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(970-2) 240 6343 :

<http://www.pcbs.org> :

(970-2) 240 6340 :

[diwan@pcbs.pna.org](mailto:diwan@pcbs.pna.org) :

(NORAD)

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# Tables





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**Table 1: Imported Energy in the Remaining West Bank and Gaza Strip by Type of Energy and Month, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,

LPG, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Month	Total Energy	Energy Type							
		Coal	Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	Electricity
January	2038	5	132	232	10559	1681	15290	11640	140058
February	2083	0	77	214	9803	1155	16904	9897	162760
March	1876	3	93	312	8399	1571	19135	12061	86210
April	1977	7	121	354	6923	1839	19006	10765	133646
May	1971	10	176	584	6581	963	20709	11274	122256
June	1998	2	271	446	5335	1516	22070	11659	122439
July	2201	2	615	756	6592	1388	24058	13118	125788
August	2318	16	186	595	6713	2050	25589	13280	135614
September	2306	23	184	383	7223	241	28542	12937	122452
October	2195	11	230	358	6924	415	25983	12315	124612
November	2258	11	229	427	7477	1337	25748	12307	127235
December	2515	13	311	484	9944	2763	28660	12777	120417
<b>Total</b>	<b>25736</b>	<b>103</b>	<b>2625</b>	<b>5145</b>	<b>92473</b>	<b>16919</b>	<b>271694</b>	<b>144030</b>	<b>1523487</b>

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**Table 2: Imported Energy in the Remaining West Bank and Gaza Strip by Type of Energy and Region, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,

LPG, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Total Energy	Energy Type								
		Coal	Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	Electricity	
West Bank- North	6984	54	1046	966	26090	2380	83770	50811	242218	
West Bank-Middle*	4988	0	108	879	15692	1031	49475	27948	385023	*
West Bank-South	5723	34	1354	1966	19933	1488	65643	38947	249809	
<b>Remaining West Bank</b>	<b>17695</b>	<b>88</b>	<b>2508</b>	<b>3811</b>	<b>61715</b>	<b>4899</b>	<b>198888</b>	<b>117706</b>	<b>877050</b>	
<b>Gaza Strip</b>	<b>8041</b>	<b>15</b>	<b>117</b>	<b>1334</b>	<b>30758</b>	<b>12020</b>	<b>72806</b>	<b>26324</b>	<b>646437</b>	
<b>Palestinian Territory</b>	<b>25736</b>	<b>103</b>	<b>2625</b>	<b>5145</b>	<b>92473</b>	<b>16919</b>	<b>271694</b>	<b>144030</b>	<b>1523487</b>	

\*Excluding that part of Jerusalem annexed by Israel in 1967.

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**Table 3: Re-Exported Energy in the Remaining West Bank and Gaza Strip by Type of Energy and Month, 1999**

Gasoline and Diesel in Thousand Liters, LPG, Coal and Wood  
in Metric Tons and Total Energy in Tera Joule

Month	Total Energy	Energy Type						
		Wood	Coal	Oils and Lubricates	LPG	Diesel	Gasoline	
January	11	66	15	15	0	206	43	
February	17	55	0	16	2	364	56	
March	12	55	106	9	0	198	40	
April	18	77	11	23	0	373	45	
May	16	70	114	11	0	245	76	
June	22	70	22	35	0	410	66	
July	10	54	0	29	0	175	34	
August	21	74	0	63	0	421	55	
September	16	43	132	33	0	278	33	
October	19	58	3	27	0	427	26	
November	20	46	0	21	2	448	37	
December	20	61	0	14	0	473	27	
<b>Total</b>	<b>202</b>	<b>729</b>	<b>403</b>	<b>296</b>	<b>4</b>	<b>4018</b>	<b>538</b>	

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**Table 4: Re-Exported Energy in the Remaining West Bank and Gaza Strip by Type of Energy and Region, 1999**

Gasoline and Diesel in Thousand Liters, LPG, Coal and Wood  
in Metric Tons and Total Energy in Tera Joule

Region	Total Energy	Energy Type						
		Coal	Wood	Oils and Lubricates	LPG	Diesel	Gasoline	
West Bank- North	41	728	121	81	4	472	79	
West Bank-Middle*	44	0	0	24	0	1105	54	*
West Bank-South	117	1	282	191	0	2441	405	
<b>Remaining West Bank</b>	<b>202</b>	<b>729</b>	<b>403</b>	<b>296</b>	<b>4</b>	<b>4018</b>	<b>538</b>	
<b>Gaza Strip</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Palestinian Territory</b>	<b>202</b>	<b>729</b>	<b>403</b>	<b>296</b>	<b>4</b>	<b>4018</b>	<b>538</b>	

\*Excluding that parts of Jerusalem annexed by Israel in 1967.

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**Table 5: Energy Purchases for Economic Activities by Type of Energy, Region, and Activity, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,

LPG, Oil and Lubricates, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Economic Activity	No .of Establ.	Total Energy	Energy Type								
				Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline			Electricity
<b>West Bank - North</b>	Industry	5152	2893	374	429	1489	534	68099	3325	38942		
	Construction	120	311	0	35	8	0	8122	154	1043		
	Internal trade	14062	1244	2	85	412	163	26494	2577	37708		
	Services	4251	389	239	88	1011	3	6767	662	15936		
	Transport, Storage & Communication	136	1020	0	47	2	0	26400	650	5168		
	<b>Total</b>	<b>23721</b>	<b>5857</b>	<b>615</b>	<b>684</b>	<b>2922</b>	<b>700</b>	<b>135882</b>	<b>7368</b>	<b>98797</b>		
<b>West Bank - Middle</b>	Industry	2522	1442	107	129	731	21	31112	1265	51340		
	Construction	85	160	0	57	8	0	3888	243	1513		
	Internal trade	7677	758	1	105	473	56	10772	2052	64763		
	Services	3389	437	168	320	1385	154	2830	1284	50861		
	Transport, Storage & Communication	260	337	0	125	10	6	8416	451	1373		
	<b>Total</b>	<b>13933</b>	<b>3134</b>	<b>276</b>	<b>736</b>	<b>2607</b>	<b>237</b>	<b>57018</b>	<b>5295</b>	<b>169850</b>		
<b>West Bank - South</b>	Industry	3821	730	145	781	1555	116	4029	2854	92917		
	Construction	76	13	4	97	8	0	72	130	394		
	Internal trade	7976	278	17	42	344	55	3762	535	24856		
	Services	2462	182	137	10	931	156	1460	640	14172		
	Transport, Storage & Communication	90	260	0	82	6	1	6889	10	383		
	<b>Total</b>	<b>14425</b>	<b>1463</b>	<b>303</b>	<b>1012</b>	<b>2844</b>	<b>328</b>	<b>16212</b>	<b>4169</b>	<b>132722</b>		

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**Table 5 (Continued): Energy Purchases for Economic Activities by Type of Energy, Region and Activity, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,

LPG, Oil and Lubricates and Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Economic Activity	No .of Establ.	Total Energy	Energy Type								
				Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline			Electricity
<b>Total of West Bank</b>	Industry	11495	5065	626	1339	3775	671	103240	7444	183199		
	Construction	281	484	4	189	24	0	12082	527	2950		
	Internal trade	29715	2280	20	232	1229	274	41028	5164	127327		
	Services	10102	1008	544	418	3327	313	11057	2586	80969		
	Transport, Storage & Communication	486	1617	0	254	18	7	41705	1111	6924		
	<b>Total</b>	<b>52079</b>	<b>10454</b>	<b>1194</b>	<b>2432</b>	<b>8373</b>	<b>1265</b>	<b>209112</b>	<b>16832</b>	<b>401369</b>		
<b>Gaza Strip</b>	Industry	4132	1365	217	288	1387	361	26816	2027	53277		
	Construction	182	136	0	27	20	0	3328	264	656		
	Internal trade	12124	556	133	159	1684	23	5694	3729	35159		
	Services	3698	239	354	54	1042	428	1881	1180	14925		
	Transport, Storage & Communication	169	323	0	26	35	8	8391	118	1603		
	<b>Total</b>	<b>20305</b>	<b>2619</b>	<b>704</b>	<b>554</b>	<b>4168</b>	<b>820</b>	<b>46110</b>	<b>7318</b>	<b>105620</b>		
<b>Palestinian Territory</b>		<b>72384</b>	<b>13073</b>	<b>1898</b>	<b>2986</b>	<b>12541</b>	<b>2085</b>	<b>255222</b>	<b>24150</b>	<b>506989</b>		

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**Table 6: Energy Purchases for Economic Activities by Type of Energy and Activity, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,

LPG, Oil and Lubricates, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Economic Activity	No. of Establ.	Total Energy	Energy Type						Electricity
			Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	
Industry	15627	6430	843	1627	5162	1032	130056	9471	236476
Construction	463	620	4	216	44	0	15410	791	3606
Internal trade	41839	2836	153	391	2913	297	46722	8893	162486
Services	13800	1247	898	472	4369	741	12938	3766	95894
Transport, storage & communication	655	1940	0	280	53	15	50096	1229	8527
<b>Total</b>	<b>72384</b>	<b>13073</b>	<b>1898</b>	<b>2986</b>	<b>12541</b>	<b>2085</b>	<b>255222</b>	<b>24150</b>	<b>506989</b>

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**Table 7: Energy Used for Production in Economic Activities by Type of Energy, Region and Activity, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,

LPG, Oil and Lubricates, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Economic Activity	No. of Establ.	Total Energy	Energy Type								
				Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	Electricity		
<b>West Bank-North</b>	Industry	5152	3009	404	453	1507	990	70707	3316	38960		
	Construction	120	296	0	35	5	1	7706	154	1043		
	Services	14062	1246	2	92	419	294	26406	2576	37604		
	Internal Trade	4251	437	912	88	1011	737	6935	666	15936		
	Transport, Storage & Communications	136	932	0	47	3	16	24016	650	5185		
	<b>Total</b>	<b>23721</b>	<b>5920</b>	<b>1318</b>	<b>715</b>	<b>2945</b>	<b>2038</b>	<b>135770</b>	<b>7362</b>	<b>98728</b>		
<b>West Bank -Middle</b>	Industry	2522	1464	107	125	745	538	31023	1302	52243		
	Construction	85	140	0	59	8	0	3326	243	1528		
	Services	7677	743	1	104	482	181	10826	2052	59492		
	Internal Trade	3389	436	175	319	1396	15	2924	1278	50922		
	Transport, Storage & Communications	260	337	0	128	10	6	8404	451	1373		
	<b>Total</b>	<b>13933</b>	<b>3120</b>	<b>283</b>	<b>735</b>	<b>2641</b>	<b>740</b>	<b>56503</b>	<b>5326</b>	<b>165558</b>		
<b>West Bank - South</b>	Industry	3821	723	146	757	1551	17	3869	2961	92910		
	Construction	76	14	4	97	9	0	94	137	394		
	Services	7976	286	17	35	333	36	3782	799	24918		
	Internal Trade	2462	181	130	10	933	138	1462	640	14172		
	Transport, Storage & Communications	90	262	0	83	6	0	6924	10	383		
	<b>Total</b>	<b>14425</b>	<b>1466</b>	<b>297</b>	<b>982</b>	<b>2832</b>	<b>191</b>	<b>16131</b>	<b>4547</b>	<b>132777</b>		



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**Table 7 (Continued): Energy Used for Production in Economic Activities by Type of Energy, Region and Activity, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters.

LPG, Oil and Lubricates, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Economic Activity	No. of Establ.	Total Energy	Energy Type								
				Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline			Electricity
<b>Total of West Bank</b>	Industry	11495	5196	657	1335	3803	1545	105599	7579	184113		
	Construction	281	450	4	191	22	1	11126	534	2965		
	Services	29715	2275	20	231	1234	511	41014	5427	122014		
	Internal Trade	10102	1054	1217	417	3340	890	11321	2584	81030		
	Transport, Storage & Communications	486	1531	0	258	19	22	39344	1111	6941		
	<b>Total</b>	<b>52079</b>	<b>10506</b>	<b>1898</b>	<b>2432</b>	<b>8418</b>	<b>2969</b>	<b>208404</b>	<b>17235</b>	<b>397063</b>		
<b>Gaza Strip</b>	Industry	4132	1467	227	294	1551	116	29552	2114	53319		
	Construction	182	137	0	29	9	0	3353	277	656		
	Services	12124	500	133	160	333	55	5714	3739	35159		
	Internal Trade	3698	224	389	55	933	156	1880	1180	14925		
	Transport, Storage & Communications	169	233	0	26	6	1	5979	118	1602		
	<b>Total</b>	<b>20305</b>	<b>2561</b>	<b>749</b>	<b>564</b>	<b>2832</b>	<b>328</b>	<b>46478</b>	<b>7428</b>	<b>105661</b>		
<b>Palestinian Territory</b>		<b>72384</b>	<b>13067</b>	<b>2647</b>	<b>2996</b>	<b>11250</b>	<b>3297</b>	<b>254882</b>	<b>24663</b>	<b>502724</b>		

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**Table 8: Energy Used for Production in Economic Activities by Type of Energy and Activity, 1999**

Electricity in Megawatt. hour, Gasoline, Diesel and Kerosene in Thousand Liters,  
LPG, Oil and Lubricates, Coal and Wood in Metric Tons and Total Energy in Tera Joule

Economic Activity	No .of Establ.	Total Energy	Energy Type						
			Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	Electricity
Industry	15627	6663	884	1629	5354	1661	135151	9693	237432
Construction	463	587	4	220	31	1	14479	811	3621
Services	41839	2775	153	391	1567	566	46728	9166	157173
Internal Trade	13800	1278	1606	472	4273	1046	13201	3764	95955
Transport, Storage & Communications	655	1764	0	284	25	23	45323	1229	8543
<b>Total</b>	<b>72384</b>	<b>13067</b>	<b>2647</b>	<b>2996</b>	<b>11250</b>	<b>3297</b>	<b>254882</b>	<b>24663</b>	<b>502724</b>

1999

:9

**Table 9: Energy Used for Electricity Generation in Economic Activities by Type of Energy and Region, 1999**

Gasoline, Diesel and Kerosene in Thousand Liters, LPG, Oil and Lubricates,

Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Total Energy	Energy Type						
		Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	
West Bank -North	859.4	0.0	46.8	6.4	69.3	23110.0	4.6	
West Bank -Middle	341.5	0.0	2.1	5.6	0.0	9204.9	27.2	
West Bank -South	64.6	0.4	45.5	9.5	1.0	1670.4	15.8	
<b>Total of West Bank</b>	<b>1265.5</b>	<b>0.4</b>	<b>94.4</b>	<b>21.5</b>	<b>70.3</b>	<b>33985.3</b>	<b>47.6</b>	
<b>Gaza Strip</b>	<b>432.7</b>	<b>0.0</b>	<b>2.4</b>	<b>0.4</b>	<b>0.0</b>	<b>11686.0</b>	<b>18.2</b>	
<b>Palestinian Territory</b>	<b>1698.2</b>	<b>0.4</b>	<b>96.8</b>	<b>21.9</b>	<b>70.3</b>	<b>45671.3</b>	<b>65.8</b>	

1999

:10

**Table 10: Energy Used for Electricity Generation in Economic Activities by Type of Energy and Activity, 1999**

Gasoline, Diesel and Kerosene in Thousand Liters, LPG, Oil and Lubricates,

Coal and Wood in Metric Tons and Total Energy in Tera Joule

Economic Activity	Total Energy	Energy Type						
		Coal and Wood	Oils and Lubricate	LPG	Diesel	Kerosene	Gasoline	
Industry	1582.2	0.0	88.8	11.7	42619.5	8.3	60.8	
Construction	20.9	0.4	0.6	0.0	564.1	0.0	1.1	
Internal Trade	26.8	0.0	5.8	5.5	708.0	4.5	0.6	
Services	67.8	0.0	1.5	4.6	1767.1	56.8	1.9	
Transport, storage and communication	0.5	0.0	0.1	0.1	12.6	0.7	1.4	
<b>Total</b>	<b>1698.2</b>	<b>0.4</b>	<b>96.8</b>	<b>21.9</b>	<b>45671.3</b>	<b>70.3</b>	<b>65.8</b>	

1999

: 11

**Table 11: Energy Losses in Economic Activities by Type of Energy and Region, 1999**

Gasoline, Diesel and Kerosene in Thousand Liters, LPG, Oil and Lubricates,

Coal and Wood in Metric Tons and Total Energy in Tera Joule

Region	Total Energy	Energy Type					
		Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline
West Bank -North	2.1	0.1	0.5	0.0	0.9	54.3	0.0
West Bank -Middle	1.2	0.0	0.5	0.0	0.0	33.2	0.0
West Bank -South	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total of West bank</b>	<b>3.3</b>	<b>0.1</b>	<b>1.0</b>	<b>0.0</b>	<b>0.9</b>	<b>87.5</b>	<b>0.0</b>
<b>Gaza Strip</b>	<b>0.8</b>	<b>0.4</b>	<b>1.2</b>	<b>1.6</b>	<b>0.0</b>	<b>18.5</b>	<b>0.5</b>
<b>Palestinian Territory</b>	<b>4.1</b>	<b>0.5</b>	<b>2.2</b>	<b>1.6</b>	<b>0.9</b>	<b>106.0</b>	<b>0.5</b>

**1999** **: 12**  
**Table 12: Energy Losses in Economic Activities by Type of Energy and Activity, 1999**

Gasoline, Diesel and Kerosene in Thousand Liters, LPG, Oil and Lubricates,

Coal and Wood in Metric Tons and Total Energy in Tera Joule

Economic Activity	Total Energy	Energy Type					
		Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline
Industry	4.1	0.5	2.2	1.6	0.9	105.7	0.4
Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Internal Trade	-	0.0	0.0	0.0	0.0	0.3	0.1
Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transport, storage & communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>4.1</b>	<b>0.5</b>	<b>2.2</b>	<b>1.6</b>	<b>0.9</b>	<b>106.0</b>	<b>0.5</b>

-: Very small value (ignored)

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1999

:13

**Table 13: Change of Energy Stock in Economic Activities by Type of Energy and Region, 1999**

Gasoline, Diesel and Kerosene in Thousand Liters, LPG, Oil and Lubricates,

Wood and Coal in Metric Tons and Total Energy in Tera Joule.

Region	Total change of Energy stock	Energy Type						
		Wood and Coal	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	
West Bank- North	-1.5	1.9	-6.9	-1.8	0.7	-31.8	0.1	
West Bank- Middle	-1.4	1.6	0.1	-27.4	-0.1	-18.9	13.0	
West Bank- South	-0.1	7.3	0.7	-6.4	0.0	0.6	0.0	
<b>Total of West Bank</b>	<b>-3.0</b>	<b>10.8</b>	<b>-6.1</b>	<b>-35.6</b>	<b>0.6</b>	<b>-50.1</b>	<b>13.1</b>	
<b>Gaza Strip</b>	<b>-1.6</b>	<b>-43.6</b>	<b>-1.3</b>	<b>-11.8</b>	<b>-0.5</b>	<b>-6.7</b>	<b>2.9</b>	
<b>Palestinian Territory</b>	<b>-4.6</b>	<b>-32.8</b>	<b>-7.4</b>	<b>-47.4</b>	<b>0.1</b>	<b>-56.8</b>	<b>16.0</b>	

1999

:14

**Table 14: Change of Energy Stock in Economic Activities by Type of Energy and Activity, 1999**

Gasoline, Diesel and Kerosene in Thousand Liters, LPG, Oil and Lubricates,

Wood and Coal in Metric Tons and Total Energy in Tera Joule

Economic Activity	Total change of Energy stock	Energy Type						
		Coal and Wood	Oils and Lubricates	LPG	Kerosene	Diesel	Gasoline	
Industry	0.6	-0.7	-1.6	-14.7	-0.8	22.1	15.1	
Construction	-3.7	0.0	-0.8	-0.3	0.0	-99.6	-0.2	
Internal Trade	-1.3	-0.1	-5.4	-25.6	0.8	4.1	-2.4	
Services	-1.0	-32.0	-0.1	-6.6	0.0	-5.2	3.5	
Transport, Storage and Communications	0.8	0.0	0.5	-0.2	0.1	21.8	0.0	
<b>Total</b>	<b>-4.6</b>	<b>-32.8</b>	<b>-7.4</b>	<b>-47.4</b>	<b>0.1</b>	<b>-56.8</b>	<b>16.0</b>	



1999-1996

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**Table 15: Electrical Energy Purchases in Economic Activities by Activity During 1996- 1999**

Electricity in Megawatt. hour.

Economic Activity	Purchases in Electrical Energy				
	1999	1998	1997	1996	
Industry	236476	351090	278630	161196	
Construction	3606	28741	18768	6592	
Internal Trade	162486	55187	50158	108291	
Services	95894	113480	73124	61552	
Transport, Storage and Communications	8527	15923	8680	2223	
<b>Total</b>	<b>506989</b>	<b>564421</b>	<b>429360</b>	<b>339854</b>	

1999-1996

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**Table 16: Total Energy Purchases in Economic Activities by Activity During 1996-1999**

Total Energy in Tera Joule

Economic Activity	Purchases in Total Energy			
	1999	1998	1997	1996
Industry	6430	5924	4631	3141
Construction	620	1817	1334	484
Internal trade	2836	1345	1243	1490
Services	1247	1191	805	818
Transport, storage and communications	1940	2484	1816	599
<b>Total</b>	<b>13073</b>	<b>12761</b>	<b>9829</b>	<b>6532</b>

1999

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:17

**Table 17: Energy Prices for Consumer in NIS by Type of Energy, Region and Period, 1999**

Prices of Wood, Coal, LPG, Oils & Lubricates in NIS/Kg  
 Prices of Kerosene, Gasoline and Diesel in NIS/Liter

Region	Period	Energy Type								
		Oils and Lubricates	Diesel	Gasoline	Wood and Coal	Kerosene	LPG	Electricity		
<b>West Bank</b>	January – February	10.21	1.35	3.43	3.00	1.34	1.98	0.47	-	
	March – April	10.21	1.38	3.46	3.00	1.42	1.98	0.47	-	
	May – June	10.31	1.46	3.52	3.00	1.52	1.94	0.47	-	
	July – August	10.31	1.64	3.60	3.05	1.67	1.94	0.47	-	
	September – October	10.37	1.84	3.78	3.00	1.83	1.99	0.47	-	
	November – December	10.48	1.93	3.94	3.00	1.96	2.27	0.50	-	
	<b>Average Annual Price</b>	<b>10.32</b>	<b>1.60</b>	<b>3.62</b>	<b>3.01</b>	<b>1.62</b>	<b>2.02</b>	<b>0.48</b>		
<b>Gaza Strip</b>	January – February	9.41	1.37	3.48	3.00	1.34	1.83	0.39	-	
	March – April	9.25	1.41	3.51	3.07	1.42	1.83	0.39	-	
	May – June	9.41	1.51	3.57	3.00	1.53	1.83	0.39	-	
	July – August	10.10	1.63	3.64	3.09	1.66	1.82	0.39	-	
	September – October	11.11	1.80	3.80	3.13	1.83	1.88	0.38	-	
	November – December	11.29	1.91	3.94	3.25	1.95	2.27	0.38	-	
	<b>Average Annual Price</b>	<b>10.10</b>	<b>1.61</b>	<b>3.66</b>	<b>3.09</b>	<b>1.62</b>	<b>1.91</b>	<b>0.39</b>		

1999

( )

:( ) 17

**Table 17 (Continued): Energy Prices for Consumer in NIS by Type of Energy, Region and Period, 1999**

Prices of Wood, Coal, LPG, Oils &amp; Lubricates in NIS/Kg

Prices of Kerosene, Gasoline and Diesel in NIS/Liter

Region	Period	Energy Type								
		Oils and Lubricates	Diesel	Gasoline	Wood and Coal	Kerosene	LPG	Electricity		
Jerusalem	January – February	15.13	1.25	3.39	3.50	1.20	2.42	0.35	-	
	March – April	15.13	1.30	3.41	3.50	1.32	2.38	0.35	-	
	May – June	15.75	1.42	3.47	3.50	1.43	2.38	0.35	-	
	July – August	15.75	1.58	3.58	3.50	1.60	2.29	0.35	-	
	September – October	15.69	1.69	3.72	3.50	1.78	2.40	0.35	-	
	November – December	15.63	1.72	3.81	3.50	1.90	2.58	0.35	-	
	<b>Average Annual Price</b>	<b>15.51</b>	<b>1.49</b>	<b>3.56</b>	<b>3.50</b>	<b>1.54</b>	<b>2.41</b>	<b>0.35</b>		
<b>Average Annual Price in Palestinian Territory</b>		<b>11.97</b>	<b>1.56</b>	<b>3.61</b>	<b>3.2</b>	<b>1.59</b>	<b>2.11</b>	<b>0.41</b>		

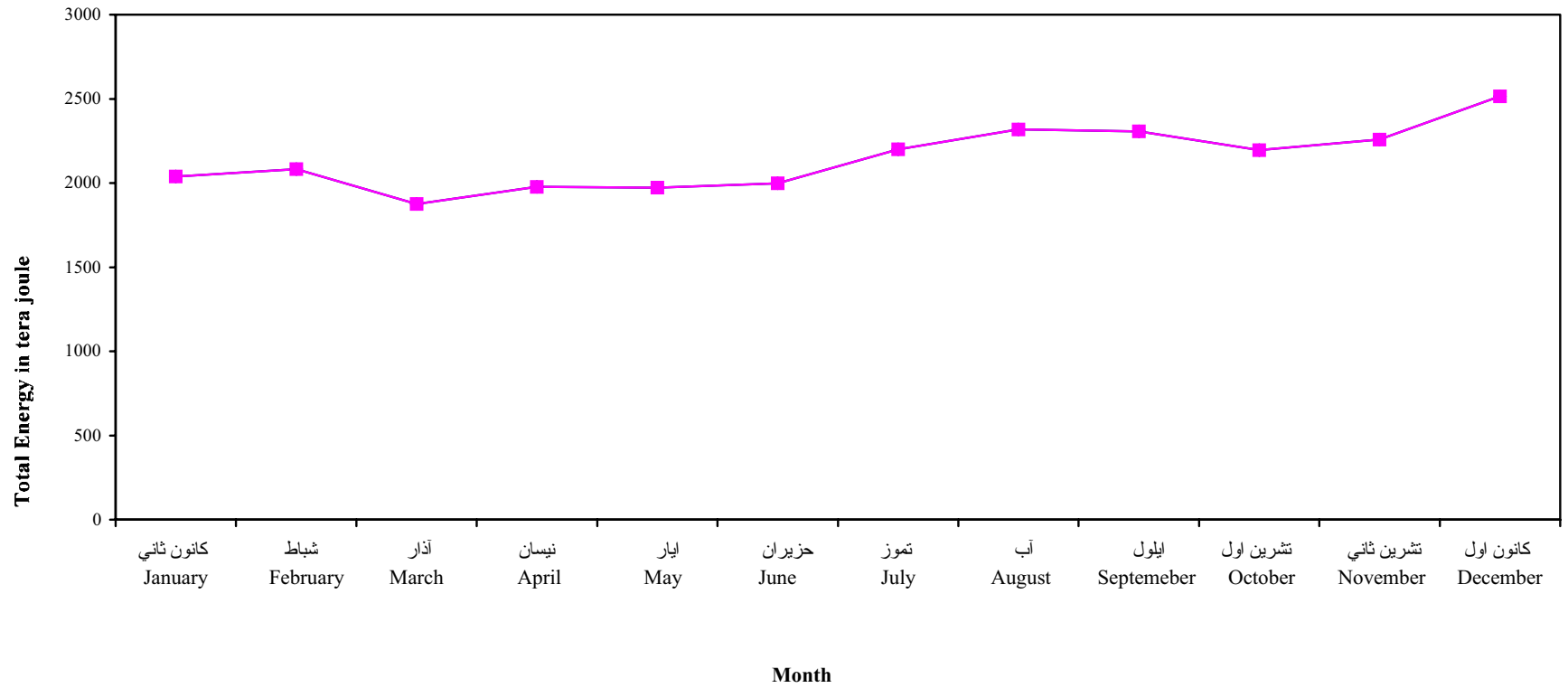
# Figures



1999

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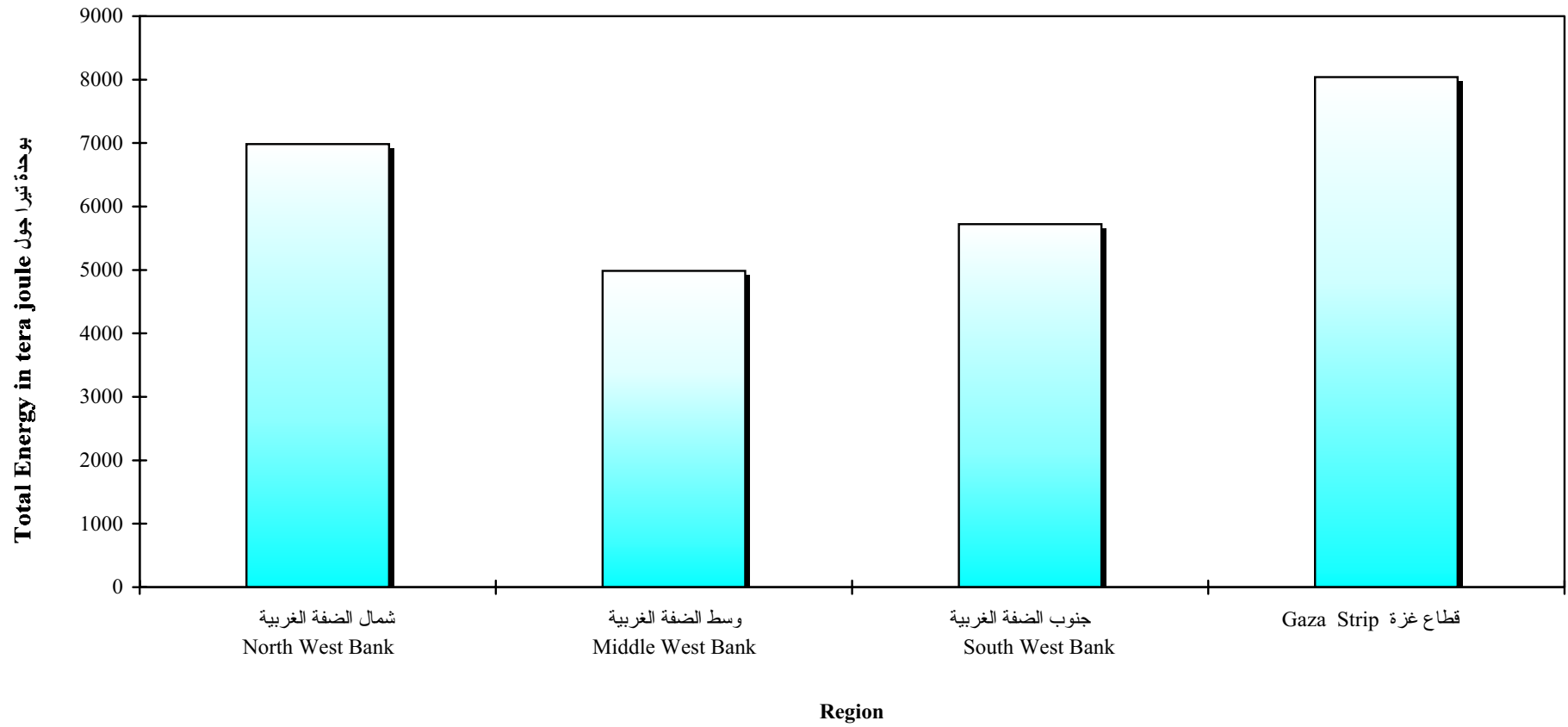
Figure 1: Total Imported Energy in Remaining West Bank and Gaza Strip by Month, 1999



1999

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Figure 2: Total Imported Energy in Remaining West Bank and Gaza Strip by Region, 1999

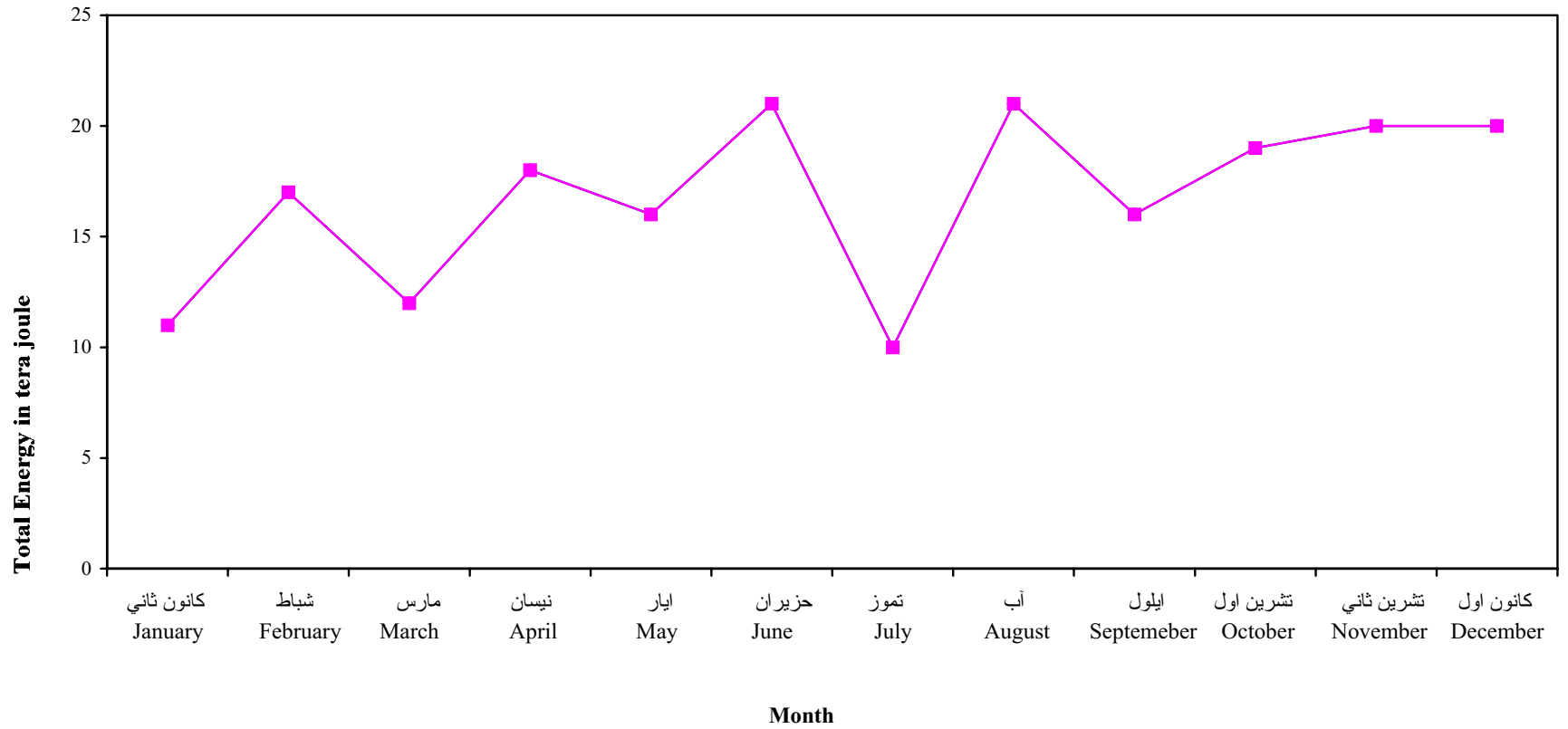




1999

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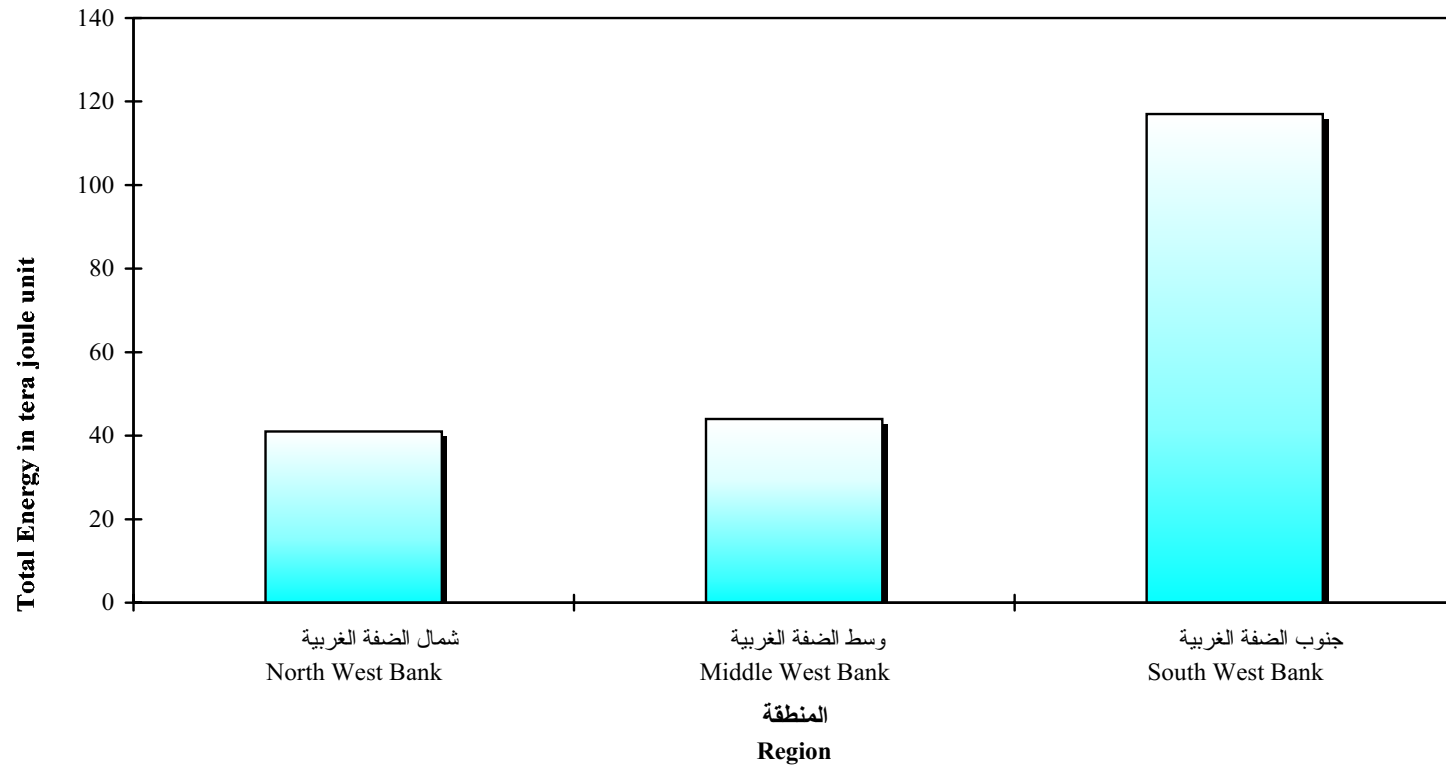
Figure 3: Total Re-Exported Energy in Remaining West Bank and Gaza Strip by Month, 1999



1999

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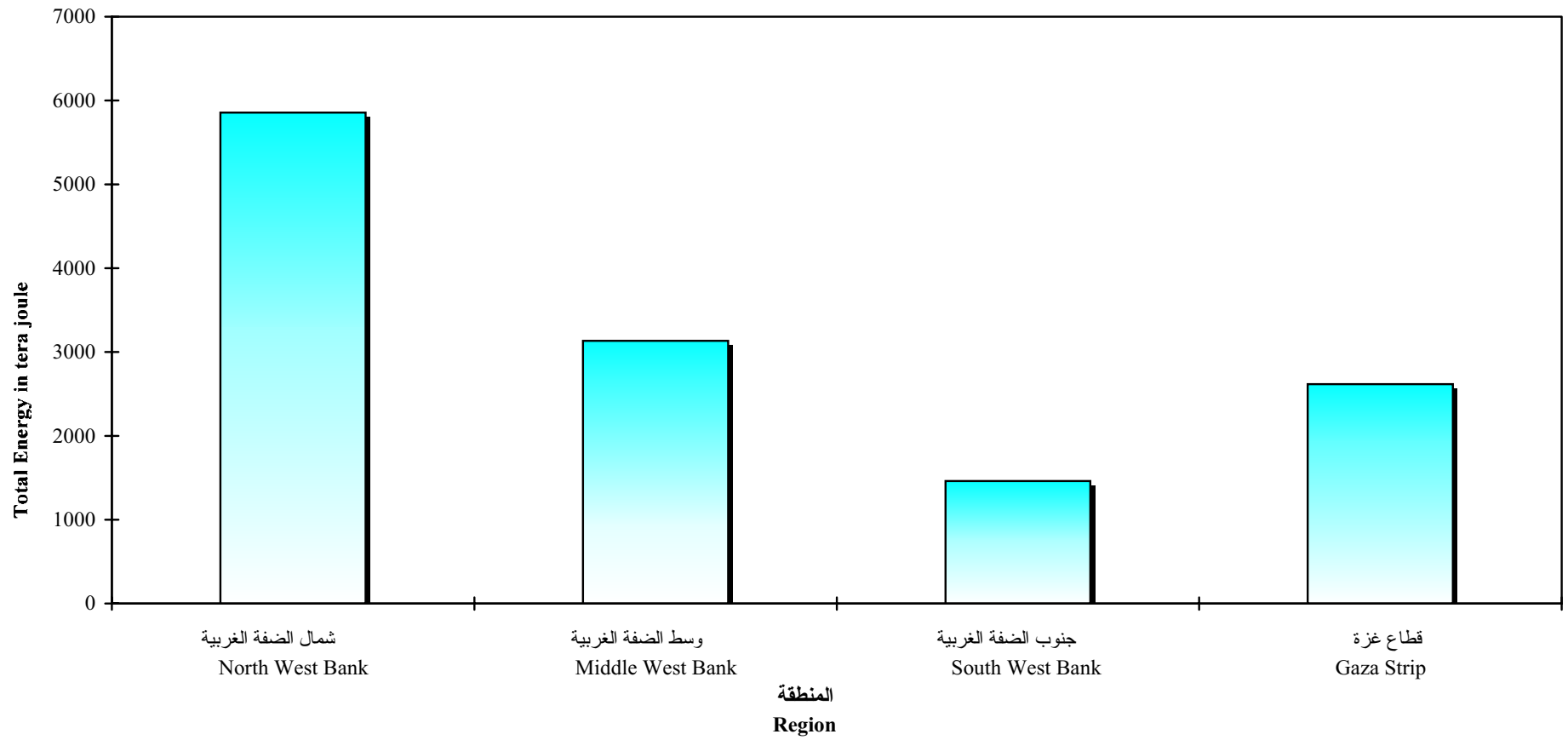
Figure 4: Total Re-Exported Energy in Remaining West Bank by Region, 1999



1999

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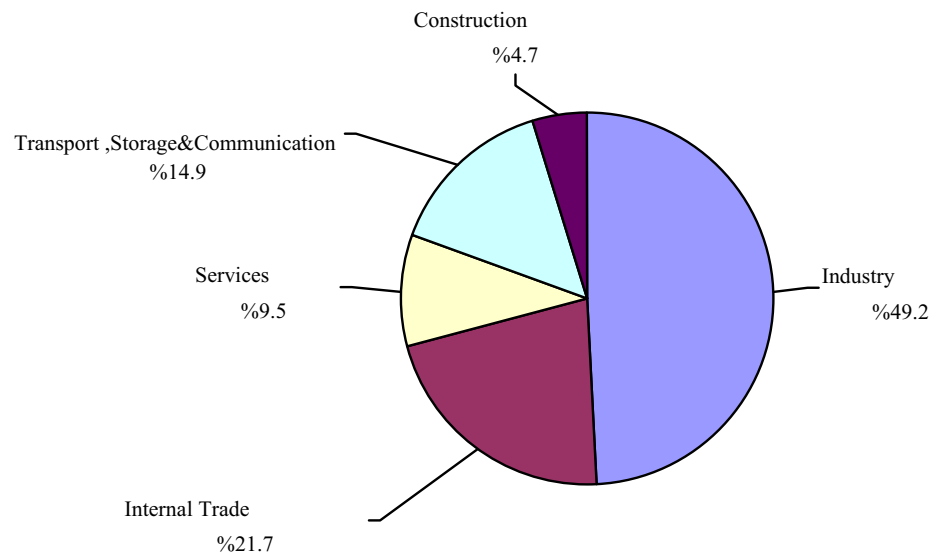
Figure 5: Total Energy Purchases in Economic Activities by Region, 1999



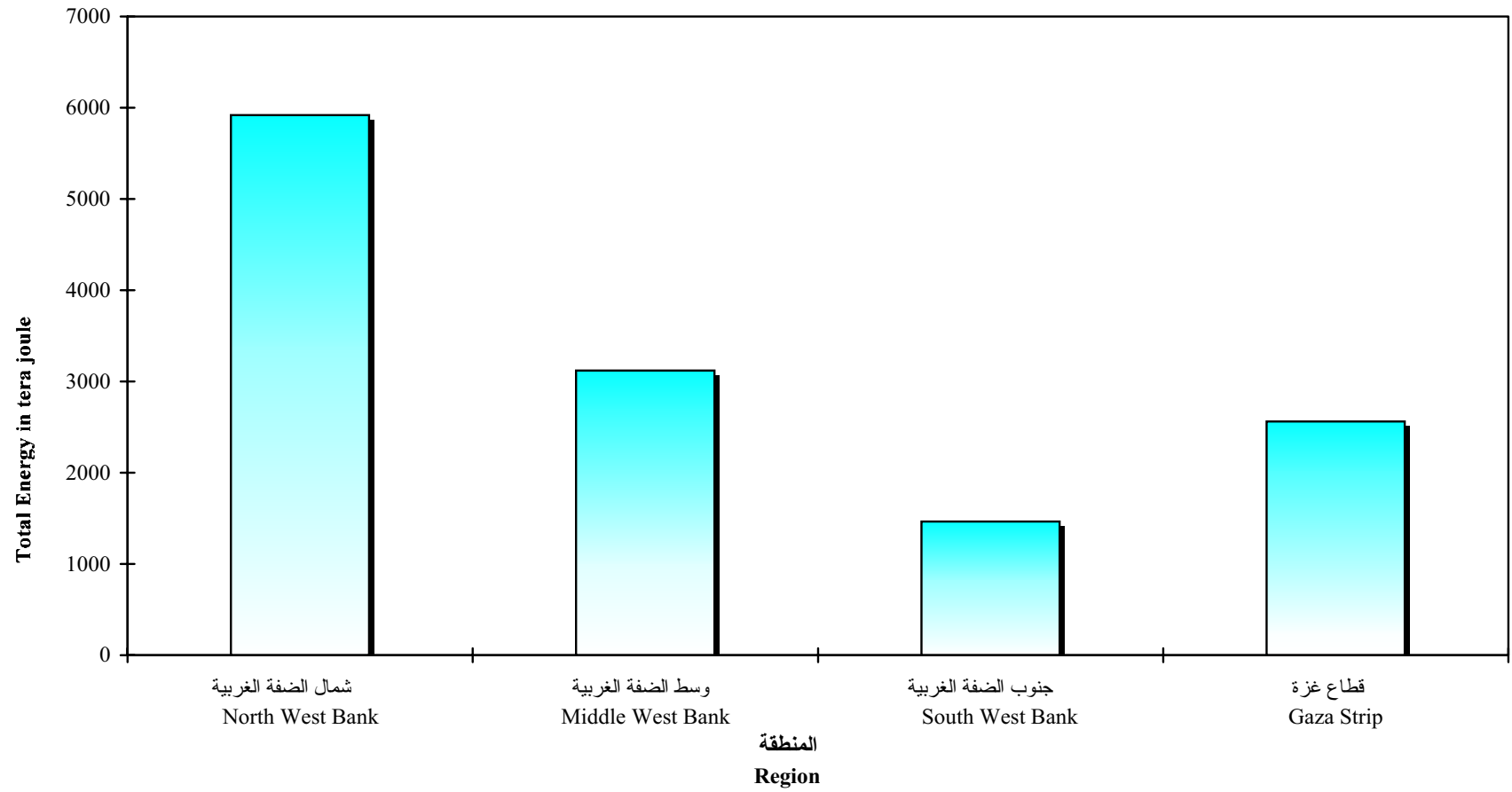
1999

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Figure 6: Percent Distribution of Total Energy Purchases in Economic Activities by Activity, 1999



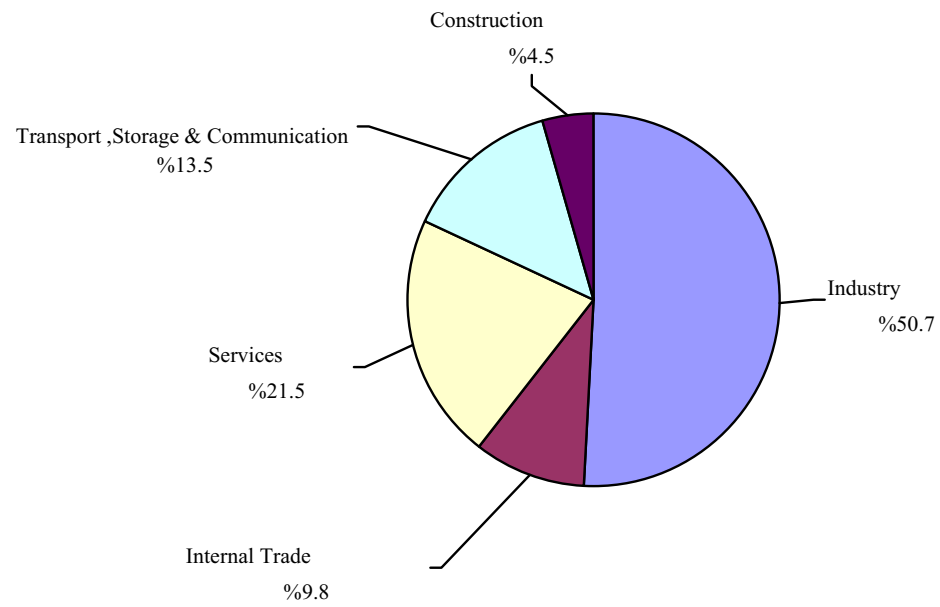
1999 :7  
**Figure 7: Total Energy Used for Production in Economic Activities by Region, 1999**



1999

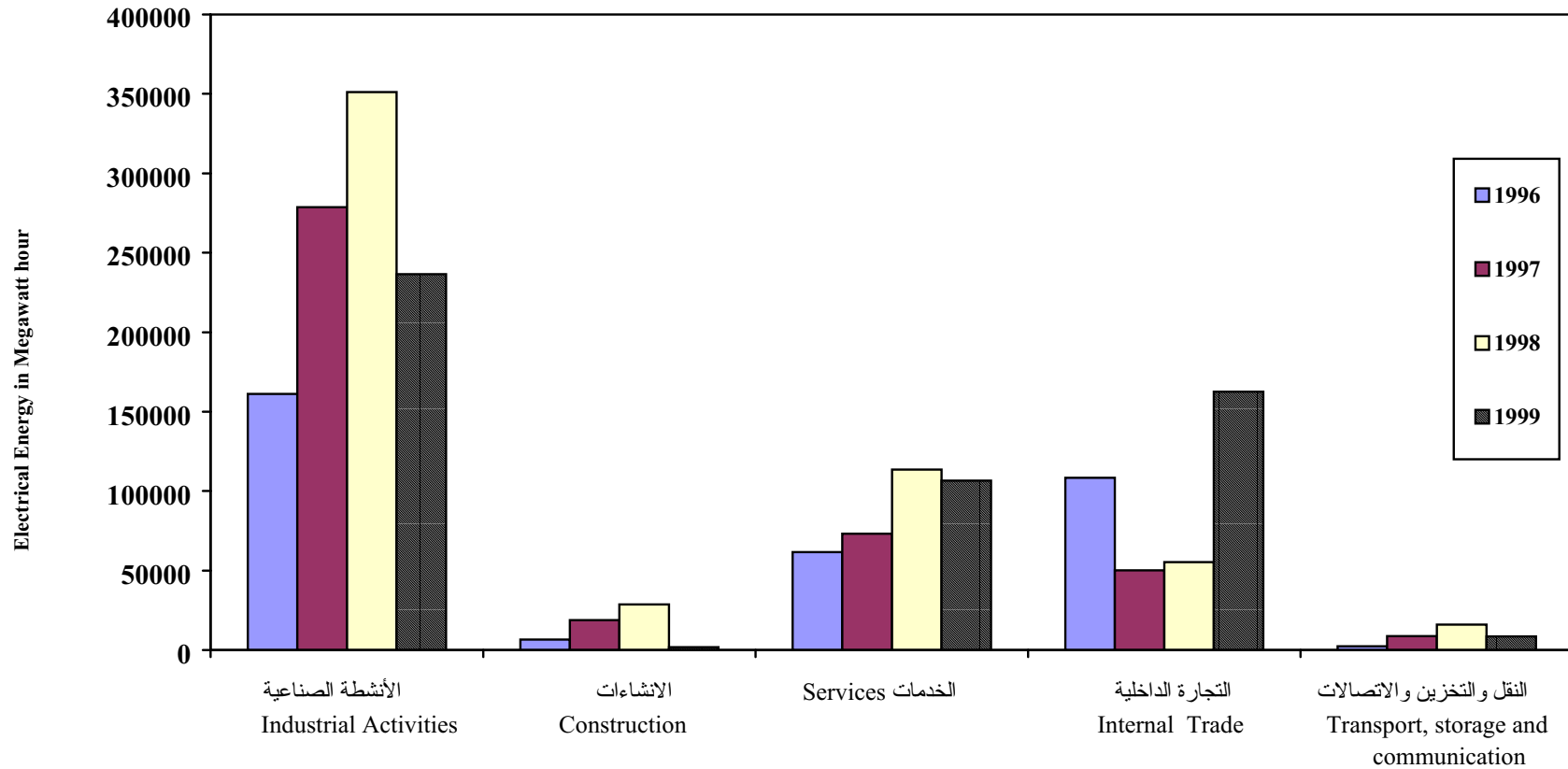
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**Figure 8: Percent Distribution of Total Energy Used for Production in Economic Activities by Activity, 1999**



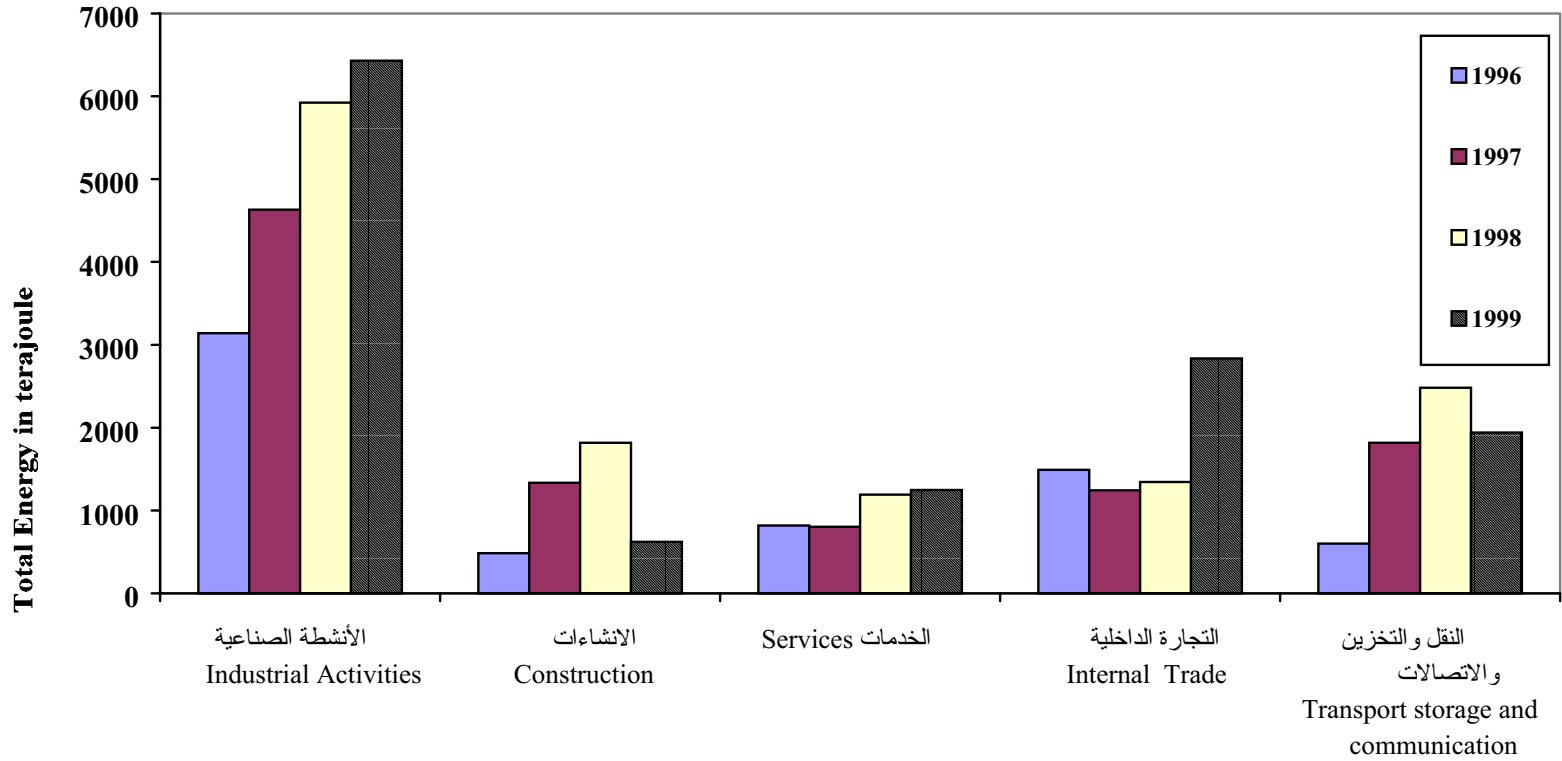
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Figure 9: Purchases of Electrical Energy in Economic Activities by Activity and Year



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Figure 10: Purchases of Electrical Energy in Economic Activities by Activity and Year

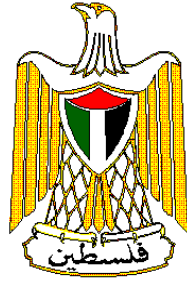




## **Appendix**

<b>Energy Type</b>	<b>Basic Unit</b>	<b>Conversions to TOE</b>	<b>Conversions to Tera Joule</b>		
Electricity	MW.h	0.099	0.00414513		
LPG	Metric Ton	1.018	0.04262366		
Kerosene	Thousand Litre	0.898	0.03759089		
Diesel	Thousand Litre	0.883	0.03697121		
Gasoline	Thousand Litre	0.751	0.03144437		
Oils and Lubricates	Metric Ton	0.942	0.04149		
Buetimen	Metric Ton	0.998	0.0417626		
Coal and Wood	Metric Ton	0.496	0.0207752		

**Energy Conversions Factor**



# **Palestinian Central Bureau of Statistics**

## **Energy Consumption in the Palestinian Territory Annual Report 1999**

**June , 2001**

"Cover Price 2 US\$"

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## **Preface**

Undoubtedly, availability of reliable statistical data on energy consumption is a major input in planning and development process. Most countries pay special attention for energy statistics due to the important role of energy in reflecting the situation of the infrastructure. Energy statistics provide basic information on economic situation, environmental indicators and the level of living in the society. Energy issue is extremely important in Palestine, due to the shortage of natural resource accompanied with the high population density.

PCBS is very pleased to introduce the third annual report of energy consumption for the reference year 1999. Statistical data provided in this report was derived from surveys and other statistical activities conducted by PCBS. The data was derived from Palestinian expenditure and consumption survey (PECS), as well as the statistical economic surveys series. Other data was derived from foreign trade and price statistics at PCBS.

This report presents statistical data on the basic indicators related to energy consumption in different economic activities.

It is worth noting that this report is a step toward establishing the energy balance in the Palestinian Territory. We hope that this report will contribute in bridging the data gap in energy statistics and in providing useful data for the main data users.

**June, 2001**

**Hasan Abu-Libdeh, Ph.D.  
President**





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## Executive Summary

### 1. Introduction:

Energy is considered of a great importance due to its role in reflecting the economy, the people welfare and the level of living. Also, energy data reflect infrastructure situation.

The data of this report is based on the administrative records and the data extracted from surveys conducted by the Palestinian Central Bureau of Statistics (PCBS). This report provides data about energy consumption in the different activities for the year 1999.

This report aims to achieve the following objectives:

1. Contributes in providing essential data for establishing energy balance in the Palestinian Territory.
2. Provides necessary data for research and analysis purposes.
3. Provides necessary data for policy makers and interested persons in the field of energy.

The report provides data on the following indicators:

1. Imported and re-exported energy in the Palestinian Territory by type of energy and region.
2. Energy consumed by economic sectors in the Palestinian Territory.
3. Energy used for Electricity generation in economic sectors in the Palestinian Territory.
4. Energy losses and stock change by economic activity in the Palestinian Territory.
5. Total energy consumption in the Palestinian Territory between 1996 and 1999.

### 2. Concepts and Definitions:

This part presents the main concepts and definitions based on the international recommendations in the field of energy statistics.

The main concepts and expressions mentioned in this report were as follows:

- Diesel:** Diesel is a hydrocarbon fuel mainly used in several types of internal-combustion engines and furnaces. This fuel is obtained via filtration of crude oil.
- Electric Energy:** Work done to move an electric charge in a conductor. It is measured in kilowatt-hour.  
Electric Energy = Power (kW) \* Time (Hours).
- Energy Conversion Factors:** For energy calculations, it is useful to convert quantities from original units into a common unit for the purpose of aggregating diverse energy sources. The coefficient used for this conversion is called a conversion factor.

<b>Energy Imports:</b>	Refers to the amount of energy obtained from other countries.
<b>Energy Re-Exports:</b>	Refers to energy obtained from other countries and supplied to other countries without making any type of processing in the shape.
<b>Gasoline:</b>	Gasoline is a hydrocarbon fuel used mainly in internal- combustion engines. This fuel is obtained via filtration of crude oil. The quality of this type of fuel is measured by the octane number, which points to its resistance of early burning. This number is obtained via comparing the performance of its resistance of early burning with a mixture of $C^7H^{16}$ and $C^8H^{18}$ . For instance, the performance of “Gasoline 95” equals the performance of a mixture of 95% $C^8H^{18}$ and 5% $C^7H^{16}$ .
<b>Household Consumption:</b>	Covers all fuel consumed by households for housing purposes (water heating, heating, lighting, cooking, space conditioning,.....etc).
<b>Kerosene:</b>	Kerosene is a hydrocarbon fuel used mainly as a heating fuel and in planes internal- combustion engines. It is also used as a dissolvent and thinner. This fuel is obtained via partial filtration of crude oil.
<b>Kilo Watt-Hour:</b>	Energy unit, a 1 kWh = 1000 Watt $\times$ 3600 Second $= 3.6 \times 10^6$ Watt. second $= 3.6$ Megawatt Other prefixes are used for referring to this unit, Mega = $10^6$ * watt. Second, Giga = $10^9$ * watt. Second and Tera = $10^{12}$ * watt. Second
<b>Liquefied Petroleum Gas (LPG):</b>	It is mainly used in heating and cooking as well as a fuel in some types of engines and as a raw material for chemical industries. Usually it is marketed in cylinder metallic packages. This gas is comprised of a mixture of gases. It is obtained from natural gas or via fractionation of crude petroleum.
<b>Remaining West Bank</b>	West Bank Excluding those part of Jerusalem annexed by Israel in 1967.
<b>The Joule:</b>	Energy unit, It is defined as the energy resulting from the movement of a one-Newton body to a distance of one meter. 1 Joule = 1 Newton. m.
<b>TheMetric Ton:</b>	Mass unit, a Metric ton = 1000 kg.
<b>Vegetal Coal:</b>	It is a solid product Which contains carbon as a main content.
<b>Watt:</b>	Electrical power unit, Its defined as the average produced energy in one second. Watt =Joule/Second



<b>West Bank-Middle</b>	Includes Jerusalem, Ramallah and AL-Bireh, and Jericho Governorates.
<b>West Bank-North</b>	Includes Jenin, Nablus, Tulkarm, Qalqiliya Governorates, Salfit and Tubas regions.
<b>West Bank-South</b>	Includes Bethlehem, and Hebron Governorates.
<b>Wood:</b>	All types of wood used as fuel.

### **3. Main Findings:**

This section presents the main findings of the report, including energy imports and re-exports as well as the energy purchases, the energy used in production, stock change and losses by economic activity.

#### **3.1 Energy Imports and Re-exports:**

The main findings of the report indicate that the total energy imports in the remaining West Bank and Gaza Strip in 1999 were estimated to be 25,736 TJ. This amount of energy was composed of 1,523,487 MW.h of electricity, 144,030 thousand liters of gasoline, 271,694 thousand liters of diesel, 16,919 thousand liters of kerosene, 92,473 tons of liquid petroleum gas, 5,145 tons of oils and lubricates, 103 tons of coal and 2,625 tons of wood.

The distribution of total energy imports over time indicates that the highest quantity of energy imports was 2,515 TJ in December 1999, and the lowest quantity of energy imports was 1,971 TJ in May 1999, on the other hand the distribution of energy imports by region indicates that the highest quantity of energy imports was 8,041 TJ in Gaza Strip and the lowest quantity of energy imports was 4,988 TJ in Middle West Bank.

The main findings of the report indicate also that the total re-exported energy in the remaining West Bank and Gaza Strip in 1999 was estimated to be 202 TJ. This amount of energy was composed of 538 thousand liters of gasoline, 4,018 thousand liters of diesel, 4 tons of liquid petroleum gas, 729 tons of wood and 403 tons of coal, while there wasn't any re-exported quantity of electricity and kerosene. The distribution of total re-exported energy overtime indicates that the quantity of re-exported energy is 22 TJ in June 1999, and the lowest quantity of re-exported energy was 10 TJ in July 1999.

On the other hand, the distribution of re-exported energy by region indicates that the highest quantity of re-exported energy was 117 TJ in south of the West Bank, while there was no re-exported energy in Gaza Strip.

The results show that 0.79% of total energy imported in the Palestinian Territory in 1999 was re-exported. This amount was composed of 0.37% of the total exported gasoline, 1.48% of the total exported diesel, 5.8% of the total exported (oils and lubricates) and 27.8% of the total exported wood. The quantity of re-exported energy from coal and wood was more than the imported energy by 300 ton.

### **3.2 Energy Purchases:**

The main findings of the report indicate that the total energy purchases in economic activities in the Palestinian Territory in 1999 were estimated to be 13,073 TJ.

This amount of energy was composed of 506,989 MW.h of electricity, 24,150 thousand liters of gasoline, 255,222 thousand liters of diesel, 2,085 thousand liters of kerosene, 12,541 tons of LPG, 1,898 tons of coal and wood and 2,986 tons of oils and lubricate.

The distribution of total energy purchases by economic activity indicated that the highest quantity of energy purchases was 6,430 TJ in industry, and the lowest quantity of energy purchases was 620 TJ in construction. On the other hand, the distribution of total energy purchases by region indicated that the highest quantity of energy purchases was 1,463 TJ in south of the West Bank and the lowest quantity was 5,857 TJ in north of the West Bank.

The relative distribution of energy purchases by economic activity showed that 49.2% of energy purchases were in industry, 21.7% in internal trade, 9.5% in services, 4.7% in construction and 14.9% in transport, storage and communications.

### **3.3 Energy Used for Production:**

The results show that the total energy used for production in the Palestinian Territory in 1999, was estimated to be 13,067 TJ, This amount of energy was composed of 502,724 MW.h of electricity, 24,663 thousand liter of gasoline, 254,882 thousand liter of diesel 3,297 thousand liters of kerosene, 11,250 tons of LPG, 2,647 tons of coal and wood and 2,996 tons of oils and lubricates.

The distribution of total energy used for production by economic activity that the highest quantity of energy used for production was 6,663 TJ in industry and the lowest quantity of energy used for production was 587 TJ in construction. The distribution of the total energy used for production by region indicated that it ranges from 1,466 TJ in south of the West Bank and 5,920 TJ in north of the West Bank.

Energy used in production is distributed by economic activity by 51% in industry, 9.8% in internal trade, 21.2% in services, 4.5% in construction and 13.5% in transport storage and communications.

### **3.4 Energy Used in Electricity Generation:**

The total energy used in generating electricity in 1999 reached 1,698.2 TJ. The quantities of fuel used were as follows: gasoline 65.8 thousand liters, diesel 45,671.3 thousand liters, kerosene 70.3 thousand liters, LPG 21.9 tons, coal and wood 0.4 tons and oils and lubricates 96.8 tons.

The energy used in generating electricity in the industrial activities was the highest, where it reached 1,582.2 TJ, while it doesn't exceed 0.5 TJ in transport, storage and communication sector. The distribution of energy used to generate electricity indicates that the heights quantity was in north of the West Bank and reaches 859.4 TJ, while it didn't exceed 64.6 TJ in south of the West Bank.

The energy used in generating electricity distributed by economic activity as follows: 93.2% in industry, 1.6% in internal trade, 4.0% in services, 1.2% in construction while it is not significant in transport storage and communication sector.

### **3.5 Energy Stock Change and Losses:**

It is indicated from the results that the total energy losses in economic activity in the Palestinian Territory in 1999 was estimated to be 4.1TJ. This amount of energy was composed of 106.0 thousand liter of diesel, 0.5 thousand liters of gasoline, 0.9 thousand liters of kerosene, 1.6 tons of LPG., 2.2 tons of oils and lubricates and 0.5 tons of wood and coal. The distribution of energy losses by region indicates that the highest quantity of losses was amounted to be 2.1 TJ in north of the West Bank, while there was not any losses in south of the West Bank.

The main findings of the report indicate that the total energy stock change in the Palestinian Territory in 1999 was estimated to be -4.6 TJ. This amount of energy was composed of 16 thousand liters of gasoline, 0.1 thousand liters of kerosene,- 56.8 thousand liters of diesel, -47.4 tons of LPG, - 32.8 tons of coal and wood and -7.4 tons of oils and lubricates. The distribution of total energy stock change by economic activity indicated that the highest quantity of energy stock change was -3.7 TJ in construction, and the lowest quantity of energy change was 0.8 TJ in transport, storage and communication. On the other hand, the distribution of total energy stock change by region indicated that the highest quantity of energy stock change was -1.6 TJ in Gaza strip and the lowest quantity of energy stock change was -0.1 TJ in south of the West Bank.

### **3.6 Prices of Energy in the Palestinian Territory:**

The prices of energy differs from one governorate to another. This difference is due to the full control of Israeli Authority on energy sources for the Palestinian Territory. The average annual price of the different types of energy in the Palestinian Territory were distributed as follows: electricity 0.41 NIS\ KW.h, gasoline 3.61 NIS\ liter, diesel 1.56 NIS\ liter, kerosene 1.59 NIS\ liter, LPG 2.11 NIS\ Kg, oils and lubricates 11.97 NIS\ Kg and wood and coal 3.20 NIS\ Kg.

## **4. Methodology:**

This section presents a documentation of the main characteristics of the methodology used in preparing this report. The statistical data was derived from various data sources. The data sources are classified into two types: statistical surveys and administrative records. The three main data sources are as following:

### **4.1 Economic Surveys 1999:**

The main objective of these surveys is to collect data on the basic economic indicators covering the main economic activities (industry, internal trade, service, transport, storage and communication and construction). Data related to production inputs of goods were used to provide data on energy purchases, energy used in production, energy used in generating Electricity and losses in the different economical activities.

## **4.2 Foreign Trade Statistics:**

The main objective of the foreign trade statistics is to cover data related to flowing of goods to the Palestinian Territory. Foreign trade statistics data were used to obtain data related to the imports and re-exports of the different energy types.

In preparing the statistical tables, the following points were taken into consideration:

1. The main consumption sectors were classified into household sector, industry, internal trade, service, transport storage and communication and construction.
2. International energy conversion factors were used to convert the different types of energy into a common energy unit (Joule).

## **5. Data Quality:**

This section provides important notes concerning the statistical quality of data. This includes data quality as compiled by data sources, in addition to special technical notes, which should be taken into consideration.

### **5.1 Data Sources:**

#### **5.1.1 Foreign Trade Statistics:**

Methodology and data processing of foreign trade statistics are consistent with international standards and recommendation. These data are trustable due to the fact that these data are compiled by comprehensive enumeration of data. But it is worth mentioning the following important notes:

1. Data excludes the quantities entered the Palestinian Territory in illegal cases .
2. Data does not cover the quantities that are not included in interchange between Israel and the Palestinian National Authority (about 20% of the total interchange according to Ministry of Finance).
3. For Petroleum Products, administrative records of General Petroleum Corporation covers the major part of data related to imports, the other part is covered by value added tax invoices from in Ministry of Finance.
4. For electricity data, administrative records of Palestinian Energy Authority were used to provide data on electricity imports in Gaza Strip. In West Bank, data were compiled from the electricity value added tax invoices for the local communities from Ministry of Finance.

#### **5.1.2 Economic Surveys 1999:**

Though dealing with data from economic surveys, the following notes should be taken into consideration:

1. The response rate of data for this survey is relatively high if it is compared with the response in other countries. There are some rejection states which affect the accuracy of data.
2. All data depends on the establishment records, and if these records were not available, the respondent was asked to give approximate estimates.

3. There were many difficulties during data collection in Jerusalem because of the special political situation of the city.

## **5.2 Special Technical Notes:**

- 1) Imports and re-exports tables cover electricity, basic petroleum products and coal for the Palestinian Territory excluding Jerusalem ( the remaining West Bank and Gaza Strip).
- 2) Report tables cover data related to the main types of energy (electricity, petroleum products and biomass). It is important to note that there are other types of energy (coke, other petroleum products, animal and vegetal residues) that are not included due to the lack of data.
- 3) There are no data available on solar energy utilization in domestic sector.
- 4) In calculating the household consumption from different energy types consumption and per capita of energy, we depend on the estimation of population in the Palestinian Territory in the middle of 1999.
- 5) All energy loss quantities represent the quantities lost inside the establishment and exclude transfer and distribution losses. Also, there are no data available on electricity losses.
- 6) In all data related to transport sector, the transport informal sector is not included according to the definition.
- 7) In all calculations related to Gasoline, we dealt with the average of all available types of Gasoline. Also, a common price and conversion factor was used.
- 8) In all calculations related to oils and lubricates, we dealt with the average of all available types of oils and lubricates. Also, a common price and conversion factor was used.
- 9) In all calculations related to wood and coal, we dealt with the average of both wood and coal (excepted imported and re-exported). Also, a common price and conversion factor was used.
- 10) The quantity of re-exported energy from Coal and Wood is greater than the imported quantity of energy, since there are Coal and Wood production in West Bank.
- 11) Energy prices were calculated depending on:  
the average exchange 1\$ to NIS: 1\$ =4.1463 NIS



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