.090	6.05	3.046	19.26	8.707	37.81	18.656	45.86	23.113
TOTAL				1377.430		419.292		1768.121		2640.957		8467.096



YASOTHON

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.741	0.030	0.022	0.0034	0.003	1.800	1.333	0.200	0.148	0.500	0.370
KEROSENE	10 <sup>-3</sup> LT	0.092	0.100	0.008	2.930	0.268	2.300	0.211	0.400	0.037	0.600	0.055
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.031		0.272		1.545		0.185		0.428

MUKDAHAN

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.202	0.030	0.008	0.0034	0.001	1.800	0.363	0.200	0.040	0.500	0.101
KEROSENE	10 <sup>-3</sup> LT		0.100	0.000	2.930	0.000	2.300	0.000	0.400	0.000	0.600	0.000
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.009		0.001		0.363		0.040		0.101

KHON KAEN

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	14.403	0.030	0.432	0.0034	0.049	1.800	25.925	0.200	2.891	0.500	7.201
KEROSENE	10 <sup>-3</sup> LT	1.841	0.100	0.184	2.930	4.808	2.300	3.774	0.400	0.658	0.600	0.985
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.596		4.857		29.700		3.537		8.188

MAHA SARAKHAM

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.182	0.030	0.035	0.0034	0.004	1.800	2.128	0.200	0.236	0.500	0.591
KEROSENE	10 <sup>-3</sup> LT	0.033	0.100	0.003	2.930	0.098	2.300	0.077	0.400	0.013	0.600	0.020
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.039		0.102		2.205		0.250		0.611

ROI ET

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	8.570	0.030	0.257	0.0034	0.029	1.800	15.426	0.200	1.714	0.500	4.285
KEROSENE	10 <sup>-3</sup> LT	1.290	0.100	0.128	2.930	3.749	2.300	2.943	0.400	0.512	0.600	0.768
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.385		3.778		18.369		2.226		5.053

KARASIN

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.703	0.030	0.021	0.0034	0.002	1.800	1.265	0.200	0.141	0.500	0.351
KEROSENE	10 <sup>-3</sup> LT	0.018	0.100	0.002	2.930	0.048	2.300	0.036	0.400	0.006	0.600	0.009
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.023		0.048		1.301		0.147		0.381

SAKHON NAKHON

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	1.142	0.030	0.034	0.0034	0.004	1.800	2.058	0.200	0.226	0.500	0.571
KEROSENE	10 <sup>-3</sup> LT	0.530	0.100	0.053	2.930	1.553	2.300	1.219	0.400	0.212	0.600	0.318
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.087		1.557		3.275		0.440		0.889

NAKHON PHANOM

SECTOR: RESIDENTIAL

type of fuel	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
LPG	10 <sup>-3</sup> LT	0.899	0.030	0.027	0.0034	0.003	1.800	1.599	0.200	0.179	0.500	0.444
KEROSENE	10 <sup>-3</sup> LT	0.135	0.100	0.014	2.930	0.396	2.300	0.311	0.400	0.054	0.600	0.081
DIESEL	10 <sup>-3</sup> LT		0.500	0.000	17.000	0.000	3.800	0.000	0.040	0.000	0.600	0.000
FUEL OIL	10 <sup>-3</sup> LT		3.020	0.000	57.000	0.000	6.600	0.000	0.080	0.000	0.600	0.000
TOTAL				0.040		0.399		1.910		0.232		0.525



PHRA NAIHON SIAYUTTAYA SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H-R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	9.297	22.80	230.112	4.04	37.590	19.26	179.050	67.88	831.050	193.63	4263.883
Motorcycle	10 <sup>-3</sup> L	12.076	88.77	1072.253	3.02	36.478	3.74	45.175	268.58	3467.958	392.35	4736.186
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	9.988	21.52	214.999	10.72	107.050	9.43	94.169	4.72	47.134	9.43	94.169
HD Trucks & Buses	10 <sup>-3</sup> L	12.079	13.14	158.718	7.89	95.303	41.38	499.829	6.97	84.191	21.62	261.148
LPG												
Samior	10 <sup>-3</sup> L	0.954	22.31	21.507	6.00	5.704	18.13	17.477	53.01	51.102	51.61	49.752
Taxi	10 <sup>-3</sup> L	0.671	20.02	13.433	6.05	4.060	19.26	12.923	37.61	25.236	45.86	30.772
TOTAL				1690.922		289.235		849.833		438.700		9439.919

ANG THONG SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H-R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	5.099	22.80	114.333	4.04	20.436	19.26	97.436	67.88	343.405	158.63	2320.208
Motorcycle	10 <sup>-3</sup> L	8.669	88.77	771.323	3.02	26.241	3.74	32.497	268.58	2516.248	392.35	3406.129
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	7.322	21.52	15.589	10.72	78.482	9.43	89.048	4.72	34.990	9.43	69.046
HD Trucks & Buses	10 <sup>-3</sup> L	19.622	13.14	230.621	7.89	155.291	41.38	814.441	6.97	137.164	21.62	425.325
LPG												
Samior	10 <sup>-3</sup> L	0.264	22.31	8.336	6.00	1.704	18.13	5.149	53.01	15.095	51.61	14.657
Taxi	10 <sup>-3</sup> L	0.324	20.02	8.496	6.05	1.982	19.26	8.242	37.61	12.188	45.86	14.669
TOTAL				1314.669		284.126		1024.810		3058.636		6253.426

SARABURI SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H-R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	11.229	22.80	253.775	4.04	45.365	19.26	216.271	67.88	762.225	158.63	5149.956
Motorcycle	10 <sup>-3</sup> L	6.811	88.77	604.612	3.02	20.669	3.74	25.473	268.58	1972.397	392.35	2672.296
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	15.213	21.52	327.384	10.72	180.003	9.43	143.459	4.72	71.805	9.43	143.459
HD Trucks & Buses	10 <sup>-3</sup> L	81.925	13.14	1076.495	7.89	646.368	41.38	3380.057	6.97	571.017	21.62	1771.219
LPG												
Samior	10 <sup>-3</sup> L	0.010	22.31	0.223	6.00	0.090	18.13	0.191	53.01	0.520	51.61	0.518
Taxi	10 <sup>-3</sup> L	0.712	20.02	14.254	6.05	4.308	19.26	13.713	37.61	28.778	45.86	32.662
TOTAL				2276.743		879.774		3768.150		3404.753		9770.099

LOP BURI SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H-R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	15.239	22.80	344.401	4.04	61.996	19.26	280.503	67.88	1034.423	158.63	6969.063
Motorcycle	10 <sup>-3</sup> L	11.534	88.77	1023.873	3.02	34.833	3.74	43.137	268.58	3340.131	392.35	4525.385
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	20.709	21.52	445.658	10.72	222.000	9.43	195.299	4.72	97.746	9.43	195.299
HD Trucks & Buses	10 <sup>-3</sup> L	55.399	13.14	727.930	7.89	437.080	41.38	2282.369	6.97	366.124	21.62	1187.705
LPG												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.922	20.02	18.499	6.05	5.578	19.26	17.795	37.61	34.678	45.86	42.263
TOTAL				2590.320		781.087		2642.053		4993.101		12519.701

SING BURI SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H-R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	5.392	22.80	121.859	4.04	21.794	19.26	100.650	67.88	396.009	158.63	2472.933
Motorcycle	10 <sup>-3</sup> L	8.763	88.77	777.882	3.02	26.464	3.74	32.774	268.58	2537.677	392.35	3438.183
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	8.839	21.52	147.175	10.72	73.314	9.43	64.482	4.72	32.200	9.43	64.482
HD Trucks & Buses	10 <sup>-3</sup> L	22.940	13.14	301.432	7.89	180.997	41.38	949.257	6.97	158.782	21.62	495.983
LPG												
Samior	10 <sup>-3</sup> L	0.001	22.31	0.022	6.00	0.006	18.13	0.018	53.01	0.053	51.61	0.052
Taxi	10 <sup>-3</sup> L	0.340	20.02	6.807	6.05	2.057	19.26	6.548	37.61	12.767	45.86	15.392
TOTAL				1365.187		304.822		1193.938		3108.691		6487.195

CHAI NAT SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H-R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	4.551	22.80	102.663	4.04	18.388	19.26	87.882	67.88	306.822	158.63	2087.225
Motorcycle	10 <sup>-3</sup> L	8.295	88.77	736.436	3.02	25.054	3.74	31.027	268.58	2402.439	392.35	3254.936
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	7.809	21.52	170.202	10.72	84.794	9.43	74.582	4.72	37.300	9.43	74.582
HD Trucks & Buses	10 <sup>-3</sup> L	16.243	13.14	213.433	7.89	126.157	41.38	672.135	6.97	112.214	21.62	351.774
LPG												
Samior	10 <sup>-3</sup> L	0.014	22.31	0.312	6.00	0.084	18.13	0.294	53.01	0.742	51.61	0.723
Taxi	10 <sup>-3</sup> L	0.292	20.02	5.045	6.05	1.525	19.26	4.854	37.61	9.478	45.86	11.567
TOTAL				1228.281		257.990		870.504		2872.125		5780.199



SIPAN BURI		SECTOR: TRANSPORTATION						AVG. SPEED = 32 KM/H					
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
<b>GASOLINE</b>													
LD Cars & Trucks	10 <sup>-3</sup> L	12.784	22.80	289.918	4.04	51.547	19.26	245.220	67.88	867.778	498.63	5863.126	
Motorcycle	10 <sup>-3</sup> L	19.911	88.77	1718.901	3.02	58.410	3.74	72.306	268.59	5600.980	392.36	7588.441	
<b>DIESEL</b>													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	23.990	21.52	515.319	10.72	236.351	9.43	225.943	4.72	113.091	9.43	225.943	
HD Trucks & Buses	10 <sup>-3</sup> L	206.783	13.14	2703.969	7.89	1623.628	41.38	8515.301	6.97	1434.308	21.82	4449.028	
<b>LPG</b>													
Samlor	10 <sup>-3</sup> L	0.037	22.31	0.925	6.00	0.222	18.13	0.671	53.01	1.981	51.61	1.910	
Taxi	10 <sup>-3</sup> L	0.728	20.02	14.575	6.05	4.404	19.26	14.021	37.61	27.300	45.86	33.266	
<b>TOTAL</b>				5240.827		1996.163		9074.491		8045.478		18181.624	

KANCHANABURI		SECTOR: TRANSPORTATION						AVG. SPEED = 32 KM/H					
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
<b>GASOLINE</b>													
LD Cars & Trucks	10 <sup>-3</sup> L	16.760	22.80	379.228	4.04	67.791	19.26	320.193	67.88	1139.026	498.63	7695.811	
Motorcycle	10 <sup>-3</sup> L	17.248	88.77	1531.105	3.02	52.008	3.74	64.509	268.59	4964.848	392.36	6767.253	
<b>DIESEL</b>													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	30.695	21.52	663.819	10.72	330.891	9.43	290.897	4.72	145.603	9.43	290.897	
HD Trucks & Buses	10 <sup>-3</sup> L	130.265	13.14	1751.102	7.89	1051.461	41.38	5514.506	6.97	929.857	21.82	2091.197	
<b>LPG</b>													
Samlor	10 <sup>-3</sup> L	0.001	22.31	0.022	6.00	0.006	18.13	0.018	53.01	0.053	51.61	0.052	
Taxi	10 <sup>-3</sup> L	0.809	20.02	18.193	6.05	5.498	19.26	17.507	37.61	34.187	45.86	41.637	
<b>TOTAL</b>				4343.506		1507.537		6210.618		7242.575		17676.688	

SAMUT SONGKHAM		SECTOR: TRANSPORTATION						AVG. SPEED = 32 KM/H					
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
<b>GASOLINE</b>													
LD Cars & Trucks	10 <sup>-3</sup> L	3.591	22.80	81.157	4.04	14.508	19.26	68.163	67.88	243.757	498.63	1646.940	
Motorcycle	10 <sup>-3</sup> L	2.903	88.77	257.899	3.02	6.767	3.74	10.267	268.59	840.600	392.36	1138.592	
<b>DIESEL</b>													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	4.929	21.52	106.072	10.72	52.806	9.43	48.490	4.72	23.265	9.43	48.490	
HD Trucks & Buses	10 <sup>-3</sup> L	20.475	13.14	269.042	7.89	161.548	41.38	847.258	6.97	142.711	21.82	442.670	
<b>LPG</b>													
Samlor	10 <sup>-3</sup> L	0.146	22.31	3.302	6.00	0.868	18.13	2.683	53.01	7.846	51.61	7.838	
Taxi	10 <sup>-3</sup> L	0.248	20.02	4.966	6.05	1.500	19.26	4.776	37.61	9.327	45.86	11.373	
<b>TOTAL</b>				722.236		240.050		981.215		1267.506		3294.094	

RATCHABURI		SECTOR: TRANSPORTATION						AVG. SPEED = 32 KM/H					
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
<b>GASOLINE</b>													
LD Cars & Trucks	10 <sup>-3</sup> L	18.256	22.80	412.936	4.04	73.751	19.26	351.611	67.88	1238.217	498.63	8372.748	
Motorcycle	10 <sup>-3</sup> L	20.219	88.77	1797.504	3.02	61.192	3.74	75.731	268.59	5683.908	392.36	7944.696	
<b>DIESEL</b>													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	28.640	21.52	618.333	10.72	307.021	9.43	270.075	4.72	136.181	9.43	270.075	
HD Trucks & Buses	10 <sup>-3</sup> L	77.567	13.14	1019.098	7.89	611.925	41.38	3209.308	6.97	540.572	21.82	1676.782	
<b>LPG</b>													
Samlor	10 <sup>-3</sup> L	0.229	22.31	5.108	6.00	1.374	18.13	4.152	53.01	12.138	51.61	11.818	
Taxi	10 <sup>-3</sup> L	1.039	20.02	20.001	6.05	6.206	19.26	20.011	37.61	39.077	45.86	47.849	
<b>TOTAL</b>				3671.431		10515.12		3930.889		7830.091		16223.789	

PHETCHABURI		SECTOR: TRANSPORTATION						AVG. SPEED = 32 KM/H					
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
<b>GASOLINE</b>													
LD Cars & Trucks	10 <sup>-3</sup> L	11.157	22.80	252.148	4.04	45.074	19.26	214.884	67.88	757.337	498.63	5176.931	
Motorcycle	10 <sup>-3</sup> L	11.317	88.77	1014.810	3.02	34.177	3.74	42.366	268.59	3271.290	392.36	4440.225	
<b>DIESEL</b>													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	20.489	21.52	440.493	10.72	219.428	9.43	193.023	4.72	86.614	9.43	183.023	
HD Trucks & Buses	10 <sup>-3</sup> L	56.095	13.14	737.088	7.89	442.590	41.38	2321.211	6.97	380.982	21.82	1212.774	
<b>LPG</b>													
Samlor	10 <sup>-3</sup> L	0.038	22.31	0.870	6.00	0.234	18.13	0.707	53.01	2.087	51.61	2.013	
Taxi	10 <sup>-3</sup> L	0.562	20.02	11.862	6.05	3.582	19.26	11.402	37.61	22.265	45.86	27.140	
<b>TOTAL</b>				2447.061		745.084		2783.582		4546.556		10882.118	

PHACHALUP KHU KHAN		SECTOR: TRANSPORTATION						AVG. SPEED = 32 KM/H					
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	
<b>GASOLINE</b>													
LD Cars & Trucks	10 <sup>-3</sup> L	7.881	22.80	179.817	4.04	31.072	19.26	148.128	67.88	522.055	498.63	3527.323	
Motorcycle	10 <sup>-3</sup> L	12.429	88.77	1102.780	3.02	37.517	3.74	48.482	268.59	3997.577	392.36	4874.184	
<b>DIESEL</b>													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	15.613	21.52	335.992	10.72	167.371	9.43	147.231	4.72	73.893	9.43	147.231	
HD Trucks & Buses	10 <sup>-3</sup> L	35.363	13.14	464.538	7.89	278.935	41.38	1482.907	6.97	248.410	21.82	764.332	
<b>LPG</b>													
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000	
Taxi	10 <sup>-3</sup> L	0.388	20.02	7.788	6.05	2.350	19.26	7.482	37.61	14.630	45.86	17.840	
<b>TOTAL</b>				2094.924		517.249		1812.221		4464.378		9300.888	



TRAT												
SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/HR												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	6.104	22.80	139.750	4.04	24.933	19.26	119.104	67.68	419.770	459.63	2608.169
Motorcycle	10 <sup>-3</sup> L	4.596	88.77	416.864	3.02	14.162	3.74	17.563	206.59	1398.815	392.35	1642.476
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	13.434	21.52	269.100	10.72	144.012	9.43	126.893	4.72	63.408	9.43	126.893
HD Trucks & Buses	10 <sup>-3</sup> L	11.012	13.14	144.898	7.89	89.886	41.38	456.877	6.97	76.754	21.82	238.079
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.296	20.02	5.926	8.05	1.791	19.26	5.701	37.81	11.133	45.88	13.575
<b>TOTAL</b>				<b>998.349</b>		<b>271.853</b>		<b>724.727</b>		<b>1800.979</b>		<b>5086.960</b>

CHANTHABURI												
SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/HR												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	20.068	22.80	471.572	4.04	94.299	19.26	401.879	67.68	1416.394	459.63	9999.774
Motorcycle	10 <sup>-3</sup> L	15.042	88.77	1306.278	3.02	45.427	3.74	56.257	206.59	4356.013	392.35	5901.729
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	40.466	21.52	871.259	10.72	434.010	9.43	381.783	4.72	191.094	9.43	381.783
HD Trucks & Buses	10 <sup>-3</sup> L	26.713	13.14	351.009	7.89	210.766	41.38	1106.384	6.97	106.190	21.82	577.535
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.026	22.31	0.580	6.00	0.159	18.13	0.471	53.01	1.378	51.61	1.342
Taxi	10 <sup>-3</sup> L	1.129	20.02	22.800	8.05	8.830	19.26	21.745	37.81	42.482	45.88	51.778
<b>TOTAL</b>				<b>3052.300</b>		<b>781.407</b>		<b>1987.519</b>		<b>6193.520</b>		<b>16483.036</b>

RAYONG												
SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/HR												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	18.502	22.80	419.953	4.04	75.071	19.26	357.869	67.68	1261.346	459.63	8522.265
Motorcycle	10 <sup>-3</sup> L	18.995	88.77	1896.186	3.02	57.365	3.74	71.041	206.59	5500.762	392.35	7432.697
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	34.714	21.52	747.045	10.72	372.134	9.43	327.263	4.72	183.060	9.43	327.263
HD Trucks & Buses	10 <sup>-3</sup> L	53.183	13.14	690.825	7.89	419.814	41.38	2200.713	6.97	370.886	21.82	1149.116
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.017	22.31	0.379	6.00	0.102	18.13	0.303	53.01	0.901	51.61	0.877
Taxi	10 <sup>-3</sup> L	1.029	20.02	20.801	8.05	8.225	19.26	19.619	37.81	38.701	45.88	47.190
<b>TOTAL</b>				<b>3572.968</b>		<b>830.512</b>		<b>2977.123</b>		<b>7338.248</b>		<b>17500.188</b>

CHON BURI												
SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/HR												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	47.826	22.80	1078.348	4.04	192.409	19.26	917.277	67.68	3232.893	459.63	21842.712
Motorcycle	10 <sup>-3</sup> L	33.159	88.77	2943.436	3.02	100.137	3.74	124.011	206.59	9932.225	392.35	13008.547
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	75.474	21.52	1624.200	10.72	809.091	9.43	711.720	4.72	358.237	9.43	711.720
HD Trucks & Buses	10 <sup>-3</sup> L	182.252	13.14	2394.791	7.89	1437.969	41.38	7541.508	6.97	1270.296	21.82	3840.288
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.132	22.31	2.945	6.00	0.782	18.13	2.383	53.01	8.997	51.61	8.813
Taxi	10 <sup>-3</sup> L	2.727	20.02	54.595	8.05	15.190	19.26	52.522	37.81	102.562	45.88	125.060
<b>TOTAL</b>				<b>8098.314</b>		<b>2998.886</b>		<b>9349.510</b>		<b>14571.172</b>		<b>35638.134</b>

CHACHINGSAO												
SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/HR												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	11.515	22.80	280.239	4.04	48.521	19.26	271.779	67.68	781.838	459.63	5281.121
Motorcycle	10 <sup>-3</sup> L	6.240	88.77	486.155	3.02	15.825	3.74	18.588	206.59	1517.452	392.35	2066.914
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	18.180	21.52	348.164	10.72	173.460	9.43	152.577	4.72	76.370	9.43	132.577
HD Trucks & Buses	10 <sup>-3</sup> L	25.975	13.14	341.312	7.89	204.943	41.38	1074.948	6.97	181.048	21.82	581.990
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.075	22.31	1.673	6.00	0.450	18.13	1.380	53.01	3.976	51.61	3.871
Taxi	10 <sup>-3</sup> L	0.737	20.02	14.795	8.05	4.438	19.26	14.195	37.81	27.718	45.88	31.789
<b>TOTAL</b>				<b>1431.327</b>		<b>446.847</b>		<b>1484.354</b>		<b>2591.199</b>		<b>8088.965</b>

PRACHIN BURI												
SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/HR												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	7.287	22.80	168.948	4.04	28.943	19.26	142.274	67.68	501.430	459.63	3387.800
Motorcycle	10 <sup>-3</sup> L	8.780	88.77	777.825	3.02	28.455	3.74	32.782	206.59	2538.808	392.35	3438.988
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	12.910	21.52	277.320	10.72	138.395	9.43	121.741	4.72	80.805	9.43	121.741
HD Trucks & Buses	10 <sup>-3</sup> L	38.120	13.14	500.897	7.89	300.767	41.38	1577.408	6.97	285.898	21.82	824.154
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.092	22.31	2.059	6.00	0.332	18.13	1.008	53.01	4.877	51.61	4.749
Taxi	10 <sup>-3</sup> L	0.421	20.02	8.428	8.05	2.547	19.26	8.108	37.81	15.834	45.88	18.307
<b>TOTAL</b>				<b>1703.772</b>		<b>498.560</b>		<b>1883.959</b>		<b>3395.580</b>		<b>7794.837</b>



NAKHONNAYOK		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	4.742	22.80	107.159	4.04	19.159	19.25	81.331	87.06	321.897	459.83	2174.823
Motorcycle	10 <sup>-3</sup> L	4.662	88.77	440.477	3.02	14.935	3.74	18.598	269.59	1436.845	392.35	1895.841
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	5.847	21.52	126.927	10.72	62.800	9.43	55.137	4.72	27.990	9.43	55.137
HD Trucks & Buses	10 <sup>-3</sup> L	18.089	13.14	237.414	7.89	142.557	41.38	747.854	8.97	125.934	21.82	390.830
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	8.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.313	20.02	8.295	8.05	1.894	19.25	8.028	37.81	11.772	45.88	14.354
<b>TOTAL</b>				917.153		241.273		918.708		1924.138		4991.788

LAMPANG		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	17.983	22.80	404.392	4.04	72.293	19.25	344.619	87.06	1214.577	459.83	2206.267
Motorcycle	10 <sup>-3</sup> L	23.252	88.77	2054.080	3.02	70.221	3.74	86.952	269.59	8733.547	392.35	9122.922
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	32.271	21.52	891.472	10.72	345.915	9.43	314.318	4.72	152.319	9.43	304.318
HD Trucks & Buses	10 <sup>-3</sup> L	28.008	13.14	378.517	7.89	227.285	41.38	1382.075	8.97	200.782	21.82	822.028
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	8.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.896	20.02	17.730	8.05	5.360	19.25	17.084	37.81	33.222	45.88	40.832
<b>TOTAL</b>				3598.209		721.109		1945.037		8334.557		18296.965

PHARE		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	11.553	22.80	261.098	4.04	46.874	19.25	222.511	87.06	784.218	459.83	5280.532
Motorcycle	10 <sup>-3</sup> L	13.202	88.77	1171.942	3.02	39.870	3.74	49.075	269.59	3823.187	392.35	5179.805
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	24.132	21.52	518.021	10.72	280.685	9.43	227.565	4.72	113.803	9.43	227.565
HD Trucks & Buses	10 <sup>-3</sup> L	14.560	13.14	191.719	7.89	115.115	41.38	603.734	8.97	101.692	21.82	315.416
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	8.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.547	20.02	10.851	8.05	3.509	19.25	10.536	37.81	20.573	45.88	25.056
<b>TOTAL</b>				2195.024		483.694		1113.720		4843.553		11048.443

U-TARADIT		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	7.508	22.80	169.535	4.04	30.324	19.25	144.588	87.06	508.507	459.83	3442.477
Motorcycle	10 <sup>-3</sup> L	8.972	88.77	695.214	3.02	30.115	3.74	37.286	269.59	2887.791	392.35	3912.514
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	12.837	21.52	278.252	10.72	137.613	9.43	121.053	4.72	60.591	9.43	121.053
HD Trucks & Buses	10 <sup>-3</sup> L	18.390	13.14	241.513	7.89	145.018	41.38	780.564	8.97	128.109	21.82	397.376
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.002	22.31	0.045	8.00	0.012	18.13	0.035	53.01	0.108	51.81	0.103
Taxi	10 <sup>-3</sup> L	0.432	20.02	8.650	8.05	2.915	19.25	5.283	37.81	18.120	45.88	22.105
<b>TOTAL</b>				1992.310		345.999		1072.798		3904.232		7865.627

NAN		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	4.222	22.80	95.417	4.04	17.067	19.25	81.518	87.06	298.999	459.83	1906.336
Motorcycle	10 <sup>-3</sup> L	8.029	88.77	801.504	3.02	27.289	3.74	33.789	269.59	2614.708	392.35	3542.528
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	8.810	21.52	189.591	10.72	84.443	9.43	63.078	4.72	41.583	9.43	83.078
HD Trucks & Buses	10 <sup>-3</sup> L	3.175	13.14	41.720	7.89	25.061	41.38	131.392	8.97	22.100	21.82	88.844
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	8.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.195	20.02	3.904	8.05	1.180	19.25	3.756	37.81	7.334	45.88	8.942
<b>TOTAL</b>				1132.136		164.988		353.300		2972.344		5539.528

PHAYAO		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	5.681	22.80	128.381	4.04	22.951	19.25	109.418	87.06	385.826	459.83	2806.477
Motorcycle	10 <sup>-3</sup> L	7.482	88.77	664.177	3.02	22.556	3.74	27.533	269.59	2186.712	392.35	2935.583
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	12.011	21.52	258.477	10.72	128.758	9.43	113.284	4.72	58.882	9.43	113.284
HD Trucks & Buses	10 <sup>-3</sup> L	5.650	13.14	74.241	7.89	44.579	41.38	230.797	8.97	39.381	21.82	122.153
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.004	22.31	0.089	8.00	0.024	18.13	0.073	53.01	0.212	51.81	0.208
Taxi	10 <sup>-3</sup> L	0.298	20.02	5.185	8.05	1.557	19.25	4.989	37.81	8.741	45.88	11.898
<b>TOTAL</b>				1130.580		220.474		469.520		2889.384		5788.541



CHANG RAI

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	16.900	22.90	382.995	4.04	63.409	19.29	326.150	67.99	1149.412	459.63	7795.900
Motorcycle	10 <sup>-3</sup> L	20.971	88.77	1661.595	3.02	63.302	3.74	78.432	289.59	6072.952	392.35	6227.972
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	31.395	21.52	675.820	10.72	336.554	9.43	296.055	4.72	148.184	9.43	296.055
HD Trucks & Buses	10 <sup>-3</sup> L	25.007	13.14	328.592	7.69	197.305	41.39	1034.790	6.97	174.299	21.62	646.851
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.828	20.02	16.957	6.05	5.034	19.26	16.024	37.61	31.292	45.66	39.156
<b>TOTAL</b>				3295.150		670.625		1751.430		1576.179		19968.675

MAE HONG SOBN

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	0.509	22.80	11.920	4.04	2.056	19.26	9.900	87.84	34.551	459.60	237.443
Motorcycle	10 <sup>-3</sup> L	1.277	88.77	113.359	3.02	3.957	3.74	4.776	216.59	399.006	392.35	501.001
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	1.069	21.52	23.025	10.72	11.460	9.43	10.791	4.72	50.76	9.43	10.081
HD Trucks & Buses	10 <sup>-3</sup> L	15.75	13.14	20.995	7.69	12.427	41.39	85.174	6.97	10.978	21.62	34.072
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.026	20.02	0.521	6.05	0.157	19.26	0.501	37.61	0.979	45.66	1.192
<b>TOTAL</b>				189.084		29.567		90.304		421.369		779.798

CHANG MAI

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	51.048	22.80	1153.665	4.04	208.224	19.26	963.194	67.99	3495.139	499.63	23412.144
Motorcycle	10 <sup>-3</sup> L	61.670	88.77	5474.445	3.02	186.243	3.74	230.646	289.59	17609.015	392.35	24895.225
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	74.782	21.52	1809.878	10.72	601.449	9.43	705.056	4.72	352.777	9.43	705.056
HD Trucks & Buses	10 <sup>-3</sup> L	40.675	13.14	534.470	7.69	320.526	41.39	1630.132	6.97	263.505	21.62	679.294
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.540	22.31	12.226	6.00	3.298	18.13	9.936	53.01	29.078	51.61	28.282
Taxi	10 <sup>-3</sup> L	2.783	20.02	55.716	6.05	16.637	19.26	53.801	37.61	104.631	45.66	127.829
<b>TOTAL</b>				8009.420		1534.977		3665.500		2294.253		43010.679

LUMPHUN

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	15.241	22.80	344.447	4.04	61.574	19.26	283.512	67.99	1074.528	459.63	5995.920
Motorcycle	10 <sup>-3</sup> L	13.261	88.77	1177.179	3.02	40.049	3.74	45.996	289.59	3640.230	392.35	5202.953
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	32.666	21.52	702.972	10.72	350.190	9.43	309.040	4.72	154.184	9.43	309.040
HD Trucks & Buses	10 <sup>-3</sup> L	10.350	13.14	126.999	7.69	81.961	41.39	428.293	6.97	72.140	21.62	220.767
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.013	22.31	0.290	6.00	0.076	18.13	0.238	53.01	0.696	51.61	0.671
Taxi	10 <sup>-3</sup> L	0.705	20.02	14.114	6.05	4.295	19.26	13.578	37.61	28.515	45.66	32.331
<b>TOTAL</b>				2375.001		537.876		1032.275		5128.339		12757.743

NAHON SAWAN

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	14.430	22.80	328.118	4.04	58.297	19.26	277.922	67.99	979.376	459.63	6799.031
Motorcycle	10 <sup>-3</sup> L	15.075	88.77	1389.209	3.02	45.527	3.74	56.381	289.59	4335.599	392.35	5914.676
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	23.995	21.52	515.533	10.72	256.809	9.43	225.905	4.72	110.072	9.43	225.905
HD Trucks & Buses	10 <sup>-3</sup> L	60.912	13.14	1083.164	7.69	635.398	41.39	3296.136	6.97	583.977	21.62	1748.317
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.034	22.31	0.759	6.00	0.204	18.13	0.876	53.01	18.02	51.61	1.755
Taxi	10 <sup>-3</sup> L	0.754	20.02	15.065	6.05	4.562	19.26	14.522	37.61	28.269	45.66	34.579
<b>TOTAL</b>				3299.866		1000.790		3923.494		6762.267		14644.263

PHETCHABUN

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	11.791	22.80	296.477	4.04	47.636	19.26	227.095	67.99	800.373	459.63	6407.705
Motorcycle	10 <sup>-3</sup> L	9.380	88.77	832.863	3.02	28.328	3.74	35.091	289.59	2718.354	392.35	3600.243
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	23.700	21.52	510.024	10.72	254.084	9.43	223.461	4.72	111.864	9.43	223.461
HD Trucks & Buses	10 <sup>-3</sup> L	39.165	13.14	514.891	7.69	309.170	41.39	1621.475	6.97	273.119	21.62	847.180
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.590	20.02	11.872	6.05	3.589	19.26	11.421	37.61	22.333	45.66	27.186
<b>TOTAL</b>				2125.926		642.765		2183.563		3524.013		10165.615



PHICHIT      SECTOR TRANSPORTATION      AVG. SPEED = 32 KM/HR

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	6.539	22.80	150.041	4.04	28.022	19.26	127.067	67.00	450.855	499.83	3044.845
Motorcycle	10 <sup>-3</sup> L	11.833	88.77	1098.292	3.02	36.033	3.74	44.828	286.59	3455.677	332.35	4681.913
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	12.720	21.52	270.734	10.72	136.358	9.43	119.950	4.72	60.009	9.43	119.950
HD Trucks & Buses	10 <sup>-3</sup> L	24.253	13.14	383.994	7.99	191.358	41.38	1000.569	6.97	189.043	21.82	524.350
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.018	22.31	0.357	6.00	0.096	18.13	0.290	53.01	0.649	51.81	0.826
Taxi	10 <sup>-3</sup> L	0.359	20.02	7.187	6.05	2.188	19.26	6.995	37.61	13.494	45.98	18.418
<b>TOTAL</b>				1869.277		392.338		1300.220		4149.727		8369.300

PHITSANULOK      SECTOR TRANSPORTATION      AVG. SPEED = 32 KM/HR

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	10.995	22.80	240.261	4.04	44.379	19.26	211.571	67.00	745.662	499.83	5039.051
Motorcycle	10 <sup>-3</sup> L	19.441	88.77	1725.779	3.02	58.712	3.74	72.709	289.59	3529.919	332.35	7627.676
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	19.041	21.52	409.782	10.72	209.120	9.43	179.957	4.72	65.974	9.43	179.957
HD Trucks & Buses	10 <sup>-3</sup> L	34.824	13.14	458.954	7.99	275.922	41.38	1445.321	6.97	243.448	21.82	756.143
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.169	22.31	3.770	6.00	1.014	18.13	3.054	53.01	0.999	51.81	8.722
Taxi	10 <sup>-3</sup> L	0.594	20.02	11.291	6.05	3.412	19.26	10.967	37.61	21.212	45.98	25.665
<b>TOTAL</b>				2067.816		597.219		1823.094		6749.071		13635.014

SUKHOTHAI      SECTOR TRANSPORTATION      AVG. SPEED = 32 KM/HR

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	5.786	22.80	130.809	4.04	23.384	19.26	111.477	67.00	382.883	499.83	2854.560
Motorcycle	10 <sup>-3</sup> L	9.812	88.77	871.011	3.02	29.832	3.74	38.997	289.59	2941.457	332.35	3849.738
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.324	21.52	243.662	10.72	121.263	9.43	108.785	4.72	53.448	9.43	108.785
HD Trucks & Buses	10 <sup>-3</sup> L	39.116	13.14	514.799	7.99	309.114	41.38	1821.166	6.97	273.071	21.82	847.028
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.012	22.31	0.288	6.00	0.072	18.13	0.219	53.01	0.837	51.81	0.819
Taxi	10 <sup>-3</sup> L	0.290	20.02	5.905	6.05	1.754	19.26	5.516	37.61	10.907	45.98	13.299
<b>TOTAL</b>				1766.365		405.250		1881.948		3572.109		7472.021

TAK      SECTOR TRANSPORTATION      AVG. SPEED = 32 KM/HR

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	6.289	22.80	141.879	4.04	25.327	19.26	120.741	67.00	425.540	499.83	2875.151
Motorcycle	10 <sup>-3</sup> L	7.124	88.77	632.397	3.02	21.514	3.74	26.614	289.59	2063.039	332.35	2796.101
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.909	21.52	256.217	10.72	127.632	9.43	112.274	4.72	58.196	9.43	112.274
HD Trucks & Buses	10 <sup>-3</sup> L	9.099	13.14	180.497	7.99	71.152	41.38	373.165	6.97	62.665	21.82	194.959
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.333	20.02	6.587	6.05	2.015	19.26	6.414	37.61	12.524	45.98	15.271
<b>TOTAL</b>				1156.457		247.840		639.207		2820.155		5992.767

KAMPHAENG PHET      SECTOR TRANSPORTATION      AVG. SPEED = 32 KM/HR

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	7.120	22.80	160.990	4.04	28.777	19.26	137.399	67.00	453.505	499.83	3298.821
Motorcycle	10 <sup>-3</sup> L	8.430	88.77	837.301	3.02	28.479	3.74	35.266	289.59	2730.834	332.35	3888.881
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	15.089	21.52	331.386	10.72	165.077	9.43	145.213	4.72	72.953	9.43	145.213
HD Trucks & Buses	10 <sup>-3</sup> L	53.922	13.14	707.221	7.99	424.858	41.38	2227.154	6.97	775.179	21.82	1820.832
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.328	20.02	6.587	6.05	1.990	19.26	6.337	37.61	12.374	45.98	15.099
<b>TOTAL</b>				2043.275		649.979		2951.161		3874.379		8290.814

UTHAI THANI      SECTOR TRANSPORTATION      AVG. SPEED = 32 KM/HR

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SOx		NOx		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	4.692	22.80	108.039	4.04	18.906	19.26	80.366	67.00	318.463	499.83	2151.892
Motorcycle	10 <sup>-3</sup> L	10.172	88.77	902.968	3.02	30.719	3.74	38.043	289.59	2996.709	332.35	3890.994
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	8.524	21.52	180.438	10.72	81.377	9.43	80.381	4.72	40.200	9.43	80.381
HD Trucks & Buses	10 <sup>-3</sup> L	12.492	13.14	184.013	7.99	99.483	41.38	518.505	6.97	87.000	21.82	268.951
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.247	20.02	4.945	6.05	1.494	19.26	4.787	37.61	9.290	45.98	11.327
<b>TOTAL</b>				1361.403		241.000		730.055		3400.725		6504.448



CHANG RAI SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H/R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	16.930	22.60	362.995	4.04	68.409	19.26	326.130	67.88	1148.412	499.63	7795.982
Motorcycle	10 <sup>-3</sup> L	20.971	88.77	1661.596	3.02	63.322	3.74	78.432	269.59	8072.932	392.35	8227.972
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	31.395	21.52	675.820	10.72	336.564	9.43	296.055	4.72	148.184	9.43	296.055
HD Trucks & Buses	10 <sup>-3</sup> L	25.007	13.14	326.592	7.89	197.305	41.38	1094.790	6.97	174.289	21.62	640.651
LPG												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.832	20.02	18.667	6.05	5.034	19.26	16.024	37.61	31.292	45.66	38.156
TOTAL				3265.150		670.635		1751.430		7576.179		16968.815

MAE HONG SOBN SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H/R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	0.508	22.60	11.520	4.04	2.058	19.26	9.900	67.88	34.597	499.63	232.443
Motorcycle	10 <sup>-3</sup> L	1.277	88.77	113.359	3.02	3.957	3.74	4.776	269.59	369.606	392.35	501.031
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	1.099	21.52	23.005	10.72	11.489	9.43	10.081	4.72	5.046	9.43	10.081
HD Trucks & Buses	10 <sup>-3</sup> L	1.575	13.14	20.896	7.89	12.427	41.38	65.174	6.97	10.379	21.62	34.032
LPG												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.026	20.02	0.521	6.05	0.157	19.26	0.501	37.61	0.978	45.66	1.192
TOTAL				199.094		29.967		90.304		421.359		779.798

CHIANG MAI SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H/R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	51.098	22.60	1153.695	4.04	208.204	19.26	863.184	67.88	3465.138	499.63	23412.144
Motorcycle	10 <sup>-3</sup> L	61.670	88.77	5474.446	3.02	186.213	3.74	230.848	269.59	17659.015	392.35	24198.225
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	74.782	21.52	1809.579	10.72	601.449	9.43	705.008	4.72	352.877	9.43	705.005
HD Trucks & Buses	10 <sup>-3</sup> L	40.675	13.14	53.470	7.89	320.926	41.38	1680.132	6.97	263.505	21.62	679.264
LPG												
Samlor	10 <sup>-3</sup> L	0.543	22.31	12.228	6.00	3.268	18.13	9.535	53.01	29.048	51.81	28.262
Taxi	10 <sup>-3</sup> L	2.760	20.02	55.716	6.05	16.607	19.26	53.801	37.61	104.669	45.66	127.629
TOTAL				6026.420		1534.977		3665.503		22094.253		49318.879

LUMPHUN SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H/R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	15.241	22.60	344.447	4.04	61.574	19.26	283.542	67.88	1034.559	499.63	6999.980
Motorcycle	10 <sup>-3</sup> L	13.281	88.77	1177.179	3.02	40.089	3.74	49.998	269.59	3840.293	392.35	5202.953
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	32.666	21.52	702.972	10.72	350.180	9.43	308.040	4.72	154.184	9.43	308.040
HD Trucks & Buses	10 <sup>-3</sup> L	10.360	13.14	126.989	7.89	81.661	41.38	426.283	6.97	72.140	21.62	223.767
LPG												
Samlor	10 <sup>-3</sup> L	0.013	22.31	0.290	6.00	0.076	18.13	0.236	53.01	0.699	51.81	0.671
Taxi	10 <sup>-3</sup> L	0.705	20.02	14.114	6.05	4.295	19.26	13.578	37.61	28.515	45.66	32.331
TOTAL				2375.001		537.806		1093.275		5128.339		12757.743

NAH-I-ON SAWAN SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H/R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	14.430	22.60	328.118	4.04	59.297	19.26	277.922	67.88	979.308	499.63	6849.037
Motorcycle	10 <sup>-3</sup> L	15.075	88.77	136.208	3.02	45.627	3.74	56.381	269.59	4365.598	392.35	5914.879
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	23.966	21.52	515.533	10.72	256.808	9.43	226.905	4.72	113.072	9.43	226.905
HD Trucks & Buses	10 <sup>-3</sup> L	60.912	13.14	1063.184	7.89	638.368	41.38	3348.138	6.97	583.967	21.62	1748.317
LPG												
Samlor	10 <sup>-3</sup> L	0.034	22.31	0.759	6.00	0.204	18.13	0.816	53.01	1.802	51.81	1.755
Taxi	10 <sup>-3</sup> L	0.754	20.02	15.056	6.05	4.582	19.26	14.522	37.61	28.369	45.66	34.579
TOTAL				3258.896		1000.780		3923.484		6082.267		14644.263

PHETCHABUN SECTOR: TRANSPORTATION AVG. SPEED = 32 KM/H/R

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	11.791	22.60	296.477	4.04	47.638	19.26	227.095	67.88	690.373	499.63	5407.706
Motorcycle	10 <sup>-3</sup> L	9.380	88.77	832.663	3.02	28.328	3.74	35.081	269.59	2716.354	392.35	3860.243
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	23.700	21.52	510.024	10.72	254.084	9.43	223.481	4.72	111.884	9.43	223.481
HD Trucks & Buses	10 <sup>-3</sup> L	39.165	13.14	514.891	7.89	308.170	41.38	1621.475	6.97	273.119	21.62	847.180
LPG												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.81	0.000
Taxi	10 <sup>-3</sup> L	0.550	20.02	11.872	6.05	3.588	19.26	11.421	37.61	22.303	45.66	27.186
TOTAL				2135.926		642.785		2118.583		3824.013		10165.815



CHAIYAPHUM		SECTOR: TRANSPORTATION										AVG. SPEED = 32 KM/H	
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
GASOLINE													
LD Cars & Trucks	10 <sup>-3</sup> L	4.783	22.80	103.095	4.04	19.223	19.26	92.121	67.88	324.870	499.63	2 193.627	
Motorcycle	10 <sup>-3</sup> L	7.292	88.77	647.311	3.02	22.022	3.74	27.272	269.59	2 111.690	392.35	2 661.048	
DIESEL													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	9.306	21.52	200.265	10.72	99.760	8.43	67.795	4.72	43.924	9.43	87.56	
HD Trucks & Buses	10 <sup>-3</sup> L	42.990	13.14	564.669	7.89	338.191	41.38	1 778.926	6.97	299.640	21.62	623.444	
LPG													
Senior	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	3.000	
Taxi	10 <sup>-3</sup> L	0.244	20.02	4.895	6.05	1.476	19.26	4.899	37.61	8.177	45.66	11.190	
TOTAL				1 925.445		461.773		1 960.774		2 769.102		6 063.032	

NAKHON RATCHASIMA		SECTOR: TRANSPORTATION										AVG. SPEED = 32 KM/H	
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
GASOLINE													
LD Cars & Trucks	10 <sup>-3</sup> L	32.857	22.80	742.569	4.04	132.742	19.26	832.926	67.88	2 200.330	499.63	15 069.209	
Motorcycle	10 <sup>-3</sup> L	26.320	88.77	2513.968	3.02	65.526	3.74	105.917	269.59	8 201.189	392.35	11 111.762	
DIESEL													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	50.535	21.52	1 067.513	10.72	541.735	8.43	476.515	4.72	2 365.255	9.43	4 765.515	
HD Trucks & Buses	10 <sup>-3</sup> L	101.162	13.14	1 421.511	7.89	953.958	41.38	4 476.571	6.97	754.029	21.62	2 339.395	
LPG													
Senior	10 <sup>-3</sup> L	0.473	22.31	10.953	6.00	2.938	18.13	6.575	53.01	25.074	51.61	24.412	
Taxi	10 <sup>-3</sup> L	1.925	20.02	38.538	6.05	11.648	19.26	37.078	37.61	72.399	45.66	6.8261	
TOTAL				5 814.650		1 629.044		5 737.510		11 521.549		29 108.680	

BURI RUM		SECTOR: TRANSPORTATION										AVG. SPEED = 32 KM/H	
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
GASOLINE													
LD Cars & Trucks	10 <sup>-3</sup> L	7.034	22.80	159.968	4.04	28.117	19.26	136.475	67.88	477.468	499.63	3 226.003	
Motorcycle	10 <sup>-3</sup> L	22.001	88.77	1 933.029	3.02	65.443	3.74	82.264	269.59	8 371.270	392.35	8 522.092	
DIESEL													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	13.970	21.52	300.634	10.72	146.751	8.43	131.737	4.72	65.931	9.43	131.737	
HD Trucks & Buses	10 <sup>-3</sup> L	11.172	13.14	146.800	7.89	68.147	41.38	462.297	6.97	77.689	21.62	241.539	
LPG													
Senior	10 <sup>-3</sup> L	0.001	22.31	0.022	6.00	0.006	18.13	0.018	53.01	0.051	51.61	0.052	
Taxi	10 <sup>-3</sup> L	0.377	20.02	7.549	6.05	2.261	19.26	7.261	37.61	14.179	45.66	17.269	
TOTAL				2 567.002		335.053		8 19.072		7 008.777		12 248.712	

SURIN		SECTOR: TRANSPORTATION										AVG. SPEED = 32 KM/H	
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
GASOLINE													
LD Cars & Trucks	10 <sup>-3</sup> L	6.655	22.80	150.403	4.04	26.996	19.26	128.175	67.88	451.741	499.63	3 082.183	
Motorcycle	10 <sup>-3</sup> L	9.452	88.77	839.054	3.02	26.545	3.74	35.360	269.59	2 737.205	392.35	3 708.492	
DIESEL													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	13.487	21.52	290.240	10.72	144.591	8.43	127.182	4.72	63.899	9.43	127.182	
HD Trucks & Buses	10 <sup>-3</sup> L	28.182	13.14	370.443	7.89	222.435	41.38	1 166.595	6.97	198.498	21.62	609.511	
LPG													
Senior	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000	
Taxi	10 <sup>-3</sup> L	0.336	20.02	6.727	6.05	2.033	19.26	6.471	37.61	12.837	45.66	15.409	
TOTAL				1 695.857		424.480		1 463.785		3 461.740		7 512.777	

SI SA KET		SECTOR: TRANSPORTATION										AVG. SPEED = 32 KM/H	
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
GASOLINE													
LD Cars & Trucks	10 <sup>-3</sup> L	5.676	22.80	126.323	4.04	22.938	19.26	109.358	67.88	395.423	499.63	2 804.101	
Motorcycle	10 <sup>-3</sup> L	10.799	88.77	955.898	3.02	32.513	3.74	40.265	269.59	3 117.721	392.35	4 224.040	
DIESEL													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.415	21.52	245.651	10.72	122.369	8.43	107.643	4.72	53.876	9.43	107.643	
HD Trucks & Buses	10 <sup>-3</sup> L	27.270	13.14	369.328	7.89	216.160	41.38	1 128.435	6.97	1 100.072	21.62	588.577	
LPG													
Senior	10 <sup>-3</sup> L	0.001	22.31	0.022	6.00	0.006	18.13	0.018	53.01	0.051	51.61	0.052	
Taxi	10 <sup>-3</sup> L	0.259	20.02	5.666	6.05	1.773	19.26	5.843	37.61	11.045	45.66	13.437	
TOTAL				1 693.887		384.780		1 381.380		3 758.172		7 531.851	

UBON RATCHATHANI		SECTOR: TRANSPORTATION										AVG. SPEED = 32 KM/H	
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO		
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	
GASOLINE													
LD Cars & Trucks	10 <sup>-3</sup> L	15.995	22.80	361.487	4.04	64.620	19.26	309.094	67.88	1 095.741	499.63	7 335.767	
Motorcycle	10 <sup>-3</sup> L	19.603	88.77	1 740.199	3.02	59.201	3.74	73.315	269.59	5 679.833	392.35	7 691.237	
DIESEL													
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	30.735	21.52	681.417	10.72	328.478	8.43	289.831	4.72	146.069	9.43	289.831	
HD Trucks & Buses	10 <sup>-3</sup> L	105.635	13.14	1 388.044	7.89	833.463	41.38	4 371.176	6.97	738.276	21.62	2 263.829	
LPG													
Senior	10 <sup>-3</sup> L	0.170	22.31	3.793	6.00	1.020	18.13	3.082	53.01	9.012	51.61	6.774	
Taxi	10 <sup>-3</sup> L	0.831	20.02	18.637	6.05	5.029	19.26	16.005	37.61	31.254	45.66	38.110	
TOTAL				4 171.536		1 292.808		5 081.473		7 654.164		17 647.597	



YASOTHON

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	4.952	22.80	111.915	4.04	20.008	19.26	95.378	67.88	336.142	459.63	2271.128
Motorcycle	10 <sup>-3</sup> L	5.298	88.77	467.840	3.02	15.938	3.74	19.702	269.59	1525.560	392.35	2066.670
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.347	21.52	244.187	10.72	121.640	9.43	107.002	4.72	53.568	9.43	107.002
HD Trucks & Buses	10 <sup>-3</sup> L	11.022	13.14	144.829	7.89	88.964	41.38	456.090	6.97	78.820	21.62	238.296
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.220	20.02	4.885	6.05	1.410	19.26	4.488	37.61	8.763	45.66	10.695
<b>TOTAL</b>				973.237		245.929		652.659		2000.849		4594.019

MUKDAHAN

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	1.382	22.80	30.565	4.04	5.492	19.26	26.040	67.88	91.774	459.63	820.688
Motorcycle	10 <sup>-3</sup> L	2.250	88.77	199.733	3.02	8.796	3.74	8.415	269.59	651.578	392.35	982.769
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	2.696	21.52	87.322	10.72	31.045	9.43	27.309	4.72	13.999	9.43	27.309
HD Trucks & Buses	10 <sup>-3</sup> L	6.942	13.14	91.216	7.89	54.772	41.38	267.260	6.97	48.338	21.62	150.098
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.095	20.02	1.301	6.05	0.390	19.26	1.292	37.61	2.445	45.66	2.991
<b>TOTAL</b>				386.129		98.468		350.276		807.651		1663.231

KHON KAEN

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	22.484	22.80	503.364	4.04	90.876	19.26	433.234	67.88	1526.890	459.63	10316.423
Motorcycle	10 <sup>-3</sup> L	20.389	88.77	1806.061	3.02	61.511	3.74	76.176	269.59	5888.389	392.35	7561.325
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	42.049	21.52	904.894	10.72	450.785	9.43	388.522	4.72	190.471	9.43	388.522
HD Trucks & Buses	10 <sup>-3</sup> L	66.095	13.14	893.064	7.89	521.253	41.38	2733.770	6.97	460.473	21.62	1481.325
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.231	22.31	5.154	6.00	1.388	18.13	4.189	53.01	12.245	51.61	11.522
Taxi	10 <sup>-3</sup> L	1.101	20.02	22.042	6.05	6.661	19.26	21.205	37.61	41.409	45.66	50.452
<b>TOTAL</b>				4116.616		1102.452		3665.096		8137.980		20195.099

MAHA SARAKHAM

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	4.900	22.80	110.740	4.04	19.798	19.26	91.374	67.88	332.812	459.63	2247.237
Motorcycle	10 <sup>-3</sup> L	4.698	88.77	413.578	3.02	14.070	3.74	17.425	269.59	1349.200	392.35	1897.965
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	9.947	21.52	214.059	10.72	106.632	9.43	83.900	4.72	48.950	9.43	63.900
HD Trucks & Buses	10 <sup>-3</sup> L	16.325	13.14	214.511	7.89	128.804	41.38	875.529	6.97	113.785	21.62	352.047
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.244	20.02	4.885	6.05	1.476	19.26	4.899	37.61	9.177	45.66	11.190
<b>TOTAL</b>				857.774		270.718		866.827		1861.724		4300.102

ROI ET

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	7.996	22.80	180.710	4.04	32.364	19.26	164.003	67.88	542.769	459.63	3097.205
Motorcycle	10 <sup>-3</sup> L	8.638	88.77	856.388	3.02	28.301	3.74	36.008	269.59	2790.489	392.35	3761.625
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	15.004	21.52	340.302	10.72	189.419	9.43	148.032	4.72	74.595	9.43	148.032
HD Trucks & Buses	10 <sup>-3</sup> L	19.397	13.14	254.977	7.89	151.042	41.38	862.849	6.97	135.197	21.62	719.363
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.001	22.31	0.022	6.00	0.006	18.13	0.019	53.01	0.053	51.61	0.052
Taxi	10 <sup>-3</sup> L	0.418	20.02	8.328	6.05	2.517	19.26	8.012	37.61	15.948	45.66	19.078
<b>TOTAL</b>				1639.427		368.389		1149.751		3599.748		9336.414

KALANG

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	4.771	22.80	107.825	4.04	18.275	19.26	91.889	67.88	323.855	459.63	2398.124
Motorcycle	10 <sup>-3</sup> L	5.530	88.77	491.164	3.02	16.780	3.74	20.893	269.59	1802.301	392.35	2170.873
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	10.189	21.52	219.498	10.72	108.797	9.43	95.705	4.72	47.900	9.43	95.705
HD Trucks & Buses	10 <sup>-3</sup> L	24.940	13.14	327.712	7.89	196.777	41.38	1002.017	6.97	173.832	21.62	529.203
<b>LPG</b>												
Samior	10 <sup>-3</sup> L	0.009	22.31	0.178	6.00	0.048	18.13	0.145	53.01	0.424	51.61	0.415
Taxi	10 <sup>-3</sup> L	0.222	20.02	4.444	6.05	1.343	19.26	4.276	37.61	8.348	45.66	10.161
<b>TOTAL</b>				1146.730		342.949		1244.726		2156.686		5004.499



SAHON NAPHON		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	7.754	22.80	175.240	4.04	31.226	19.26	149.342	57.08	526.312	499.63	3595.217
Motorcycle	10 <sup>-3</sup> L	9.142	89.77	811.535	3.02	27.809	3.74	31.191	269.99	2847.432	392.35	3595.964
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	16.102	21.52	347.806	10.72	173.257	9.43	192.408	4.72	76.205	9.43	102.408
HD Trucks & Buses	10 <sup>-3</sup> L	21.745	13.14	295.729	7.89	171.958	41.39	899.600	6.97	151.563	21.62	470.127
LPG												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	16.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.391	20.02	7.327	6.05	2.214	19.26	7.045	37.61	13.765	45.86	16.765
TOTAL				1627.538		405.974		1,442.796		3415.936		7782.400

NAHON PHANOM		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	4.026	22.80	90.998	4.04	18.265	19.26	77.541	67.89	273.295	499.63	1849.444
Motorcycle	10 <sup>-3</sup> L	5.141	89.77	456.267	3.02	15.526	3.74	19.227	269.99	1469.782	392.35	2017.071
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.431	21.52	101.500	10.72	90.412	9.43	79.533	4.72	39.707	9.43	79.533
HD Trucks & Buses	10 <sup>-3</sup> L	4.933	13.14	64.700	7.89	39.099	41.39	204.003	6.97	34.392	21.62	106.597
LPG												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	16.13	0.000	53.01	0.000	51.61	0.000
Taxi	10 <sup>-3</sup> L	0.193	20.02	3.954	6.05	1.166	19.26	3.717	37.61	7.299	45.86	8.851
TOTAL				797.498		162.269		694.021		1843.496		4063.465

UDON THANI		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	17.039	22.80	366.533	4.04	69.519	19.26	329.956	67.89	1157.995	499.63	7623.769
Motorcycle	10 <sup>-3</sup> L	18.048	89.77	1802.121	3.02	54.505	3.74	67.500	269.99	5226.521	392.35	7081.133
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	33.220	21.52	714.094	10.72	356.110	9.43	313.265	4.72	196.798	9.43	313.265
HD Trucks & Buses	10 <sup>-3</sup> L	76.912	13.14	1010.624	7.89	606.036	41.39	3197.819	6.97	536.077	21.62	1632.837
LPG												
Samlor	10 <sup>-3</sup> L	0.224	22.31	4.997	6.00	1.344	16.13	4.061	53.01	11.874	51.61	11.561
Taxi	10 <sup>-3</sup> L	0.844	20.02	16.697	6.05	5.106	19.26	16.255	37.61	31.743	45.86	39.706
TOTAL				3735.067		1092.820		3912.295		7120.977		16031.270

NONG KHAI		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	3.490	22.80	78.874	4.04	14.100	19.26	67.217	67.89	236.901	499.63	1800.619
Motorcycle	10 <sup>-3</sup> L	6.979	89.77	619.528	3.02	21.077	3.74	26.101	269.99	2021.073	392.35	2716.211
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	7.217	21.52	135.310	10.72	77.366	9.43	68.036	4.72	34.094	9.43	68.036
HD Trucks & Buses	10 <sup>-3</sup> L	16.702	13.14	245.744	7.89	147.559	41.39	773.869	6.97	130.363	21.62	404.337
LPG												
Samlor	10 <sup>-3</sup> L	0.050	22.31	1.116	6.00	0.300	16.13	0.907	53.01	2.651	51.61	2.561
Taxi	10 <sup>-3</sup> L	0.199	20.02	3.183	6.05	0.982	19.26	3.082	37.61	5.980	45.86	7.292
TOTAL				1103.753		261.363		679.233		2430.997		4821.095

LOEI		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	5.178	22.80	117.045	4.04	20.923	19.26	89.748	67.89	351.551	499.63	2315.245
Motorcycle	10 <sup>-3</sup> L	7.893	89.77	709.538	3.02	24.139	3.74	29.894	269.99	2314.693	392.35	3136.051
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.433	21.52	246.030	10.72	122.562	9.43	107.813	4.72	53.964	9.43	107.813
HD Trucks & Buses	10 <sup>-3</sup> L	16.890	13.14	216.207	7.89	131.604	41.39	583.812	6.97	116.229	21.62	380.838
LPG												
Samlor	10 <sup>-3</sup> L	0.076	22.31	1.596	6.00	0.456	16.13	1.778	53.01	4.029	51.61	3.922
Taxi	10 <sup>-3</sup> L	0.239	20.02	4.785	6.05	1.446	19.26	4.603	37.61	6.989	45.86	10.661
TOTAL				1266.409		301.210		934.068		2998.564		6664.632

CHUMPHON		SECTOR: TRANSPORTATION							AVG. SPEED = 32 KM/H			
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/yr	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr	kg/unit	ton/yr
GASOLINE												
LD Cars & Trucks	10 <sup>-3</sup> L	5.544	22.80	125.284	4.04	22.399	19.26	106.777	67.89	378.327	499.63	2542.645
Motorcycle	10 <sup>-3</sup> L	10.248	89.77	909.715	3.02	30.949	3.74	30.328	269.99	2667.719	392.35	4020.803
DIESEL												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.515	21.52	247.803	10.72	123.441	9.43	106.896	4.72	54.261	9.43	106.896
HD Trucks & Buses	10 <sup>-3</sup> L	14.822	13.14	194.761	7.89	116.946	41.39	613.324	6.97	103.309	21.62	320.452
LPG												
Samlor	10 <sup>-3</sup> L	0.012	22.31	0.268	6.00	0.072	16.13	0.218	53.01	0.836	51.61	0.619
Taxi	10 <sup>-3</sup> L	0.273	20.02	5.465	6.05	1.852	19.26	5.250	37.61	10.268	45.86	12.520
TOTAL				1483.306		295.457		872.501		3512.608		7005.625



SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/H-R												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	6.539	22.80	150.041	4.04	26.022	19.26	127.967	67.09	450.955	499.63	3044.045
Motorcycle	10 <sup>-3</sup> L	15.450	88.77	1375.314	3.02	46.709	3.74	57.944	299.99	4408.637	392.36	8079.679
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.519	21.52	248.534	10.72	123.005	9.43	100.907	4.72	54.511	9.43	100.907
HD Trucks & Buses	10 <sup>-3</sup> L	20.929	13.14	270.447	7.89	162.362	41.36	851.683	6.97	143.457	21.62	444.663
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.475	22.31	10.597	6.00	2.850	18.13	8.612	53.01	25.180	51.61	24.515
Tad	10 <sup>-3</sup> L	0.336	20.02	8.707	6.05	2.027	19.26	5.452	37.61	12.999	45.86	15.363
<b>TOTAL</b>				2061.641		364.664		1961.466		5173.020		9717.291

SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/H-R												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	3.707	22.80	83.779	4.04	14.976	19.26	71.397	67.99	251.601	499.63	1700.141
Motorcycle	10 <sup>-3</sup> L	7.857	88.77	697.466	3.02	23.726	3.74	29.305	299.99	2275.008	392.36	3082.694
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	8.023	21.52	172.655	10.72	86.007	9.43	75.667	4.72	37.667	9.43	75.667
HD Trucks & Buses	10 <sup>-3</sup> L	9.903	13.14	131.309	7.89	79.945	41.36	413.510	6.97	89.651	21.62	216.049
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.000	22.31	0.000	6.00	0.000	18.13	0.000	53.01	0.000	51.61	0.000
Tad	10 <sup>-3</sup> L	0.173	20.02	3.493	6.05	1.047	19.26	3.332	37.61	6.507	45.86	7.834
<b>TOTAL</b>				1068.671		204.602		593.211		2640.966		5032.475

SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/H-R												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	27.406	22.80	619.363	4.04	110.716	19.26	527.420	67.09	1660.251	499.63	12998.796
Motorcycle	10 <sup>-3</sup> L	33.945	88.77	2900.036	3.02	100.752	3.74	124.710	299.99	9668.379	392.36	13082.911
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	45.523	21.52	979.970	10.72	461.114	9.43	429.376	4.72	214.916	9.43	429.376
HD Trucks & Buses	10 <sup>-3</sup> L	54.717	13.14	718.961	7.89	431.717	41.36	2284.169	6.97	381.377	21.62	1162.962
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.005	22.31	0.112	6.00	0.130	18.13	0.091	53.01	0.295	51.61	0.299
Tad	10 <sup>-3</sup> L	1.484	20.02	29.209	6.05	8.657	19.26	26.197	37.61	55.061	45.86	87.139
<b>TOTAL</b>				5307.661		1140.136		3374.304		12168.249		27331.421

SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/H-R												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	2.852	22.80	84.456	4.04	11.522	19.26	54.800	67.09	190.994	499.63	1308.010
Motorcycle	10 <sup>-3</sup> L	4.630	88.77	411.005	3.02	13.990	3.74	17.316	299.99	1340.802	392.36	1816.561
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	5.234	21.52	112.638	10.72	56.108	9.43	49.267	4.72	24.704	9.43	49.267
HD Trucks & Buses	10 <sup>-3</sup> L	5.188	13.14	68.170	7.89	40.833	41.36	214.679	6.97	36.160	21.62	112.165
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.001	22.31	0.022	6.00	0.006	18.13	0.010	53.01	0.053	51.61	0.052
Tad	10 <sup>-3</sup> L	0.146	20.02	2.923	6.05	0.863	19.26	2.812	37.61	5.491	45.86	8.896
<b>TOTAL</b>				659.212		123.436		338.172		1607.804		3282.862

SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/H-R												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	8.777	22.80	199.380	4.04	35.429	19.26	169.045	67.09	595.783	499.63	4025.398
Motorcycle	10 <sup>-3</sup> L	11.129	88.77	967.965	3.02	31.961	3.74	41.611	299.99	3221.978	392.36	4366.265
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	17.715	21.52	381.227	10.72	161.974	9.43	167.052	4.72	83.615	9.43	167.052
HD Trucks & Buses	10 <sup>-3</sup> L	18.293	13.14	240.370	7.89	144.232	41.36	798.964	6.97	127.502	21.62	395.495
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.004	22.31	0.099	6.00	0.024	18.13	0.073	53.01	0.212	51.61	0.206
Tad	10 <sup>-3</sup> L	0.450	20.02	9.870	6.05	2.963	19.26	9.495	37.61	18.542	45.86	22.809
<b>TOTAL</b>				1817.571		406.203		1344.241		4047.632		8976.044

SECTOR: TRANSPORTATION												
AVG. SPEED = 32 KM/H-R												
type of fuel & engine	unit	consumption 10 <sup>-3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>-3</sup> L	6.418	22.80	145.002	4.04	25.621	19.26	123.572	67.09	435.518	499.63	2842.570
Motorcycle	10 <sup>-3</sup> L	15.224	88.77	1351.434	3.02	45.976	3.74	59.908	299.99	4408.718	392.36	5973.138
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>-3</sup> L	11.510	21.52	247.695	10.72	123.367	9.43	108.509	4.72	54.327	9.43	108.509
HD Trucks & Buses	10 <sup>-3</sup> L	40.867	13.14	536.651	7.89	322.362	41.36	1690.663	6.97	284.773	21.62	683.329
<b>LPG</b>												
Samlor	10 <sup>-3</sup> L	0.012	22.31	0.269	6.00	0.072	18.13	0.219	53.01	0.636	51.61	0.619
Tad	10 <sup>-3</sup> L	0.369	20.02	7.748	6.05	2.341	19.26	7.454	37.61	14.565	45.86	17.748
<b>TOTAL</b>				2286.006		520.059		1967.381		5193.529		8925.941



NARATHWAT

SECTOR: TRANSPORTATION

AVG. SPEED = 32 KM/H

type of fuel & engine	unit	consumption 10 <sup>3</sup> unit/y	SPM		SO <sub>x</sub>		NO <sub>x</sub>		HC		CO	
			kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y	kg/unit	ton/y
<b>GASOLINE</b>												
LD Cars & Trucks	10 <sup>3</sup> 3 L	7.034	22.90	153.968	4.04	28.417	19.26	136.475	67.08	477.468	450.53	3229.000
Motorcycle	10 <sup>3</sup> 3 L	22.051	88.71	1953.025	3.02	86.443	3.74	82.294	299.99	8371.270	382.35	8502.092
<b>DIESEL</b>												
LD Cars & Trucks & Vans	10 <sup>3</sup> 3 L	13.970	21.52	300.634	10.72	149.758	9.43	131.737	4.72	65.933	9.43	131.737
HD Trucks & Buses	10 <sup>3</sup> 3 L	11.172	13.14	146.800	7.89	86.147	41.39	482.297	8.97	77.999	21.82	241.539
<b>LPG</b>												
Samior	10 <sup>3</sup> 3 L	0.001	22.31	0.22	8.00	0.005	18.13	0.018	53.01	0.053	51.81	0.052
Fat	10 <sup>3</sup> 3 L	0.377	20.02	73.49	8.05	2281	19.26	7.281	37.81	14.175	75.98	17.299
<b>TOTAL</b>				<b>2587.002</b>		<b>326.053</b>		<b>819.072</b>		<b>7098.777</b>		<b>12249.712</b>



ศูนย์วิจัยทรัพยากร  
 จุฬาลงกรณ์มหาวิทยาลัย  
 จุฬาลงกรณ์มหาวิทยาลัย

รายละเอียดการจัดทำและการใช้ฐานข้อมูล

๑.1 โปรแกรมโลตัส วีลิส 2.3

ผู้ทำการศึกษาได้เลือกใช้โปรแกรมโลตัส เพราะเหตุว่าลักษณะการทำการศึกษาในครั้ง  
นี้เน้นหนักไปทางด้านการจัดการข้อมูลและการคำนวณผลที่มีจำนวนมากๆ มีความสอดคล้องกับความ  
สามารถของโปรแกรมโลตัส ซึ่งมีคุณสมบัติที่สำคัญ 3 ประการ คือ

1. การจัดการด้านการคำนวณ (spreadsheet)
2. การจัดการด้านกราฟิกส์ (graphics)
3. การจัดการเกี่ยวกับฐานข้อมูล (database)

นอกเหนือจากนี้ยังสามารถใช้คำสั่งมาโคร (macros) ซึ่งเป็นคำสั่งหลาย ๆ คำสั่ง  
มาเขียนเรียงกันเพื่อช่วยให้สามารถจัดการข้อมูลที่มีลักษณะซ้ำซ้อนกันได้รวดเร็วยิ่งขึ้น ไม่ต้องใช้  
คำสั่งทีละคำสั่ง โดยกดแป้น Alt พร้อมกับแป้นแทนชื่อมาโครเท่านั้น จึงเป็นการช่วยลดขั้นตอน  
ในการจัดการได้มาก จากการทำการศึกษาที่มีความจำเป็นอย่างยิ่งสำหรับการใช้มาโครมาช่วยใน  
การจัดการข้อมูลจำนวนมาก ๆ นอกจากนี้ผู้ทำการศึกษาได้ใช้มาโครในการสร้างเมนูสำหรับจัด  
การข้อมูลเพื่อให้ผู้ใช้ที่ไม่เคยใช้โลตัสเลยสามารถใช้งานได้โดยง่าย เนื่องจากเรียนรู้คำสั่งเบื้องต้น  
ค้นเพิ่มเติมอีกเล็กน้อยเท่านั้น

สาเหตุที่ต้องใช้ วีลิส 2.3 เนื่องจากในวีลิสนี้มีโปรแกรมเสริม (add-in) ที่เรียก  
ว่า wysiwyg (what you see is what you get) หมายถึงว่าเมื่อทำการจัดรูปแบบของ  
สเปรดชีตในโหมด wysiwyg ไว้อย่างไร เมื่อทำการพิมพ์เวิร์กชีตนั้นก็จะได้ผลงานพิมพ์ใกล้เคียง  
เคียงหรือเหมือนสิ่งๆที่มองเห็นได้ในหน้าจอภาพมาก นอกจากนี้ยังมีลักษณะเด่น ๆ ดังนี้



- สามารถเลือกใช้ชนิดและขนาดของตัวอักษรได้หลายแบบ ไม่ว่าจะเป็นตัวหนาหรือตัวเอน รวมทั้งการตีเส้นในลักษณะต่าง ๆ รวมทั้งการทำตารางจะกระทำได้ง่าย
- ทำรายงานที่มีข้อมูลตัวเลข ผสมข้อความและภาพกราฟิกสัณฐานในหน้าเดียวกัน
- พิมพ์ข้อมูลจำนวนมาก ๆ แบบตัวอักษรเล็กกระทัดรัดอยู่ภายในหน้าเดียว
- มองเวอ์กรังค์ตขนาดใหญได้มากขึ้นทางจอภาพ ในโหมดแบบย่ออัตโนมัติ

อย่างไรก็ดีการใช้โปรแกรมเสริม wysiwyg จำเป็นต้องอาศัยเนื้อที่ดิสค์ค่อนข้างมาก เพื่อการเก็บไฟล์โปรแกรมและไฟล์อื่น ๆ ที่เกี่ยวข้อง ขนาดดิสค์ที่ต้องการประมาณ 2,310,000 ไบต์ ดังนั้น การใช้โปรแกรมเสริมตัวนี้จึงจำเป็นต้องใช้ในฮาร์ดดิสค์เท่านั้น สำหรับการติดตั้งซอฟต์แวร์ 1-2-3 เมนูของการติดตั้งจะให้เลือกว่าต้องการนำโปรแกรมเสริมงาน 1-2-3 ตัวใดมาโหลดบ้าง ถ้าเลือกโปรแกรม wysiwyg ระบบจะโอนย้ายไฟล์ของ wysiwyg ไปเก็บในไดเรกทอรีชื่อ ของ 1-2-3 แล้วทำการเลือกพอนด์ที่ต้องการซึ่งมีอยู่ 3 ชุด คือ พอนด์พื้นฐาน (basic) พอนด์ขนาดกลาง (medium) และพอนด์ขยาย (extended)

อุปกรณ์ที่ใช้งานกับโปรแกรมโลตัส วลีส์ 2.3 มีดังนี้

- เครื่องคอมพิวเตอร์ 16 บิต เช่น IBM PC, XT, AT, PS/2 หรือเครื่อง compatible ทั่ว ๆ ไปซึ่งจะต้องมีหน่วยความจำอย่างน้อย 512 กิโลไบต์
- จอภาพ (monitor) เป็นแบบจอสีเขียว (monochrome) หรือจอสี (CGA, EGA, VGA)
- เครื่องพิมพ์ใช้ได้ทั้ง dot-matrix, near-letter-quality และ laser printer
- โปรแกรมควบคุมระบบ (operating system หรือ OS) ขึ้นอยู่กับเครื่องคอมพิวเตอร์ที่ใช้ ถ้าเป็นเครื่อง PC XT ใช้ DOS version 2.0 หรือสูงกว่า ถ้าเป็นเครื่อง PC AT ขึ้นไป ใช้ DOS version 3.0 หรือสูงกว่า

## ๑.2 แผ่น diskette

พร้อมนี้ผู้ทำการศึกษาได้ทำการ backup ข้อมูลที่เกี่ยวข้องและผลที่ได้จากการศึกษาไว้ในแผ่น diskette ชนิดอ่อนขนาด 3.5 นิ้ว ความจุแผ่นละ 1.44 ล้านตัวอักษร จำนวน 2 แผ่น ดังนั้นในการใช้ฐานข้อมูลปริมาณมลพิษจากการสันดาปเชื้อเพลิงชุดนี้จะต้องทำการ restore ทั้งสองแผ่นดังกล่าวเข้าในฮาร์ดดิสค์เสียก่อน โดยใช้คำสั่ง b>restore b: c:\*.\*/s แล้วใส่แผ่นที่หนึ่งและสองตามลำดับ

## ๑.3 ข้อมูลและผลการศึกษาที่เกี่ยวข้อง

### ๑.3.1 ข้อมูลที่เกี่ยวข้องกับปริมาณเชื้อเพลิง ดังนี้

- แหล่งข้อมูลและปริมาณน้ำมัน
- ข้อมูลในการทำสมดุลของข้อมูล
- ข้อมูลปริมาณน้ำมันที่ใช้ในสาขาคมนาคมขนส่ง

### ๑.3.2 ข้อมูล Emission Factor จาก

- U.S. EPA, 1976.
- TDRI, 1990.
- Emission Factor ที่ผู้ทำการศึกษารวบรวมจากแหล่งทั้งสองตามความเหมาะสม

๑.3.3 Calculation Table ประกอบด้วยตารางการคำนวณปริมาณมลพิษทางอากาศจากการสันดาปเชื้อเพลิง แยกตามสาขาเศรษฐกิจ 7 สาขา แต่ละสาขาเศรษฐกิจ แยกเป็นรายจังหวัด 73 จังหวัด ในแต่ละตารางการคำนวณจะประกอบไปด้วยปริมาณเชื้อเพลิงแต่ละชนิด Emission Factor และปริมาณมลพิษที่เกิดขึ้น 5 ชนิด

๑.3.4 Polltants ประกอบด้วยปริมาณมลพิษจากการสันดาปเชื้อเพลิง ในระดับประเทศ ระดับภาค และระดับจังหวัด พร้อมทั้งค่าเฉลี่ยอัตราการปล่อยมลพิษ ความหนาแน่นของมลพิษ และลำดับความสำคัญของพื้นที่ต่าง ๆ ตามปริมาณมลพิษ อัตราการปล่อยมลพิษ และความหนาแน่นของมลพิษ



#### ฉ.4 ชื่อแฟ้มข้อมูลและลักษณะของข้อมูล

ฉ.4.1 ข้อมูลที่เกี่ยวข้องกับปริมาณน้ำมันเชื้อเพลิงจัดเก็บอยู่ใน path directory c:\thesis\fuel\ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตารางจะแสดงถึงแหล่งข้อมูล ลักษณะของข้อมูลและรายละเอียดของแฟ้มข้อมูลในตารางที่ระบุในคอลัมน์ด้านขวาสุด ดังนี้

ชื่อแฟ้มข้อมูล	แหล่งข้อมูล	ลักษณะของข้อมูล	ตารางที่
\DCR\LPG-12	กรมทะเบียนการค้า	ปริมาณการขาย LPG แยกตามสาขา เศรษฐกิจ 12 สาขา เป็นรายจังหวัด	2.3
\DCR\KER-12	กรมทะเบียนการค้า	ปริมาณการขายน้ำมันก๊าดแยกตามสาขา เศรษฐกิจ 12 สาขา เป็นรายจังหวัด	2.3
\DCR\PGAS-12	กรมทะเบียนการค้า	ปริมาณการขายน้ำมันเบนซินพิเศษ แยกตามสาขาเศรษฐกิจ 12 สาขาเป็นรายจังหวัด	2.3
\DCR\RGAS-12	กรมทะเบียนการค้า	ปริมาณการขาย น้ำมันเบนซินธรรมดา แยกตามสาขาเศรษฐกิจ 12 สาขาเป็นรายจังหวัด	2.3
\DCR\HSD-12	กรมทะเบียนการค้า	ปริมาณการขาย น้ำมันดีเซลหมุนเร็ว แยกตามสาขาเศรษฐกิจ 12 สาขา เป็นรายจังหวัด	2.3
\DCR\LSD-12	กรมทะเบียนการค้า	ปริมาณการขายน้ำมันดีเซลหมุนช้า แยกตามสาขาเศรษฐกิจ 12 สาขา เป็นรายจังหวัด	2.3
\DCR\FO-12	กรมทะเบียนการค้า	ปริมาณการขายน้ำมันเตา แยกตามสาขาเศรษฐกิจ 12 สาขาเป็นรายจังหวัด	2.3

ชื่อแฟ้มข้อมูล	แหล่งข้อมูล	ลักษณะของข้อมูล	ตารางที่
\NEA\FUEL-7	สำนักงานพลังงาน แห่งชาติ	ปริมาณการใช้ น้ำมันแต่ละชนิด แยกตาม สาขาเศรษฐกิจ 7 สาขา	2.4
\NEA\FUEL-P	สำนักงานพลังงาน แห่งชาติ	ปริมาณยอดรวมการใช้ น้ำมันแต่ละชนิด เป็นรายจังหวัด	2.5
\EGAT\FUEL	การไฟฟ้าฝ่ายผลิต แห่งประเทศไทย	ปริมาณการใช้ เชื้อเพลิงของสาขาการ ผลิตไฟฟ้า	2.6
\PTT\NG-MAN	การปิโตรเลียมแห่ง ประเทศไทย	ปริมาณการใช้ ก๊าซธรรมชาติของสาขา อุตสาหกรรม	2.7
\DMR\LN-MAN	กรมทรัพยากรธรณี	ปริมาณการใช้ ก๊าซหิน ลิกไนต์ ของ สาขาอุตสาหกรรม	2.8

ณ.4.2 ข้อมูลที่เกี่ยวข้องกับการทำสมดุลของข้อมูลจัดเก็บอยู่ใน path directory c:\thesis\fuel\ ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตารางจะแสดงถึงลักษณะของข้อมูลและรายละเอียดของแฟ้มข้อมูลในตารางที่ระบุในคอลัมน์ด้านขวาสุด ดังนี้

ชื่อแฟ้มข้อมูล	ลักษณะของข้อมูล	ตารางที่
\EQUI\GROUP	ตารางการจัดกลุ่มสาขาเศรษฐกิจ และค่าแตกต่างระหว่าง ข้อมูลจากกรมทะเบียนการค้ากับข้อมูลของสำนักงานพลังงาน แห่งชาติ	3.1
\EQUI\EX-LPG	ตัวอย่างการทำสมดุลปริมาณการใช้ LPG แยกตามสาขา เศรษฐกิจ 7 สาขา เป็นรายจังหวัด	3.2
\EQUI\LPG	ข้อมูลการใช้ LPG แยกตามสาขาเศรษฐกิจ เป็นรายจังหวัด	3.3



ชื่อแฟ้มข้อมูล	ลักษณะของข้อมูล	ตารางที่
\EQUI\KER	ข้อมูลการใช้น้ำมันก๊าดแยกตามสาขาเศรษฐกิจเป็นรายจังหวัด	3.3
\EQUI\PGAS	ข้อมูลการใช้น้ำมันเบนซินพิเศษ แยกตามสาขาเศรษฐกิจเป็นรายจังหวัด	3.3
\EQUI\RGAS	ข้อมูลการใช้น้ำมันเบนซินธรรมดา แยกตามสาขาเศรษฐกิจเป็นรายจังหวัด	3.3
\EQUI\HSD	ข้อมูลการใช้ น้ำมันดีเซลหมุนเร็ว แยกตามสาขาเศรษฐกิจเป็นรายจังหวัด	3.3
\EQUI\LSD	ข้อมูลการใช้ น้ำมันดีเซลหมุนช้า แยกตามสาขาเศรษฐกิจเป็นรายจังหวัด	3.3
\EQUI\FO	ข้อมูลการใช้ น้ำมันเตาแยกตามสาขาเศรษฐกิจเป็นรายจังหวัด	3.3

ฉ.4.3 ข้อมูลที่เกี่ยวข้องกับปริมาณน้ำมันที่ใช้ในสาขาคมนาคมขนส่ง ส่งจัดเก็บอยู่ใน path directory c:\thesis\fuel\ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตาราง จะแสดงถึงแหล่งข้อมูล ลักษณะของข้อมูล และรายละเอียดของแฟ้มข้อมูลดูในตารางหรือภาคผนวกที่ระบุในคอลัมน์ด้านขวาสุด ดังนี้

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย

ชื่อแฟ้มข้อมูล	แหล่งข้อมูล	ลักษณะของข้อมูล	ค/น
\TRAN\VEHICLE	กรมการขนส่งทางบก	จำนวนรถที่จดทะเบียนในปี 2532 แยกตามชนิดรถ เป็นรายจังหวัด	ค
\TRAN\FE	สำนักงานพลังงานแห่งชาติและสำนักงานนโยบายพลังงานแห่งชาติ	สัดส่วนของรถที่ใช้เครื่องยนต์เบนซิน ดีเซล และ LPG ระยะทางวิ่งเฉลี่ย และอัตราการใช้น้ำมันของรถชนิดต่างๆ แยกเป็นพื้นที่กรุงเทพฯ นอกกรุงเทพฯ	3.4
\TRAN\AFE	สถาบันวิจัยเพื่อการพัฒนาแห่งประเทศไทย	อัตราการใช้น้ำมันของรถชนิดต่าง ๆ ที่ความเร็ว 0-1, 8, 16, 32 กม/ชม	2.11
\TRAN\CAL-BMR	-	ตารางการคำนวณปริมาณการใช้น้ำมันของรถประเภทต่าง ๆ เป็นรายจังหวัด ในกรุงเทพมหานครและปริมณฑล	ง
\TRAN\CAL-C	-	ตารางการคำนวณปริมาณการใช้น้ำมันของรถประเภทต่าง ๆ เป็นรายจังหวัด ในภาคกลาง	ง
\TRAN\CAL-E	-	ตารางการคำนวณปริมาณการใช้น้ำมันของรถประเภทต่าง ๆ เป็นรายจังหวัด ในภาคตะวันออก	ง
\TRAN\CAL-W	-	ตารางการคำนวณปริมาณการใช้น้ำมันของรถประเภทต่าง ๆ เป็นรายจังหวัด ในภาคตะวันตก	ง
\TRAN\CAL-N	-	ตารางการคำนวณปริมาณการใช้น้ำมันของรถประเภทต่าง ๆ เป็นรายจังหวัด ในภาคเหนือ	ง



ชื่อแฟ้มข้อมูล	แหล่งข้อมูล	ลักษณะของข้อมูล	ต/น
\TRAN\CAL-NE	-	ตารางการคำนวณปริมาณการใช้ น้ำมัน ของรถประเภทต่าง ๆ เป็นรายจังหวัด ในกรุงเทพมหานครและปริมณฑล	ง
\TRAN\CAL-S	-	ตารางการคำนวณปริมาณการใช้ น้ำมัน ของรถประเภทต่าง ๆ เป็นรายจังหวัด ในกรุงเทพมหานครและปริมณฑล	ง
\TRAN\FUEL	-	สรุปปริมาณการใช้ น้ำมันของรถประเภท ต่าง ๆ เป็นรายจังหวัด	3.5

ดู.4.4 ข้อมูลที่เกี่ยวข้องกับคุณภาพของเชื้อเพลิง และตัวแปลงหน่วยที่เกี่ยวข้องกับเชื้อเพลิง จัดเก็บอยู่ใน path directory c:\thesis\fuel\ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตารางจะแสดงถึงแหล่งข้อมูล ลักษณะของข้อมูลและรายละเอียดของแฟ้มข้อมูลในภาคผนวกที่ระบุในคอลัมน์ด้านขวาสุด ดังนี้

ชื่อแฟ้มข้อมูล	แหล่งข้อมูล	ลักษณะของข้อมูล	ภาคผนวก
\OTHER\QUALITY	การปิโตรเลียมแห่งประเทศไทย สำนักงานพลังงานแห่งชาติ และ การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย	คุณภาพของเชื้อเพลิงที่ใช้ในประเทศ ไทย	ก
\OTHER\CONVERSE	สำนักงานพลังงานแห่งชาติ	ตารางการเปลี่ยนหน่วย	ข

๓.4.5 ข้อมูลที่เกี่ยวข้องกับ emission factor จัดเก็บอยู่ใน path directory c:\thesis\ef\ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตารางจะแสดงถึงแหล่งข้อมูล ลักษณะของข้อมูลและรายละเอียดของแฟ้มข้อมูลในตารางที่ระบุในคอลัมน์ด้านขวาสุด ดังนี้

ชื่อแฟ้มข้อมูล	แหล่งข้อมูล	ลักษณะของข้อมูล	ตารางที่
\US-EPA\A-C-M	U.S.EPA, 1976.	Emission Factors ที่ใช้กับสาขาเกษตรกรรม ก่อสร้าง และอุตสาหกรรม	2.9
\TDRI\TRAN-KM	สถาบันวิจัยเพื่อการ พัฒนาแห่งประเทศไทย	Emission Factors สำหรับสาขาคมนาคมขนส่ง (กรัม/กิโลเมตร)	2.10
\TDRI\TRAN-LIT	-	Emission Factors สำหรับสาขาคมนาคมขนส่ง (กิโลกรัม/1000 ลิตร)	2.12
\TDRI\S-F	สถาบันวิจัยเพื่อการ พัฒนาแห่งประเทศไทย	Emission Factors แยกตามสาขาเศรษฐกิจ และชนิดของเชื้อเพลิง	2.13
\STUDY\STUDY	-	Emission Factors แยกตามสาขาเศรษฐกิจ และชนิดของเชื้อเพลิงที่ใช้ในการศึกษา	2.14



๔.4.6 ข้อมูลที่เกี่ยวข้องกับตารางการคำนวณปริมาณมลพิษทางอากาศ จัดเก็บอยู่ใน path directory c:\thesis\cal-t\ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตาราง จะแสดงถึงลักษณะของข้อมูลและรายละเอียดของแฟ้มข้อมูลดูในภาคผนวกที่ระบุ ในคอลัมน์ด้านขวา

ชื่อแฟ้มข้อมูล	ลักษณะของข้อมูล	ภาคผนวก
\AGR	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาเกษตรกรรม เป็นรายจังหวัด	จ
\MIN	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาเหมืองแร่ เป็นรายจังหวัด	ฉ
\MAN	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาอุตสาหกรรม เป็นรายจังหวัด	ช
\ELE	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาการผลิตไฟฟ้า เป็นรายจังหวัด	ซ
\CONS	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาก่อสร้าง เป็นรายจังหวัด	ฅ
\RES	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาบ้านที่อยู่อาศัย เป็นรายจังหวัด	ฉ
\TRA	ตารางการคำนวณปริมาณมลพิษ แยกตามสาขาคมนาคมขนส่ง เป็นรายจังหวัด	ค

๔.4.7 ข้อมูลที่เกี่ยวข้องกับปริมาณมลพิษทางอากาศ ค่าเฉลี่ยอัตราการปล่อยมลพิษ และความหนาแน่นของมลพิษจัดเก็บอยู่ใน path directory c:\thesis\poll\ตามด้วยชื่อแฟ้มข้อมูลในตารางข้างล่างนี้ ในตารางจะแสดงถึงลักษณะของข้อมูลและรายละเอียดของแฟ้มข้อมูลในตารางที่ระบุ ในคอลัมน์ด้านขวาสุด ดังนี้

ชื่อแฟ้มข้อมูล	ลักษณะของข้อมูล	ตารางที่
\ALL\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาปเชื้อเพลิงแยกตามสาขาเศรษฐกิจ	4.2
\ALL\AVE-DEN	ปริมาณมลพิษต่อ GDP ปริมาณมลพิษต่อคนและปริมาณมลพิษต่อพื้นที่ ปี 2532	4.3
\REGION\POL	ปริมาณและสัดส่วนการปล่อยสารมลพิษทางอากาศจากการสันดาปเชื้อเพลิงเป็นรายภาค ปี 2532	4.4
\REGION\PRIOLITY\POL	ลำดับความสำคัญจัดตามปริมาณมลพิษ แยกเป็นรายภาค	4.5
\REGION\SECTOR	ปริมาณและสัดส่วนการปล่อยสารมลพิษทางอากาศจากการสันดาปเชื้อเพลิง แยกตามสาขาเศรษฐกิจเป็นรายภาค ปี 2532	4.6
\REGION\AVE-DEN	ปริมาณมลพิษต่อ GRP และปริมาณมลพิษต่อพื้นที่เป็นรายภาค ปี 2532	4.7
\REGION\PRIORITY\AVE	ลำดับตามปริมาณมลพิษต่อ GRP เป็นรายภาค ปี 2532	4.8
\REGION\PRIOLITY\DEN	ลำดับตามปริมาณมลพิษต่อ พื้นที่ เป็นรายภาค ปี 2532	4.9
\PROVINCE\POL	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาปเชื้อเพลิงเป็นรายจังหวัด ปี 2532	4.10
\PROVINCE\POL	สัดส่วนการปล่อยสารมลพิษทางอากาศจากการสันดาปเชื้อเพลิงเป็นรายจังหวัด ปี 2532	4.11



ชื่อเต็มข้อมูล	ลักษณะของข้อมูล	ตารางที่
\PROVINCE\PRIORITY\POL	ลำดับตามปริมาณ SPM เป็นรายจังหวัด ปี 2532	4.12
\PROVINCE\PRIORITY\POL	ลำดับตามปริมาณ SOx เป็นรายจังหวัด ปี 2532	4.13
\PROVINCE\PRIORITY\POL	ลำดับตามปริมาณ NOx เป็นรายจังหวัด ปี 2532	4.14
\PROVINCE\PRIORITY\POL	ลำดับตามปริมาณ HC เป็นรายจังหวัด ปี 2532	4.15
\PROVINCE\PRIORITY\POL	ลำดับตามปริมาณ CO เป็นรายจังหวัด ปี 2532	4.16
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาเกษตรกรรม เป็นรายจังหวัด	4.17
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาเหมืองแร่ เป็นรายจังหวัด	4.18
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาอุตสาหกรรม เป็นรายจังหวัด	4.19
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาการผลิตไฟฟ้า เป็นรายจังหวัด	4.20
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาก่อสร้าง เป็นรายจังหวัด	4.21
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาบ้านที่อยู่อาศัย เป็นรายจังหวัด	4.22
\PROVINCE\SECTOR	ปริมาณการปล่อยสารมลพิษทางอากาศจากการสันดาป เชื้อเพลิง แยกตามสาขาคมนาคมขนส่ง เป็นรายจังหวัด	4.23
\PROVINCE\AVE-DEN	ปริมาณ SPM ต่อ GPP และปริมาณ SPM ต่อ พื้นที่เป็น เป็นรายจังหวัด ปี 2532	4.24
\PROVINCE\AVE-DEN	ปริมาณ SOx ต่อ GPP และปริมาณ SOx ต่อ พื้นที่เป็น เป็นรายจังหวัด ปี 2532	4.25
\PROVINCE\AVE-DEN	ปริมาณ NOx ต่อ GPP และปริมาณ NOx ต่อ พื้นที่เป็น เป็นรายจังหวัด ปี 2532	4.26

ชื่อนี้มีข้อมูล	ลักษณะของข้อมูล	ตารางที่
\PROVINCE\AVE-DEN	ปริมาณ HC ต่อ GPP และปริมาณ HC ต่อ พื้นที่ เป็น เป็นรายจังหวัด ปี 2532	4.27
\PROVINCE\AVE-DEN	ปริมาณ CO ต่อ GPP และปริมาณ CO ต่อ พื้นที่ เป็น เป็นรายจังหวัด ปี 2532	4.28
\PROVINCE\PRIORITY\AVE	ลำดับตามปริมาณ SPM ต่อ GPP เป็นรายจังหวัด ปี 2532	4.29
\PROVINCE\PRIORITY\AVE	ลำดับตามปริมาณ SOx ต่อ GPP เป็นรายจังหวัด ปี 2532	4.30
\PROVINCE\PRIORITY\AVE	ลำดับตามปริมาณ NOx ต่อ GPP เป็นรายจังหวัด ปี 2532	4.31
\PROVINCE\PRIORITY\AVE	ลำดับตามปริมาณ HC ต่อ GPP เป็นรายจังหวัด ปี 2532	4.32
\PROVINCE\PRIORITY\AVE	ลำดับตามปริมาณ CO ต่อ GPP เป็นรายจังหวัด ปี 2532	4.33
\PROVINCE\PRIORITY\DEN	ลำดับตามปริมาณ SPM ต่อ พื้นที่ เป็นรายจังหวัด ปี 2532	4.34
\PROVINCE\PRIORITY\DEN	ลำดับตามปริมาณ SOx ต่อ พื้นที่ เป็นรายจังหวัด ปี 2532	4.35
\PROVINCE\PRIORITY\DEN	ลำดับตามปริมาณ NOx ต่อ พื้นที่ เป็นรายจังหวัด ปี 2532	4.36
\PROVINCE\PRIORITY\DEN	ลำดับตามปริมาณ HC ต่อ พื้นที่ เป็นรายจังหวัด ปี 2532	4.37
\PROVINCE\PRIORITY\DEN	ลำดับตามปริมาณ CO ต่อ พื้นที่ เป็นรายจังหวัด ปี 2532	4.38



### ผ.5 การเรียกใช้โปรแกรมโลตัส ลิสต์ 2.3

เมื่อจอภาพมีเครื่องหมาย C> และมี Cursor รอยต่อจากเครื่องหมายนี้แล้ว ให้พิมพ์ cd\123r23 กด Enter จากนั้นพิมพ์ 123 กด Enter จากนั้นจอภาพจะปรากฏเวอริกซ์ติด เพื่อความสะดวกในการใช้โปรแกรม Add-in ที่เรียกว่า wysiwyg ให้ใช้คำสั่งโดยกระทัดรัด ดังนี้

กดเครื่องหมาย / เพื่อใช้คำสั่งในโลตัส worksheet global default other add-in set 1 wysiwyg หลังจากนั้นให้ใช้คำสั่ง worksheet global default update ต่อไปนี้หลังจากเรียกโปรแกรมโลตัสแล้ว จะมีการเรียกโปรแกรมเสริม Add-in wysiwyg เข้ามาโดยอัตโนมัติ การใช้คำสั่งใน Add-in wysiwyg เนียงแต่กดเครื่องหมาย : (colon) โดยการกด Shift พร้อมกับอักษร ว นั้นเอง

### ผ.6 การเลิกทำงาน การลบเวอริกซ์ติดและการลบข้อมูลเนื่องบางส่วน

การเลิกทำงานให้ใช้คำสั่ง quit yes ในกรณีที่เวอริกซ์ติดมีการเปลี่ยนแปลงไป จะมีคำถามย้ำว่าต้องการเลิกทำงานจริงหรือไม่ ถ้าลืมเก็บข้อมูลโดยการ save ให้เลือก no แล้วทำการ save และตั้งชื่อแฟ้มข้อมูลต่อไป แต่ถ้าต้องการเลิกทำงานแน่นอนโดยไม่ต้องเก็บข้อมูลนั้นมาใช้อีก ให้เลือก yes จอภาพจะปรากฏ C> ปิดเครื่องได้

การลบเวอริกซ์ติดบนจอภาพทั้งหมดให้ใช้คำสั่ง worksheet delete yes ถ้าไม่ต้องการลบให้เลือก no เช่นเดียวกัน

การลบข้อมูลบางส่วนบนเวอริกซ์ติดให้ใช้คำสั่ง range erase จากนั้นกำหนดตำแหน่งกลุ่มเซลล์ที่ต้องการจะลบโดยการใส่เป็นลูกศร เช่น a1..e10 เป็นต้น แล้วกด Enter ข้อมูลในคอลัมน์ a ถึง e และแถวที่ 1 ถึง 10 จะถูกลบไป

### ๑.7 การทำงานนอกเหนือจาก drive C:

หลังจากเรียกโปรแกรมโวลต์สแล้ว ต้องการทำงานบน drive อื่น เช่น drive A: หรือ drive B: ให้ใช้คำสั่ง file directory แล้วพิมพ์ A: หรือ B: เพื่อเปลี่ยน drive ให้ไปทำงานตาม drive ที่ต้องการ

### ๑.8 การเรียกเพิ่มข้อมูลมาหรือต้องการแก้ไขข้อมูล

เนื่องจากชื่อเพิ่มข้อมูลมีจำนวนมากอาจทำให้ การเรียกข้อมูลมาหรือทำการแก้ไขได้ลำบาก ดังนั้นผู้ทำการศึกษาจึงเขียนมาโครแสดงเป็นเมนูให้เลือกเพิ่มข้อมูลเป็นตัวเลข เพื่อให้การเรียกใช้เพิ่มข้อมูลกระทำได้ง่ายขึ้น หลังจากเข้าสู่โปรแกรมโวลต์สแล้ว ให้เรียกเพิ่มข้อมูลโดยใช้คำสั่ง file retrieve (/fr) แล้วเลือกชื่อเพิ่มข้อมูล MENU กด Enter หน้าจอภาพจะปรากฏเมนูมาให้เลือกตัวเลขต่าง ๆ ในโหนดของมาโคร ซึ่งจะปรากฏตัวอักษร CMD ด้านล่างของจอภาพ เพื่อบอกสภาพการขอรับข้อมูลในการทำงานของมาโคร จากนั้นเลือกตัวเลขซึ่งแสดงลักษณะของข้อมูลในเมนูเพื่อเข้าสู่เพิ่มข้อมูลที่ต้องการ เมื่อเพิ่มข้อมูลปรากฏมาแล้วเป็นอันสิ้นสุดการทำงานของมาโคร จากนั้นสามารถทำการดูหรือแก้ไขข้อมูลโดยใช้คำสั่งของโวลต์สต่อไป (ในกรณีที่กำลังอยู่ในโหนดของมาโครถ้าหากต้องการทำงานโดยใช้คำสั่งของโวลต์ส ให้กดแป้น Ctrl+Break แล้วกดแป้น Esc) ถ้าหากไม่สามารถดูเพิ่มข้อมูลได้ทั้งหมดในหน้าจอเดียวสามารถเลื่อนดูเพิ่มข้อมูลโดยใช้เป็นลูกศร ข้าง ขวา หน้า หลัง เลื่อนดูได้ที่ละคอลัมน์และที่ละแถว หากต้องการเลื่อนเพิ่มข้อมูลที่ละหน้าจอภาพ ให้กดแป้น Tab เป็นการเลื่อนหน้าจอภาพไปทางขวาหนึ่งหน้าจอภาพ หรือให้เลื่อนมาทางซ้ายหนึ่งหน้าจอให้กดแป้น Shift ค้างไว้แล้วกดแป้น Tab ถ้าต้องการเลื่อนหน้าจอขึ้นหรือลงที่ละหน้าจอ ให้กดแป้น Page up หรือ Page down

การแก้ไขเพิ่มข้อมูลให้เลื่อน Cursor ไปยังเซลล์ข้อมูลที่ต้องการแก้ไข แล้วพิมพ์ตัวเลขหรือตัวอักษรที่ต้องการใหม่จากนั้นกด Enter ข้อมูลใหม่ก็จะไปแทนที่ข้อมูลเก่าทันที ในกรณีข้อมูลที่เป็นตัวเลขหรือตัวอักษรที่ต้องการแก้ไขมีเล็กน้อย ไม่จำเป็นต้องแก้ไขทั้งหมดให้กดแป้น F2 ตัวเลขหรือข้อความที่อยู่ในเซลล์นั้น จะไปปรากฏอยู่ที่มุมบนด้านซ้ายของจอภาพ Cursor จะอยู่



ที่ตำแหน่งตัวสุดท้ายของบรรทัด เลื่อน Cursor ไปยังตำแหน่งที่ต้องการแก้ไขกดแป้น Del จะเป็นการลบตัวเลขหรือตัวอักษรที่ Cursor อยู่ ตัวเลขหรือตัวอักษรทางขวาจะชิดเข้ามา แล้วพิมพ์ตัวเลขหรือตัวอักษรที่ถูกต้องเข้าแทน กด Enter ตัวเลขหรือข้อความที่แก้ไขแล้วจะแทนที่ในเซลล์นั้น ๆ

การป้อนข้อมูลที่เป็นตัวเลขหรือแก้ไขตัวเลขใหม่ ในเซลล์ที่เป็นข้อมูลประเภทตารางการคำนวณ เช่น การป้อนตัวเลขหรือแก้ไขตัวเลขปริมาณน้ำมัน หรือ Emission Factor จากแฟ้มข้อมูล \THESIS\CAL-T\\*. \* จะมีผลให้ผลลัพธ์ของปริมาณมลพิษเปลี่ยนตามไปด้วย หรือการป้อนตัวเลขหรือแก้ไขตัวเลขจำนวนรถหรือสัดส่วนของรถ จากแฟ้มข้อมูล \THESIS\FUEL\TRAN\CAL-\*. \* จะมีผลให้ผลลัพธ์ของปริมาณน้ำมันที่ใช้เปลี่ยนแปลงไป หรือจากแฟ้มข้อมูลทุกแฟ้มในบรรทัดที่เป็นผลลัพธ์ซึ่งมักจะมีคำว่า subtotal และ total ผลลัพธ์ที่ได้จะเปลี่ยนไปตามสูตรการคำนวณที่กำหนดลงในเซลล์นั้น ๆ เนื่องจากโครงสร้างสูตรในลักษณะรีเลทีฟ (relative) คือ สามารถปรับผลลัพธ์ตามตัวเลขที่เปลี่ยนไป หรือเมื่อย้ายสูตรไปที่ใดก็จะทำการปรับสูตรตามจำนวนคอลัมน์และแถวที่ย้ายไป

การดูสูตรที่บรรทัดอยู่ในเซลล์ต่าง ๆ สามารถดูได้ โดยเลื่อน Cursor ไปยังเซลล์นั้น สูตรที่บรรทัดอยู่ในเซลล์นั้นจะไปปรากฏอยู่บนด้านซ้ายของจอภาพ และสามารถแก้ไขสูตรเหล่านั้นได้โดยการกดแป้น F2 แล้วทำการแก้ไขตามขั้นตอนที่กล่าวมาแล้ว ผลลัพธ์ที่ได้จะเปลี่ยนไปตามสูตรใหม่ที่ใส่เข้าไป

#### ๑.9 การทำงานบนเมนู

เรียกเมนูโดยการใช้น้ำเสียง /fr เลือกแฟ้มข้อมูล MENU หรือจะเข้าสู่เมนูโดยกด ALT+M จะปรากฏเมนูบนจอภาพดังภาพที่แสดงในหน้าถัดไป ให้เลือกหมายเลขที่ต้องการ พิมพ์ตัวเลขนั้นลงในเซลล์ที่มีลูกศรชี้เท่านั้น ถ้าหากพิมพ์ตัวเลขนอกเหนือจากที่มีในเมนู จะปรากฏข้อความว่า PLEASE CHOOSE ONLY NUMBER 1-5...! + ENTER ให้กดแป้น Enter มาโดยจะสั่งให้มาทำงานในเมนูเดิมต่อไป จากนั้นให้กดตัวเลขตามที่ต้องการใหม่ โดยมีเส้นทางเข้าสู่แฟ้มข้อมูล ดังนี้

**MAIN MENU**

1. FUEL DATA
2. EMISSION FACTORS
3. POLLUTANTS CALCULATION TABLE
4. POLLUTANTS
5. EXIT TO 1-2-3 ACCESS MENU

CHOOSE ITEM NUMBER-->

MENU 1

ศูนย์วิจัยทรัพยากร  
อุทกศาสตร์และมหาสมุทรวิทยา  
จุฬาลงกรณ์มหาวิทยาลัย



<i>FUEL DATA</i>	
1. DEPARTMENT OF COMMERCIAL REGISTRATION	(DCR)
2. NATIONAL ENERGY ADMINISTRATION	(NEA)
3. ELECTRICITY GENERATION AUTHORITY OF THAILAND	(EGAT)
4. PETROLEUM AUTHORITY OF THAILAND	(PTT)
5. DEPARTMENT OF MINERAL RESOURCES	(DMR)
6. EQUILIBIUM DATA	(EQU)
7. TRANSPORT DATA	(TRAN)
8. OTHER DATA	(OTHER)
0. QUIT TO MAIN MENU	

CHOOSE ITEM NUMBER-->

MENU 1.1

<i>DCR</i>
1. LPG
2. KEROSENE
3. PREMIUM GASOLINE
4. REGULAR GASOLINE
5. HIGH SPEED DIESEL
6. LOW SPEED DIESEL
7. FUEL OIL
0. QUIT TO FUEL DATA

CHOOSE ITEM NUMBER-->

MENU 1.1.1

NATIONAL ENERGY ADMINISTRATION (NEA)

1. TYPE OF FUEL BY ECONOMIC
2. TYPE OF FUEL BY PROVINCES
0. QUIT TO FUEL DATA

CHOOSE ITEM NUMBER-->

MENU 1.1.2

ELECTRICITY GENERATION AUTHORITY

1. TYPE OF FUEL BY ELECTRICITY
0. QUIT TO FUEL DATA

CHOOSE ITEM NUMBER-->

MENU 1.1.3



PETROLEUM AUTHORITY OF THAILAND	
1. NATURAL GAS BY MANUFACTURE	
0. QUIT TO FUEL DATA	
CHOOSE ITEM NUMBER-->	<input type="text"/>

MENU 1.1.4

DEPARTMENT OF MINERAL RESOURCES	
1. FOSSIL FUEL BY MANUFACTURE	
0. QUIT TO FUEL DATA	
CHOOSE ITEM NUMBER-->	<input type="text"/>

MENU 1.1.5

EQUILIBIUM DATA	
1. GROUPING FROM DCR DATA	
2. EXAMPLE FOR LPG EQUILIBIUM	
3. LPG	
4. KEROSENE	
5. PREMIUM GASOLINE	
6. REGULAR GASOLINE	
7. HIGH SPEED DIESEL	
8. LOW SPEED DIESEL	
9. FUEL OIL	
0. QUIT TO FUEL DATA	
CHOOSE ITEM NUMBER--> <input type="text"/>	

MENU 1.1.6

TRANSPORT DATA	
1. NUMBER OF VEHICLE BY TYPE, PROVINCE	
2. FUEL EFFICIENCY BY VEHICLE TYPE, FUEL TYPE AND AREAS	
3. ABSOLUTE FLEET EFFICIENCY	
4. CALCULATION TABLE FOR FUEL USE BY TRANSPORTATION	
5. FUEL TYPE USE BY TRANSPORT, PROVINCE	
0. QUIT TO FUEL DATA	
CHOOSE ITEM NUMBER--> <input type="text"/>	

MENU 1.1.7



**EMISSION FACTOR**

1. U.S. EPA, 1976. FOR AGRICULTURE, CONSTRUCTION, MANUFACTURE
  2. TDRI, 1990. FOR TRANSPORTATION (G/Km)
  3. TDRI, 1990. FOR TRANSPORTATION (Km/1000 L)
  4. TDRI, 1990. BY ECONOMIC SECTORS, FUEL TYPES
  5. USAGE IN THIS STUDY
0. QUIT TO MAIN MENU

CHOOSE ITEM NUMBER--> 

MENU 1.2

**POLLUTANTS CALCULATION TABLE**

1. CALCULATION TABLE BY AGRICULTURE, PROVINCE
  2. CALCULATION TABLE BY MINING, PROVINCE
  3. CALCULATION TABLE BY MANUFACTURE, PROVINCE
  4. CALCULATION TABLE BY ELECTRICITY, PROVINCE
  5. CALCULATION TABLE BY CONSTRUCTION, PROVINCE
  6. CALCULATION TABLE BY RESIDENTIAL, PROVINCE
  7. CALCULATION TABLE BY TRANSPORTATION, PROVINCE
0. QUIT TO MAIN MENU

CHOOSE ITEM NUMBER--> 

MENU 1.3

**POLLUTANTS**

1. ALL
2. REGIONS
3. PROVINCES
  
0. QUIT TO MAIN MENU

CHOOSE ITEM NUMBER-->

MENU 1.4

**ALL**

1. SECTORS
2. AVERAGE (KG/PERSON) AND DENSITY (KG/SQ.KM)
  
0. QUIT TO POLLUTANTS

CHOOSE ITEM NUMBER-->

MENU 1.4.1



<i>REGIONS</i>	
1. POLLUTANTS	
2. SECTORS	
3. AVERAGE (KG/PERSON) AND DENSITY (KG/SQ.Km)	
4. PRIORITY OF POLLUTANT , AVERAGE , DENSITY	
0. QUIT TO POLLUTANTS	
CHOOSE ITEM NUMBER--> <input type="text"/>	

MENU 1.4.2

<i>PRIORITY (REGION)</i>	
1. POLLUTANTS	
2. AVERAGE (KG/PERSON)	
3. DENSITY (KG/SQ.Km)	
0. QUIT TO REGION	
CHOOSE ITEM NUMBER---> <input type="text"/>	

MENU 1.4.2.1

**PROVINCES**

1. POLLUTANTS
2. SECTORS
3. AVERAGE (KG/PERSON) AND DENSITY (KG/SQ.Km)
4. PRIORITY OF POLLUTANT , AVERAGE , DENSITY
  
0. QUIT TO POLLUTANTS

CHOOSE ITEM NUMBER-->

MENU 1.4.3

**PRIORITY (PROVINCE)**

1. POLLUTANTS
2. AVERAGE (KG/PERSON)
3. DENSITY (KG/SQ.Km)
  
0. QUIT TO REGION

CHOOSE ITEM NUMBER-->

MENU 1.4.3.1



MAIN MENU1----->FUEL DATA

- 1 (DCR)----->1 LPG
  - 2 KEROSENE
  - 3 PREMIUM GASOLINE
  - 4 REGULAR GASOLINE
  - 5 HIGH SPEED DIESEL
  - 6 LOW SPEED DIESEL
  - 7 FUEL OIL
  - 0 QUIT TO FUEL DATA
- 2 (NEA)----->1 TYPE OF FUEL BY ECONOMIC
  - 2 TYPE OF FUEL BY PROVINCES
  - 0 QUIT TO FUEL DATA
- 3 (EGAT)----->1 TYPE OF FUEL BY ELECTRICITY
  - 0 QUIT TO FUEL DATA
- 4 (PTT)----->1 NATURAL GAS BY MANUFACTURE
  - 0 QUIT TO FUEL DATA
- 5 (DMR)----->1 FOSSIL FUEL BY MANUFACTURE
  - 0 QUIT TO FUEL DATA
- 6 (EQUI)----->1 GROUPING FROM DCR DATA
  - 2 EXAMPLE FOR LPG EQUILIBIUM
  - 3 LPG
  - 4 KEROSENE
  - 5 PREMIUM GASOLINE
  - 6 REGULAR GASOLINE
  - 7 HIGH SPEED DIFSEL
  - 8 LOW SPEED DIESEL

- 9 FUEL OIL
- 0 QUIT TO FUEL DATA
- 7 (TRAN)----->1 NUMBER OF VEHICLE BY TYPE, PROVINCE.
  - 2 FUEL EFFICIENCY BY VEHICLE TYPE, FUEL TYPE AND AREAS
  - 3 ABSOLUTE FLEET EFFICIENCY
  - 4 CALCULATION TABLE FOR FUEL USE BY TRANSPORT
    - 1 PROVINCES OF BMR
    - 2 PROVINCES OF CENTRAL
    - 3 PROVINCES OF EASTERN
    - 4 PROVINCES OF WESTERN
    - 5 PROVINCES OF NORTHERN
    - 6 PROVINCES OF NORTHEASTERN
    - 7 PROVINCES OF SOUTHERN
    - 0 QUIT TO TRANSPORT DATA
- 8 (OTHER)----->1 QUALITY OF FUEL TYPE
  - 2 CONVERSION FACTORS
  - 0 QUIT TO MAIN MENU

2----->EMISSION FACTOR

- 1 U.S.EPA, 1976. FOR AGRICULTURE, CONSTRUCTION, MANUFACTURE
- 2 TDRI, 1990. FOR TRANSPORTATION (G/KM).
- 3 TDRI, 1990. FOR TRANSPORTATION (KG/1000 L).
- 4 TDRI, 1990. BY ECONOMIC SECTORS, FUEL TYPES
- 5 USAGE IN THIS STUDY
- 0 QUIT TO MAIN MENU



3----->POLLUTANTS CALCULATION TABLE

- 1 CALCULATION TABLE BY AGRICULTURE, PROVINCE.
- 2 CALCULATION TABLE BY MINING, PROVINCE.
- 3 CALCULATION TABLE BY MANUFACTURE, PROVINCE.
- 4 CALCULATION TABLE BY ELECTRICITY, PROVINCE.
- 5 CALCULATION TABLE BY CONSTRUCTION, PROVINCE.
- 6 CALCULATION TABLE BY RESIDENTIAL, PROVINCE.
- 7 CALCULATION TABLE BY TRANSPORTATION, PROVINCE.
- 0 QUIT TO AMIN MENU

4----->POLLUTANTS

- 1 ALL.
  - 1 SECTORS.
    - 2 AVERAGE (KG/PERSON) AND DENSITY (KG/SQ.KM).
    - 0 QUIT TO POLLUTANTS.
  - 2 REGIONS
    - 1 POLLUTANTS.
      - 2 SECTORS.
        - 3 AVERAGE (KG/PERSON) AND DENSITY (KG/SQ.KM).
        - 4 PRIORITY OF POLLUTANT, AVERAGE, DENSITY.
          - 1 POLLUTANTS
          - 2 AVERAGE (KG/PERSON)
          - 3 DENSITY (KG/SQ.KM)
          - 0 QUIT TO REGION
      - 0 QUIT TO POLLUTANTS

## 3 PROVINCES

- 1 POLLUTANTS.
- 2 SECTORS.
- 3 AVERAGE (KG/PERSON) AND DENSITY (KG/SQ.KM).
- 4 PRIORITY OF POLLUTANT, AVERAGE, DENSITY.
  - 1 POLLUTANTS
  - 2 AVERAGE (KG/PERSON)
  - 3 DENSITY (KG/SQ.KM)
  - 0 QUIT TO REGION
- 0 QUIT TO POLLUTANTS
- 0 QUIT TO AMIN MENU

๓.10 การบันทึกข้อมูล

หลังจากทำการป้อนข้อมูลหรือแก้ไขข้อมูลแล้ว ต้องการบันทึกข้อมูลเหล่านั้นลงในแผ่น diskette โดยใช้คำสั่ง file save ในกรณีที่ต้องการใช้ชื่อแฟ้มข้อมูลเดิมให้เลือก replace ข้อมูลใหม่จะถูกบันทึกแทนที่ข้อมูลเดิม หากต้องการตั้งชื่อใหม่ก็ให้พิมพ์ชื่อใหม่ตามต้องการ แล้ว กด Enter เป็นการเสร็จสิ้นการบันทึกข้อมูล หรือถ้าต้องการทำสำรองแฟ้มข้อมูลให้เลือก back up

๓.11 การพิมพ์แฟ้มข้อมูล

ในกรณีที่ต้องการพิมพ์แฟ้มข้อมูลทั้งหมด ผู้ทำการศึกษาได้บันทึกค่าตัวแปรต่าง ๆ ลงในแฟ้มข้อมูลทุกแฟ้มข้อมูลแล้ว โดยการเขียนมาโครสำหรับการพิมพ์ ดังนั้นผู้ใช้เพียงแต่ใส่กระดาษที่เครื่องพิมพ์ โดยให้ตำแหน่งขอบกระดาษขนาดมาตรฐาน A4 ด้านซ้าย อยู่ในตำแหน่งของเครื่องพิมพ์ จากนั้น load กระดาษเข้าเครื่องพิมพ์แล้วเปิดสวิทซ์ การใส่กระดาษในแนวตั้ง (portrait) หรือในแนวนอน (landscape) จะบอกอยู่ในแฟ้มข้อมูลทุกแฟ้มตรงตำแหน่งเซลล์ A2 ในเวอร์กชีต จากนั้นกดแป้น ALT พร้อมกับอักษร z เท่านั้น ก็จะทำการพิมพ์แฟ้มข้อมูลให้



เหมือนกับข้อมูลที่ปรากฏอยู่ในตารางต่าง ๆ และข้อมูลในภาคผนวก การพิมพ์แฟ้มข้อมูลขนาดใหญ่ ไม่สามารถพิมพ์ได้หมดในหนึ่งหน้ากระดาษขนาดมาตรฐาน A4 ให้ใส่กระดาษเพื่อพิมพ์แฟ้มข้อมูลต่อ load กระดาษเข้าเครื่องพิมพ์และเปิดสวิทช์ให้เรียบร้อย จากนั้นบนจอภาพจะปรากฏข้อความ press any key to print (ESC to cancel) กดแป้นใด ๆ ก็จะทำให้ทำการพิมพ์ต่อทำ อย่างนี้จนกว่าจะพิมพ์หมดแฟ้มข้อมูล คำตัวแปรที่บันทึกในแฟ้มข้อมูล ดังนี้

- เครื่องพิมพ์ EPSON ประเภท LQ นอกเหนือจากนี้ก่อนพิมพ์จะต้องตั้งเครื่องพิมพ์ จากโปรแกรมเสริม Add-in wysiwyg โดยกดแป้น Shift พร้อมอักษร ๆ แล้วใช้คำสั่ง print config printer เพื่อเลือกชนิดของเครื่องพิมพ์ที่มีอยู่ หลังจากนั้นให้ทำการบันทึก แฟ้มข้อมูล คำตัวแปรใหม่ก็จะถูกบันทึกลงแฟ้มข้อมูลด้วย

- ช่วงของข้อมูลที่ต้องการพิมพ์ในแต่ละหน้ากระดาษ
- กระดาษที่ใช้เป็นกระดาษขนาดมาตรฐานขนาด A4
- ลักษณะการพิมพ์กระดาษแบบตั้งกำหนด margins จากขอบกระดาษ ดังนี้  
ด้านบน ด้านขวา ด้านซ้าย ด้านล่าง 1.3 นิ้ว
- ลักษณะการพิมพ์กระดาษแบบนอนกำหนด margins จากขอบกระดาษ ดังนี้  
ด้านบน 1.5 นิ้ว ด้านขวา 1.3 นิ้ว ด้านซ้าย 1.0 นิ้ว ด้านล่าง 1.3 นิ้ว
- กำหนดให้พิมพ์แบบย่อขนาดที่กำหนดสัดส่วนอัตโนมัติ

ในกรณีที่ต้องการพิมพ์นอกเหนือจากที่ได้ตั้งตัวแปรไว้แล้ว ผู้ใช้จะต้องตั้งตัวแปรในการ พิมพ์เองในคำสั่ง print ของโปรแกรมเสริม Add-in wysiwyg ก่อนอื่นต้องกำหนดช่วง ที่ต้องการพิมพ์ให้เหมาะสมกับขนาดของกระดาษที่เลือกใช้ เลือกชนิดของเครื่องพิมพ์ให้ตรงกับ เครื่องพิมพ์ที่มีอยู่ กำหนด margins และกำหนดให้พิมพ์แบบย่อขนาดที่กำหนดสัดส่วนอัตโนมัติ ก่อนพิมพ์ให้ใช้คำสั่ง preview เพื่อดูผลงานการพิมพ์จากกลุ่มเซลล์ที่กำหนด ถ้าเห็นว่าการ กำหนดกลุ่มเซลล์ หรือ margins ไม่เหมาะสมกับกับหน้ากระดาษ ก็สามารถเปลี่ยนคำตัวแปร ใหม่จนกว่าจะเป็นที่พอใจ แล้วใช้คำสั่ง go เพื่อพิมพ์แฟ้มข้อมูล ผลงานพิมพ์ที่ได้จะเหมือนกับ ที่ได้เห็นโดยใช้คำสั่ง preview ซึ่งเป็นผลคืออย่างหนึ่งของโลตัส วีลิส 2.3

รายละเอียดชุดคำสั่งในการพิมพ์ มีดังนี้

- Go การสั่งพิมพ์งานที่เลือกกลุ่มเซลล์ไว้แล้ว
- File การสั่งงานพิมพ์ไปเก็บใส่ไฟล์นามสกุล .ENC เพื่อนำออกเครื่องพิมพ์ภายหลัง
  - Cancel การยกเลิกไม่บันทึกไฟล์เมื่อชื่อไฟล์นั้นมีอยู่แล้ว
  - Replace การบันทึกแทนที่ชื่อไฟล์ที่มีอยู่แล้ว
- Background การสั่งงานพิมพ์ไปเก็บเป็นไฟล์นามสกุล .ENC แล้วนำออกพิมพ์ที่เครื่องพิมพ์แบบฉาก
  - Cancel การยกเลิกไม่บันทึกไฟล์เมื่อชื่อไฟล์นั้นมีอยู่แล้ว
  - Replace การบันทึกแทนที่ชื่อไฟล์ที่มีอยู่แล้ว
- Range การกำหนดกลุ่มเซลล์เพื่อนำออกพิมพ์
- Config การเลือกระบบของเครื่องพิมพ์
  - Printer การเลือกชื่อและโมเดลของเครื่องพิมพ์
  - Interface การเลือกวิธีติดต่อเครื่องพิมพ์แบบขนานหรืออนุกรมโดยมีให้เลือก 8 แบบ
  - 1 st-Cart การใช้รูปแบบตัวอักษรในคาร์ตริจด์แรก
  - 2 nd-Cart การใช้รูปแบบตัวอักษรในคาร์ตริจด์ที่สอง
  - Orientation การปรับรูปลักษณะรูปแบบของภาพ
    - Protrait ภาพตามแนวตั้งเหมือนรูปถ่าย
    - Landscape ภาพตามแนวนอนเหมือนรูปวิวของทิวทัศน์ต่าง ๆ
  - Bin การเลือกถาดใส่กระดาษพิมพ์
    - Reset การปรับไปใช้ค่าตัวแปรของดีฟอลต์
    - Single-Sheet การเลือกป้อนกระดาษพิมพ์ทีละแผ่น
    - Manual การเลือกป้อนกระดาษพิมพ์เรียงติดต่อกัน
    - Upper-Tray การเลือกใช้กระดาษพิมพ์จากถาดบน
    - Lower-Tray การเลือกใช้กระดาษพิมพ์จากถาดล่าง
  - Quit การกลับคืนไปสู่เมนูของ Print



### Setting การปรับตั้งวิธีและจำนวนสำเนาการพิมพ์

- Begin เริ่มพิมพ์หน้าเท่าไร
- End สิ้นสุดการพิมพ์หน้าเท่าไร
- Start-Number ใส่นามเลขหน้าเริ่มพิมพ์
- Copies จำนวนชุดของการพิมพ์
- Wait จะมีการหยุดพิมพ์ในแต่ละหน้าหรือไม่
- Grid พิมพ์แบบให้มีเส้นร่างแหหรือไม่
- Frame พิมพ์กรอบของแถวหรือคอลัมน์หรือไม่
- Reset ปรับให้มาใช้ค่าตัวแปรของดีฟอลต์
- Quit กลับคืนไปสู่เมนูของ Print

### Layout การปรับตั้งขนาดกระดาษ มาร์จิน การพิมพ์หัวเรื่อง และการพิมพ์แบบย่อ

#### Page-Size การเลือกขนาดกระดาษพิมพ์

- 1:Letter กระดาษสั้น 8.5x11 นิ้ว (216 mm x 279 mm)
- 2:A4 กระดาษมาตรฐาน A4 8.268x11.693 นิ้ว (210 mm x 297 mm)
- 3:80x60 กระดาษ 8x11 นิ้ว เพื่อพิมพ์ 80 คอลัมน์และ 66 บรรทัด
- 4:132x66 กระดาษ 13.2x11 นิ้ว เพื่อพิมพ์ 132 คอลัมน์และ 66 บรรทัด
- 5:80x72 กระดาษ 8x12 นิ้ว เพื่อพิมพ์ 80 คอลัมน์และ 72 บรรทัด
- 6:Legal กระดาษ 8.5x14 นิ้ว (216 mm x 356 mm)
- 7:B5 กระดาษมาตรฐาน B5 6.929x9.843 นิ้ว (176 mm x 250 mm)
- Custom การเลือกขนาดกระดาษเองระบุหน่วยเป็นมิลลิเมตร

#### Margins การย่อหน้า

- Left การตั้งการย่อหน้าทางซ้าย
- Right การตั้งการย่อหน้าทางขวา
- Top การตั้งการย่อหน้าด้านบน
- Bottom การตั้งการย่อหน้าด้านล่าง
- Quit การกลับคืนสู่เมนูของ Print

- Titles การกำหนดหัวเรื่อง
  - Header การกำหนดข้อความบรรทัดส่วนจำกัดหัวในกระดาษพิมพ์
  - Footer การกำหนดข้อความบรรทัดส่วนท้ายในกระดาษพิมพ์
  - Clear การลบหัวเรื่อง
    - Header การลบไม่มีบรรทัดส่วนจำกัดหัวในกระดาษพิมพ์
    - Footer การลบไม่มีบรรทัดส่วนท้ายในกระดาษพิมพ์
    - Both การลบไม่มีทั้งส่วนจำกัดหัวและส่วนท้าย
  - Quit การถอยกลับไปสู่เมนู Layout
- Border การกำหนดข้อมูลของเวอร์กชีตไปพิมพ์ในกระดาษพิมพ์ทุกหน้า
  - Top การกำหนดแถวของเวอร์กชีตเพื่อให้พิมพ์ที่ด้านบนของกระดาษพิมพ์ทุกหน้า
  - Left การกำหนดคอลัมน์ของเวอร์กชีตให้พิมพ์ที่ด้านบนของกระดาษพิมพ์ทุกหน้า
  - Clear การยกเลิกการพิมพ์ข้อมูล เวอร์กชีตในทุกหน้ากระดาษพิมพ์
    - Top การยกเลิกการพิมพ์ข้อมูลด้านบนกระดาษพิมพ์
    - Left การยกเลิกการพิมพ์ข้อมูลด้านซ้ายกระดาษพิมพ์
    - All การยกเลิกการพิมพ์ทั้งด้านบนและด้านซ้ายของกระดาษพิมพ์
  - Quit การถอยกลับไปสู่เมนู Layout
- Compression การพิมพ์แบบย่อขนาดเมื่อขนาดกลุ่มเซลล์ที่เลือกใหญ่กว่ากระดาษพิมพ์
  - None ไม่มีการพิมพ์แบบย่อขนาด
  - Manual การพิมพ์แบบย่อขนาดที่กำหนดสัดส่วนการย่อเอง
  - Automatic การพิมพ์แบบย่อขนาดที่กำหนดสัดส่วนโดยอัตโนมัติ
- Default การปรับตั้งค่าการพิมพ์เป็นไฟล์ดีฟอลต์
  - Restore การเรียกไฟล์ดีฟอลต์ของการปรับตั้งค่าการพิมพ์
  - Update การบันทึกไฟล์ที่ตั้งค่าการพิมพ์ดีฟอลต์กับชื่อไฟล์เดิมที่มีอยู่
- Library การใช้ไฟล์การปรับตั้งค่าการพิมพ์ที่บันทึกเป็นไลบรารี
  - Retrieve การเรียกใช้ไฟล์การปรับตั้งค่าการพิมพ์
  - Save การบันทึกไฟล์การปรับตั้งค่าการพิมพ์
    - Cancel การยกเลิกการบันทึกไฟล์
    - Replace การบันทึกไฟล์แทนที่ชื่อไฟล์เดิมที่มีอยู่แล้ว







ภาคผนวก ๕

จำนวนประชากร พื้นที่ และมูลค่าผลิตภัณฑ์จังหวัด เป็นราชจังหวัด ปี 2532

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย



REGIONS	PROVINCES	GPP. (1000 BATH)	AREA (SQ.KM)	POPULATION (PERSON)
BMR	BANGKOK	628,033,464	1,565.2	5,832,843
	SAMUT PRAKAN	99,980,857	1,004.1	829,412
	NONTHABURI	37,209,554	622.3	627,667
	PATHUM THANI	44,830,919	1,525.9	441,930
	NAKHON PATHOM	20,655,067	2,168.3	646,803
	SAMUT SAKHON	24,369,754	672.4	349,680
	SUBTOTAL	855,079,615	7,753.2	8,728,335
CENTRAL	PHRA NAKRON SI AYUTTHAYA	15,592,233	2,556.6	680,100
	ANG THONG	5,703,904	968.4	277,682
	SARABURI	32,518,379	3,576.5	530,281
	LOP BURI	14,857,318	6,199.7	740,260
	SING BURI	5,085,082	822.5	230,094
	CHAI NAT	8,246,472	2,469.7	353,953
	SUBTOTAL	82,003,388	16,593.4	2,812,370
WESTERN	SUPHAN BURI	18,754,866	5,358.0	820,229
	KANCHANABURI	24,088,126	19,483.2	684,693
	SAMUT SONGKHRAM	3,739,410	416.7	206,939
	RATCHABURI	20,284,893	5,196.5	713,788
	PHETCHABURI	11,217,975	6,225.1	423,589
	PHACHUAP KHIRI KHAN	14,097,996	6,367.6	419,945
	SUBTOTAL	92,183,266	43,047.1	3,269,183
EASTERN	TRAT	5,241,283	2,819.0	192,905
	CHANTHABURI	9,439,352	6,338.0	431,408
	RAYONG	17,141,515	3,552.0	445,399
	CHON BURI	73,296,907	4,363.0	896,340
	CHACHOENGSAO	29,191,461	5,351.0	575,731
	PRACHIN BURI	14,031,352	11,957.5	864,692
	NAKHON NAYOK	4,285,133	2,122.0	227,079
	SUBTOTAL	152,627,003	36,502.5	3,633,554
NORTHERN	LAMPANG	15,905,205	12,534.0	764,354
	PHARE	7,013,841	6,536.6	491,352
	UTTARADIT	9,458,025	7,836.6	456,158
	NAN	5,828,672	11,472.1	441,067
	PHAYAO	6,951,790	6,335.1	498,454
	CHIANG RAI	17,165,120	11,678.4	1,027,647
	MAE HONG SORN	2,737,721	12,681.2	169,682
	CHIANG MAI	33,480,696	20,107.1	1,361,320
	LUMPHUN	6,503,135	4,505.9	414,515
	NAKHON SAWAN	22,638,688	9,597.7	1,081,502
	PHETCHABUN	14,797,330	12,608.4	942,547
	PHICHIT	8,989,824	4,531.0	553,773
	PHITSANULOK	14,202,538	10,615.8	775,740
	SUKHOTHAI	9,816,474	6,596.1	588,890
	TAK	7,797,605	16,406.6	346,492
	KAMPHAENG PHET	14,302,081	8,607.5	658,039
UTHAI THANI	5,336,827	5,793.2	301,220	
SUBTOTAL	202,925,574	163,644.3	10,872,752	

REGIONS	PROVINCES	GPP. (1000 BATH)	AREA (SQ.KM)	POPULATION (PERSON)
NORTH - EASTERN	CHAIYAPHUM	12,730,373	12,778.3	1,042,763
	NAKHON RATCHASIMA	34,192,697	27,494.0	2,360,797
	BURI RUM	14,914,808	10,321.9	1,422,777
	SURIN	12,506,489	8,124.0	1,272,597
	SI SAKET	12,007,564	8,840.0	1,313,192
	UBON RATCHATHANI	20,696,958	18,906.1	1,902,177
	YASOTHON	5,241,945	4,161.6	521,117
	MUKDAHAN	3,121,762	4,339.8	264,141
	KHON KAEN	25,512,794	10,666.0	1,666,671
	MAHA SARAKHAM	9,572,453	5,291.7	895,891
	ROI ET	12,466,238	8,299.4	1,214,341
	KALASIN	9,298,353	6,946.7	883,360
	SAKHON NAKHON	10,553,440	9,605.8	956,295
	NAKHON PHANOM	6,724,497	5,512.7	626,221
	UDON THANI	20,963,075	15,589.4	1,799,261
	NONG KHAI	10,971,821	7,332.3	869,720
	LCEI	8,396,734	11,424.6	544,328
	SUBTOTAL	229,875,001	163,854.3	19,575,949
SOUTHERN	CHUMPHON	9,266,360	6,009.0	390,631
	RANONG	4,916,360	3,298.0	114,395
	SURAT THANI	20,804,212	12,891.5	725,643
	PHANGNGA	7,393,419	4,170.9	210,062
	PHUKET	11,349,651	543.0	162,694
	KRABI	7,816,758	4,708.5	290,300
	NAKHON SI THAMMARAT	25,068,993	9,342.5	1,411,966
	TRANG	11,041,810	4,917.5	512,402
	PHATTHALUNG	7,137,515	3,424.5	455,273
	SONGKHLA	26,447,375	7,393.9	1,073,586
	SATUN	5,162,319	2,479.0	217,932
	PATTANI	7,721,365	1,940.4	526,258
	YALA	7,415,783	4,521.1	348,872
	NARATHIWAT	9,700,411	4,475.4	554,016
	SUBTOTAL	161,284,211	70,715.2	6,996,250
	TOTAL	1,775,978,058	512,115.0	55,688,393

SOURCE : NATIONAL STATISTICAL OFFICE

ศูนย์วิจัยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



## ประวัติผู้เขียน

นายผลศักดิ์ วิฑูรชวลิตวงษ์ เกิดวันที่ 9 พฤษภาคม 2504 ที่อำเภอสุโขทัย จังหวัดนครราชสีมา สำเร็จการศึกษาปริญญาตรีวิศวกรรมศาสตรบัณฑิต สาขาวิศวกรรมโยธา ภาควิชาวิศวกรรมโยธา คณะวิศวกรรมศาสตร์ มหาวิทยาลัยเชียงใหม่ ในปีการศึกษา 2528 จากนั้นเข้ารับราชการที่กองประปาภูมิภาค กรมโยธาธิการ ในปี พ.ศ. 2528 ทำหน้าที่วางแผนและวางโครงการระบบประปาหมู่บ้าน ประปาสุขาภิบาล ประปาเทศบาล (ที่อยู่ในสัมปทานของกรมโยธาธิการ) รวมทั้งระบบประปาที่หน่วยราชการอื่นร้องขอมา และขอลาศึกษาต่อในหลักสูตรวิศวกรรมศาสตรมหาบัณฑิต สาขาวิศวกรรมสุขาภิบาล ภาควิชาวิศวกรรมสิ่งแวดล้อม จุฬาลงกรณ์มหาวิทยาลัย ในปี พ.ศ. 2532 และขอกลับเข้ารับราชการที่กองนันทนน้ำสะอาด (เปลี่ยนชื่อมาจากกองประปาภูมิภาค) กรมโยธาธิการ ในปี พ.ศ. 2534 จนถึงปัจจุบัน โดยเปลี่ยนหน้าที่มารับผิดชอบด้านการสำรวจออกแบบระบบประปาสุขาภิบาล ประปาเทศบาล (ทั้งที่ขอตั้งขึ้นใหม่ และที่เก่าที่มีความต้องการปรับปรุงขยายการผลิตน้ำประปาให้เพียงพอต่อความต้องการใช้น้ำของประชากร) ประปาภูเขา รวมทั้งประปาโดยใช้แหล่งน้ำผิวดินขนาดเล็ก



ศูนย์วิจัยและพัฒนาการ  
จุฬาลงกรณ์มหาวิทยาลัย  
จุฬาลงกรณ์มหาวิทยาลัย