

Annex A. Cambodia Energy Balance Tables 2000–2019

Annex A-1. Cambodia Energy Balance Table 2000

Unit: ktoe

		1.	3.	4.								4.10	6.	9.	10.	12.
		Coal	Crude Oil & NGL	Petroleum Products	4.1	4.2	4.3	4.4	4.5	4.6	4.7	Other Petroleum Products	Hydro	Others	Electricity	Total
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil	Fuel Oil	LPG					
1.	Indigenous Production												3	1,279		1,282
2.	Imports			682	125		17	31	392	96	16	3			4	685
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-12			-12									-12
5.	Stock Changes															
6.	Total Primary Energy Supply			670	125		5	31	392	96	16	3	3	1,279	4	1,955
7.	Transfers															
8.	Total Transformation Sector			-126					-72	-54			-3	-537	42	-623
	8.1 Main Activity Producer			-126					-72	-54			-3		42	-86
	8.8 Charcoal Processing													-537		-537
9.	Loss & Own Use															-7
10.	Discrepancy			0			0		0	0	0				0	0
11.	Total Final Energy Consumption			544	125		5	31	321	42	16	3		742	39	1,324
12.	Industry Sector			69					32	37				164	2	236
13.	Transport Sector			415	125		5		281			3				415
	13.2 Domestic Air Transport			5			5									5
	13.3 Road			409	125				281			3				409
14.	Other Sector			60				31	8	5	16			578	36	674
	14.1 Residential & Commercial			47				31			16			578	36	661
	14.1.1 Commerce and Public Services			14							14				16	30
	14.1.2 Residential			33				31			2			578	20	631
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			13					8	5					0	13
15.	of which Non-energy Use															
16	Electricity Output in GWh	0		461									31	0		492

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid, MTBE = methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-2. Cambodia Energy Balance Table 2001

Unit: ktoe

		1.	3.	4.									6.	9.	10.	12.			
					Coal	Crude Oil & NGL	Petroleum Products	4.1	4.2	4.3	4.4	4.5					4.6	4.7	4.10
								Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil					Fuel Oil	LPG	Other Petroleum Products
1.	Indigenous Production												3	1,308		1,311			
2.	Imports			760	126		17	30	471	93	20	3			4	764			
3.	Exports																		
4.	International Marine Bunkers																		
13.1	International Aviation Bunkers			-12			-12									-12			
5.	Stock Changes																		
6.	Total Primary Energy Supply			748	126		5	30	471	93	20	3	3	1,308	4	2,063			
7.	Transfers																		
8.	Total Transformation Sector			-138					-79	-59			-3	-549	46	-644			
	8.1 Main Activity Producer			-138					-79	-59			-3		46	-94			
	8.8 Charcoal Processing													-549		-549			
9.	Loss & Own Use															-8			
10.	Discrepancy			0			0							0	0	0			
11.	Total Final Energy Consumption			610	126		5	30	393	34	20	3		759	42	1,411			
12.	Industry Sector			69					39	30				169	3	241			
13.	Transport Sector			478	126		5		344			3				478			
	13.2 Domestic Air Transport			5			5									5			
	13.3 Road			473	126				344			3				473			
14.	Other Sector			63				30	10	4	20			590	39	692			
	14.1 Residential & Commercial			50				30			20			590	39	678			
	14.1.1 Commerce and Public Services			17							17				18	35			
	14.1.2 Residential			32				30			2			590	22	644			
	14.2 Agriculture			0					0							0			
	14.4 Non-specified Others			13					9	4					0	13			
15.	of which Non-Energy Use																		
16.	Electricity Output in GWh	0		504									34	0		538			

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-3. Cambodia Energy Balance Table 2002

Unit: ktoe

		1.	3.	4.	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10	6.	9.	10.	12.
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil	Fuel Oil	LPG	Other Petroleum Products				
1.	Indigenous Production												3	1,335		1,338
2.	Imports			736	122		17	53	394	123	21	5			4	740
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-12			-12									-12
5.	Stock Changes															
6.	Total Primary Energy Supply			724	122		5	53	394	123	21	5	3	1,335	4	2,067
7.	Transfers															
8.	Total Transformation Sector			-150					-86	-64			-3	-561	50	-663
	8.1 Main Activity Producer			-150					-86	-64			-3		50	-103
	8.8 Charcoal Processing													-561		-561
9.	Loss & Own Use														-9	-9
10.	Discrepancy			0			0		0	0				0	0	0
11.	Total Final Energy Consumption			574	122		5	53	308	59	21	5		775	46	1,395
12.	Industry Sector			83					31	52				174	4	261
13.	Transport Sector			402	122		5		270			5				402
	13.2 Domestic Air Transport			5			5									5
	13.3 Road			397	122				270			5				397
14.	Other Sector			89				53	8	7	21			601	42	732
	14.1 Residential & Commercial			75				53			21			601	42	718
	14.1.1 Commerce and Public Services			19							19				19	38
	14.1.2 Residential			56				53			2			601	23	680
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			14					7	7					0	14
15.	of which Non-energy Use															
16.	Electricity Output in GWh	0		549									37	0		586

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-4. Cambodia Energy Balance Table 2003

Unit: ktoe

		1.	3.	4.	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10	6.	9.	10.	12.
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil	Fuel Oil	LPG	Other Petroleum Products				
1.	Indigenous Production												3	1,373		1,376
2.	Imports			770	108		17	89	405	119	26	5			5	775
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-12			-12									-12
5.	Stock Changes															
6.	Total Primary Energy Supply			759	108		5	89	405	119	26	5	3	1,373	5	2,140
7.	Transfers															
8.	Total Transformation Sector			-168					-96	-72			-3	-576	56	-691
	8.1 Main Activity Producer			-168					-96	-72			-3		56	-115
	8.8 Charcoal Processing													-576		-576
9.	Loss & Own Use														-10	-10
10.	Discrepancy			0			0							0	0	0
11.	Total Final Energy Consumption			591	108		5	89	309	47	26	5		797	52	1,439
12.	Industry Sector			73					31	42				181	7	260
13.	Transport Sector			390	108		5		271			5				390
	13.2 Domestic Air Transport			5			5									5
	13.3 Road			385	108				271			5				385
14.	Other Sector			128				89	8	6	26			616	45	789
	14.1 Residential & Commercial			115				89			26			616	45	776
	14.1.1 Commerce and Public Services			23							23				20	43
	14.1.2 Residential			92				89			3			616	25	733
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			13					7	6					0	13
15.	of which Non-energy Use															
16.	Electricity Output in GWh	0		614									42	0		656

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-5. Cambodia Energy Balance Table 2004

Unit: ktoe

		1	3.	4.									6.	9.	10.	12.			
					Coal	Crude Oil & NGL	Petroleum Products	4.1	4.2	4.3	4.4	4.5					4.6	4.7	4.10
								Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil					Fuel Oil	LPG	Other Petroleum Products
1.	Indigenous Production												2	1,423		1,425			
2.	Imports			768	101		20	51	414	143	32	6			5	773			
3.	Exports																		
4.	International Marine Bunkers																		
13.1	International Aviation Bunkers			-14			-14									-14			
5.	Stock Changes																		
6.	Total Primary Energy Supply			754	101		6	51	414	143	32	6	2	1,423	5	2,184			
7.	Transfers																		
8.	Total Transformation Sector			-201					-109	-92			-2	-597	66	-735			
	8.1 Main Activity Producer			-201					-109	-92			-2		66	-138			
	8.8 Charcoal Processing													-597		-597			
9.	Loss & Own Use														-11	-11			
10.	Discrepancy			0			0			0	0				0	0			
11.	Total Final Energy Consumption			553	101		6	51	305	52	32	6		826	60	1,439			
12.	Industry Sector			76					31	46				190	9	275			
13.	Transport Sector			380	101		6		267			6				380			
	13.2 Domestic Air Transport			6			6									6			
	13.3 Road			374	101				267			6				374			
14.	Other Sector			97				51	7	6	32			636	51	784			
	14.1 Residential & Commercial			83				51			32			636	51	770			
	14.1.1 Commerce and Public Services			29							29				23	52			
	14.1.2 Residential			54				51			4			636	28	718			
	14.2 Agriculture			0					0							0			
	14.4 Non-specified Others			13					7	6					0	13			
15.	of which Non-energy Use																		
16.	Electricity Output in GWh	0		736									29	0		766			

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether
Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-6. Cambodia Energy Balance Table 2005

Unit: ktoe

		1. Coal	3. Crude Oil & NGL	4. Petroleum Products	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10	6. Hydro	9. Others	10. Electricity	12. Total
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil	Fuel Oil	LPG	Other Petroleum Products				
1.	Indigenous Production												4	1,493		1,497
2.	Imports			760	135		20	32	351	181	33	7			7	767
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-14			-14									-14
5.	Stock Changes															
6.	Total Primary Energy Supply			746	135		6	32	351	181	33	7	4	1,493	7	2,249
7.	Transfers															
8.	Total Transformation Sector			-235					-136	-99			-4	-626	78	-787
	8.1 Main Activity Producer			-235					-136	-99			-4	0	78	-161
	8.8 Charcoal Processing													-626		-626
9.	Loss & Own Use														-11	-11
10.	Discrepancy			0			0		0	0	0				0	0
11.	Total Final Energy Consumption			511	135		6	32	214	83	33	7		867	74	1,451
12.	Industry Sector			94					21	73				202	12	309
13.	Transport Sector			336	135		6		188			7				336
	13.2 Domestic Air Transport			6			6									6
	13.3 Road			330	135				188			7				330
14.	Other Sector			80				32	5	10	33			664	61	806
	14.1 Residential & Commercial			65				32			33			664	61	791
	14.1.1 Commerce and Public Services			29							29				30	59
	14.1.2 Residential			36				32			4			664	31	732
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			15					5	10					0	15
15.	of which Non-energy Use															
16.	Electricity Output in GWh	0		861									45	0		906

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-7. Cambodia Energy Balance Table 2006

Unit: ktoe

		1. Coal	3. Crude Oil & NGL	4. Petroleum Products	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10	6. Hydro	9. Others	10. Electricity	12. Total
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil	Fuel Oil	LPG	Other Petroleum Products				
1.	Indigenous Production												4	1,558		1,562
2.	Imports			976	166		27	26	455	251	45	7			9	986
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-19			-19									-19
5.	Stock Changes															
6.	Total Primary Energy Supply			958	166		8	26	455	251	45	7	4	1,558	9	2,529
7.	Transfers															
8.	Total Transformation Sector			-291					-175	-116			-4	-653	96	-853
	8.1 Main Activity Producer			-291					-175	-116			-4	-1	96	-200
	8.8 Charcoal Processing													-653		-653
9.	Loss & Own Use														-15	-15
10.	Discrepancy			0							0			0	0	0
11.	Total Final Energy Consumption			667	166		8	26	280	134	45	7		904	91	1,662
12.	Industry Sector			146					28	118				214	19	379
13.	Transport Sector			441	166		8		246		15	7				441
	13.2 Domestic Air Transport			8			8									8
	13.3 Road			433	166				246		15	7				433
14.	Other Sector			79				26	7	16	31			690	72	842
	14.1 Residential & Commercial			56				26			31			690	72	819
	14.1.1 Commerce and Public Services			27							27				39	66
	14.1.2 Residential			29				26			4			690	33	753
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			23					7	16					0	23
15.	of which Non-energy Use															
16.	Electricity Output in GWh	0		1,066									52	2		1,120

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-8. Cambodia Energy Balance Table 2007

Unit: ktoe

		1.	3.	4.									6.	9.	10.	12.			
					Coal	Crude Oil & NGL	Petroleum Products	4.1	4.2	4.3	4.4	4.5					4.6	4.7	4.10
								Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil					Fuel Oil	LPG	Other Petroleum Products
1.	Indigenous Production												4	1,582		1,586			
2.	Imports			1,194	249		49	35	498	296	56	11			14	1,208			
3.	Exports																		
4.	International Marine Bunkers																		
13.1	International Aviation Bunkers			-34			-34									-34			
5.	Stock Changes																		
6.	Total Primary Energy Supply			1,160	249		15	35	498	296	56	11	4	1,582	14	2,760			
7.	Transfers																		
8.	Total Transformation Sector			-364					-218	-146			-4	-664	120	-913			
8.1	Main Activity Producer			-364					-218	-146			-4	-2	120	-251			
8.8	Charcoal Processing													-662		-662			
9.	Loss & Own Use														-18	-18			
10.	Discrepancy			0			0			0						0			
11.	Total Final Energy Consumption			796	249		15	35	280	151	56	11		918	116	1,830			
12.	Industry Sector			161					28	133				224	29	414			
13.	Transport Sector			538	249		15		245		18	11				538			
13.2	Domestic Air Transport			15			15									15			
13.3	Road			523	249				245		18	11				523			
14.	Other Sector			97				35	7	18	38			694	87	878			
14.1	Residential & Commercial			72				35			38			694	87	853			
	14.1.1 Commerce and Public Services			33							33				47	81			
	14.1.2 Residential			39				35			4			694	39	772			
	14.2 Agriculture			0					0							0			
	14.4 Non-specified Others			24					7	18					0	25			
15.	of which Non-energy Use																		
16.	Electricity Output in GWh	0		1,333									51	5		1,390			

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether
Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-9. Cambodia Energy Balance Table 2008

Unit: ktoe

		1. Coal	3. Crude Oil & NGL	4. Petroleum Products								6. Hydro	9. Others	10. Electricity	12. Total	
					4.1	4.2	4.3	4.4	4.5	4.6	4.7					4.10
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil	Fuel Oil	LPG					Other Petroleum Products
1.	Indigenous Production											4	1,651		1,655	
2.	Imports	14		1,220	306		44	33	461	312	51	12		32	1,266	
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-31			-31								-31	
5.	Stock Changes															
6.	Total Primary Energy Supply	14		1,190	306		14	33	461	312	51	12	4	1,651	32	2,891
7.	Transfers															
8.	Total Transformation Sector	-14		-397					-238	-159			-4	-693	131	-975
	8.1 Main Activity Producer	-14		-397					-238	-159			-4	-2	131	-284
	8.8 Charcoal Processing													-691		-691
9.	Loss & Own Use														-21	-21
10.	Discrepancy														0	0
11.	Total Final Energy Consumption			793	306		14	33	223	154	51	12		959	143	1,895
12.	Industry Sector			158					22	136				234	34	425
13.	Transport Sector			544	306		14		196		16	12				544
	13.2 Domestic Air Transport			14			14									14
	13.3 Road			531	306				196		16	12				531
14.	Other Sector			91				33	5	18	35			725	110	925
	14.1 Residential & Commercial			67				33			35			725	109	901
	14.1.1 Commerce and Public Services			31							31				60	90
	14.1.2 Residential			37				33			4			725	49	811
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			23					5	18					0	24
15.	of which Non-energy Use															
16.	Electricity Output in GWh	25		1,452									48	5		1,529

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether
Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-10. Cambodia Energy Balance Table 2009

Unit: ktoe

		1. Coal	3. Crude Oil & NGL	4. Petroleum Products	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10	6. Hydro	9. Others	10. Electricity	12. Total
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil	Fuel Oil	LPG	Other Petroleum Products				
1.	Indigenous Production												4	1,697		1,701
2.	Imports	17		1,434	327		35	31	685	272	67	17			72	1,523
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-24			-24									-24
5.	Stock Changes															
6.	Total Primary Energy Supply	17		1,410	327		11	31	685	272	67	17	4	1,697	72	3,200
7.	Transfers															
8.	Total Transformation Sector	-17		-324					-194	-130			-4	-712	109	-948
8.1	Main Activity Producer	-17		-324					-194	-130			-4	-2	109	-238
8.8	Charcoal Processing													-710		-710
9.	Loss & Own Use														-22	-22
10.	Discrepancy			0			0		0	0				0		0
11.	Total Final Energy Consumption			1,086	327		11	31	490	142	67	17		985	159	2,230
12.	Industry Sector			175					49	126				240	33	448
13.	Transport Sector			806	327		11		429		22	17				806
13.2	Domestic Air Transport			11			11									11
13.3	Road			795	327				429		22	17				795
14.	Other Sector			105				31	12	17	46			745	126	976
14.1	Residential & Commercial			76				31			46			745	126	947
	14.1.1 Commerce and Public Services			40							40				67	107
	14.1.2 Residential			36				31			5			745	59	839
14.2	Agriculture			0					0							0
14.4	Non-specified Others			29					12	17					0	29
15.	of which Non-energy Use															
16.	Electricity Output in GWh	29		1,187									49	6		1,272

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-11. Cambodia Energy Balance Table 2010

Unit: ktoe

		1.	3.	4.									6.	9.	10.	12.
		Coal	Crude Oil & NGL	Petroleum Products	4.1 Motor Gasoline	4.2 Naphtha	4.3 Jet Fuel	4.4 Kerosene	4.5 Gas/Diesel Oil	4.6 Fuel Oil	4.7 LPG	4.10 Other Petroleum Products	Hydro	Others	Electricity	Total
1.	Indigenous Production											3	1,720		1,723	
2.	Imports	24		1,590	401		47	32	771	246	77	16			132	1,747
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-32			-32									-32
5.	Stock Changes															
6.	Total Primary Energy Supply	24		1,557	401		14	32	771	246	77	16	3	1,720	132	3,438
7.	Transfers															
8.	Total Transformation Sector	-19		-253					-152	-101			-3	-722	86	-910
8.1	Main Activity Producer	-19		-253					-152	-101			-3	-2	86	-191
8.8	Charcoal Processing													-719		-719
9.	Loss & Own Use														-24	-24
10.	Discrepancy			0						0	0			0	0	0
11.	Total Final Energy Consumption	6		1,305	401		14	32	619	145	77	16		999	194	2,503
12.	Industry Sector	6		199					62	137				244	42	490
13.	Transport Sector			999	401		14		543		25	16				999
13.2	Domestic Air Transport			14			14									14
13.3	Road			984	401				543		25	16				984
14.	Other Sector			107				32	15	7	52			755	152	1,014
14.1	Residential & Commercial			84				32			52			755	152	991
	14.1.1 Commerce and Public Services			46							46				77	123
	14.1.2 Residential			38				32			6			755	75	869
14.2	Agriculture			0					0							0
14.4	Non-specified Others			22					15	7					0	23
15.	of which Non-energy Use															
16.	Electricity Output in GWh	34		926									33	6		998

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-12. Cambodia Energy Balance Table 2011

Unit: ktoe

		1.	3.	4.								6.	9.	10.	12.	
					4.1	4.2	4.3	4.4	4.5	4.6	4.7					4.10
		Coal	Crude Oil & NGL	Petroleum Products	Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas / Diesel Oil	Fuel Oil	LPG	Other Petroleum Products	Hydro	Others	Electricity	Total
1.	Indigenous Production												4	1,798		1,803
2.	Imports	28		1,640	416		55	13	824	230	85	17			157	1,825
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-38			-38									-38
5.	Stock Changes															
6.	Total Primary Energy Supply	28		1,602	416		17	13	824	230	85	17	4	1,798	157	3,590
7.	Transfers															
8.	Total Transformation Sector	-22		-256					-153	-102			-4	-755	90	-947
8.1	Main Activity Producer	-22		-256					-153	-102			-4	-4	90	-196
8.8	Charcoal Processing													-751		-751
9.	Loss & Own Use														-26	-26
10.	Discrepancy	0		0							0			0	0	0
11.	Total Final Energy Consumption	6		1,346	416		17	13	671	128	85	17		1,043	221	2,617
12.	Industry Sector	6		204					82	121				254	54	518
13.	Transport Sector			1,057	416		17		580		27	17				1,057
13.2	Domestic Air Transport			17			17									17
13.3	Road			1,040	416				580		27	17				1,040
14.	Other Sector			86				13	9	7	57			789	167	1,042
14.1	Residential & Commercial			70				13			57			789	167	1,026
	14.1.1 Commerce and Public Services			51							51				93	144
	14.1.2 Residential			19				13			7			789	73	882
14.2	Agriculture			0					0							0
14.4	Non-specified Others			15					8	7					1	16
15.	of which Non-energy Use															
16.	Electricity Output in GWh	49		936									53	12		1,050

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-13. Cambodia Energy Balance Table 2012

Unit: ktoe

		1.	3.	4.	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10	6.	9.	10.	12.
		Coal	Crude Oil & NGL	Petroleum Products	Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas / Diesel Oil	Fuel Oil	LPG	Other Petroleum Products	Hydro	Others	Electricity	Total
1.	Indigenous Production												44	1,871		1,916
2.	Imports	39		1,721	405		69	7	908	215	100	17			181	1,941
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-48			-48									-48
5.	Stock Changes															
6.	Total Primary Energy Supply	39		1,673	405		21	7	908	215	100	17	44	1,871	181	3,809
7.	Transfers															
8.	Total Transformation Sector	-31		-241					-145	-96			-44	-786	126	-977
8.1	Main Activity Producer	-31		-241					-145	-96			-44	-4	126	-195
8.8	Charcoal Processing													-782		-782
9.	Loss & Own Use														-26	-26
10.	Discrepancy	0		0			0		0	0	0			0		0
11.	Total Final Energy Consumption	7		1,432	405		21	7	763	119	100	17		1,085	281	2,806
12.	Industry Sector	7		203					91	112				265	77	552
13.	Transport Sector			1,114	405		21		638		32	17				1,114
13.2	Domestic Air Transport			21			21									21
13.3	Road			1,093	405				638		32	17				1,093
14.	Other Sector			115				7	34	7	68			821	203	1,139
14.1	Residential & Commercial			74				7			68			821	203	1,098
	14.1.1 Commerce and Public Services			60							60				110	170
	14.1.2 Residential			14				7			8			821	93	928
14.2	Agriculture			0					0							0
14.4	Non-specified Others			41					34	7					1	42
15.	of which Non-energy Use															
16.	Electricity Output in GWh	39		882									533	12		1,466

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-14. Cambodia Energy Balance Table 2013

Unit: ktoe

	1.	3.	4.										6.	9.	10.	12.
				Coal	Crude Oil & NGL	Petroleum Products	4.1 Motor Gasoline	4.2 Naphtha	4.3 Jet Fuel	4.4 Kerosene	4.5 Gas/ Diesel Oil	4.6 Fuel Oil				
1.	Indigenous Production												87	1,948		2,035
2.	Imports	57	1,723	409		80	3	929	167	116	18				196	1,976
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers		-55			-55										-55
5.	Stock Changes															
6.	Total Primary Energy Supply	57	1,668	409		24	3	929	167	116	18	87	1,948		196	3,956
7.	Transfers															
8.	Total Transformation Sector	-50	-163					-98	-65			-87	-818		157	-960
8.1	Main Activity Producer	-50	-163					-98	-65			-87	-2		157	-145
8.8	Charcoal Processing												-815			-815
9.	Loss & Own Use															-48
10.	Discrepancy		0			0		0	0	0			0			0
11.	Total Final Energy Consumption	7	1,505	409		24	3	831	102	116	18		1,131		306	2,948
12.	Industry Sector	7	190					93	97				276		71	544
13.	Transport Sector		1,142	409		24		652		38	18					1,142
13.2	Domestic Air Transport		24			24										24
13.3	Road		1,117	409				652		38	18					1,117
14.	Other Sector		173				3	86	5	79			855	235		1,263
14.1	Residential & Commercial		82				3			79			855	234		1,171
14.1.1	Commerce and Public Services		70							70					132	202
14.1.2	Residential		12				3			9			855	102		969
14.2	Agriculture		0					0								0
14.4	Non-specified Others		91					86	5						1	92
15.	of which Non-energy Use															
16.	Electricity Output in GWh	177	596										1,046	7		1,826

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-15. Cambodia Energy Balance Table 2014

Unit: ktoe

	1.	3.	4.									6.	9.	10.	12.
				Coal	Crude Oil & NGL	Petroleum Products	4.1 Motor Gasoline	4.2 Naphtha	4.3 Jet Fuel	4.4 Kerosene	4.5 Gas/ Diesel Oil				
1.	Indigenous Production											159	2,043		2,202
2.	Imports	315	1,788	446		92		1,017	90	132	11			155	2,259
3.	Exports														
4.	International Marine Bunkers														
13.1	International Aviation Bunkers		-64			-64									-64
5.	Stock Changes														
6.	Total Primary Energy Supply	315	1,725	446		28		1,017	90	132	11	159	2,043	155	4,397
7.	Transfers														
8.	Total Transformation Sector	-305	-92					-55	-37			-159	-859	272	-1,143
8.1	Main Activity Producer	-305	-92					-55	-37			-159	-6	272	-290
8.8	Charcoal Processing												-853		-853
9.	Loss & Own Use													-81	-81
10.	Discrepancy	0	0			0		0						0	0
11.	Total Final Energy Consumption	10	1,633	446		28		962	53	132	11		1,183	347	3,173
12.	Industry Sector	10	152					102	50				289	91	542
13.	Transport Sector		1,241	446		28		713		43	11				1,241
13.2	Domestic Air Transport		28			28									28
13.3	Road		1,213	446				713		43	11				1,213
14.	Other Sector		240					147	3	90			895	256	1,390
14.1	Residential & Commercial		90							90			895	255	1,240
14.1.1	Commerce and Public Services		79							79				141	221
14.1.2	Residential		10							10			895	114	1,019
14.2	Agriculture		0					0							0
14.4	Non-specified Others		150					147	3					1	150
15.	of which Non-energy Use														
16.	Electricity Output in GWh	906	337									1,907	17		3,167

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-16. Cambodia Energy Balance Table 2015

Unit: ktoe

		1.	3.	4.								6.	9.	10.	12.
		Coal	Crude Oil & NGL	Petroleum Products	4.1 Motor Gasoline	4.2 Naphtha	4.3 Jet Fuel	4.4 Kerosene	4.5 Gas/ Diesel Oil	4.6 Fuel Oil	4.7 LPG	4.10 Other Petroleum Products	Hydro	Others	Electricity
1.	Indigenous Production											186	2,101		2,287
2.	Imports	558		1,960	530				1,086	36	192	20		131	2,648
3.	Exports														
4.	International Marine Bunkers														
13.1	International Aviation Bunkers			-67		-67									-67
5.	Stock Changes														
6.	Total Primary Energy Supply	558		1,892	530	30		1,086	36	192	20	186	2,101	131	4,868
7.	Transfers														
8.	Total Transformation Sector	-543		-46				-28	-18			-186	-881	401	-1,254
8.1	Main Activity Producer	-543		-46				-28	-18			-186	-15	401	-388
8.8	Charcoal Processing												-866		-866
9.	Loss & Own Use														-85
10.	Discrepancy	0		0		0				0			0	0	0
11.	Total Final Energy Consumption	14		1,846	530	30		1,058	17	192	20		1,221	448	3,529
12.	Industry Sector	14		124				109	16				312	98	549
13.	Transport Sector			1,410	530	30		769		62	20				1,410
13.2	Domestic Air Transport			30		30									30
13.3	Road			1,380	530			769		62	20				1,380
14.	Other Sector			312				181	2	130			909	350	1,570
14.1	Residential & Commercial			130						130			909	349	1,387
14.1.1	Commerce and Public Services			115						115				218	332
14.1.2	Residential			15						15			909	131	1,055
14.2	Agriculture			0				0							0
14.4	Non-specified Others			182				180	2					1	183
15.	of which Non-energy Use														
16.	Electricity Output in GWh	2,234		169								2,224	38		4,665

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE- methyl tertiary-butyl ether Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-17. Cambodia Energy Balance Table 2016

Unit: ktoe

		1. Coal	3. Crude Oil & NGL	4. Petroleum Products	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10 Other Petroleum Products	6. Hydro	9. Others	10. Electricity	12. Total
					Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil	Fuel Oil	LPG					
1.	Indigenous Production												221	2,081		2,302
2.	Imports	774		2,289	536		106		1,255	140	228	24			133	3,196
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-74			-74									-74
5.	Stock Changes															
6.	Total Primary Energy Supply	774		2,216	536		33		1,255	140	228	24	221	2,081	133	5,425
7.	Transfers															
8.	Total Transformation Sector	-755		-135					-81	-54			-221	-882	490	-1,503
	8.1 Main Activity Producer	-755		-135					-81	-54			-221	-14	490	-635
	8.8 Charcoal Processing													-868		-868
9.	Loss & Own Use														-87	-87
10.	Discrepancy	0		0						0	0			0	0	0
11.	Total Final Energy Consumption	19		2,081	536		33		1,174	86	228	24		1,199	536	3,835
12.	Industry Sector	19		196					125	71				318	135	668
13.	Transport Sector			1,529	536		33		863		74	24				1,529
	13.2 Domestic Air Transport			33			33									33
	13.3 Road			1,497	536				863		74	24				1,497
14.	Other Sector			355					186	15	155			881	401	1,637
	14.1 Residential & Commercial			155							155			881	400	1,436
	14.1.1 Commerce and Public Services			137							137				228	365
	14.1.2 Residential			18							18			881	172	1,071
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			200					186	15					1	201
15.	of which Non-energy Use															
16.	Electricity Output in GWh	2,514		493									2,645	42		5,694

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline included naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-18. Cambodia Energy Balance Table 2017

Unit: ktoe

		1.	3.	4.									6.	9.	10.	12.
					4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10				
		Coal	Crude Oil & NGL	Petroleum Products	Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/Diesel Oil	Fuel Oil	LPG	Other Petroleum Products	Hydro	Others	Electricity	Total
1.	Indigenous Production	20											233	2,028		2,281
2.	Imports	895		2,357	587		153		1,262	78	265	12			124	3,376
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-106			-106									-106
5.	Stock Changes															
6.	Total Primary Energy Supply	915		2,251	587		47		1,262	78	265	12	233	2,028	124	5,551
7.	Transfers															
8.	Total Transformation Sector	-837		-81					-49	-33			-233	-867	594	-1,425
	8.1 Main Activity Producer	-837		-81					-49	-33			-233	-13	594	-572
	8.8 Charcoal Processing													-854		-854
9.	Loss & Own Use														-112	-112
10.	Discrepancy	0		0			0		0	0	0			0	0	0
11.	Total Final Energy Consumptions	77		2,169	587		47		1,213	46	265	12		1,161	605	4,013
12.	Industry Sector	77		169					126	43				306	150	703
13.	Transport Sector			1,617	587		47		886		85	12				1,617
	13.2 Domestic Air Transport			47			47									47
	13.3 Road			1,570	587				886		85	12				1,570
14.	Other Sector			383					201	2	179			855	455	1,693
	14.1 Residential & Commercial			179							179			855	454	1,489
	14.1.1 Commerce and Public Services			159							159				267	425
	14.1.2 Residential			21							21			855	187	1,063
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			204					201	2					1	205
15.	of which Non-Energy Use															
16.	Electricity Output in GWh	3,747		298									2,792	59		6,902

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-19. Cambodia Energy Balance Table 2018

Unit: ktoe

		1.	3.	4.									6.	9.	10.	12.
					4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.10				
		Coal	Crude Oil & NGL	Petroleum Products	Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil	Fuel Oil	LPG	Other Petroleum Products	Hydro	Others	Electricity	Total
1.	Indigenous Production	12											407	1,927		2,347
2.	Imports	960		2,609	633		202		1,359	85	319	11			135	3,704
3.	Exports															
4.	International Marine Bunkers															
13.1	International Aviation Bunkers			-140			-140									-140
5.	Stock Changes															
6.	Total Primary Energy Supply	972		2,469	633		62		1,359	85	319	11	407	1,927	135	5,911
7.	Transfers															
8.	Total Transformation Sector	-896		-84					-51	-34			-407	-838	729	-1,498
	8.1 Main Activity Producer	-896		-84					-51	-34			-407	-12	729	-672
	8.8 Charcoal Processing													-826		-826
9.	Loss & Own Use														-120	-120
10.	Discrepancy	0					0			0				0	0	0
11.	Total Final Energy Consumption	76		2,385	633		62		1,308	51	319	11		1,089	744	4,293
12.	Industry Sector	76		185					136	49				272	197	729
13.	Transport Sector			1,762	633		62		952		103	11				1,762
	13.2 Domestic Air Transport			62			62									62
	13.3 Road			1,699	633				952		103	11				1,699
14.	Other Sector			438					220	2	216			817	547	1,802
	14.1 Residential & Commercial			216							216			817	545	1,578
	14.1.1 Commerce and Public Services			191							191				296	487
	14.1.2 Residential			25							25			817	249	1,091
	14.2 Agriculture			0					0							0
	14.4 Non-specified Others			222					220	2					2	223
15.	of which Non-energy Use															
16.	Electricity Output in GWh	3,209		308									4,879	64		8,476

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex A-20. Cambodia Energy Balance Table 2019

Unit: ktoe

		1.	3.	4.									6.	9.	10.	12.			
					Coal	Crude Oil & NGL	Petroleum Products	4.1	4.2	4.3	4.4	4.5					4.6	4.7	4.10
								Motor Gasoline	Naphtha	Jet Fuel	Kerosene	Gas/ Diesel Oil					Fuel Oil	LPG	Other Petroleum Products
1.	Indigenous Production												346	1,902		2,256			
2.	Imports	1,270		3,261	758		226			1,681	181	402	13		263	4,794			
3.	Exports																		
4.	International Marine Bunkers																		
13.1	International Aviation Bunkers			-156			-156									-156			
5.	Stock Changes																		
6.	Total Primary Energy Supply	1,270		3,104	758		69			1,681	181	402	13	346	1,902	263	6,894		
7.	Transfers																		
8.	Total Transformation Sector	-1,133		-206						-123	-82			-346	-849	774	-1,768		
	8.1 Main Activity Producer	-1,133		-206						-123	-82			-346	-33	774	-952		
	8.8 Charcoal Processing														-816		-816		
9.	Loss & Own Use															-159	-159		
10.	Discrepancy			0			0				0				0		0		
11.	Total Final Energy Consumption	137		2,899	758		69			1,557	99	402	13		1,053	879	4,967		
12.	Industry Sector	137		257						162	95				263	291	948		
13.	Transport Sector			2,103	758		69			1,133		130	13				2,103		
	13.2 Domestic Air Transport			69			69										69		
	13.3 Road			2,034	758					1,133		130	13				2,034		
14.	Other Sector			538						262	3	272			790	588	1,916		
	14.1 Residential & Commercial			272								272			790	585	1,648		
	14.1.1 Commerce and Public Services			241								241				293	534		
	14.1.2 Residential			31								31			790	292	1,114		
	14.2 Agriculture			0						0							0		
	14.4 Non-specified Others			265						262	3					2	268		
15.	of which Non-energy Use																		
16.	Electricity Output in GWh	3,921		754										4,146	91		9,005		

GWh = gigawatt-hour, ktoe = kilotonne of oil equivalent, LPG = liquid petroleum gas, NGL = natural gas liquid. MTBE = methyl tertiary-butyl ether
Gasoline includes naphtha and MTBE; Other petroleum products include lubricant and base oil.

Annex B. Estimation Results of Energy Demand Functions

INDUSTRY

Total (INTT)

$$INTT = 50.3145*CONS + .6382E-7*INUSD + .54319*INTT(-1)$$

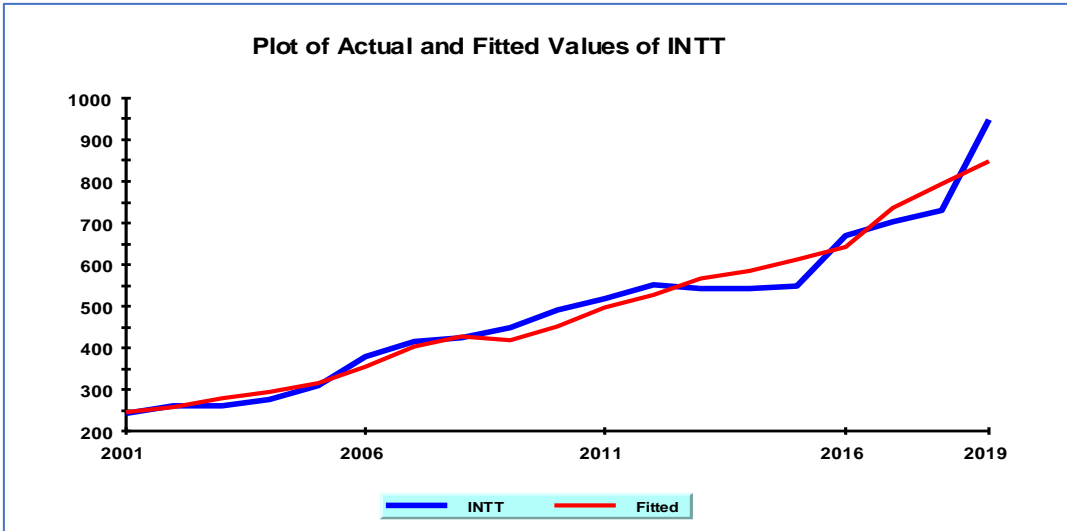
Ordinary Least Squares Estimation

Dependent variable is INTT

19 observations used for estimation from 2001 to 2019

Regressor	Coefficient	Standard Error
T-Ratio[Prob]		
CONS	50.3145	39.3386
1.2790 [.219]		
INUSD	.6382E-7	.2239E-7
2.8503 [.012]		
INTT (-1)	.54319	.21794
2.4924 [.024]		

R-Squared	.95687	R-Bar-Squared	
.95148			
S.E. of Regression	41.1494	F-Stat.	F(2,16)
177.4884 [.000]			
Mean of Dependent Variable	487.1610	S.D. of Dependent Variable	
186.8101			
Residual Sum of Squares	27092.3	Equation Log-likelihood	
-95.9542			
Akaike Info. Criterion	-98.9542	Schwarz Bayesian Criterion	
-100.3709			
DW-statistic	1.6668	Durbin's h-statistic	
2.3252 [.020]			



Diesel (INDO)

$$\text{INDO} = 18.9625 \cdot \text{CONS} + .1038\text{E-}7 \cdot \text{INUSD} - .0017183 \cdot \text{CPOIL} + .52913 \cdot \text{INDO}(-1) - 20.6162 \cdot \text{DUM0208}$$

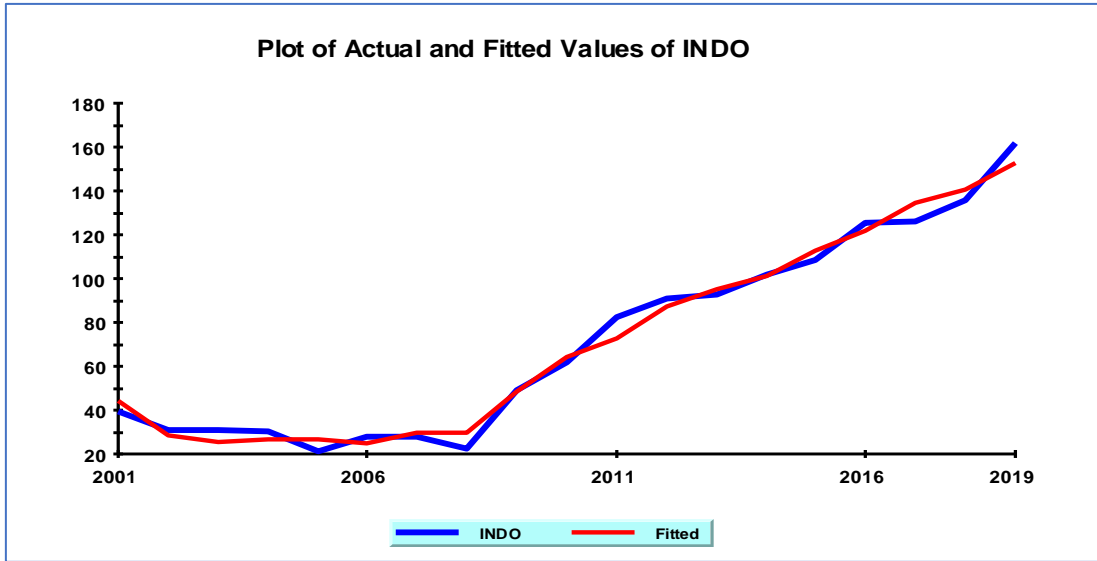
Ordinary Least Squares Estimation

Dependent variable is INDO

19 observations used for estimation from 2001 to 2019

Regressor T-Ratio[Prob]	Coefficient	Standard Error
CONS 2.8478[.013]	18.9625	6.6587
INUSD 3.6029[.003]	.1038E-7	.2880E-8
CPOIL -1.2463[.233]	-.0017183	.0013787
INDO(-1) 4.2489[.001]	.52913	.12453
DUM0208 -5.2179[.000]	-20.6162	3.9510

R-Squared .98280	.98662	R-Bar-Squared
S.E. of Regression 258.0627[.000]	5.9271	F-Stat. F(4,14)
Mean of Dependent Variable Variable 45.1879	71.9977	S.D. of Dependent
Residual Sum of Squares -57.8698	491.8225	Equation Log-likelihood
Akaike Info. Criterion Criterion -65.2309	-62.8698	Schwarz Bayesian
DW-statistic -.13237[.895]	2.0510	Durbin's h-statistic



Electricity (INEL)

$$INEL = -94.7491*CONS + .5285E-7*INUSD$$

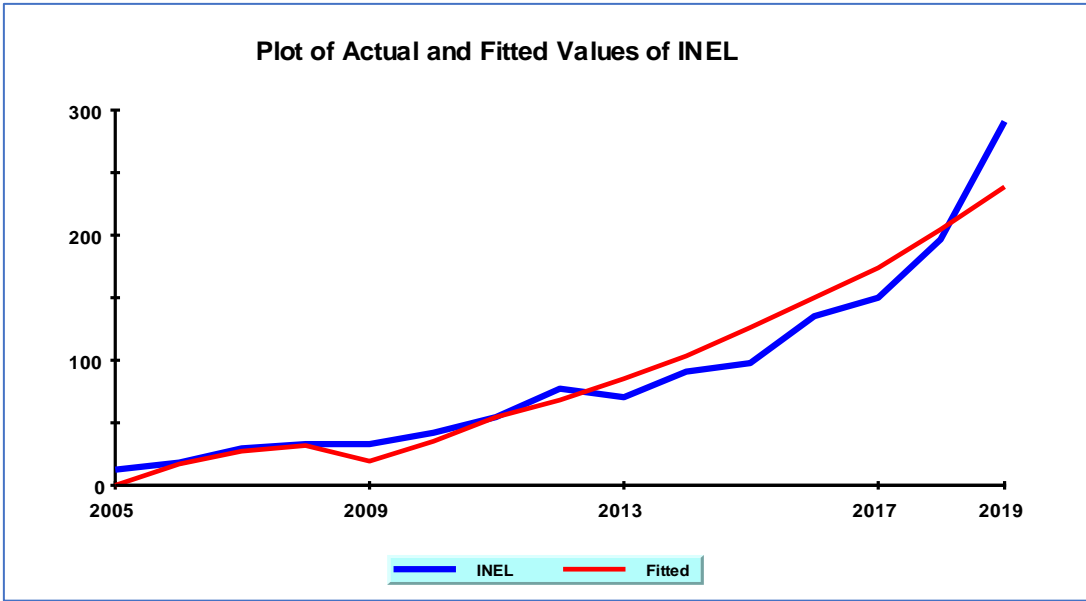
Ordinary Least Squares Estimation

Dependent variable is INEL

15 observations used for estimation from 2005 to 2019

Regressor	Coefficient	Standard Error	
T-Ratio[Prob]			
CONS	-94.7491	14.2051	-
6.6701[.000]			
INUSD	.5285E-7	.3806E-8	
13.8854[.000]			

R-Squared	.93683	R-Bar-Squared	
.93197			
S.E. of Regression	20.0706	F-Stat.	F(1,13)
192.8051[.000]			
Mean of Dependent Variable	88.9008	S.D. of Dependent Variable	
76.9527			
Residual Sum of Squares	5236.8	Equation Log-likelihood	
-65.1996			
Akaike Info. Criterion	-67.1996	Schwarz Bayesian Criterion	
-67.9077			
DW-statistic	1.0338		



TRANSPORT

Total (TSTT)

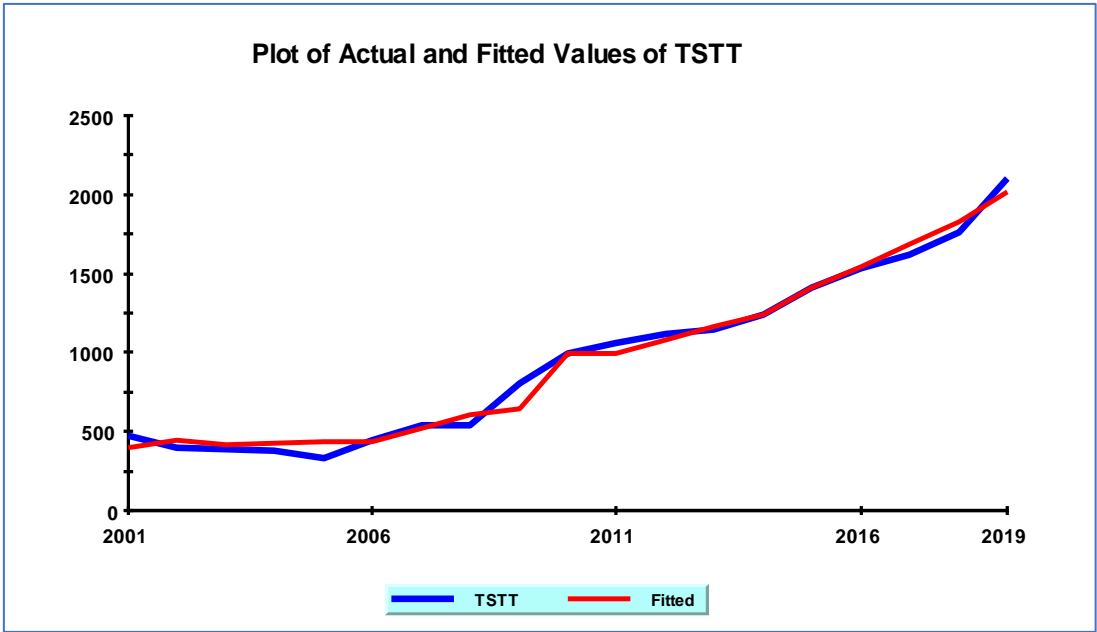
$$TSTT = 69.0120*CONS + .1799E-3*TTVHC - 1.7348*RPOILJ2 + .58721*TSTT(-1) + 160.4866*DUM10 + 46.8317*DUM15$$

Ordinary Least Squares Estimation

Dependent variable is TSTT

19 observations used for estimation from 2001 to 2019

Regressor	Coefficient	Standard Error	
T-Ratio[Prob]			
CONS	69.0120	74.5323	
.92593[.371]			
TTVHC	.1799E-3	.6251E-4	
2.8782[.013]			
RPOILJ2	-1.7348	68.7814	-
.025222[.980]			
TSTT(-1)	.58721	.18614	
3.1546[.008]			
DUM10	160.4866	79.6295	
2.0154[.065]			
DUM15	46.8317	81.2558	
.57635[.574]			
R-Squared	.98585	R-Bar-Squared	
.98041			
S.E. of Regression	75.8880	F-Stat.	F(5,13)
181.1440[.000]			
Mean of Dependent Variable	962.5685	S.D. of Dependent Variable	
542.1610			
Residual Sum of Squares	74866.8	Equation Log-likelihood	
-105.6106			
Akaike Info. Criterion	-111.6106	Schwarz Bayesian Criterion	
-114.4439			
DW-statistic	2.0077	Durbin's h-statistic	-
.028873[.977]			



ROAD

Diesel (RDMG)

$$RDMG = -67.2756*CONS + .6439E-5*MGDPLCU - .3584E-3*RPOILJ + .66744*RDMG(-1) - 45.8016*DUM16$$

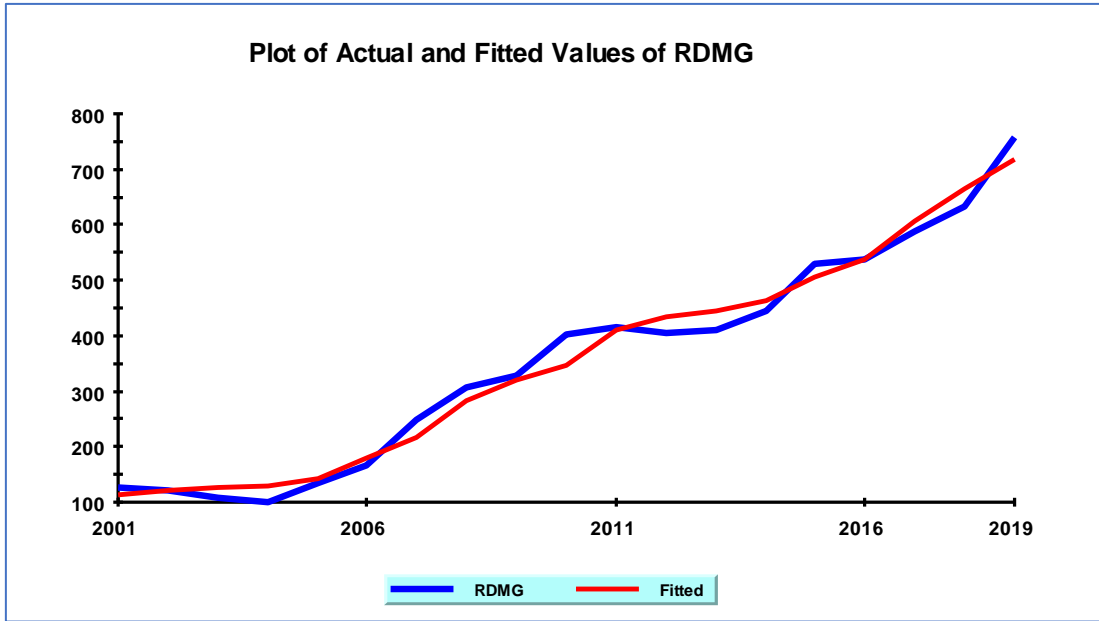
Ordinary Least Squares Estimation

Dependent variable is RDMG

19 observations used for estimation from 2001 to 2019

Regressor	Coefficient	Standard Error	
T-Ratio[Prob]			
CONS	-67.2756	35.0740	-
1.9181[.076]			
MGDPLCU	.6439E-5	.2212E-5	
2.9110[.011]			
RPOILJ	-.3584E-3	.010955	-
.032713[.974]			
RDMG(-1)	.66744	.15702	
4.2507[.001]			
DUM16	-45.8016	33.2571	-
1.3772[.190]			

R-Squared	.98292	R-Bar-Squared	
.97803			
S.E. of Regression	29.3632	F-Stat.	F(4,14)
201.3612[.000]			
Mean of Dependent Variable	355.8906	S.D. of Dependent Variable	
198.1191			
Residual Sum of Squares	12070.7	Equation Log-likelihood	
-88.2738			
Akaike Info. Criterion	-93.2738	Schwarz Bayesian Criterion	
-95.6349			
DW-statistic	1.4572	Durbin's h-statistic	
1.6225[.105]			



Diesel (RDDO)

$$\begin{aligned}
 \text{RDDO} = & -8.5115 \cdot \text{CONS} + .1149\text{E-}4 \cdot \text{MGDPLCU} - \\
 & .011686 \cdot \text{RPOILJ2} + .46581 \cdot \text{RDDO}(-1) - 46.9912 \cdot \text{DUM02} - \\
 & 139.0378 \cdot \text{DUM05} - 118.2242 \cdot \text{DUM07} - 182.6804 \cdot \text{DUM08}
 \end{aligned}$$

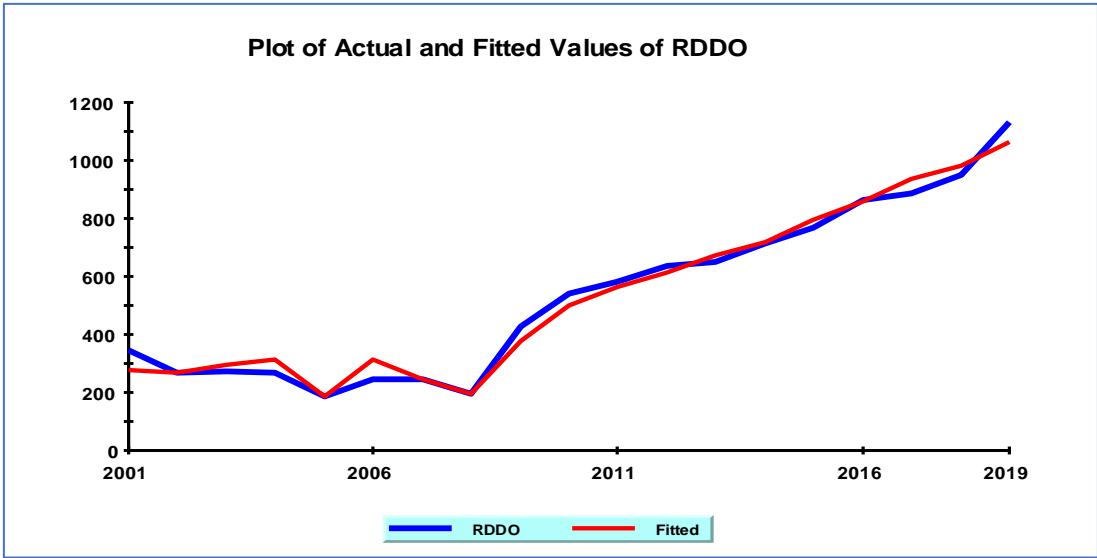
Ordinary Least Squares Estimation

Dependent variable is RDDO

19 observations used for estimation from 2001 to 2019

Regressor T-Ratio[Prob]	Coefficient	Standard Error	
CONS .14756[.885]	-8.5115	57.6823	-
MGDPLCU 3.5742[.004]	.1149E-4	.3215E-5	
RPOILJ2 .90669[.384]	-.011686	.012888	-
RDDO(-1) 2.9212[.014]	.46581	.15946	
DUM02 .76750[.459]	-46.9912	61.2260	-
DUM05 2.5964[.025]	-139.0378	53.5493	-
DUM07 2.0363[.067]	-118.2242	58.0593	-
DUM08 2.9735[.013]	-182.6804	61.4360	-

R-Squared .97125	.98243	R-Bar-Squared	
S.E. of Regression 87.8713[.000]	49.5600	F-Stat.	F(7,11)
Mean of Dependent Variable 292.2919	535.9193	S.D. of Dependent Variable	
Residual Sum of Squares -95.9282	27018.2	Equation Log-likelihood	
Akaike Info. Criterion -107.7059	-103.9282	Schwarz Bayesian Criterion	
DW-statistic 1.8371[.066]	1.3940	Durbin's h-statistic	



OTHERS

Commercial

Electricity (CPEL)

$$\begin{aligned} \text{CPEL} = & -10.3834 * \text{CONS} + .4126\text{E-}5 * \text{MSVLCU} - \\ & 1.4145 * \text{RINELT2} + .79045 * \text{CPEL}(-1) + \\ & 21.0476 * \text{DUM1415} + 17.4953 * \text{DUM18} \end{aligned}$$

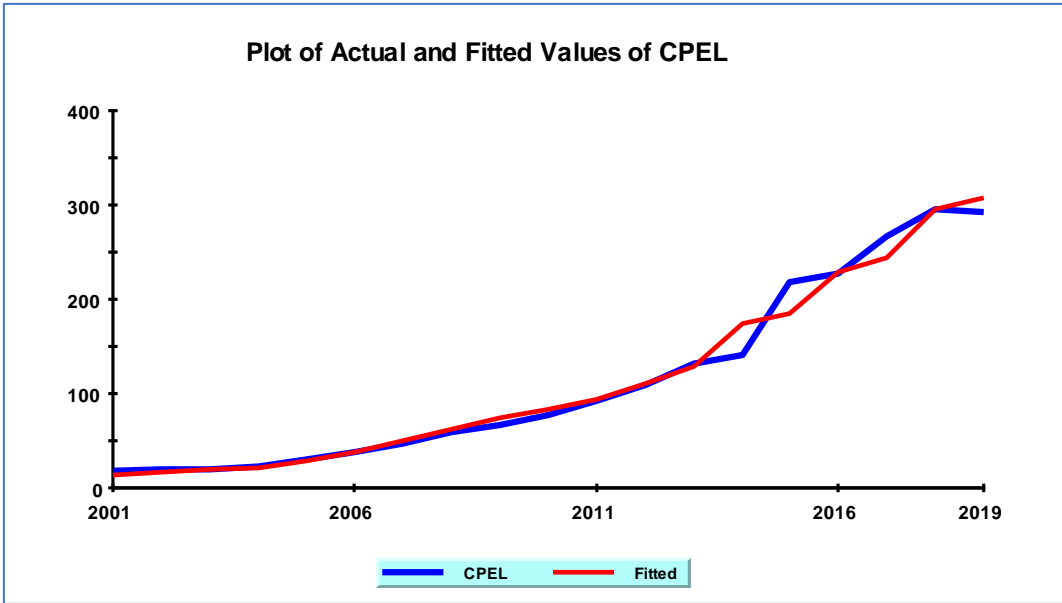
Ordinary Least Squares Estimation

Dependent variable is CPEL

19 observations used for estimation from 2001 to 2019

Regressor	Coefficient	Standard Error	
T-Ratio[Prob]			
CONS	-10.3834	57.9706	-
.17911[.861]			
MSVLCU	.4126E-5	.3907E-5	
1.0560[.310]			
RINELT2	-1.4145	3.9221	-
.36065[.724]			
CPEL(-1)	.79045	.17809	
4.4386[.001]			
DUM1415	21.0476	12.8488	
1.6381[.125]			
DUM18	17.4953	18.3908	
.95131[.359]			

R-Squared	.98288	R-Bar-Squared	
.97630			
S.E. of Regression	15.0934	F-Stat.	F(5,13)
149.2760[.000]			
Mean of Dependent Variable	114.5956	S.D. of Dependent Variable	
98.0349			
Residual Sum of Squares	2961.5	Equation Log-likelihood	
-74.9256			
Akaike Info. Criterion	-80.9256	Schwarz Bayesian Criterion	
-83.7589			
DW-statistic	2.6616	Durbin's h-statistic	-
2.2872[.022]			



Residential

Electricity (REEL)

$$REEL = -102.3253*CONS + .1221E-3*GDPC - 18.8721*RRSELT + 17.7127*DUM10 + .63237*DUM11$$

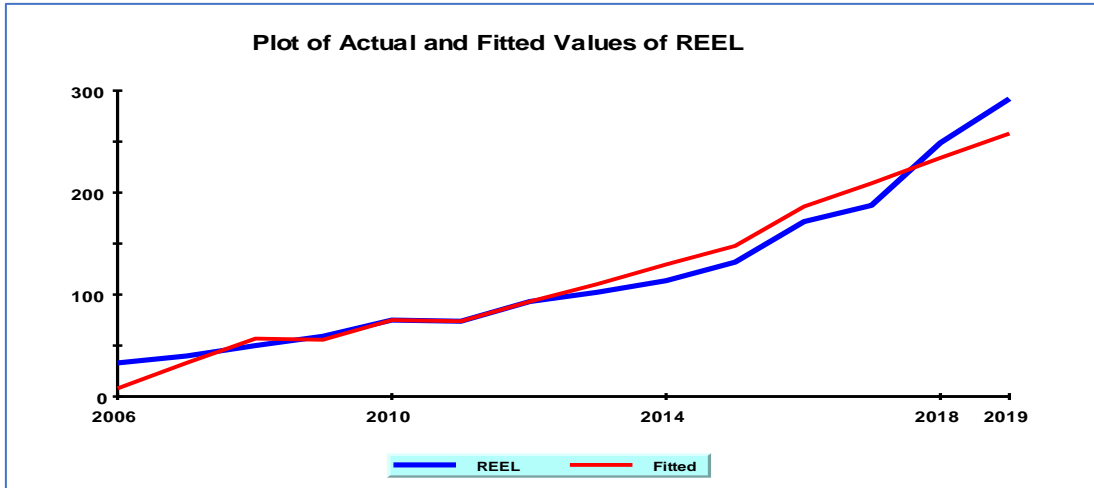
Ordinary Least Squares Estimation

Dependent variable is REEL

14 observations used for estimation from 2006 to 2019

Regressor	Coefficient	Standard Error
T-Ratio[Prob]		
CONS	-102.3253	159.4502
-.64174[.537]		
GDPC	.1221E-3	.3117E-4
3.9173[.004]		
RRSELT	-18.8721	18.3463
-1.0287[.330]		
DUM10	17.7127	21.2786
.83242[.427]		
DUM11	.63237	21.2446
.029766[.977]		

R-Squared	.95701	R-Bar-Squared
.93791		
S.E. of Regression	19.7648	F-Stat. F(4,9)
50.0908[.000]		
Mean of Dependent Variable	119.2762	S.D. of Dependent Variable
79.3178		
Residual Sum of Squares	3515.8	Equation Log-likelihood
-58.5469		
Akaike Info. Criterion	-63.5469	Schwarz Bayesian Criterion
-65.1446		
DW-statistic	.73842	



LPG (RELPG)

$$RELPG = -2.2973*CONS + .3824E-5*GDPC - .0011134*RPOILJ2 + .90287*RELPG(-1) + .42223*DUM05 - .55384*DUM09 - 2.0490*DUM14 - 1.8626*DUM1518$$

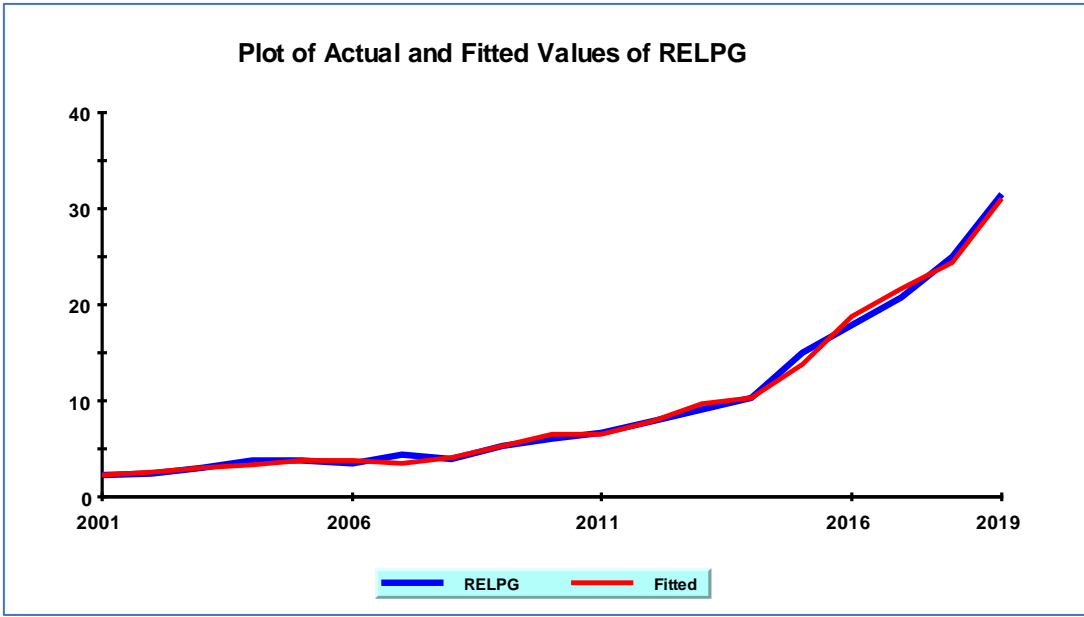
Ordinary Least Squares Estimation

Dependent variable is RELPG

19 observations used for estimation from 2001 to 2019

Regressor	Coefficient	Standard Error	T-
Ratio[Prob]			
CONS	-2.2973	1.2641	-
1.8173[.096]			
GDPC	.3824E-5	.1395E-5	
2.7410[.019]			
RPOILJ2	-.0011134	.3390E-3	-
3.2845[.007]			
RELPG(-1)	.90287	.12443	
7.2560[.000]			
DUM05	.42223	.79520	
.53097[.606]			
DUM09	-.55384	.85360	-
.64882[.530]			
DUM14	-2.0490	.92752	-
2.2091[.049]			
DUM1518	-1.8626	.84602	-
2.2016[.050]			

R-Squared	.99568	R-Bar-Squared	
.99293			
S.E. of Regression	.71244	F-Stat.	F(7,11)
362.0022[.000]			
Mean of Dependent Variable	9.6100	S.D. of Dependent Variable	
8.4715			
Residual Sum of Squares	5.5833	Equation Log-likelihood	
-15.3256			
Akaike Info. Criterion	-23.3256	Schwarz Bayesian Criterion	
-27.1034			
DW-statistic	2.3447	Durbin's h-statistic	-
.89422[.371]			



Agriculture

Diesel (AGDO)

$$\text{AGDO} = -.057142 * \text{CONS} + .2179\text{E-}7 * \text{MAGLCU} - .061441 * \text{RPOILJ2} + .64552 * \text{AGDO}(-1) - .025450 * \text{DUM05} - .0064527 * \text{DUM07}$$

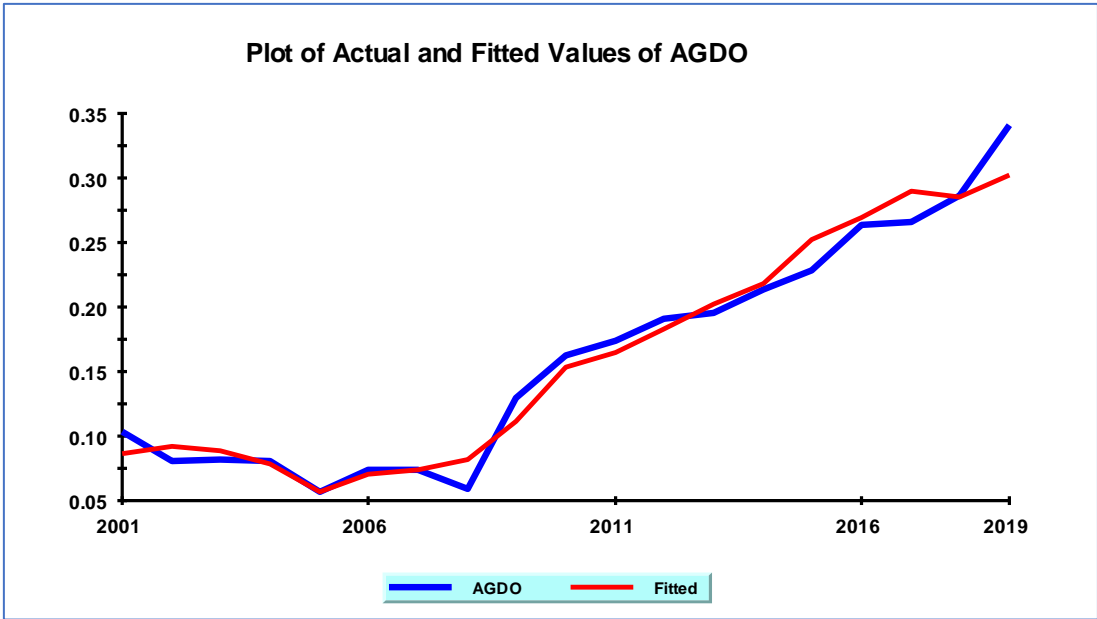
Ordinary Least Squares Estimation

Dependent variable is AGDO

19 observations used for estimation from 2001 to 2019

Regressor T-Ratio[Prob]	Coefficient	Standard Error	
CONS 2.1238[.053]	-.057142	.026905	-
MAGLCU 3.4596[.004]	.2179E-7	.6300E-8	
RPOILJ2 2.6981[.018]	-.061441	.022772	-
AGDO(-1) 4.8980[.000]	.64552	.13179	
DUM05 1.3226[.209]	-.025450	.019243	-
DUM07 .32747[.749]	-.0064527	.019704	-

R-Squared .95835	.96992	R-Bar-Squared	
S.E. of Regression 83.8431[.000]	.017954	F-Stat.	F(5,13)
Mean of Dependent Variable .087979	.16106	S.D. of Dependent Variable	
Residual Sum of Squares 53.0240	.0041906	Equation Log-likelihood	
Akaike Info. Criterion 44.1907	47.0240	Schwarz Bayesian Criterion	
DW-statistic 1.2046[.228]	1.5476	Durbin's h-statistic	



DEMAND TOTAL

$$\text{INHEAT} = 5.7380 \cdot \text{CONS} + .2156\text{E-}7 \cdot \text{INUSD} - .0087461 \cdot \text{RPOILJ} + .76698 \cdot \text{INHEAT}(-1) + 41.2918 \cdot \text{DUM06} - 70.7074 \cdot \text{DUM15}$$

Ordinary Least Squares Estimation

Dependent variable is INHEAT

19 observations used for estimation from 2001 to 2019

Regressor	Coefficient	Standard Error	
T-Ratio[Prob]			
CONS .20194 [.843]	5.7380	28.4148	
INUSD 1.4854 [.161]	.2156E-7	.1452E-7	
RPOILJ .43028 [.674]	-.0087461	.020327	-
INHEAT(-1) 1.9398 [.074]	.76698	.39540	
DUM06 1.1203 [.283]	41.2918	36.8592	
DUM15 2.1342 [.052]	-70.7074	33.1299	-

R-Squared .85167	.89287	R-Bar-Squared	
S.E. of Regression 21.6698 [.000]	30.7901	F-Stat.	F(5,13)
Mean of Dependent Variable 79.9452	172.3805	S.D. of Dependent Variable	
Residual Sum of Squares -88.4713	12324.4	Equation Log-likelihood	
Akaike Info. Criterion -97.3046	-94.4713	Schwarz Bayesian Criterion	
DW-statistic *NONE*	1.6835	Durbin's h-statistic	

Diagnostic Tests

```

*****
*****
*   Test Statistics   *       LM Version       *           F
Version              *
*****
*****
*
*
* A:Serial Correlation*CHSQ(1) = .0080882[.928]*F(1,12)      =
.0051105[.944]*
*
*
* B:Functional Form   *CHSQ(1) = .85861[.354]*F(1,12)      =
.56795[.466]*
*
*
* C:Normality         *CHSQ(2) = .91053[.634]*           Not
applicable           *
*
*
* D:Heteroscedasticity*CHSQ(1) = 10.2577[.001]*F(1,17)      =
19.9467[.000]*
*****
*****

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A:Lagrange multiplier test of residual serial correlation
B:Ramsey's RESET test using the square of the fitted values
C:Based on a test of skewness and kurtosis of residuals
D:Based on the regression of squared residuals on squared
fitted values

```

