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ABBREVIATIONS

ESCWA	Economic and Social Commission for Western Asia
GWh	Gigawatt hour
kWh	kilowatt hour
LPG	Liquefied Petroleum Gas
MW	Megawatts
NGL	Natural Gas Liquids
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
..	data not available
*	ESCWA estimate

Table 1. ESCWA region oil reserves, end-of-year figures
(Millions of barrels)

Year	Bahrain	Democratic				Oman	Qatar	Saudi Arabia	Syrian Arab Republic		United Arab Emirates	Yemen	ESCWA Total
		Yemen	Egypt	Iraq	Jordan	Kuwait			Arab	Arab			
1973	360	0	5125	31500	0	72750	5250	6500	140750	7100	25500	0	294835
1974	336	0	4700	35000	0	81450	6000	6000	173150	1500	33920	0	342056
1975	312	0	3900	34300	0	71200	5900	5850	151800	2240	32200	0	307702
1976	290	0	1950	34000	0	70550	5800	5700	113150	2200	31200	0	264840
1977	270	0	2450	34500	0	70100	5650	5600	153100	2150	32425	0	306245
1978	250	0	3200	32100	0	69440	2500	4000	168940	2080	31316	0	313826
1979	240	0	3000	31000	0	68530	2400	3760	166480	2000	29411	0	306821
1980	209	0	2930	29700	0	67730	2500	3434	167850	1890	32176	0	308419
1981	209	0	2960	29700	0	67730	2570	3434	167850	1890	32176	0	308519
1982	197	0	3325	41000	0	67150	2730	3425	165320	1521	32354	0	317022
1983	185	0	3450	43000	0	66748	2790	3330	168846	1490	32340	0	322179
1984	170	0	3200	44500	0	92710	3500	3350	171710	1450	32490	0	353080
1985	155	0	3850	65000	0	92464	4000	3300	171490	1440	32990	200	374889
1986	140	0	3600	72000	0	94522	4032	3154	169180	1400	33050	500	381578
1987	141	0	4300	100000	12	94525	4012	3150	169585	1750	98105	550	476130
1988	126	3380	4300	100000	5	94525	4071	3150	172575	1730	98105	1000	482967
1989	112	3000	4500	100000	10	97125	4250	4500	256209	1700	98105	1000	570511

Sources: OAPEC Annual Statistical Report, various issues, and Oil and Gas Journal, various issues.

Table 2. ESCWA region oil production, by country
(Thousands of barrels/day)

Year	Bahrain	Democratic		Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates		ESCWA Total
		Yemen	Egypt							Arab	Yemen	
1973	66	0	165	2018	3020	292	570	7596	106	1548	0	15381
1974	67	0	147	1970	2546	290	518	8479	122	1678	0	15817
1975	61	0	223	2261	2084	340	436	7075	183	1695	0	14358
1976	58	0	315	2422	2151	366	498	8600	192	1947	0	16549
1977	58	0	412	2348	1969	341	444	9199	174	2014	0	16959
1978	55	0	484	2562	2131	314	486	8301	171	1831	0	16335
1979	51	0	497	3476	2500	295	508	9581	167	1831	0	18906
1980	48	0	557	2653	1668	283	472	9927	158	1708	0	17474
1981	46	0	603	897	1129	319	415	9808	161	1502	0	14880
1982	44	0	624	1012	824	324	332	6483	155	1249	0	11047
1983	42	0	682	1098	1054	389	269	4539	177	1149	0	9399
1984	42	0	780	1224	1166	418	326	4090	178	1071	0	9295
1985	40	0	885	1404	936	491	290	3175	174	1203	0	8598
1986	42	0	804	1687	1416	557	332	5041	175	1369	0	11423
1987	41	5	903	2078	1214	572	311	4204	231	1500	9	11068
1988	42	12	851	2615	1413	597	315	5053	273	1570	159	12900
1989	42	..	854	2830	1741	623	395	5134	385	1845	177	14025

Sources: Various national and international sources.

Table 3. Oil discoveries in the ESCWA region

Year	Democratic Yemen	Egypt	Iraq	Jordan	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	Yemen
1976		7	1			1		3		6	
1977		1								1	
1978		4				4		3	3	2	
1979		1						3			
1980		2								2	
1981		6								2	
1982	1	1				1				2	
1983						1				2	
1984				2		2			1	1	
1985		2							1		
1986		3			1				1		
1987		21			1	1					
1988		3				5			1		
1989		6	4					1			1

Sources: Various international sources.

Notes: Discoveries are not necessarily commercial. Data for publicly reported discoveries only. Blank entries signify no discoveries reported.

Table 4. Crude-oil exports from major ESCWA region oil exporting countries
(Thousands of barrels/day)

Year	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	ESCWA Total
1974	3.7	1849.0	2203.2	289.9	511.2	7922.4	123.7	1689.5	14592.6
1975	36.5	2058.8	1803.4	342.2	428.3	6601.1	191.4	1661.4	13123.1
1976	132.5	2241.1	1790.9	376.1	486.6	8031.8	194.0	1932.8	15185.8
1977	79.1	2167.4	1624.8	342.5	410.3	8608.4	159.6	1990.0	15382.1
1978	84.7	2384.4	1761.2	342.6	480.0	7706.0	162.8	1816.3	14738.0
1979	104.0	3275.3	2083.1	301.8	494.9	8817.7	145.8	1805.3	17027.9
1980	114.7	2459.0	1296.5	285.1	465.7	9223.2	119.3	1697.3	15660.8
1981	143.7	746.1	813.8	328.8	391.0	9017.9	105.4	1439.0	12985.7
1982	141.1	811.4	368.8	325.5	322.8	5639.4	101.1	1167.0	8877.1
1983	343.2	725.4	544.4	351.5	268.3	3920.8	111.6	1077.3	7342.5
1984	418.2	856.0	658.0	369.0	356.8	3186.9	97.3	1036.7	6978.9
1985	442.1	1085.4	475.9	451.0	285.3	2150.7	84.5	977.7	5952.6
1986	345.9	1372.0	741.9	510.8	292.0	3265.8	59.0	1132.0	7719.4
1987	422.2	1717.0	607.0	540.0	254.0	2416.5	44.1	1250.0	7250.8
1988	373.9	2095.0	698.0	550.0	304.0	3030.1	80.0	1345.0	8476.0
1989	415.0	2260.0	850.0	580.0	320.0	3335.5	120.0	1650.0	9530.5

Sources: OPEC Annual Statistical Bulletin, various issues; United Nations, Energy Statistics Yearbook, various issues; and United Nations, World Energy Supplies, 1972-1976.

Table 5. Crude-oil imports of ESCWA region countries
(Thousands of barrels/day)

Year	Bahrain	Democratic Yemen	Jordan	Lebanon	Syrian Arab Republic
1977	119.6	38.4	23.6	34.8	58.4
1978	190.2	38.6	26.6	36.6	44.8
1979	197.6	39.0	34.6	37.2	88.4
1980	191.0	39.0	35.0	41.0	84.6
1981	212.8	41.4	43.2	30.4	99.0
1982	150.4	42.8	50.6	9.7	104.5
1983	132.0	62.0	51.0	10.0	122.0
1984	161.0	64.0	52.0	15.0	118.0
1985	142.8	70.0	50.0	13.0	96.4
1986	197.0	66.0	46.0	22.0	93.8
1987	198.9	68.1	50.0*	20.0*	53.0
1988	199.3	69.9	50.0*	20.0*	37.5
1989	201.1	70.0	50.0*	20.0*	20.0

Sources: World Oil Trade, various issues, and OPEC Annual Statistical Bulletin, 1987.

* ESCWA estimate.

Table 6. ESCWA region petroleum revenues, by country
(Millions of US dollars)

Year	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	ESCWA Total
1973	16	1834	3520	332	601	8956	76	1740	17075
1974	104	6506	10394	1137	1979	35476	432	6306	62334
1975	164	8176	8424	1439	1757	29473	642	6807	56882
1976	232	9114	8953	1562	2137	38157	665	8384	69204
1977	261	9505	8778	1569	1987	43308	758	9258	75424
1978	482	10850	9422	1503	2295	40332	658	8661	74203
1979	765	21289	16770	2152	3610	62855	1134	12862	121437
1980	2139	26136	17678	3281	5409	108174	1334	19390	183541
1981	1758	10388	13790	4402	5338	118998	1285	18761	174720
1982	1731	10095	8277	4099	4018	75534	1040	15337	120131
1983	2656	7816	9736	4203	3110	42809	1169	12235	83734
1984	2567	9354	10740	3908	4386	34243	1324	12978	79500
1985	2003	10685	9817	4690	3068	24180	2200	11842	68485
1986	1140	6905	6378	2470	1720	16975	2000	7453	45041
1987	1123	11416	7520	3400	1829	19271	2500	8665	55724
1988	1072	10952	6840	3000	1709	19015	2000	7352	51940
1989	..	14500	10863	..	2000	24000	..	11500	62863

Sources: Various national, regional and international sources.

Note: Petroleum products and natural gas liquids are included where relevant.

Table 7. Oil consumption in ESCWA countries
(Thousands of barrels/day)

Year	Democratic				Saudi Arabia				Syrian Arab Republic		United Arab Emirates		ESCWA Total
	Bahrain	Yemen	Egypt	Iraq	Jordan	Kuwait	Lebanon	Oman	Qatar	Arab Republic	Emirates	Yemen	
1970	251	137	68	76	9	413	40	0	1	586	40	0	1621
1975	212	31	177	97	17	294	41	0	3	465	49	0	1386
1976	218	32	205	106	23	370	40	0	9	544	63	6	1616
1977	261	38	221	110	23	354	34	0	11	549	82	11	1694
1978	246	39	234	128	28	370	37	0	10	576	81	12	1761
1979	251	39	234	128	28	370	37	0	10	576	81	12	1766
1980	238	39	286	185	36	350	38	0	9	594	127	12	1914
1981	258	42	311	179	44	318	36	0	13	570	179	48	1998
1982	198	62	351	171	50	430	10	0	13	731	183	68	2267
1983	177	70	364	251	52	482	10	36	13	928	187	92	2662
1984	203	68	392	277	52	506	15	45	19	870	223	132	2802
1985	183	71	406	291	50	598	13	49	26	1064	232	134	3117
1986	242	66	424	291	47	600	22	53	32	1340	221	137	3482
1987	243	68	450	341	50	592	25	42	29	1219	230	149	3446
1988	246	70	451	341	49	661	25	55	39	1275	237	149	3605

Sources: United Nations, Energy Statistics Yearbook, various issues.

Note: Consumption is defined as production plus imports minus exports minus bunkers plus/minus stock changes.

Table 8. Production of refined products in the ESCWA region
(Thousands of barrels/day)

Year	Bahrain	Egypt	Iraq	Kuwait	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	ESCWA Total
1977	260.9	211.9	166.4	351.0	6.5	680.5	73.9	11.0	1762.1
1978	246.4	231.2	182.6	373.3	6.2	720.4	84.4	10.8	1855.3
1979	244.3	236.1	183.0	439.8	9.4	746.8	105.4	11.3	1976.1
1980	239.7	265.2	187.0	336.5	7.7	736.9	127.6	11.8	1912.4
1981	257.0	288.6	190.0	276.3	7.8	758.8	177.0	54.8	2010.3
1982	194.0	345.6	190.5	420.0	7.4	804.8	180.9	84.0	2227.2
1983	174.8	336.6	292.0	468.4	8.4	877.2	181.3	108.6	2447.3
1984	200.5	362.7	340.0	478.9	14.2	917.6	204.0	142.2	2660.1
1985	200.0	374.5	344.0	566.3	23.2	1115.6	..	148.5	2772.1
1986	205.0	392.7	346.4	599.0	29.0	1333.5	..	166.0	3071.6
1987	210.0	400.0	366.9	619.0	33.0	1386.8	..	171.8	3187.5
1988	225.0	410.0	396.3	707.7	37.6	1442.3	..	178.8	3397.7
1989	..	..	421.7	783.6	49.3	1474.0	..	180.7	2909.3

Sources: OPEC Annual Statistical Bulletin, various issues, and OAPEC Annual Statistical Report, various issues.

Table 9. Exports of refined products for selected ESCWA region countries
(Thousands of barrels/day)

Year	Democratic			Iraq	Kuwait	Qatar	Saudi Arabia	United Arab Emirates
	Bahrain	Yemen	Egypt					
1974	185.1	47.6	1.8	21.3	192.5	0.0	321.5	0.0
1975	176.8	22.9	24.0	37.5	140.5	0.0	330.7	0.0
1976	168.7	25.1	19.8	39.3	336.9	0.0	390.0	0.0
1977	201.6	23.8	19.0	35.7	313.3	0.0	341.4	2.8
1978	197.3	23.8	21.1	33.1	327.1	0.0	357.5	7.9
1979	230.1	..	20.9	34.1	423.6	6.7	375.6	13.0
1980	219.9	..	22.5	35.0	343.4	0.0	406.8	19.6
1981	237.3	..	26.2	53.9	280.8	13.2	481.0	37.7
1982	178.1	..	29.0	50.0	370.4	11.6	505.1	45.7
1983	159.5	..	29.6	61.3	414.3	16.8	389.2	60.7
1984	181.9	..	36.9	61.0	394.9	26.0	442.1	97.7
1985	168.0	..	34.6	70.0	492.9	28.3	574.3	92.1
1986	222.7	..	36.0	93.5	525.0	36.0	712.3	111.6
1987	223.3	..	43.3	110.0	553.0	41.0	1021.4	114.0
1988	224.6	..	45.9	110.0	635.0	44.0	1141.0	117.0
1989	225.0	..	48.0	145.0	690.0	75.0	1072.6	155.0

Source: OPEC Annual Statistical Bulletin, various issues.

Note: Including re-exports and exports of petroleum from gas plants.

Table 10. Consumption of refined products for selected ESCWA
region countries
(Thousands of barrels/day)

Year	Egypt	Iraq	Kuwait	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates
1980	258.9	188.9	37.0	6.1	407.2	100.2	58.3
1981	286.0	204.6	49.4	6.8	498.6	152.1	78.0
1982	321.4	203.2	67.9	7.8	546.6	136.6	83.7
1983	331.6	249.7	74.4	8.5	603.6	158.4	85.0
1984	350.0	234.2	89.5	8.9	651.8	160.0	98.3
1985	357.9	256.0	101.7	10.5	632.1	165.9	100.9
1986	376.6	261.3	96.1	11.6	621.3	178.8	102.6
1987	383.4	281.3	85.0	11.6	632.0	182.9	109.4
1988	379.2	294.7	75.0	12.5	685.9	188.3	112.7
1989	392.3	303.4	72.3	13.4	717.7	..	114.2

Sources: OPEC Annual Statistical Bulletin, various issues.

Table 11. Crude-oil and refined products stocks in OECD countries
(Millions of barrels)

Year	European OECD	Japan	United States	OECD Countries
1977	1259	400	1247	3083
1978	1202	405	1190	2963
1979	1345	450	1267	3254
1980	1454	486	1304	3447
1981	1326	472	1379	3373
1982	1248	476	1346	3241
1983	1130	460	1344	3087
1984	1100	469	1435	3167
1985	1065	483	1405	3099
1986	1108	498	1465	3216
1987	1143	527	1479	3309
1988	1116	527	1478	3271
1989	1114	561	1446	3274

Sources: Oil and Energy Trends, various issues.

Table 12. Number of refineries in the ESCWA region, end-of-year figures

Year	Democratic										ESCWA Total	
	Bahrain	Yemen	Egypt	Iraq	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		
									Syrian Arab Republic	United Arab Emirates	Yemen	
1973	1	1	4	6	1	5	2	0	1	2	0	24
1974	1	1	4	7	1	5	2	0	1	3	0	26
1975	1	1	4	7	1	5	2	0	1	3	0	26
1976	1	1	4	7	1	5	2	0	1	3	0	26
1977	1	1	6	7	1	5	2	0	1	3	0	29
1978	1	1	4	7	1	5	2	0	1	3	1	28
1979	1	1	6	7	1	5	2	0	1	3	1	30
1980	1	1	6	7	1	5	2	0	1	3	0	30
1981	1	1	6	7	1	5	2	0	1	3	0	31
1982	1	1	6	7	1	5	2	1	1	3	0	32
1983	1	1	6	7	1	5	2	1	2	4	0	35
1984	1	1	6	8	1	5	1	1	2	4	0	35
1985	1	1	6	8	1	5	1	1	2	5	0	36
1986	1	1	7	8	1	4	2	1	2	6	1	39
1987	1	1	7	7	1	4	2	1	2	7	1	38
1988	1	1	8	8	1	4	2	1	2	7	1	40
1989	1	1	8	8	1	4	2	1	1	7	1	39

Sources: Oil and Gas Journal, various issues, and national sources.

Table 13. Refinery capacity in the ESCWA region, end-of-year figures
(Barrels/day)

Year	Bahrain	Democratic			Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates		ESCWA Total
		Yemen	Egypt	Iraq	Jordan						Emirates	Yemen	
1973	250000	162000	180000	98500	14100	646000	53500	0	1000	428300	51300	0	0 1884700
1974	250000	169100	180000	168500	21223	646000	53500	0	6800	610300	49690	0	0 2155113
1975	250000	169100	180000	168500	21223	684800	53500	0	7400	537200	116728	0	0 2188451
1976	250000	169100	180000	168500	21223	684800	53500	0	7400	537200	116728	0	0 2188451
1977	250000	142857	234000	168500	29580	712000	53000	0	9800	586093	102440	15000	0 2303270
1978	250000	142857	251000	168500	30300	712000	53000	0	10500	487332	223040	15000	0 2343529
1979	250000	175000	234000	168500	20720	645000	53000	0	10788	487332	223040	13500	0 2280880
1980	250000	175000	234000	168500	20720	645000	53000	0	10788	487332	223040	13500	0 2280880
1981	250000	178000	292000	168500	91330	623000	52000	0	13300	487332	223040	128500	0 2507002
1982	250000	178000	340650	168500	100000	623000	52000	45890	11753	705000	228790	135000	0 2838583
1983	250000	130000	369330	168500	100000	622800	52000	48082	63200	860000	228790	185250	0 3077952
1984	250000	178000	369330	318500	100000	668600	17000	50000	56058	840000	228790	185250	0 3261528
1985	250000	161500	434150	318500	100000	633600	17000	48082	56058	1115000	228790	185250	0 3547930
1986	250000	170000	452110	318500	100000	618000	37000	48082	62000	1125000	228790	185250	10000 3604732
1987	250000	170000	452110	318500	100000	628000	37000	76932	62000	1375000	228790	180000	10000 3888332
1988	243000	161500	489203	318500	100000	817000	37000	76932	62000	1375000	243774	180000	10000 4113909
1989	243000	161500	489203	318500	100000	819000	37000	76932	62000	1007000	243774	180000	10000 3747909

Sources: Oil and Gas Journal, various issues, and national sources.

Table 14. Tanker freight rates
(US dollars per cargo ton)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Yearly average
1973	11.59	11.91	11.94	10.78	15.77	23.73	18.23	28.06	31.11	28.28	10.22	8.46	17.51
1976	4.21	4.41	4.10	5.23	4.84	4.43	4.90	5.03	4.44	4.98	5.45	5.28	4.78
1977	4.39	4.41	4.86	4.10	3.51	3.53	3.93	4.10	3.79	4.11	4.67	5.54	4.25
1978	3.54	4.10	3.72	3.74	3.56	3.48	4.63	5.53	6.11	8.90	8.90	7.93	5.35
1979	6.32	4.81	7.58	7.33	7.47	8.23	12.23	9.16	9.40	9.69	9.49	10.69	8.53
1980	9.59	7.21	7.10	6.99	7.36	8.40	8.85	7.26	10.72	8.44	11.33	12.29	8.80
1981	9.46	7.87	8.18	8.35	8.88	8.43	7.93	9.29	9.72	7.86	6.90	5.90	8.23
1982	5.60	6.26	4.67	5.65	6.93	6.00	7.31	6.81	12.52	8.18	7.20	7.82	7.08
1983	6.68	6.92	6.79	6.05	6.30	5.65	7.05	7.81	7.92	8.68	8.57	7.92	7.20
1984	5.41	5.87	8.08	7.27	13.33	11.36	13.58	5.85	7.92	5.03	6.56	7.40	8.14
1985	..	8.34	6.95	6.53	6.67	5.59	5.47	6.35	7.55	6.72	9.74	9.02	7.18
1986	8.12	5.20	5.30	6.62	7.44	10.39	8.23	9.98	7.53	4.75	5.07	5.66	7.02
1987	5.66	4.64	4.51	5.44	6.30	6.98	9.26	11.16	6.10	7.62	8.57	6.61	6.90
1988	6.50	6.46	6.56	7.41	7.08	6.05	8.21	7.74	8.57	10.05	10.55	12.82	8.17

Sources: World Tanker Fleet Review, various issues.

Note: Spot market dirty fixtures, Arabian Gulf to Rotterdam (Cape/Cape), by cargo size, reported each month.

Table 15. Number of tankers in the ESCWA region

Year	Egypt	Iraq	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	United Arab Emirates	Yemen
1975	..	9	8	..	..	..	5	..	..
1976	..	14	10	..	..	1	11	1	..
1977	..	18	12	..	..	1	18	1	..
1978	..	18	13	..	..	1	18	1	..
1979	..	18	13	..	..	1	20	1	..
1980	..	19	15	..	..	1	21	1	..
1981	..	17	18	..	..	1	30	1	..
1982	..	18	22	..	..	1	40	1	..
1983	..	18	24	..	..	1	36	2	..
1984	5	18	20	1	..	2	23	12	..
1985	4	14	26	1	1	2	25	12	..
1986	4	15	22	1	..	2	26	11	1
1987	7	15	11	2	..	2	25	13	1
1988	7	16	9	1	..	2	24	15	1
1989	7*	17	17	1*	..	2	20	15	1*

Sources: OPEC Annual Statistical Bulletin, various issues, and World Tanker Fleet Review, various issues.

* ESCWA estimate.

Table 16. Dead-weight tonnage of tankers in the ESCWA region
(Thousands of dead-weight tons)

Year	Egypt	Iraq	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	United Arab Emirates	Yemen
1975	..	373.7	1292.1	..	..	..	548.3	..	..
1976	..	1493.0	1638.8	..	..	135.5	1037.8	135.5	..
1977	..	2095.8	2309.0	..	..	135.5	1577.3	135.5	..
1978	..	2095.8	2327.5	..	..	135.5	1891.3	135.5	..
1979	..	2099.7	2451.3	..	..	135.5	1859.0	135.5	..
1980	..	2112.2	2312.0	..	..	135.5	2552.2	135.5	..
1981	..	2047.9	2201.4	..	..	135.5	4355.4	135.5	..
1982	..	2085.1	2613.5	..	..	135.5	6513.9	135.5	..
1983	..	2085.1	2955.8	..	..	135.5	5544.9	155.5	..
1984	129.6	1429.1	2108.0	20.9	..	197.6	2658.1	1053.5	..
1985	112.7	1334.7	2959.4	20.9	256.1	197.6	2833.5	586.8	..
1986	112.7	1369.5	2148.8	20.9	..	197.6	2959.7	571.1	400.2
1987	443.5	1369.5	504.7	38.2	..	197.6	3110.5	696.3	400.2
1988	443.5	1405.2	418.4	20.9	..	197.6	2712.0	728.7	400.2
1989	443.5*	1493.0	1956.7	20.9*	..	197.6	2529.3	728.4	400.2*

Sources: OPEC Annual Statistical Bulletin, various issues, and World Tanker Fleet Review, various issues.

* ESCWA estimate.

Table 17. Selected ESCWA region oil prices
(US dollars/barrel)

Year	Arabian light spot price	Dubai light spot price	Arabian heavy official price
1973	2.70	..	2.48
1974	9.76	..	10.64
1975	10.72	..	10.27
1976	11.51	..	11.10
1977	12.40	..	11.70
1978	12.70	..	12.02
1979	17.26	..	14.84
1980	28.67	..	26.00
1981	32.50	..	37.00
1982	33.47	30.90	32.70
1983	29.31	28.20	29.60
1984	28.47	27.50	28.00
1985	27.80	26.50	28.00
1986	13.14	11.80	28.05
1987	16.48	18.50	16.27
1988	13.82	13.19	14.19
1989	16.29	15.67	15.03

Sources: Various international sources.

Notes: Arabian Light spot prices for 1986-1987 are netback values. 1989 Arabian Light and Arabian Heavy prices are derived from contract formulas.

Table 18. OPEC quotas affecting the ESCWA region
(Thousands of barrels/day)

Year	Iraq	Kuwait	Qatar	Saudi Arabia	United Arab Emirates	ESCWA Total
1984	1200	1050	300	5000	1100	8650
1985	1200	900	280	4353	950	7683
1986	<u>a/</u>	999	300	4353	950	6602 <u>b/</u>
1987	1466	948	285	4133	902	7734
1988	<u>a/</u>	996	299	4343	948	6586 <u>b/</u>
Jan-Sept 1989	2640	1037	312	4524	988	9501
Oct-Dec 1989	2926	1149	346	5014	1094	10529
Jan-July 1990	3140	1500	371	5380	1095	11486

Sources: Various international sources.

a/ No quota was set for Iraq;

b/ Denotes the exclusion of Iraq.

Notes: In 1983 the output for Saudi Arabia was effectively limited to 5 million b/d when it formally accepted swing producer status. The 1987 quota for Iraq was set without its approval. The 1990 quota was set without the approval of the United Arab Emirates.

Table 19. ESCWA region oil producing wells, by country

Year	Bahrain	Egypt	Iraq	Jordan	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	Yemen	ESCWA Total
1974	211	437	156	..	917	61	81	895	123	208	..	3089
1975	202	319	156	..	917	208	88	936	346	273	..	3445
1976	223	376	170	..	836	235	77	939	345	291	..	3492
1977	235	401	200	..	816	238	77	984	402	301	..	3654
1978	233	430	250	..	814	100	95	1103	442	315	..	3782
1979	233	432	250	..	802	254	95	937	513	333	..	3849
1980	240	440	285	..	761	300	139	953	300	386	..	3804
1981	243	450	280	..	771	363	128	1007	179	369	..	3790
1982	243	411	280	..	753	416	125	778	601	497	..	4104
1983	243	500	290	..	755	477	125	780	601	399	..	4170
1984	257	617	290	..	762	555	179	787	802	415	..	4664
1985	271	658	..	..	819	641	174	1268	847	429	..	5107
1986	280	666	..	..	610	736	174	807	847	567	45	4732
1977	279	724	615	10	609	789	174	834	963	693	45	5735
1988	274	821	868	3	609	1104	174	834	963	1177	12	6839
1989	286	896	820	3	363	1240	174	858	963	1176	70	6849

Sources: Oil and Gas Journal, various issues, and OPEC Annual Statistical Bulletin, various issues.

Notes: Democratic Yemen began producing oil in 1987 but oil well data are not available.

Table 20. Major crude-oil pipelines in the ESCWA region

Country	Pipeline	Length (miles)	Diameter (inches)
Egypt	Sumed	210	2x42
	Rasshukheir/Cairo/Suez	220	18/26
	Suez/Al-Maadi	80	..
	Ras Gharib/Helwan	150	20
	Meleiha/Al-Hamra	104	16
Iraq	Bai-Hassan/Kirkuk	20	16
	Butmah/Ain Zalah/K.2P.S	134	12
	K.2 P.S/Baghdad	110	12
	Fao/Khor Al-Amaya	28	32
	Baiji/Daura	197	12
	Jamhur/Kirkuk	36	6/8
	Rumaila/Zubair/Fao	65	24
	Haditha/Rumaila	407	42
	Haditha/Rumaila	407	18
	Naft Khaneh/Daura	81	12
	Kirkuk/Ceyhan/Dortyol(Turkey)	652	40
	Zubair/Station P3 Petroline	391	48
Kuwait	Raudhatain/Ahmadi	57	2x30
	Minagish/Ahmadi	30	22/24/26
	Umm Gudai/Shuaiba	26	14/18
	Bergan/Ahmadi	4.7	20/24
	Bergan/Ahmadi	4.7	20/20
	Bergan/Ahmadi	4.7	34/46
	Bergan/Ahmadi	4.7	36
	Naser/Al-Brege	107	36
Neutral zone	Wafra/Mina Saud	3x22	18/16/10
	Wafra/Umm Gudair	22	16
	Submarine gathering line	25	26
	Submarine oil transmission line	19	24
	Tanker loading lines	10	36/30/26/21
	Hout/Ratawi trunk lines	19	24
	Haut/Ratawi transmission line	25	24
	Wafra Field/Minal Abdullah	3x33	8 to 24
Qatar	Haluk Island/Umm Said	60	12
	Dukhan/Umm Said	80	20
	Dukhan/Umm Said	80	12

Table 20. (continued)

Country	Pipeline	Length (miles)	Diameter (inches)
Saudi Arabia	Ain Dar/Abqaia No. 1	28	20/22/24
	Ain Dar/Abqaia No. 2	28	24/26/28
	Ain Dar/Ju'aymah No. 1	73	32/24
	Uthmaniyah/Abqaiq	128	18/20/24/30/31
	Uthmaniyah/Loop line	23	24
	Ain Dar/Ju'aymah No. 2	33	33/36
	Ain Dar/Ju'aymah No. 3	15	38/40
	Ain Dar/Ju'aymah No. 4	60	24/40/42
	Khurais/Ain Dar No. 1	86	16/18
	Abqaiq/Qatif Junction	6x44	20/30/40/46
	Abqaiq/Dhahran No. 1	39	12/14
	Qaisumah 7/Qatif Junction	15	46/48
	Qaisumah 7/Km 50	16	46/48
	Uthmaniyah/Abqaiq No. 6	77	46/48
	Abqaiq/Dhahran No. 2	40	14
	Qatif Junction/Qaisumah	269	30/31
	Qatif Junction/Ras Tanura	5x17	20/34/40/46
	Ju'aymah/Ras Tanura No. 2	12	46/48
	Qatif Junction/Ju'aymah No. 1	13	46/48
	Arabian/Bahrain Nos. 1, 2	14	18/20/22
	Arabian/Bahrain No. 1	26	12
	Arabian/Bahrain No. 2	26	12
	Safaniyah/Khursaniyah No. 1	66	22
	Safaniyah/Khursaniyah No. 1		
	Safaniyah/Khursaniyah No. 3	66	36/38
	Safaniyah/Khursaniyah No. 4	27	40/42
	Khursaniyah/Ras Tanura No. 1	65	22
	Khursaniyah/Ras Tanura No. 2	65	30
	Khursaniyah/Ras Tanura No. 3	65	40/42
	Khursaniyah/Ras Tanura No. 4	27	40/42
	Berri/Ras Tanura No. 1	36	16
	Berri/Ras Tanura No. 2	36	40/42
	Transfer Lines Etc.	142	..
	Qaisumah/Sidon (Tapline)	754	30/31
	Riyadh/Khurais	87	..
	Abqaiq/Yanbu	789	48
	Abqaiq/Yanbu	725	26/28/30
United Arab Emirates	MP 21/Jabel Dhanna	2x50	24/30
	Umm Shaif/Das Island	22	30
	Lower Zakum/Das Island	56	30
	Upper Zakum/Zirku Island	40	42
	Sanduuq/Das Island	18	16
	Mubarras/Mubarras Island	21	24

Sources: OPEC Annual Statistical Bulletin, various issues, and Arab Oil Gas Directory, various issues.

Table 21. Major petroleum product pipelines in the ESCWA region, 1988

Country	Pipeline	Length (miles)	Diameter (inches)
Egypt	Suez/Mostorod	70	..
	Suez/Mostorod/Mex	190	..
Iraq	Baghdad Busra	2x364	8
Kuwait	Shuaiba/Sabhen	31	8
	Shuaiba/Sabhen	31	10
United Arab Emirates	Uan Refinery/Al-Ain	104	12
	Uan Refinery/Abu Dhabi New Airport	11	10

Sources: OPEC Annual Statistical Bulletin, various issues, and Arab Oil and Gas Directory, various issues.

Table 22. ESCWA region proven gas reserves at year end
(Billion cubic metres)

Year	Bahrain	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic			United Arab Emirates	Yemen	ESCWA Total
								Arab	Arab	Emirates			
1973	113	119	623	1033	57	226	1554	20	425			..	4170
1974	187	99	778	1013	59	226	1664	20	651			..	4697
1975	156	113	767	1007	57	212	3022	34	651			..	6019
1976	85	79	764	968	57	778	1854	34	637			..	5256
1977	85	91	792	962	57	1132	2476	88	608			..	6291
1978	198	85	787	957	59	1132	2728	42	611			..	6599
1979	255	85	778	948	74	1698	2708	42	580			..	7168
1980	255	85	778	940	71	1698	3181	42	611			..	7661
1981	243	85	773	982	76	1698	3345	42	659			..	7903
1982	224	204	815	965	85	1755	3430	37	809			..	8324
1983	209	201	821	996	91	1755	3543	37	872			..	8525
1984	207	198	815	1039	209	4245	3608	37	894			..	11252
1985	201	201	821	1036	170	4188	3540	34	917			..	11108
1986	198	252	792	1166	212	4302	3685	34	2960			..	13601
1987	195	289	744	1206	269	4435	4135	42	5759			45	17119
1988	190	325	2689	1378	263	4435	5193	371	5702			105	20651
1989	184	331	2690	1546	263	4618	5304	113	5683			156	20889

Sources: Oil and Energy Trends, various issues; Annual Statistical Review, various issues; and Oil and Gas Journal, various issues.

Table 23. ESCWA region marketed gas production, by major producing country
(Million cubic metres)

Year	Bahrain	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	ESCWA Total
1972	1113	71	935	5126	..	1103	5509	227	1378	15462
1973	1602	88	1210	5267	..	1580	6299	198	1732	17976
1974	1933	42	1189	5331	..	1300	8223	180	1518	19716
1975	2077	45	1654	5204	..	2209	5663	209	1656	18717
1976	2178	380	2107	5577	..	1476	6796	221	1937	20672
1977	2360	500	1600	5961	..	1607	8000	200	3898	24126
1978	2590	730	1700	6260	..	1479	9484	200	5768	28211
1979	2900	1110	2230	8612	..	4362	11695	200	6190	37299
1980	3579	1579	1281	4071	1650	4741	11431	200	6863	35395
1981	3538	1580	620	4684	1950	4323	22245	..	9075	48015
1982	3760	2670	680	3675	2700	5055	8950	..	8320	35810
1983	3680	3130	470	4035	460	5235	4380	..	8400	29790
1984	3790	4020	590	4376	1000	5930	18200	..	11060	48966
1985	4540	4930	850	4200	2000	5460	18800	..	13210	53990
1986	5100	5680	1550	5730	2010	5800	25200	..	15220	66290
1987	5070	6280	3750	4780	2260	5610	26800	620	18890	74060
1988	5150	6920	5600	6840	2070	5860	29100	720	19360	81620
1989	5270	7740	6100	8160	2790	6090	29800	..	21980	87930

Sources: OPEC Annual Statistical Bulletin, various issues, and Petroleum Economist, various issues.

Table 24. ESCWA region gas discoveries

Year	Egypt	Jordan	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	Yemen
1976			1							
1977				1			1			
1978	3				1					
1979					1			1		
1980						1				
1981	1									
1982	3				2	1		1		
1983										
1984					1				1	1
1985								1		
1986										
1987	1	2								
1988	1									
1989			1		2	1				1

Sources: Various international sources. Discoveries are not necessarily commercial.

Notes: Data for publicly reported discoveries only. Blank entries signify no discoveries reported.

Table 25. Natural gas liquid plant capacity, ESCWA countries
(Million cubic metres)

Year	Bahrain	Egypt	Kuwait	Oman	Qatar	Saudi Arabia	United Arab Emirates	Yemen
1977	..	2584	..	..	..	..	5788	..
1978	..	2584	..	..	..	13436	5788	..
1979	1137	5716	17364	..	..	13436	4651	..
1980	1140	5731	17412	..	6011	29019	4644	..
1981	1137	5716	17364	..	5995	28940	4651	..
1982	1137	5716	17364	..	5995	44444	18584	..
1983	1320	5716	17364	..	5995	44444	23752	..
1984	1499	8537	17364	..	5981	44444	34397	..
1985	1478	10015	17364	..	5995	44444	35224	..
1986	1736	10532	17364	..	5788	44444	39772	..
1987	1736	14975	5788	6470	5984	44444	30201	..
1988	1736	13643	18759	6470	5984	44444	30201	4134

Sources: United Nations, Energy Statistics Yearbook, various issues.

Table 26. Production of natural gasoline from NGL plants in the ESCWA region
(Thousand metric tons)

Year	Bahrain	Egypt	Egypt (con- densates)	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	United Arab Emirates
1975	0	45	0	92	467	0	25	1190	0
1976	0	115	0	92	530	0	73	2100	0
1977	0	396	0	120	584	0	20	2690	0
1978	0	583	0	120	542	0	0	2670	80
1979	0	595	0	120	1027	0	0	5500	117
1980	120	600	0	120	773	0	41	3910	120
1981	117	0	323	60	578	10	132	4055	120
1982	115	0	345	70	409	10	148	2998	1044
1983	128	0	374	60	504	10	184	2639	1051
1984	113	0	456	70	539	10	225	2719	970
1985	182	0	551	80	553	10	173	1940	1000
1986	127	0	663	80	620	10	186	1413	890
1987	131	25	754	80	723	10	172	2263	900
1988	132	0	901	80	730	10	180	4010	960

Sources: United Nations, Energy Statistics Yearbook, various issues.

Table 27. Production of LPG from NGL plants in the ESCWA region
(Thousand metric tons)

Year	Bahrain	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	United Arab Emirates
1975	0	0	190	1114	0	140	3391	0
1976	0	0	150	1248	0	230	3987	0
1977	0	0	215	1273	0	25	4943	81
1978	0	0	260	1189	0	0	5518	360
1979	30	0	260	3095	0	0	6600	505
1980	162	0	260	2400	0	106	8061	766
1981	163	72	260	1409	400	392	10347	909
1982	160	78	260	890	4387	401	10698	1999
1983	163	99	160	1591	4400	517	7867	2012
1984	160	163	160	1279	4500	690	8684	1970
1985	149	204	200	1611	200	549	8115	1980
1986	154	231	210	2012	180	591	8121	2100
1987	159	318	200	2514	250	585	8681	2200
1988	160	488	210	2515	300	593	9397	2240

Sources: United Nations, Energy Statistics Yearbook, various issues.

Table 28. Total production from NGL plants in the ESCWA region
(Thousand metric tons)

Year	Bahrain	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	United Arab Emirates
1975	0	45	282	1581	0	165	4581	0
1976	0	115	242	1778	0	303	6087	0
1977	0	396	335	1857	0	45	7633	81
1978	0	583	380	1731	0	0	8188	440
1979	30	595	380	4122	0	0	12100	622
1980	282	600	380	3173	0	147	11971	886
1981	280	395	320	1987	410	524	14402	1029
1982	275	423	330	1299	4460	549	13696	4383
1983	291	473	220	2095	4490	701	10506	4302
1984	273	619	230	1827	4650	915	11403	4180
1985	331	755	280	2247	210	722	10055	4230
1986	281	894	290	2970	190	777	9534	4360
1987	290	1097	280	3237	260	757	10944	4500
1988	292	1389	290	3245	310	773	13407	4650

Sources: United Nations, Energy Statistics Yearbook, various issues.

Table 29. ESCWA region annual average LPG prices
(US dollars/ton)

Year	Kuwait		Qatar		Saudi Arabia		United Arab Emirates	
	propane	butane	propane	butane	propane	butane	propane	butane
1980	310.0	313.6	..	..	311.0	298.0	..	..
1981	274.5	280.2	240.0	240.0	270.0	275.7	..	..
1982	238.0	258.0	235.0	255.0	235.0	255.0	238.0	258.0
1983	259.0	265.6	257.5	264.1	242.5	255.0	259.0	265.6
1984	217.7	221.5	217.7	221.5	217.7	221.5	217.7	221.5
1985	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0
1986	142.8	137.8	142.8	137.8	142.8	137.8	142.8	137.8
1987	121.0	125.0	121.0	125.0	121.0	125.0	121.0	125.0
1988	110.4	115.4	110.4	115.4	110.4	115.4	110.4	115.4
1989	110.4	108.5	110.4	115.4	110.4	115.4	110.4	115.4

Sources: International Crude Oil and Product Prices, various issues.

Table 30. Exports of ESCWA region LPG to Japan
(Thousands of barrels/day and cents/gallon)

Year	<u>Kuwait</u>		<u>Saudi Arabia</u>		<u>United Arab Emirates</u>	
	Amount	Price	Amount	Price	Amount	Price
1975	24.5	28.2	86.6	27.2	..	..
1976	26.6	27.7	109.4	27.4	..	..
1977	34.9	29.1	124.1	28.5	..	..
1978	31.3	30.3	142.1	30.0	..	..
1979	58.7	39.1	168.4	37.9	..	..
1980	57.5	68.3	170.4	67.1	..	..
1981	47.0	63.1	177.5	61.4	..	..
1982	29.9	53.3	209.0	53.8	..	..
1983	21.7	58.6	170.1	59.9	70.6	57.3
1984	27.0	50.9	192.6	50.8	74.1	50.6
1985	25.6	47.8	174.5	48.3	78.1	47.7
1986	22.3	35.5	179.5	36.4	91.9	36.5
1987	40.2	29.6	196.3	31.3	90.0	31.5
1988	42.3	29.4	181.9	31.0	92.3	30.2
1989	50.1	25.7	185.2	26.0	91.9	25.6

Sources: International Crude Oil and Product Prices, various issues.

Note: Information for the United Arab Emirates not available prior to 1985.

Table 31. Exports and imports of natural gas in the ESCWA region
(Million cubic metres)

Year	<u>Exports</u>		<u>Imports</u>
	<u>Iraq</u>	<u>United Arab Emirates</u>	<u>Kuwait</u>
1977	..	516	..
1978	..	1698	..
1979	..	1676	..
1980	..	2604	..
1981	..	2646	..
1982	..	2981	..
1983	..	2476	..
1984	..	2874	..
1985	..	3036	..
1986	650	3004	650
1987	2750	2869	2750
1988	3100	3180	3100
1989	3600	3110	3600

Sources: OPEC Annual Statistical Yearbook, various issues.

Table 32. Natural gas consumption in selected ESCWA region countries
(Million cubic metres)

Year	Bahrain	Egypt	Iraq	Kuwait	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates
1976	2282	398	2207	3503	..	1546	609	121	919
1977	2476	553	1676	3832	..	1683	633	38	609
1978	2720	1087	1780	4322	..	1546	633	36	698
1979	2942	1644	2336	3595	..	4568	671	36	484
1980	3052	1088	1343	3578	..	4713	1306	50	585
1981	3081	1998	358	6285	..	5208	1074	51	6400
1982	3387	2226	363	4802	..	4829	1342	53	1418
1983	3578	2290	359	5273	1103	4522	1342	80	1464
1984	3714	2919	503	5707	1450	4276	14187	136	1034
1985	4495	3754	840	5672	1831	4698	17098	161	7306
1986	4516	4388	314	7016	2233	5879	24226	188	9702
1987	4516	4548	1047	8244	2281	4949	24339	199	14170

Sources: United Nations, Energy Statistics Yearbook, various issues.

Notes: Consumption is defined as production plus imports minus exports minus bunkers plus/minus stock changes.

Table 33. Liquid petroleum gas carrier fleet in ESCWA region countries
(capacity in cubic metres)

Year	<u>United Arab Emirates</u>		<u>Kuwait</u>		<u>Saudi Arabia</u>	
	Number	Capacity	Number	Capacity	Number	Capacity
1977	1	646	0	0	0	0
1978	2	1546	0	0	0	0
1979	2	1546	2	73104	1	25102
1980	2	1546	4	217754	2	101802
1981	2	1546	6	366554	2	101802
1982	2	1546	5	365100	2	101802
1983	2	1546	5	365100	3	152472
1984	2	1546	5	365100	3	152472
1985	2	1546	5	365100	2	101802
1986	1	900	5	365100	1	76700
1987	0	0	1	76700	1	76700
1988	0	0	1	76700	1	76700
1989	0	0	5	365100	1	76700

Sources: Liquid Gas Carrier Register, various issues, and OPEC Annual Statistical Bulletin, various issues.

Table 34. Major gas pipelines in the ESCWA region, 1988

Country	Pipeline	Length (miles)	Diameter (inches)
Egypt	Abu Madi/Tanta	50.0	..
	Abu Gharadiq/Helwan	..	170
	Helwan/Suez	75.0	22
	AbuQir/Alexandria	23.0	10
Iraq	Rumaila/Kuwait	106.0	..
Kuwait	Raudhatain/Ahmadi	57.0	30
	Magwa/Ahmadi	9.7	20/40
	Umm Gudair/Shuaiba	40.5	10/12
	Burghan/Ahmadi	13.6	32/40
Qatar	Halul Island/Umm Said	60	12
	Dukhan/Umm Said	80	30
	Dukhan/Ras Abu Fontas	70	24
	Dukhan/Doha	70	10
United Arab Emirates	Asab/Bab	55	20
	Buhasa/Bab	28	20
	Bab/Maqta	2x81	30/24
	Maqta/Baniyas	11	16
	Bab/Ruwais	63	30
	Bab/MP 21	21	20
	Buhasa/MP 21	21	16
	MP 21/Ruwais	41	24
	Umm Shaif/Das Island	19	30
	Zakum/Umm Shaif	37	18
	Murgam/Jabel Ali	47	24
	Junction 2/Ajman	8	10
	Sajaa/Junction 6	26	20
	Junction 6/New Qidfa	49	14
	Junction 6-10-7/Rak	59	16/10/6
	Sajaa/Sharjah	27	18/6/4

Sources: OPEC Annual Statistical Bulletin, various issues, and Arab Oil and Gas Directory, various issues.

Table 35. Installed capacity of electric power plants in the ESCWA region
(Megawatts)

Year	Democratic										Syrian Arab Republic	United Arab Emirates	Yemen	Total ESCWA
	Bahrain	Yemen	Egypt	Iraq	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia				
1970	120	82	4357	680	80	779	421	33	78	316	301	301	6	7554
1971	120	82	4041	764	80	1062	483	34	78	341	296	296	8	7685
1972	135	64	3884	764	80	1196	538	44	109	406	304	304	10	7838
1973	136	66	4003	899	100	1196	548	49	126	403	174	174	17	7891
1974	150	66	3956	895	115	1464	608	77	151	408	715	715	17	9337
1975	206	66	3955	900	134	1474	608	91	204	601	755	755	17	9766
1976	278	91	3944	900	162	1566	668	121	239	997	995	997	20	10978
1977	340	93	3918	910	228	1998	668	176	366	1290	1268	1290	23	12568
1978	437	82	4000	910	301	2268	668	206	519	2139	1084	2139	38	14791
1979	485	100	4000	1200	301	1728	668	362	519	2221	1084	2221	54	14943
1980	588	100	4500	1200	400	2738	668	388	630	2867	1112	2867	62	18120
1981	588	130	4500	1200	456	2846	668	388	630	3100	1112	3100	104	18822
1982	588	130	4946	1744	540	3446	668	611	805	9145	1808	2300	104	26835
1983	588	150	5291	2150	642	4030	668	644	865	10704	1808	2340	115	29995
1984	645	150	5409	2400	730	5230	668	887	905	12200	2834	2460	115	34633
1985	1062	160	9067	3400	712	5230	819	1107	1005	14233	2918	3920	260	43893
1986	1082	160	10027	3700	983	5530	819	1157	1005	15102	2918	4300	478	47261
1987	1082	160	10045	3700	983	6060	819	1412	1005	15279	3024	4420	490	48479
1988	1082	190	11645	3700	991	6580	819	1429	1105	15601	3024	4430	525	51121

Sources: United Nations, Energy Statistics Yearbook, various issues, and United Nations, World Energy Supplies, various issues.

Table 36. Electric energy generation in the ESCWA region
(Gigawatt hours)

Year	Bahrain	Democratic Yemen	Egypt	Iraq	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syrian Arab Republic	United Arab Emirates	Yemen	Total ESCWA
1971	430	185	8017	2800	230	3087	1375	111	320	1150	1049	210	24	18988
1972	450	186	8030	2900	278	3738	1545	130	365	1350	1223	477	29	20701
1973	500	174	8104	3519	315	4138	1791	173	425	1564	1154	692	32	22581
1974	575	201	8915	3855	350	4582	1975	228	465	1670	1366	896	39	25117
1975	700	208	10386	4584	407	5100	1850	306	640	2478	1673	1335	49	29716
1976	900	223	12256	5295	501	5667	1450	413	816	3410	1785	1942	63	34721
1977	1110	233	14054	6429	601	6500	1600	550	1026	3398	2043	2863	69	40476
1978	1212	242	15150	6950	704	7446	1700	613	1364	6196	2702	3759	118	48156
1979	1474	245	16750	8000	726	9039	1800	776	2002	8920	3356	4340	149	57577
1980	1660	248	18520	8000	1070	9417	1800	957	2431	11600	3837	6000	185	65725
1981	1830	260	18590	6290	1237	10336	1810	965	2515	11100	3920	6050	228	65131
1982	2009	50	22576	13708	1512	12016	1290	1381	3089	31014	5737	6470	279	101131
1983	2026	40	22800	16200	1918	12830	1220	1623	3315	29915	6312	6570	285	105054
1984	2056	70	22870	18460	2304	14196	1355	2364	3425	31150	6897	6636	295	112078
1985	2937	413	34030	20994	2495	15689	3861	2899	3949	33601	8038	11614	497	141017
1986	3211	452	35300	22297	2955	17216	4170	3587	4303	37071	7942	12610	712	151826
1987	3316	465	34470	22860	3486	18400	4600	3875	4420	40607	7989	13100	718	158306
1988	3320	510	35410	23450	3262	19998	4505	3895	4500	42201	8110	13150	820	163131

Sources: United Nations, Energy Statistics Yearbook, various issues, and United Nations, World Energy Supplies, various issues.

Table 37. Electric power peak load in the ESCWA region
(Megawatts)

Year	Democratic				Iraq	Jordan	Kuwait	Lebanon	Oman	Qatar	Syrian Arab Republic		United Arab Emirates		Yemen
	Bahrain	Yemen	Egypt	Saudi Arabia							Arab	Emirates			
1971	68	..	1160	..	52	600	297		5	72	345	167	..		..
1972	73	..	1176	..	61	745	324		6	82	438	190	121		..
1973	93	..	1248	..	69	860	348		10	102	577	193	..		..
1974	107	..	1433	..	74	975	383		16	116	722	214	242		..
1975	143	41	1733	762	85	1120	340		26	153	850	292	374		12
1976	171	43	2080	873	97	1205	253		47	180	1110	379	421		13
1977	223	50	2600	1137	125	1425	312		65	237	1590	436	605		20
1978	269	58	2361	1347	145	1595	335		77	332	2092	523	828		36
1979	306	66	2820	1811	183	1950	371		107	425	2890	641	1000		40
1980	375	68	2900	2225	196	2290	408		136	534	3967	770	1174		50
1981	414	81	3360	2188	244	2100	441		175	573	4770	878	1370		67
1982	441	94	3850	2421	297	2590	407		214	653	5580	1070	1600		78
1983	490	109	4300	2820	363	2730	443		280	714	6450	1243	1952		92
1984	514	121	4600	3300	410	2975	480		340	745	7796	1429	2195		100
1985	594	86	5432	3706	475	3134	779		359	804	9427	1733	2557		107
1986	627	89	5742	4560	488	3592	842		393	892	10252	1842	2580		113
1987	672	90	6152	4700	516	3740	909		429	907	10300	1900	3069		140
1988	712	90	6221	4900	560	3800	981		470	941	10400	1950	3554		150

Sources: Arab Fund for Economic and Social Development; national sources; and United Nations, Energy Statistics Yearbook, various issues.

Table 38. Hydroelectric power in the ESCWA region

Year	<u>Egypt</u>		<u>Iraq</u>		<u>Jordan</u>		<u>Lebanon</u>		<u>Syrian Arab Republic</u>	
	Capacity (MW)	Production a/ (GWh)	Capacity (MW)	Production (GWh)	Capacity (MW)	Production (GWh)	Capacity (MW)	Production (GWh)	Capacity (MW)	Production (GWh)
1975	2448	6799	84	550	0	0	246	60	320	750
1976	2448	8069	84	604	0	0	246	800	475	1230
1977	2448	9038	84	573	0	0	246	800	548	1768
1978	2445	9320	84	682	0	0	246	800	427	2109
1978	2445	9510	84	690	0	0	246	850	427	3263
1980	2445	9801	84	690	0	0	246	850	427	2561
1981	2535	10215	84	690	0	0	246	850	427	2658
1982	2535	10474	84	610	0	0	246	650	823	2959
1983	2535	10500	90	600	0	0	246	560	823	2802
1984	2535	10000	100	610	0	0	246	585	827	1928
1985	2445	8100	100	610	0	0	246	585	827	2055
1986	2445	8000	100	600	11	3	246	560	827	1633
1987	2445	6000	100	610	11	19	246	610	848	2045
1988	2445	6100	100	600	11	27	246	600	848	2010

Sources: United Nations, Energy Statistics Yearbook, various issues.

a/ Megawatts;

b/ Gigawatt hours.

Table 39. Wind energy potential at selected sites in the ESCWA region

Country	Site	Measurement period	Height (metres)	Speed (m/s) ^{a/}	Power (w/m ²) ^{b/}
Bahrain	Muharraq	1959-1968	10	4.57	139
Democratic Yemen	Aden Airport	1968-1984	10	4.00	112
	Riyan	1973-1984	10	3.60	102
	Socotra Isl.	1976-1978	10	6.60	441
Egypt	Ras Sharab	1985-1986	10	8.21	467
	Ras Sharab	1985-1986	20	8.68	546
	Hurghada	1985-1985	10	4.92	229
	Ras Al-Hakma	1985-1986	10	4.92	122
	Ras Al-Hakma	1985-1986	20	5.71	172
Jordan	Ras Muneef	1984	10	6.60	364
Kuwait	Al-Ahmadi	1960-1972	10	5.3	170
Oman	Masirah	1985	10	4.6	139
	Thumrait	1985	10	5.7	251
Qatar	Doha	1956-1972	10	3.82	95
	Ras Rakan	1957-1968	12	4.47	123
	Halul Island	1957-1971	10	6.09	261
Saudi Arabia	Ras Tanura	1967-1972	8	4.01	75
Syrian Arab Republic	Al-Queneitra	..	10	6.58	364
	Palmyra	..	10	4.95	192
	Abu Kamal	..	10	4.43	151
	Qarachuk	..	10	4.00	120
United Arab Emirates	Jebel Dhanna	1962-1971	12	3.95	79
	Das Island	1958-1972	12	4.13	151
	Sharjah	1960-1969	10	4.14	83

Source: Mahmoud Saleh, "Wind Energy and Prospects for its Utilization in ESCWA Countries," Baghdad, 10 February 1988, (E/ESCWA/NR/88/2/Rev.1), presented at the Seminar on Prospects of Wind Energy Utilization in the Arab World (Algeria, 4-6 April 1988).

^{a/} Metres per second;

^{b/} Watts per square metre.

Table 40. Average daily means for solar global radiation on horizontal surfaces in capital cities of the ESCWA region
(Kilowatt hours per square metre)

Month	Democratic										Saudi Arabia	Syrian Arab Republic	United Arab Emirates	Yemen
	Bahrain	Yemen	Egypt	Iraq	Jordan	Kuwait	Lebanon	Oman	Qatar					
January	4.19	4.88	3.49	3.37	3.20	3.72	2.91	4.42	4.19	4.36	2.91	4.19	4.77	
February	4.94	5.58	4.65	4.07	4.07	4.65	3.78	5.12	4.94	5.12	3.78	1.94	5.52	
March	5.81	6.16	5.81	4.88	5.23	5.47	5.12	6.05	5.81	6.05	5.12	5.81	6.16	
April	7.09	6.74	6.74	6.40	6.51	6.98	6.28	6.98	7.09	7.21	6.28	7.09	6.74	
May	7.67	6.74	7.44	7.67	7.67	7.67	7.44	7.56	7.67	7.56	7.44	7.67	6.74	
June	7.21	6.16	7.79	8.26	8.26	8.26	8.26	7.74	7.71	6.98	8.26	7.98	6.16	
July	7.56	5.81	7.44	8.26	8.26	8.14	8.26	6.98	7.56	6.98	8.26	7.56	5.93	
August	6.98	6.28	6.98	7.67	7.67	7.56	7.09	6.40	6.98	6.86	7.56	6.98	6.16	
September	6.51	6.28	6.40	6.51	6.40	7.56	5.81	6.40	6.51	6.51	6.40	6.51	6.16	
October	5.58	5.93	5.23	6.51	5.23	5.47	4.65	5.81	5.58	5.58	5.23	5.58	5.93	
November	4.42	5.81	3.95	3.60	3.72	4.19	3.49	4.65	4.53	4.65	3.49	4.65	5.58	
December	3.49	4.77	3.26	2.91	2.91	3.26	2.79	3.95	3.60	3.84	2.79	3.72	4.77	

Source: Ali Sayigh, "Solar Energy Utilization in the Arab World", Solar Energy Applications, Proceedings of the International Seminar on Appropriate Technology in the Field of Solar and Wind Energy Applications, Amman, Jordan, 24 August to 2 September, 1986.