

محطات إنتاج الطاقة الكهربائية في جمهورية مصر العربية

Electrical Power Stations in Egypt

شركة القاهرة لانتاج الكهرباء

Name of Power Station	N.of units	Provided by	Rated capacity	date of putting into operation	Type of fuel	Type of cooling	Main parts		
							type	Manufactre	Rated capacity
SHOUBRA EL-KHEIMA POWER PLANT	4	ITALY - USA - KOREA - JAPAN - CANADA - HOLLAND	315Mw	1984	Residual oil NG	Hydrogen inner cooled	Boiler	water tube boiler	Ansaldo
							Turbine	tandurn compound	westing house
							Generator	hydrogen inner cooled	westing house
							Turbine	REACTION	FIAT TTG
							Generator	TR-2 TURBO GENERATOR - 3- PHASE	ANSALDO
							Compressor	AXIAL	FIAT
GAIRO WEST POWER PLANT (A)	4	WESTINGHOU SE / BABCOCK & WILCOX	4 X 87.5 MW	U1,2,3: 1966 U4:1979	MAZOUT NG	Circulating water (Nile rever)	Boiler	water tube single drum radiant natural circulation reheat boiler	Babcock & Wilcox
							Turbine	Tow case tandem compound condensing reheat turbine	Westing house
							Generator	AC Generator hydrogen cooled	Westing house

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Cairo South Power Plant	9 unit		ST.4X60 MW	1957-1964	Gas	Nile Water	Boiler	Forcen Cerculation	Stein Muller Simon-Craves			
							Turbine	Open Cycle	Siemens English Electric			
							Generator	Hydrogen	Siemens English Electric			
			CC. 1GAS 110 MW 1ST 50MW)	1987			Boiler 4HRSG	Natural Circulation / Forced Circulation	VOGT - Lentjes			
							S.Turbine	Axial Exhaust Steam/ Nile Water (open Cycle)	G.E Siemens- English Electric			
							G.Turbine	MS (9001E)	G.E			
			GT.3X110 MW	1994			Compressor	Axial Flow Compressor	G.E			
							Generator	Air cooled / Hydrogen	G.E			
							Turbine	Combination between Impulse and Reaction	G.E			
Tabbin Power Station - EL Tabbin - Helwan	3 ST	Complex - Hungerian - Alstom Atlant	15 MW ST	1958 ST	Mazout NG	Water	Generator	Hydrogen cooled	G.E			
							Boiler	GIB - M- 75/ 65	Ganz Budapest			
							Turbine	Reaction with Regulation Stage	Lang Budapest			
	2 GT		23.1MW GT	1979 GT			Generator	OG 670* 324012	Ganz Budapest			
							Turbine	5341 P	Alsthom Atlant			
							Generator	Package Type NF	Alsthom Atlant			
Wadi Hof Power Station - Helwan	3 units	Brown Boveri Co. (B.B.C)	33.5 MW	1985	NG solar No.1		Compressor	Axial Flow	Alsthom Atlant			
							Turbine	9, Reaction	Brown Boveri Co. (B.B.C)			
							Generator	WY 161 - 004 LLT	Brown Boveri Co. (B.B.C)			
							Compressor	9, Axial	Brown Boveri Co. (B.B.C)			

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ELKURIEMAT STEAM POWER PLANTM - ELKURIEMAT - ATFEEH, GIZA	2 units	GE, B & W, etc	627 Mw	1997	Mazout NG	Circulating Water (River Water)	Boiler	Radiant , natuaral circulation, forced draft	BABCOCK & WILCOX	2063 ton/hr				
							Turbine	Tandera - compound reheat unit with four -t low pressure	General Electric	627 MW				
							Generator	3000 rpm, HT23 kv Hydrogen & stator cooling water	General Electric	811.2 MVA				
Asslut Thermal Power Plant - Wallidia - Asslut	2 units	MHI & TOSHIBA	2 X 312 MW	U1:1992	Mazout	water cooling	Boiler	Boiler with drum and forced circulation & tangential firing	MHI	1085 ton/hr				
		ANSALDO & SADELM					Turbine	TCDF tandene - compound double flow (2) & cylinders reheat turbine	Toshiba	300 MW				
							Generator	Three phase synchronous generator totally enclosed direct coupled to steam turbine	Toshiba	425 MVA				
							Boiler	Boiler with drum & natural circulation with TEA firing system	ANSALDO	1052 ton / hr				
		U 2:199		NG		Turbine	TCDF	ANSALDO	300 MW					
						Generator	THAR - 2- 419000	ANSALDO ABB	419 MVA					
						Boiler	Natuaral Circulation , forced draft	Walther & Cle	135 ton / hr					
Assiut Steam Power Plant - Assiut	3 units	ABB, Germany	30 MW	1967	Mazout NG	Circulating water : River water	Turbine	DQ2e 42	ABB	30 MW				
							Generator	Air cooled WT5721, 37.5 MVA, 3000 rpm, HT , 11 kv, 08PF	ABB	37.5 MVA				
							Boiler	2*7A - 1x2322	2 Babcock & Wilcox	2x1100 ton/hr				

شركة غرب الدلتا لانتاج الكهرباء

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Sidi Krir P.S Sidi Krir-Alex - Matroh way	2 units	Siemens	2 x 230 MW	U 1: 1999 , U2 : 2000	NG	Hydrogen THDD 108 / 44	Turbine	Steam	Siemens 320 MW		
							Generator	M 127798, M 127799	Siemens 320 MW		
Abu Quir P.S Alix Rshid	1	GE - USA	26 MW	1983	Solar		Turbine	MS- 5001/R 357	GE - USA 26 MW		
							Generator	Axial flow	GE - USA		
							Compressor		GE - USA 26 MW		
Abu Quir P.S Alix Rshid	5 units	GEC ALSTOM	4 X 150 MW	U1-4: 1983-1984	NG	Hydrogen - cooled generator	Boiler		Stein industry Stan 475 ton / hr		
							Turbine	impulse steam	ALSTOM 150 MW		
			1X 312 MW	U 5 : 1990			Generator	THDD 108/44	ALSTOM		
							Boiler		Stein industry Stan 1030 ton / hr		
							Turbine	impulse steam	ALSTOM 312 MW		
							Generator	THDD 108/44	CGEE		
Marsa Matroh P.S	2 units	MIH & Ship building co,Ltd	2x30 Mw	1990	NG	Sea water	Boiler		Nabom 140 t/hr		
							Turbine	Steam	Mitsui 30 Mw		
							Generator		Toshiba 30 Mw		
Siouf steam P.S - Alex EL Awaid	4 Ring system	1,2 Siemens	2 X 26 MW	U1-2 :1961	Mazout	Water	Boiler		2 Lengens 2x130 ton / hr		
							Turbine		2 Seimens 2 x 26 MW		
							Generator	125 CHP / 9	Intersegma 2 x 30 MW		
		3,4 Skoda	2 X 30 MW	U3-4:1969			Boiler		3 Berno 3x140 ton / hr		
							Turbine		2 Scoda 2 x 30 MW		
							Generator	125 CHP / 9	Intersegma 2 x 26 MW		
		2,3,4 ABB-Switzerland		U1-2:1981 U3:1982			Turbine	ABB TYPE 9	ABB 33 Mw		
							Generator		ABB		

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Siouf Gas Turbine P.S - Alex EL Awaid	6 Units	General Electric	6 X 33 MW	U3:1981	NG Solar		compressor	W 251 - Axial Flow	ABB	33 Mw			
							Turbine		Westinghouse				
		5,6,7 Westinghouse		U4,5:1983 U6:1984			Generator		Westinghouse				
							compressor		Westinghouse				
K armouz P.S	2 Units	ABB - ASEA Stal laval	2 X 125 MW	1980	Special Solar		Turbine			12.5 Mw			
							Generator	GTP1050 C.Z	Asea Sweden	12.5 MW			
							compressor	W 251 - Axial Flow		33 Mw			
Damanhour Power station	1 unit	Insaldo	300 MW	300 MW	H.O N.G	Hydrogen & Water	Boiler	Elpaso	B & W	1007 ton / hr			
							Turbine	Tandom compound flow	Insaldo	300 MW			
							Generator	THOR - 2.421625.366.22000	Insaldo	421.925 MVA			
Damanhour Power station	3 unit	AEG	3 x 65 MW	1968	H.O N.G	Hydrogen	Boiler	Passive Pressure	E.V.T	290 ton / hr			
							Turbine	Impluse	A.E.G	65 MW			
							Generator	FKWS 3729 P	A.E.G	81.25 MVA			
Damanhour Power station	2 unit	VEB	2 x 15 MW	1960	H.O	Hydrogen	Boiler	Negative Pressure	VEB	65 ton / hr			
							Turbine	Impluse reaction	EKM	15 MW			
							Generator	SG 360/155 AK	EKM	18.75 MVA			
							Boiler	HRSG	NEM	52 ton/hr			
							S.Turbine	Combixed blade	GE	58 MW			

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Damanhour Combine Cycle	5 unit	Hitachi & GE	4x25 MW & 1x58 MW	1984	L.O G	Air	G.Turbine	Reaction	HITACHI 25 MW
							compressor	Axial	HITACHI 221 kg/sec
							Generator	EFZB1 LA FROM IK	GE 78 MVA
Kafr Eldawar Power station	4 unit	Scoda	4 x 110 MW	1979 - 1925 - 1986	H.O N.G	Hydrogen	Boiler	Negative Pressure	SCODA 385 ton / hr
							Turbine	K 110 - 130	SCODA 110 MW
							Generator	H 9644840/2 HeH	SCODA 137.5 MVA
Mohmodia Combine Cycle	10 unit	GE	8x25 MW & 2x58 MW	1983	L.O N.G	Air	Boiler	HRSG	NEM 52 ton/hr
							S.Turbine	Combixed blade	GE 58 MW
							G.Turbine	Reaction	GE 25 MW
							compressor	Axial	GE 221 kg/sec
							Generator	EFZB1 LA FROM IK	GE 78 MVA
Mohmodia Gas Turbine	4 unit	R.R	4x50 MW	1981	L.O N.G		Turbine	Reaction	R.R 50 MW
							Generator		
							compressor	50.6048714	Persoonal Pepol 60 MVA

شركة شرق الدلتا لانتاج الكهرباء

Talkha Power Plant	2 unit	Scoda	210 MW	U1 : 1992, U2 : 1995	G	Hydrogen	Boiler	Water tube with drum	SES TLMACK	670 ton / hr
							Turbine	3- casing impulse ST.T,	Skoda export	210 MW
							Generator	3H 6688/2 VH	Skoda export	210 MW
Talkha Combine Cycle	10 unit (8GT + 2 ST)	GE	24.27 MW (GT) & 2x58 MW (ST)	GT : 1979 , ST : 1989	N.G	Water cooling system for turbine and	Boiler	Natural Circulation Convection Boiler	Hery vogt Machine Company U.S.A	47.3 x 8 ton/hr
							S.Turbine	SCSF STAG (Industrial)	GE (U.S.A)	50 x 2 MW
							G.Turbine	Frame -5 (simple Sycle)	GE (U.S.A)	24.27 x 8 MW
							compressor	Axial flow	GE (U.S.A)	955000LBS/H x 8

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						generatore	Generator	Syn. Generator	GE (U.S.A)	62.5 MVA x 2
						generatore	Generator	Syn. Generator	GE (U.S.A)	32 MVA x 8
Damietta Combined Cycle Power Station	9 unit (6 GT + 3C.C)	GT.Siemens C.C.Alstom Boiler.Bborsig	(6 x 135 + 3 x 140) MW	GT : 1989 , C.C : 1992	N.G		Boiler	Heat recovery steam generator without subliminary firing (double press)	Babeock - Borsing	HP 59.74 kg/sec - 74kgcm2 491°C LP13.7 kg/sec 4.3kg/cm2-188 °C
							S.Turbine	HP Multistages impulse and counter pressure type LP Multistages Single acting reaction type	Gec- Alstom	140 MW
							G.Turbine	V 94-2 (one shaft)	Siemens	135 MW
							compressor	Axial flow compressor disc type	Siemens	496.77kg/sec at 1.013bar-15°C
							compressor	Axial flow compressor disc type	Siemens	496.77kg/sec at 1.013bar-15°C
							Generator	T 237-370 (Air cooling)	Gec- Alstom	175 MVA
							Generator	TLRI 108/38 (Air cooling)	Siemens	152 MVA
Abu Sultan Power Plant	4 unit	General Electric	150 MW	1983	Residual oil Gas	Hydrogen cooled	Boiler	Single - stage reheat steam N.O.balanced draft	Foster wheeler	530 ton / hr
							Turbine	Reheat double flow	General Electric	150 MW
							Generator	Static Exciter	General Electric	193.235 KVA
Ayoun Moussa Power Plant - Suez City	2 unit	Packages	320 MW	2000	Residual oil Gas	Hydrogen cooled	Boiler	Natural circulation radiant boiler	Babcock & Wilcox	1090 ton / hr
							Turbine	3- casing condensing with reheat, Heat extraction	Siemens	320 MW
							Generator	THDD 108/44	Siemens	320 MW

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Sharm Elsheikh	6 Units	U1,2,3 : Alstom, U4,5,6 : GE	2 x 23.4 MW + 4 x 24.2 MW	U1,2:1992 U3,4:1995 U5:2001, U6:2003	L.O N.G		Turbine	PG5331P	Alstom
							Turbine	MS5000	GE
							Generator	T 174-160	Alstom
							Generator	5A2	GE
							compressor	Axial flow	Alstom
Hurgkada Station	6 Units	GE	3 x 23.45 MW + 3 x 24.27 MW	1991	Solar		Turbine	PG5341 P	GE
									23.45 MW
							Generator	5 A2	GE
									28900 KVA
							compressor	Axial flow - heavy duty	GE
Port Said Power Plant - Elraswa Road South Port Said	3 Units	GE (USA) + R.R (Rolls Royce Limited) (UK)	2X23.96 MW + 1X 24.6 MW	1977 1996 1981	Solar		Turbine	Generator drive	USA
							Turbine	SK 30 Power Turbine	UK
							Generator	B air coaled open ventilation	USA
							Generator	(BDAX 7-250)	Brush Electrical Machine.E England
							compressor	Axial flow - heavy duty	USA
							compressor	Axial flow type	UK
Suez Thermal Power Station - Suez	5 Units	ABB	4x22 MW + 1x97 MW	1964 1991	Residual oil Solar	Hydrogen cooled	Boiler	يجرى تجهيز الغلايات تمهدًا لاعادة تأهيل المحطة	
							Turbine	TMI 14T flash TML 225	ABB Stal turbine generator
							Turbine		97 MW
							Generator	GTL 1530 GN	ABB Stal turbine generator
							Generator		97 MW

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Al-Arish Power Plant	2 Units	Packages - E.E.A	33.14 MW	1995 1996	Residual oil Gas Solar	Circulating water	Boiler	Natural circulation	BHEL, India
							Turbine	One Cylinder	Fuji, Japan
							Generator	FTLRI 484/58-2	Fuji, Japan
Ataka Power Station - Suez	4 Units	Siemens	2x150 MW + 2x300 MW	1985	Residual oil Gas	open circuit	Boiler	Natural circulation	Wagner Biro
							Boiler	Forced circulation	Stein
							Turbine	3 casing reheat condensation turbine	Kraftwerk union
							Turbine	casing reheat condensation	Siemens
							Generator	THOI 93/43	Kraftwerk union
							Generator	THDD/108/53	Fuji, Japan
							Generator	THOI 93/43	Siemens
EL Shabab Power Station	3 Units	ABB (Asia Brownen Boveri)	33.5 MW	1982	Gas solar		Turbine	9DINA dual fuel	ABB
							Generator	WY 16L-044 LLT	ABB
							compressor	Axial one shaft (15stages)	ABB