



Total of Electricity Consumption

Table-1

Indicator	Unit	Years								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Electricity Consumption	*GW/H	218,254	225,509	246,610	262,685	281,155	294,612	296,673	298,439	299,188

source: Electricity & Cogeneration Regulatory Authority

*Gigawatt / Hour

Electric energy consumed by regions

Table-2

Years	Unit	Central Region	Western region	Eastern region	Southern region	Total
2009	Gigawatt hours (GWh)	58,584	65,292	59,809	15,812	199,497
2010		63,746	71,101	65,803	17,604	218,254
2011		67,660	70,381	69,225	18,242	225,508
2012		72,970	79,388	73,728	20,524	246,610
2013		74,284	86,189	78,655	23,557	262,685
2014		85,237	87,998	82,360	25,560	281,155
2015		90,210	95,831	81,353	27,218	294,612
2016		90,285	97,774	80,665	27,948	296,672
2017		90,799	97,137	82,061	28,443	298,440
2018		85,358	101,159	83,885	28,786	299,188

Source: Electricity & Cogeneration Regulatory Authority (ECRA)

the percentage of fuel consumption for electricity

Table-3

Fuel consumed	Unit	Years									
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Natural gas	%	0.38	0.34	0.37	0.46	0.47	0.44	0.43	0.51	0.54	0.57
Crude Oil		0.34	0.40	0.37	0.31	0.28	0.32	0.32	0.24	0.20	0.18
Heavy fuel oil		0.06	0.04	0.05	0.08	0.10	0.11	0.12	0.17	0.22	0.22
Diesel		0.22	0.22	0.21	0.15	0.15	0.13	0.13	0.09	0.05	0.03
Total		1	1	1	1	1	1	1	1	1	1

Source: Electricity & Cogeneration Regulatory Authority (ECRA)

The production capacity of electricity by design technology

Table-4

Indicator	Unit	Years								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Installed Capacity_ Diesel Generator	*GWH	1.0	1.0	0.8	0.8	0.8	0.8	0.6	0.4	0.4
Installed Capacity_ Combind cycle units Generator		7	7	8	9	9	10	15	17	17
Installed Capacity_ Gas Turbine		30	31	33	35	36	38	36	35	30
Installed Capacity_ Steam Turbine		21	22	23	26	31	32	36	36	38
The total design capacity		59	61	65	71	77	81	88	89	86

source: Electricity & Cogeneration Regulatory Authority

*Gigawatt / Hour

Energy consumed for electricity production

Table-5

Indicator	Unit	Years								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Energy consumed for electricity production (Single purpose)	*TBTU	2,077	2,101	2,254	2,280	2,288	2,238	2,281	2,545	2,264
Fuel consumption for cogeneration and desalination of sea water	TBTU	-	-	-	-	-	-	1,559	1,685	1,633

source: Electricity & Cogeneration Regulatory Authority

*Trillion British Thermal Unit



Import and export of electricity

Table-6

Indicator	Unit	Years								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
*Import of electricity	***GW/H	1.00	5.00	416.00	434.00	465.00	461.00	342.50	2.99	2.00
**Export of electricity	GW/H	3.00	74.00	470.00	482.00	515.00	512.00	1,062.17	38.00	36.00

source: Electricity & Cogeneration Regulatory Authority

*from Gulf cooperation Council Interconnection Authority

**from Gulf cooperation Council Interconnection Authority

***Gigawatt / Hour



Produced energy

Table-7

Indicator	Unit	Years								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Produced energy	*GW/H	240,067	250,077	271,679	284,016	311,807	338,328	345,446	355,080	358,853
Generated energy from the stations of Saudi Electricity Company	GW/H	189,416	193,952	211,603	203,372	219,133	215,670	209,692	206,938	192,606

source: Electricity & Cogeneration Regulatory Authority

*Gigawatt / Hour

Consumption of Electrical Energy by Sectors

Table-8

Sector	Unit	Years								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Residential	*GWH	109,021	109,623	120,652	126,113	136,368	144,513	143,660	143,473	130,428
Commercial		28,918	32,622	39,388	38,882	42,274	47,163	48,225	48,349	46,849
Governmental		28,753	27,746	30,614	32,126	35,940	39,674	38,498	38,666	43,909
Industrial		43,247	46,726	46,626	55,636	56,618	51,856	53,587	54,863	58,177
Other		8,315	8,791	9,330	9,928	9,955	11,406	12,702	13,089	19,824
Total		218,254	225,509	246,610	262,685	281,155	294,612	296,673	298,439	299,188

source: Electricity & Cogeneration Regulatory Authority

*Gigawatt / Hour



Available Generation Capacities

Table-9

Available Capacities	Years							
	Unit	2012	2013	2014	2015	2016	2017	2018
	*MW	53,588.00	58,462.00	65,506.00	69,155.00	74,702.00	80,471.00	76,941.00

source: Electricity & Cogeneration Regulatory Authority

*Megawatt



Installed Capacity by Type of Production

Table-10

Years	Unit	Steam Generators	Gas Generators	Combined Cycle Generators	Diesel Generators	Solar	Other	Total
2012	*MW	13,986	26,327	2,331	439	-	10,505	53,588
2013		14,686	24,416	6,342	464	-	12,554	58,462
2014		16,782	24,527	6,899	415	-	16,883	65,506
2015		16,782	24,282	8,708	399	-	18,984	69,155
2016		19,350	22,980	11,954	387	-	20,031	74,702
2017		21,988	21,861	12,471	265	3	23,883	80,471
2018		22,488	17,505	13,353	185	3	23,407	76,941

source: Electricity & Cogeneration Regulatory Authority

*Megawatt

Maximum Load

Table-11

Maximum Load	Years							
	Unit	2012	2013	2014	2015	2016	2017	2018
	*MW	51,939	53,864	56,547	62,260	60,828	62,121	61,743

source: Electricity & Cogeneration Regulatory Authority

*Megawatt



Produced Electrical Energy

Table-12

Years	Unit	Stem Generators	Gas Generators	Combined Cycle Generators	Diesel Generators	rent Diesel Generators	Total
2012	*GW/H	93,475	97,664	15,615	377	4,472	211,603
2013		88,277	81,689	28,469	466	4,472	203,372
2014		94,902	81,834	37,589	263	4,544	219,133
2015		87,602	83,254	40,871	271	3,672	215,670
2016		84,975	70,214	50,602	254	3,647	209,692
2017		95,367	54,022	54,959	207	2,380	206,935
2018		95,644	36,596	58,752	166	1,444	192,603

source: Electricity & Cogeneration Regulatory Authority

*Gigawatt / Hour

Total Main Indicators of Electrical Energy and Capacity in Saudi Arabia

Table-13

Electrical Energy	Unit	Years						
		2012	2013	2014	2015	2016	2017	2018
Installed Capacity	MW*	53,588	58,462	65,506	69,155	74,702	80,471	76,941
Maximum Load	MW	51,939	53,864	56,547	62,260	60,828	62,121	61,743
Produced Energy	GWH**	271,679	284,016	311,807	338,328	345,446	355,080	358,853
Consumed Energy	GWH	246,610	262,685	281,155	294,612	296,673	298,439	299,188

source: Electricity & Cogeneration Regulatory Authority

*Megawatt

**Gigawatt / Hour

Missing Energy in the Networks of Transmission and Distribution

Table-14

Electrical Energy	Unit	Years						
		2012	2013	2014	2015	2016	2017	2018
Generated energy from the stations of Saudi Electricity Company	*GWH	211,603	203,372	219,133	215,670	209,692	206,938	192,606
Transmitted energy from desalination plants		14,102	14,597	13,757	25,180	30,733	32,998	15,400
Transmitted energy from other producers		45,973	66,048	78,917	97,486	105,021	115,144	150,847
Produced energy		271,679	284,016	311,807	338,328	345,446	355,080	358,853
Transmitted energy through networks		264,853	277,455	304,240	330,367	337,428	345,712	349,594
Energy sales		240,288	256,688	274,502	286,037	287,692	288,656	287,982
Missing energy in the networks of transmission and distribution		24,551	20,763	21,144	25,596	26,186	32,423	33,105
Percentage of missing energy in the networks of transmission and distribution		-9.27%	-7.48%	-6.95%	-7.75%	-7.76%	-9.38%	-9.47%

source: Electricity & Cogeneration Regulatory Authority

*Gigawatt / Hour



Electricity generated from the Saline Water Conversion Corporation

Table-15

City	Unit	Years						
		2012	2013	2014	2015	2016	2017	2018
Jubail	*GWH	8,704	10,756	10,538	10,301	10,366	8,972	8,169
Al-khobar		5,985	4,586	4,953	5,903	5,453	6,683	4,254
Al-khafji		33	41	48	46	45	43	18
Jeddah		2,181	2,647	1,503	1,182	1,226	806	452
Al-shu'aibah		3,880	4,068	3,921	4,231	3,571	4,339	4,473
Yanbu		2,501	2,072	2,474	2,553	2,472	2,177	1,382
Al-shaqeq		364	711	644	754	835	872	646
Ras Al-khair		-	-	5,609	12,059	18,978	21,346	21,355
Total		23,647	24,881	29,690	37,029	42,947	45,236	40,749

source: Electricity & Cogeneration Regulatory Authority/The Saline Water Conversion Corporation

*Gigawatt / Hour



Total electricity generated from desalination plants for licensed companies including the Saline Water Conversion Corporation

Table-16

Total of electricity generation	Unit	Years						
		2012	2013	2014	2015	2016	2017	2018
	*GW/H	99,379	104,480	111,875	128,911	145,811	151,298	135,448

source: Electricity & Cogeneration Regulatory Authority/The Saline Water Conversion Corporation

*Gigawatt / Hour



Number of Population and Energy Sales Per Capita/ Subscriber

Table-17

Years	Number of Population	Number of Subscribers	Energy sales (*GW/H)	Energy Indicator Per Capita (**KW/H per capita)	Energy Indicator Per Subscriber (KW/H per subscriber)
2012	28,896,842	6,746,646	246,610	8,534	36,553
2013	29,613,068	7,159,368	262,685	8,871	36,691
2014	30,339,797	7,620,128	281,155	9,267	36,896
2015	31,062,072	8,112,539	294,612	9,485	36,316
2016	31,787,580	8,607,000	296,673	9,333	34,469
2017	32,612,846	9,069,513	298,439	9,151	32,906
2018	33,413,660	9,434,489	299,188	8,954	31,712

source: Electricity & Cogeneration Regulatory Authority/General Authority for statistics

*Gigawatt / Hour

**Kilowatt