

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Table Notes

Data on utilization are derived by dividing the data on electricity production shown in Table 32 by the net installed capacity shown in Table 30, and then by the total number of hours in a year to yield a percentage of theoretical maximal utilization.

For this table, **Other** under total producers refers to geothermal, tide, wave, marine and other non-specified sources. **Other** under autoproducers refers to nuclear (if any), wind, solar, tide, wave, marine and other non-specified sources. **Other** under main activity producers refers to wind, solar, tide, wave, marine and other non-specified sources.

For Austria data are given in gross maximum capacity.

Please refer to the Definitions Section on pages ix to xv for the appropriate product description /classification, and xvi to xvii for the descriptions of relevant flows.

Figure 74: Utilization of installed electric generating capacity by source and region, 2018

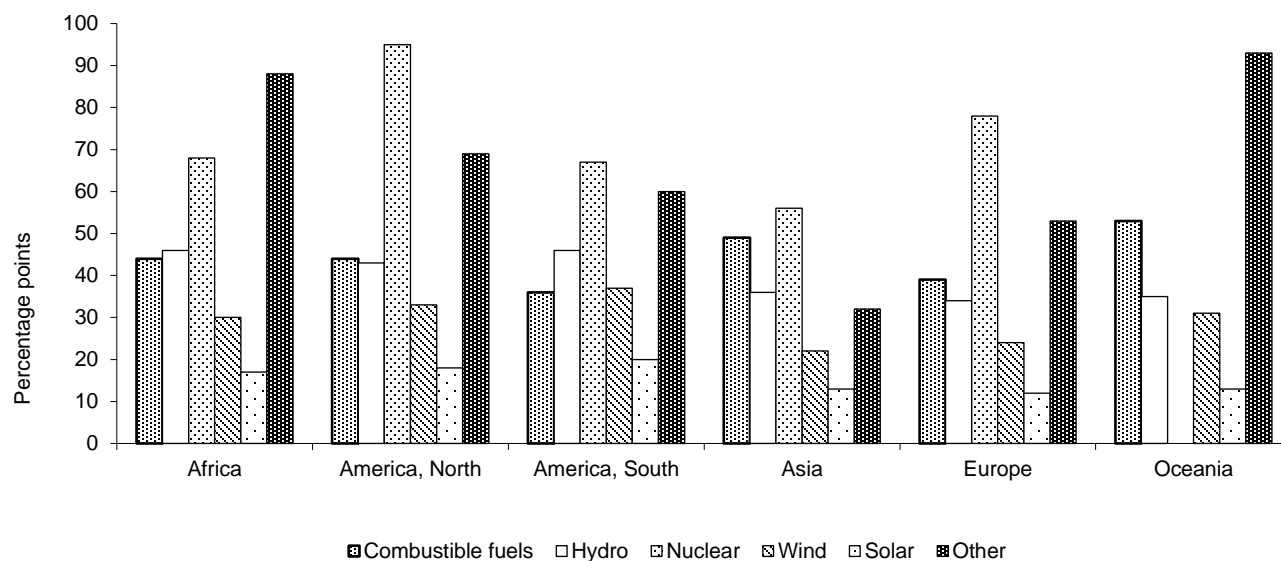


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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
World	2015	44	46	37	75	23	13	63
	2016	42	45	38	74	23	12	60
	2017	42	45	37	75	25	13	58
	2018	42	46	38	76	26	13	44
Africa	2015	51	52	50	75	21	16	79
	2016	48	49	47	98	25	14	75
	2017	46	46	45	93	28	17	79
	2018	44	44	46	68	30	17	88
Algeria	2015	46	46	7	..	22	17	..
	2016	43	43	7	..	22	1	..
	2017	45	46	26	..	78	2	..
	2018	42	42	56	..	96	2	..
Angola	2015	44	48	41	..	..	16	..
	2016	41	40	42	..	..	16	..
	2017	28	17	37	..	..	16	..
	2018	27	15	37	..	..	16	..
Benin	2015	10	12	0	..	..	11	..
	2016	8	10	1	..	..	11	..
	2017	10	12	0	..	..	11	..
	2018	6	7	..	..	..	11	..
Botswana	2015	55	55	..	..	..	11	..
	2016	49	49	..	..	..	18	..
	2017	46	46	..	..	..	18	..
	2018	45	45	..	..	..	44	..
Burkina Faso	2015	35	35	33	..	..	..	..
	2016	34	32	50	..	..	..	..
	2017	38	37	46	..	..	27	..
	2018	33	34	33	..	..	26	..
Burundi	2015	31	36	31	..	..	18	..
	2016	32	39	32	..	..	18	..
	2017	31	56	24	..	..	18	..
	2018	40	71	31	..	..	18	..
Cabo Verde	2015	30	30	..	..	35	9	..
	2016	30	30	..	..	34	9	..
	2017	28	28	..	..	32	10	..
	2018	27	27	..	..	34	13	..
Cameroon	2015	48	35	68	..	..	11	..
	2016	42	26	68	..	..	11	..
	2017	45	27	75	..	..	15	..
	2018	59	45	78	..	..	11	..
Central African Rep.	2015	37	1	64	..	..	16	..
	2016	37	1	65	..	..	16	..
	2017	37	1	66	..	..	16	..
	2018	38	1	67	..	..	16	..
Chad	2015	30	30	..	..	..	..	..
	2016	31	31	..	..	..	..	..
	2017	31	31	..	..	..	..	..
	2018	31	31	..	..	..	..	..
Comoros	2015	23	23	..	..	..	..	..
	2016	26	26	..	..	..	..	..
	2017	30	30	..	..	..	..	..
	2018	33	33
Congo	2015	53	49	60	25	..
	2016	56	53	62	25	..
	2017	65	66	64	20	..
	2018	66	66	66	20	..

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
37	42	33	16	44	47	38	75	21
38	44	29	16	43	45	38	74	21
40	48	27	16	42	45	38	75	21
40	48	29	15	43	46	38	76	21
24	26	12	14	54	55	51	75	38
29	32	9	16	51	51	48	98	37
25	26	15	21	48	49	46	93	36
26	26	15	21	47	46	47	68	35
11	11	..	..	57	58	7	..	18
13	13	..	..	51	53	7	..	2
14	14	..	..	53	55	26	..	4
10	10	..	..	55	56	56	..	5
35	35	..	..	45	50	41	..	16
31	31	..	..	42	42	42	..	16
20	20	..	..	28	17	37	..	16
19	19	..	..	27	14	37	..	16
28	28	..	..	7	9	0	..	11
24	24	..	..	6	7	1	..	11
25	25	..	..	8	10	0	..	11
29	29	..	..	3	4	..	..	11
..	..	..	..	56	56	..	..	11
..	..	..	..	51	51	..	..	18
..	..	..	..	47	47	..	..	18
..	..	..	..	45	45	..	..	44
..	..	..	..	35	35	33	..	..
..	..	..	..	34	32	50	..	..
..	..	..	..	38	37	46	..	27
..	..	..	..	33	34	33	..	26
34	34	..	..	31	36	31	..	18
40	40	..	..	32	39	32	..	18
38	38	..	..	31	60	24	..	18
23	23	..	..	41	81	31	..	18
15	15	..	..	30	30	..	..	29
14	14	..	..	30	30	..	..	29
17	17	..	..	28	28	..	..	27
18	18	..	..	27	27	..	..	29
57	57	..	..	43	8	68	..	11
44	44	..	..	41	6	68	..	11
48	48	..	..	44	5	75	..	15
58	58	..	..	60	13	78	..	11
..	..	..	..	37	1	64	..	16
..	..	..	..	37	1	65	..	16
..	..	..	..	37	1	66	..	16
..	..	..	..	38	1	67	..	16
..	..	..	..	30	30	..	..	..
..	..	..	..	31	31	..	..	..
..	..	..	..	31	31	..	..	..
..	31	31
..	23	23
..	26	26
..	30	30
..	33	33
55	55	50	..	60	..	25
60	60	51	..	62	..	25
74	74	54	..	64	..	20
74	74	55	..	66	..	20

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Côte d'Ivoire	2015	52	64	26	..	..	..	..
	2016	61	76	29	..	..	..	..
	2017	53	70	27	..	..	..	..
	2018	53	62	38	..	..	..	..
Dem. Rep. of the Congo	2015	40	4	42	..	..	..	..
	2016	39	3	41	..	..	..	..
	2017	35	3	36	..	..	..	..
	2018	43	72	42	..	..	16	..
Djibouti	2015	16	16	..	..	..	..	..
	2016	8	8	..	..	..	..	..
	2017	5	5	..	..	..	..	..
	2018	5	5	..	..	..	..	..
Egypt	2015	57	58	55	..	28	21	..
	2016	55	56	55	..	31	14	..
	2017	49	49	52	..	34	47	..
	2018	42	42	51	..	26	32	..
Equatorial Guinea	2015	28	33	18	..	..	..	..
	2016	28	33	18	..	..	..	..
	2017	18	33	7	..	..	..	..
	2018	15	28	7	..	..	..	..
Eritrea	2015	25	25	..	..	23	23	..
	2016	26	26	..	..	23	23	..
	2017	21	21	..	..	23	13	..
	2018	25	25	..	..	23	25	..
Eswatini	2015	30	26	36	..	..	..	..
	2016	24	26	19	..	..	..	..
	2017	25	29	18	..	..	13	..
	2018	31	30	33	..	..	13	..
Ethiopia	2015	49	3	57	..	27	21	..
	2016	34	5	35	..	28	17	..
	2017	36	4	38	..	19	21	..
	2018	36	5	39	..	19	21	..
Gabon	2015	48	41	62	..	..	23	..
	2016	51	45	64	..	..	23	..
	2017	49	43	61	..	..	23	..
	2018	40	42	36	..	..	23	..
Gambia	2015	27	28	..	..	1	18	..
	2016	29	29	..	..	1	18	..
	2017	30	30	..	..	1	18	..
	2018	29	30	..	..	1	18	..
Ghana	2015	34	29	42	..	..	2	..
	2016	38	36	40	..	..	14	..
	2017	35	33	41	..	..	14	..
	2018	37	34	43	..	..	9	..
Guinea	2015	21	12	27	..	..	..	..
	2016	31	26	34	..	..	..	..
	2017	31	23	38	..	..	..	..
	2018	36	34	37	..	..	..	..
Guinea-Bissau	2015	29	29	..	..	..	..	..
	2016	31	34	..	..	..	15	..
	2017	31	34	..	..	..	15	..
	2018	31	35	..	..	..	15	..
Kenya	2015	48	20	50	..	26	..	83
	2016	51	21	57	..	25	..	79
	2017	51	38	38	..	27	..	83
	2018	48	22	55	..	13	..	93

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
52	52	..	..	52	65	26	..	..
86	86	..	..	61	76	29	..	..
86	86	..	..	52	70	27	..	..
30	30	..	..	53	63	38	..	..
1	14	0	..	49	1	51	..	..
0	11	0	..	49	1	52	..	..
4	3	4	..	42	2	42	..	..
25	90	8	..	48	2	48	..	16
..	..	..	..	16	16	..	..	..
..	..	..	..	8	8	..	..	..
..	..	..	..	5	5	..	..	..
..	..	..	..	5	5	..	..	..
91	91	..	..	57	58	55	..	27
93	93	..	..	55	55	55	..	29
93	93	..	..	48	48	52	..	36
78	78	..	..	41	41	51	..	27
..	..	..	..	28	33	18	..	..
..	..	..	..	28	33	18	..	..
..	..	..	..	18	33	7	..	..
..	..	..	..	15	28	7	..	..
13	13	..	..	26	26	..	..	23
13	13	..	..	27	27	..	..	23
16	16	..	..	21	21	..	..	13
16	16	..	..	25	26	..	..	24
28	29	..	..	34	0	38	..	..
28	29	..	..	18	0	20	..	..
31	32	..	13	17	..	19	..	..
31	33	..	13	30	..	34	..	..
..	..	..	..	49	0	57	..	26
..	..	..	..	34	0	35	..	27
..	..	..	..	35	0	38	..	18
..	..	..	..	36	1	39	..	18
35	36	..	23	49	42	62	..	..
36	37	..	23	53	47	64	..	..
37	38	29	23	51	44	62	..	..
22	22	29	23	42	48	36	..	..
12	12	..	..	34	35	..	..	12
12	12	..	..	35	36	..	..	12
12	12	..	..	37	38	..	..	12
12	12	..	..	36	37	..	..	12
10	10	..	..	36	31	42	..	2
10	10	..	..	39	39	40	..	14
10	10	..	..	37	34	41	..	14
10	10	..	..	38	36	43	..	9
20	20	..	..	22	6	27	..	..
36	36	..	..	29	5	34	..	..
29	29	..	..	32	9	38	..	..
48	48	..	..	32	14	37	..	..
33	33	..	..	28	28	..	..	..
40	40	29	32	15
39	39	29	33	15
41	41	29	33	15
..	48	20	50	..	81
..	51	21	57	..	77
..	51	38	38	..	81
76	76	48	21	55	..	65

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Lesotho	2015	76	..	76	..	..	..	..
	2016	72	9	72	..	..	..	..
	2017	76	14	77	..	..	..	..
	2018	79	14	80	..	..	..	..
Liberia	2015	39	38	50	..	..	..	..
	2016	47	47	50	..	..	..	..
	2017	45	45	51	..	..	17	..
	2018	26	36	15	..	..	15	..
Libya	2015	45	45	..	..	..	18	..
	2016	35	35	..	..	..	18	..
	2017	37	37	..	..	..	18	..
	2018	37	37	..	..	..	18	..
Madagascar	2015	36	23	65	..	..	11	..
	2016	41	31	64	..	..	1	..
	2017	34	27	54	..	..	1	..
	2018	36	25	67	..	..	1	..
Malawi	2015	43	10	63	..	..	..	..
	2016	43	10	63	..	..	..	..
	2017	40	10	58	..	..	..	..
	2018	39	10	53	..	..	..	..
Mali	2015	30	38	24	..	..	17	..
	2016	29	35	24	..	..	22	..
	2017	31	39	23	..	..	16	..
	2018	33	43	23	..	..	17	..
Mauritania	2015	25	24	..	..	35	19	..
	2016	26	25	..	..	37	19	..
	2017	27	28	..	..	34	13	..
	2018	25	26	..	..	35	19	..
Mauritius	2015	43	46	23	..	24	16	..
	2016	41	44	19	..	19	13	..
	2017	43	46	17	..	16	15	..
	2018	41	46	24	..	16	8	..
Morocco	2015	31	33	15	..	36	0	..
	2016	32	34	11	..	38	28	..
	2017	31	34	10	..	34	23	..
	2018	33	35	13	..	38	42	..
Mozambique	2015	89	71	93	..	..	10	..
	2016	86	86	86	..	..	14	..
	2017	71	81	69	..	..	2	..
	2018	69	67	71	..	..	1	..
Namibia	2015	35	3	51	..	30	21	..
	2016	32	5	44	..	30	18	..
	2017	36	5	52	..	11	18	..
	2018	27	2	38	..	40	23	..
Niger	2015	22	22	..	..	..	19	..
	2016	18	17	..	..	..	19	..
	2017	22	22	..	..	..	19	..
	2018	18	18	..	..	..	19	..
Nigeria	2015	35	36	33	..	..	25	..
	2016	31	28	47	..	..	26	..
	2017	31	30	37	..	..	27	..
	2018	34	34	34	27	..
Rwanda	2015	35	32	40	18	..
	2016	38	39	38	19	..
	2017	37	39	37	15	..
	2018	38	40	39	17	..

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	76	..	76	..	..
..	..	..	..	72	9	72	..	..
..	..	..	..	76	14	77	..	..
..	..	..	..	79	14	80	..	..
33	33	..	..	52	53	50	..	..
43	43	..	..	54	55	50	..	..
46	46	..	..	45	45	51	..	17
34	34	..	..	21	41	15	..	15
..	..	..	..	45	45	..	..	18
..	..	..	..	35	35	..	..	18
..	..	..	..	37	37	..	..	18
..	..	..	..	37	37	..	..	18
61	61	..	..	34	20	65	..	1
61	61	..	..	39	27	64	..	1
51	51	..	..	32	24	54	..	1
52	52	..	..	34	22	67	..	1
10	10	11	..	63	63	63	..	..
10	10	11	..	64	63	64	..	..
10	10	11	..	59	63	59	..	..
10	10	11	..	53	63	53	..	..
66	66	..	..	25	27	24	..	17
40	40	..	..	27	32	24	..	22
43	43	..	..	28	36	23	..	16
52	52	..	..	28	36	23	..	17
45	45	..	..	21	19	..	..	29
51	51	..	..	20	19	..	..	28
49	49	..	..	23	23	..	..	22
46	46	..	..	22	21	..	..	23
65	69	..	16	29	30	23	..	24
60	65	..	14	28	29	19	..	31
65	72	..	15	28	30	17	..	24
56	69	..	9	30	31	24	..	22
5	0	..	..	42	53	15	..	30
5	..	..	..	43	54	11	..	37
5	..	..	..	41	53	10	..	32
5	..	..	..	44	54	13	..	38
40	25	60	10	90	74	93	..	..
28	25	61	14	86	90	86	..	..
29	16	38	2	73	86	71	..	..
1	..	2	1	73	72	74	..	..
..	..	..	..	35	3	51	..	21
..	..	..	..	32	5	44	..	18
..	..	..	..	36	5	52	..	17
..	..	..	..	27	2	38	..	24
5	3	..	19	26	26	..	..	..
5	3	..	19	21	21	..	..	..
5	2	..	19	27	27	..	..	..
7	2	..	19	21	21	..	..	..
22	22	33	25	41	44	33	..	..
20	19	48	26	35	32	47	..	..
21	21	45	27	35	34	37	..	..
24	23	38	27	37	38	34
23	23	35	32	40	..	18
23	23	38	40	38	..	19
23	23	37	39	37	..	15
23	23	38	41	39	..	17

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Sao Tome and Principe	2015	36	36	38	..	..	14	..
	2016	36	36	38	..	..	14	..
	2017	36	37	34	..	..	14	..
	2018	36	37	29	..	..	14	..
Senegal	2015	49	52	..	..	..	2	..
	2016	52	55	..	..	..	3	..
	2017	50	55	..	..	..	11	..
	2018	44	49	..	..	..	6	..
Seychelles	2015	45	47	..	..	13	34	..
	2016	41	43	..	..	13	13	..
	2017	38	39	..	..	11	11	..
	2018	38	40	..	..	14	11	..
Sierra Leone	2015	22	10	38	..	..	17	..
	2016	25	12	42	..	..	16	..
	2017	25	12	42	..	..	17	..
	2018	14	12	16	..	..	15	..
Somalia	2015	50	50	..	..	..	..	..
	2016	50	50	..	..	..	..	..
	2017	50	50	..	..	..	..	..
	2018	50	50	..	..	..	..	..
South Africa	2015	60	64	57	75	12	17	..
	2016	58	61	61	98	18	15	..
	2017	55	57	80	93	25	18	..
	2018	55	57	85	68	32	16	..
South Sudan	2015	79	82	..	..	..	16	..
	2016	61	63	..	..	..	16	..
	2017	47	51	..	..	..	4	..
	2018	51	55	..	..	..	4	..
St. Helena and Depend.	2015	13	12	..	..	14	11	..
	2016	12	13	..	..	11	15	..
	2017	12	13	..	..	8	11	..
	2018	11	12	..	..	11	11	..
Sudan	2015	45	32	60	..	..	..	..
	2016	47	38	58	..	..	..	..
	2017	47	36	61	..	..	..	..
	2018	47	38	58	..	..	..	..
Togo	2015	22	27	10	..	..	..	..
	2016	51	54	43	..	..	..	..
	2017	35	35	35	..	..	..	..
	2018	30	28	34	..	..	11	..
Tunisia	2015	41	42	13	..	21	19	..
	2016	41	42	8	..	23	19	..
	2017	41	42	3	..	21	31	..
	2018	41	43	3	..	22	14	..
Uganda	2015	44	17	50	..	..	..	..
	2016	46	17	54	..	..	4	..
	2017	48	24	55	..	..	13	..
	2018	47	23	55	..	..	9	..
United Rep. of Tanzania	2015	56	66	42	..	..	13	..
	2016	59	68	48	..	..	20	..
	2017	59	67	48	..	..	20	..
	2018	52	55	45	40	..
Zambia	2015	64	33	66
	2016	47	17	53
	2017	56	46	58
	2018	64	81	60	10	..

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	36	36	38	..	14
..	..	..	..	36	36	38	..	14
..	..	..	..	36	37	34	..	14
..	..	..	..	36	37	29	..	14
22	24	..	1	70	70	..	..	..
26	28	..	1	72	72	..	..	..
24	28	..	9	71	71	..	..	..
26	33	..	5	57	57	..	..	..
35	35	..	..	49	51	..	..	15
35	35	..	..	43	46	..	..	13
35	35	..	..	38	41	..	..	11
35	35	..	..	39	41	..	..	13
39	39	..	..	22	10	38	..	17
39	39	..	..	25	12	42	..	16
39	39	..	..	25	12	42	..	17
39	39	..	..	13	12	16	..	15
..	..	..	..	50	50	..	..	..
..	..	..	..	50	50	..	..	..
..	..	..	..	50	50	..	..	..
..	..	..	..	50	50	..	..	..
31	60	32	14	65	65	59	75	30
42	70	26	16	62	60	63	98	38
32	54	26	21	59	57	85	93	39
35	63	14	22	58	57	92	68	78
92	94	..	11	65	70	..	..	27
72	73	..	11	50	54	..	..	25
11	11	..	23	64	72	..	..	2
12	11	..	23	68	77	..	..	2
..	..	..	..	13	12	..	..	13
..	..	..	..	12	13	..	..	12
..	..	..	..	12	13	..	..	9
..	..	..	..	11	12	..	..	11
6	7	..	..	48	35	60	..	..
6	7	..	..	49	42	58	..	..
7	7	..	..	50	39	61	..	..
6	7	..	..	50	42	58	..	..
17	17	..	..	23	28	10	..	..
19	19	..	..	52	55	43	..	..
19	19	..	..	36	36	35	..	..
7	6	..	11	31	29	34	..	..
50	42	..	19	41	42	13	..	21
57	51	..	19	40	42	8	..	23
55	47	..	31	40	42	3	..	21
49	58	..	14	41	42	3	..	22
42	31	54	..	44	8	50	..	..
42	31	52	..	47	7	54	..	4
29	22	37	..	52	26	58	..	14
35	25	45	..	50	22	57	..	9
5	13	57	68	42
10	20	60	70	48
8	20	61	70	48
5	40	59	68	45
..	64	33	66
..	47	17	53
..	56	46	58
..	64	81	60	..	10

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Zimbabwe	2015	55	42	74	..	..	..	..
	2016	40	38	44	..	..	..	..
	2017	43	32	60	..	..	..	..
	2018	46	39	55	..	..	..	..
America, North	2015	47	45	40	94	30	16	73
	2016	46	44	41	94	32	17	73
	2017	45	42	44	94	33	19	62
	2018	46	44	43	95	33	18	69
Anguilla	2015	32	33	..	..	..	2	..
	2016	35	36	..	..	..	5	..
	2017	38	38	..	..	..	7	..
	2018	41	41	..	..	..	7	..
Antigua and Barbuda	2015	34	35	..	..	..	13	..
	2016	34	35	..	..	..	17	..
	2017	34	35	..	..	..	17	..
	2018	45	49	..	..	..	16	..
Aruba	2015	37	35	..	..	53	..	..
	2016	38	35	..	..	55	..	..
	2017	39	37	..	..	55	..	..
	2018	39	36	..	..	67	..	..
Bahamas	2015	40	40	..	..	..	..	..
	2016	39	39	..	..	..	..	..
	2017	39	39	..	..	..	..	..
	2018	45	45	..	..	..	..	..
Barbados	2015	46	47	..	..	..	18	..
	2016	45	48	..	..	..	16	..
	2017	43	44	..	..	..	23	..
	2018	47	49	..	..	..	20	..
Belize	2015	31	21	49	..	..	..	..
	2016	32	19	58	..	..	..	..
	2017	44	37	60	..	..	..	..
	2018	45	40	56	..	..	..	..
Bermuda	2015	45	45	..	..	..	..	..
	2016	44	44	..	..	..	..	..
	2017	45	45	..	..	..	..	..
	2018	42	43	..	..	..	..	..
Bonaire, St Eustatius, Saba	2015	54	61	..	..	42	..	..
	2016	47	54	..	..	39	27	..
	2017	48	58	..	..	36	27	..
	2018	49	54	..	..	43	27	..
British Virgin Islands	2015	53	54	..	..	24	11	..
	2016	54	55	..	..	24	11	..
	2017	54	55	..	..	23	9	..
	2018	51	52	..	..	23	11	..
Canada	2015	52	45	55	83	27	10	25
	2016	52	43	55	83	29	17	33
	2017	51	40	56	82	29	14	25
	2018	50	40	54	82	30	14	26
Cayman Islands	2015	55	55	..	..	..	..	..
	2016	47	47	..	..	..	..	..
	2017	48	48	..	..	..	..	..
	2018	47	47	..	..	..	..	..
Costa Rica	2015	34	5	43	..	22	29	64
	2016	32	7	39	..	19	2	74
	2017	36	4	43	..	39	12	62
	2018	36	6	40	..	50	14	53

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Total	Autoproducers			Main activity producers				
	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
14	14	..	..	56	43	74	..	..
70	70	..	..	39	36	44	..	..
42	42	..	..	43	32	60	..	..
52	52	..	..	46	39	55	..	..
49	57	71	18	47	44	39	94	30
45	54	62	17	46	43	41	94	31
45	56	64	17	45	41	43	94	32
44	56	63	16	46	43	42	95	31
..	..	..	..	32	33	..	..	2
..	..	..	..	35	36	..	..	5
..	..	..	..	38	38	..	..	7
..	..	..	..	41	41	..	..	7
11	11	..	..	34	35	..	..	13
11	11	..	..	35	36	..	..	17
11	11	..	..	34	35	..	..	17
11	11	..	..	46	49	..	..	16
..	..	..	..	37	35	..	..	53
..	..	..	..	38	35	..	..	55
..	..	..	..	39	37	..	..	55
..	..	..	..	39	36	..	..	67
22	22	..	..	41	41	..	..	..
22	22	..	..	40	40	..	..	..
22	22	..	..	41	41	..	..	..
23	23	..	..	47	47	..	..	..
20	20	..	..	47	48	..	..	18
20	20	..	..	46	49	..	..	16
20	20	..	..	43	45	..	..	23
20	20	..	..	48	51	..	..	20
54	54	..	..	25	4	49	..	..
44	44	..	..	29	4	58	..	..
83	83	..	..	29	6	60	..	..
87	87	..	..	29	10	56	..	..
36	36	..	..	45	45	..	..	..
36	36	..	..	45	45	..	..	..
39	39	..	..	45	45	..	..	..
17	33	..	..	43	43	..	..	..
..	..	..	..	54	61	..	..	42
..	..	..	..	47	54	..	..	37
..	..	..	..	48	58	..	..	34
..	..	..	..	49	54	..	..	40
..	..	..	..	53	54	..	..	16
..	..	..	..	54	55	..	..	17
..	..	..	..	54	55	..	..	15
..	..	..	..	51	52	..	..	17
64	65	73	5	51	41	54	83	25
59	63	63	16	51	40	54	83	28
60	64	67	15	51	36	55	82	27
54	55	65	15	50	37	53	82	28
..	..	..	..	55	55	..	..	..
..	..	..	..	47	47	..	..	..
..	..	..	..	48	48	..	..	..
..	..	..	..	47	47	..	..	..
61	82	98	35	29	2	37	..	34
54	78	88	33	28	4	35	..	31
36	47	0	13	36	1	43	..	47
26	34	0	13	36	3	40	..	51

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Cuba	2015	37	37	9	..	17	17	..
	2016	36	37	11	..	15	15	..
	2017	36	37	14	..	11	11	..
	2018	36	36	26	..	14	14	..
Curaçao	2015	33	32	..	..	47	22	..
	2016	33	32	..	..	49	14	..
	2017	40	40	..	..	41	21	..
	2018	38	35	..	..	57	20	..
Dominica	2015	38	41	28	..	..	..	..
	2016	40	39	42	..	..	..	..
	2017	33	34	31	..	..	..	..
	2018	28	28	28	..	..	..	..
Dominican Republic	2015	39	42	17	..	39	16	..
	2016	41	44	28	..	27	13	..
	2017	42	44	41	..	33	15	..
	2018	43	46	33	..	31	13	..
El Salvador	2015	41	37	33	..	..	7	86
	2016	40	35	31	..	..	23	88
	2017	33	23	34	..	..	28	88
	2018	31	21	32	..	..	20	86
Greenland	2015	32	12	53	..	..	..	..
	2016	30	11	50	..	..	..	..
	2017	32	15	49	..	..	..	..
	2018	32	15	50	..	..	..	..
Grenada	2015	49	49	..	..	..	3	..
	2016	51	52	..	..	..	3	..
	2017	51	52	..	..	..	3	..
	2018	50	50	..	..	..	3	..
Guatemala	2015	41	41	43	..	16	20	86
	2016	39	42	35	..	32	26	98
	2017	42	36	50	..	33	25	86
	2018	44	49	40	..	34	26	73
Haiti	2015	36	40	16	..	..	..	..
	2016	37	42	13	..	..	..	..
	2017	35	38	24	..	..	18	..
	2018	34	33	37	..	..	18	..
Honduras	2015	47	61	42	..	50	12	..
	2016	43	52	40	..	37	25	..
	2017	41	44	53	..	29	23	30
	2018	41	39	54	..	47	22	97
Jamaica	2015	50	52	50	..	22	..	..
	2016	48	52	46	..	23	6	..
	2017	48	51	61	..	33	13	..
	2018	48	51	70	..	34	13	..
Mexico	2015	53	58	29	88	31	16	80
	2016	50	56	28	75	29	15	76
	2017	49	55	29	77	29	19	69
	2018	50	57	30	97	30	9	60
Montserrat	2015	50	50	..	..	..	..	..
	2016	42	42	..	..	..	..	..
	2017	40	40	..	..	..	..	..
	2018	41	41	..	..	..	..	..
Nicaragua	2015	39	36	24	..	53	17	50
	2016	38	34	34	..	45	17	52
	2017	35	31	38	..	39	11	55
	2018	36	30	33	..	49	20	59

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Total	Autoproducers			Main activity producers				
	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
19	19	..	..	38	39	9	..	17
22	22	..	..	37	38	11	..	15
21	21	..	..	38	38	14	..	11
16	16	..	..	38	38	26	..	14
16	16	..	..	50	53	..	..	41
13	13	..	..	51	57	..	..	38
10	10	..	..	54	62	..	..	38
15	15	..	..	49	49	..	..	50
28	34	..	..	46	47	42	..	..
28	34	..	..	48	43	63	..	..
28	34	..	..	37	33	47	..	..
28	34	..	..	28	23	42	..	..
15	15	49	15	49	56	17	..	39
16	16	50	15	50	56	28	..	24
17	17	50	14	51	54	41	..	30
18	18	50	14	51	57	33	..	24
33	35	32	7	43	37	33	..	86
32	31	42	23	42	37	30	..	88
34	32	43	39	33	20	33	..	72
28	30	42	17	31	17	32	..	72
..	..	..	..	35	14	53	..	..
..	..	..	..	33	13	50	..	..
..	..	..	..	35	19	49	..	..
..	..	..	..	35	19	50	..	..
48	48	..	..	49	49	..	..	3
52	52	..	..	51	52	..	..	3
51	51	..	..	51	52	..	..	3
92	92	..	..	50	50	..	..	3
14	14	73	..	48	56	42	..	30
15	15	52	..	45	57	35	..	41
13	13	56	..	49	49	50	..	38
18	18	63	..	50	67	40	..	37
5	5	..	..	48	59	16	..	..
4	4	..	..	50	63	13	..	..
3	3	..	..	48	56	24	..	18
2	2	..	..	47	50	37	..	18
60	60	..	..	45	61	42	..	23
30	30	..	..	44	56	40	..	28
57	57	..	..	40	41	53	..	26
76	76	..	..	38	31	54	..	33
59	68	..	23	45	45	50	..	..
55	68	..	23	44	46	46	..	..
55	65	..	32	44	45	61	..	..
55	65	..	34	44	44	70	..	..
43	48	45	27	55	61	29	88	63
37	40	44	26	54	62	28	75	59
43	47	46	28	51	57	29	77	48
43	49	52	28	52	59	29	97	27
..	..	..	..	50	50	..	..	..
..	..	..	..	42	42	..	..	..
..	..	..	..	40	40	..	..	..
..	..	..	..	41	41	..	..	..
43	43	13	..	38	35	25	..	52
38	38	13	..	37	33	34	..	48
46	46	0	..	33	27	38	..	45
47	48	0	..	34	26	33	..	52

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Panama	2015	36	34	41	..	19	4	..
	2016	37	34	42	..	26	9	..
	2017	37	29	47	..	21	12	13
	2018	32	17	50	..	25	14	25
Puerto Rico	2015	40	41	6	..	22	12	..
	2016	38	40	8	..	18	10	..
	2017	30	31	6	..	17	11	..
	2018	30	32	4	..	12	6	..
Sint Maarten (Dutch part)	2015	43	43	..	..	..	..	..
	2016	44	44	..	..	..	..	..
	2017	43	43	..	..	..	..	..
	2018	36	36	..	..	..	..	..
St. Kitts-Nevis	2015	39	39	..	..	42	19	..
	2016	40	41	..	..	42	17	..
	2017	41	42	..	..	42	17	..
	2018	37	38	..	..	46	17	..
St. Lucia	2015	49	49	..	..	..	..	..
	2016	51	51	..	..	..	..	..
	2017	52	52	..	..	..	..	..
	2018	50	52	..	..	..	19	..
St. Pierre-Miquelon	2015	22	22	..	..	..	..	..
	2016	22	22	..	..	..	..	..
	2017	22	22	..	..	..	..	..
	2018	22	22	..	..	..	..	..
St. Vincent-Grenadines	2015	31	32	30	..	..	15	..
	2016	33	34	32	..	..	14	..
	2017	36	36	41	..	..	12	..
	2018	38	38	48	..	..	11	..
Trinidad and Tobago	2015	47	47	..	..	..	18	..
	2016	46	46	..	..	..	22	..
	2017	45	45	..	..	..	22	..
	2018	49	49	..	..	..	22	..
Turks and Caicos Islands	2015	33	33	..	..	..	..	..
	2016	35	35	..	..	..	..	..
	2017	33	33	..	..	..	..	..
	2018	35	35	..	..	..	..	..
United States	2015	46	44	30	96	30	17	73
	2016	45	43	32	96	32	17	73
	2017	44	41	36	96	34	19	61
	2018	45	43	35	97	33	19	72
United States Virgin Is.	2015	27	28	..	..	..	16	..
	2016	27	28	..	..	..	15	..
	2017	21	21	..	..	..	12	..
	2018	21	22	..	..	..	12	..
America, South	2015	47	45	49	67	31	23	0
	2016	44	40	47	73	36	25	23
	2017	42	37	46	67	38	17	30
	2018	42	36	46	67	37	20	60
Argentina	2015	44	43	47	46	32	19	..
	2016	45	45	43	54	29	18	..
	2017	42	42	42	40	31	23	..
	2018	41	42	42	42	21	6	..
Bolivia (Plur. State of)	2015	43	39	57	..	46	11	..
	2016	43	45	40	..	15	13	..
	2017	42	43	41	..	25	6	..
	2018	41	41	43	..	25	20	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
2	2	..	..	39	40	43	..	17
2	2	..	..	39	39	44	..	22
2	2	..	..	39	34	48	..	18
8	11	..	..	33	17	52	..	20
47	47	..	..	39	41	6	..	18
47	47	..	..	38	40	8	..	14
39	39	..	..	30	31	6	..	13
42	42	..	..	30	32	4	..	8
..	..	..	..	43	43	..	..	..
..	..	..	..	44	44	..	..	..
..	..	..	..	43	43	..	..	..
..	..	..	..	36	36	..	..	..
3	3	..	..	41	42	..	..	33
3	3	..	..	43	44	..	..	30
3	3	..	..	44	45	..	..	30
3	3	..	..	39	40	..	..	31
..	..	..	..	49	49	..	..	..
..	..	..	..	51	51	..	..	..
..	..	..	..	52	52	..	..	..
..	..	..	..	50	52	..	..	19
..	..	..	..	22	22	..	..	..
..	..	..	..	22	22	..	..	..
..	..	..	..	22	22	..	..	..
..	..	..	..	22	22	..	..	..
23	..	..	23	31	32	30	..	13
25	..	..	25	33	34	32	..	12
23	..	..	23	36	36	41	..	9
24	..	..	24	38	38	48	..	8
10	10	..	..	48	49	..	..	18
9	9	..	..	47	47	..	..	22
9	9	..	..	47	47	..	..	22
8	8	..	..	51	51	..	..	22
..	..	..	..	33	33	..	..	..
..	..	..	..	35	35	..	..	..
..	..	..	..	33	33	..	..	..
..	..	..	..	35	35	..	..	..
50	63	54	16	46	43	30	96	31
47	63	49	15	45	42	32	96	31
45	64	53	14	44	41	36	96	32
43	64	57	14	46	43	35	97	32
15	..	..	15	27	28	..	..	17
15	..	..	15	27	28	..	..	17
10	..	..	10	21	21	..	..	17
11	..	..	11	22	22	..	..	17
46	46	49	24	47	45	49	67	31
44	44	49	14	44	39	47	73	35
42	42	44	10	42	36	47	67	34
42	42	46	11	42	34	46	67	33
44	44	15	..	44	43	47	46	31
47	47	26	..	44	45	43	54	29
47	47	26	..	41	41	42	40	31
47	47	26	..	41	41	42	42	18
20	20	46	..	44	41	57	..	23
17	17	46	..	46	48	40	..	15
21	20	46	..	44	45	41	..	20
22	22	53	..	42	43	43	..	22

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Brazil	2015	47	53	45	85	32	32	..
	2016	44	41	45	91	38	11	..
	2017	43	43	42	90	39	9	..
	2018	42	41	43	90	38	17	..
Chile	2015	40	41	42	..	27	25	..
	2016	37	37	40	..	27	27	..
	2017	34	35	37	..	31	24	30
	2018	34	34	40	..	27	24	61
Colombia	2015	51	56	48	..	43	4	..
	2016	50	53	48	..	32	4	..
	2017	51	33	60	..	2	4	..
	2018	51	37	58	..	27	2	..
Ecuador	2015	45	37	59	..	53	16	..
	2016	36	32	40	..	45	17	..
	2017	38	24	49	..	40	17	..
	2018	37	25	45	..	43	16	..
Falkland Is. (Malvinas)	2015	20	18	..	..	30	..	..
	2016	22	20	..	..	35	..	..
	2017	21	19	..	..	30	..	..
	2018	21	18	..	..	31	..	..
Guyana	2015	31	31	..	..	50	16	..
	2016	34	34	..	..	50	16	..
	2017	36	37	..	..	50	16	..
	2018	37	38	..	..	50	16	..
Paraguay	2015	73	1	73	..	..	..	..
	2016	83	29	83	..	..	..	..
	2017	78	34	78	..	..	..	..
	2018	77	35	77	..	..	..	..
Peru	2015	46	36	66	..	28	26	..
	2016	41	34	55	..	51	28	..
	2017	41	28	63	..	51	13	..
	2018	41	27	65	..	46	28	..
Suriname	2015	47	51	42	..	..	10	..
	2016	46	46	47	..	..	10	..
	2017	48	44	56	..	..	10	..
	2018	52	47	60	..	..	10	..
Uruguay	2015	39	25	61	..	28	9	..
	2016	41	31	58	..	28	19	..
	2017	36	26	56	..	29	13	..
	2018	34	21	49	..	36	19	..
Venezuela (Bolivar. Rep.)	2015	46	36	56	..	33	48	23
	2016	41	35	47	..	38	48	23
	2017	36	28	46	..	38	27	23
	2018	35	27	44	..	16	23	..
Asia	2015	43	48	35	47	16	11	58
	2016	42	47	36	48	18	11	56
	2017	42	48	35	52	20	11	55
	2018	43	49	36	56	22	13	32
Afghanistan	2015	29	13	35	..	..	..	..
	2016	31	13	37	..	..	..	..
	2017	31	15	37	..	..	..	..
	2018	28	17	32	..	..	..	..
Armenia	2015	25	17	20	78	11	11	..
	2016	23	16	20	67	8	11	..
	2017	25	18	20	73	8	7	..
	2018	25	21	20	58	7	12	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
48	48	49	48	47	58	45	85	32
46	46	49	11	43	37	45	91	38
45	46	42	14	42	41	42	90	37
45	47	44	13	41	35	43	90	36
53	53	63	34	39	39	42	..	26
32	32	51	0	37	38	40	..	27
22	23	63	0	36	38	37	..	28
18	19	62	1	37	39	40	..	26
62	66	15	4	50	53	49	..	9
64	68	16	4	48	48	49	..	32
65	69	18	4	49	22	60	..	3
71	75	20	4	49	25	59	..	6
48	46	62	..	45	34	59	..	33
50	48	66	..	34	27	39	..	30
62	58	82	..	35	15	48	..	27
65	60	87	..	33	16	44	..	28
11	11	..	..	22	20	..	..	29
11	11	..	..	25	22	..	..	34
11	11	..	..	23	21	..	..	29
11	11	..	..	23	20	..	..	30
13	13	..	..	34	34	..	..	17
17	17	..	..	37	38	..	..	17
19	19	..	..	39	40	..	..	17
19	19	..	..	41	41	..	..	17
..	..	..	..	73	1	73	..	..
..	..	..	..	83	29	83	..	..
..	..	..	..	78	34	78	..	..
..	..	..	..	77	35	77	..	..
19	15	65	..	50	40	66	..	28
17	14	63	..	44	37	54	..	44
18	14	60	12	43	31	63	..	32
19	15	65	13	44	30	65	..	39
48	58	42	..	46	47	..	..	10
53	62	47	..	35	36	..	..	10
53	49	56	..	40	41	..	..	10
62	65	60	..	35	35	..	..	10
40	42	..	4	39	18	61	..	27
39	42	..	3	41	23	58	..	28
39	43	..	4	36	16	56	..	27
42	46	..	5	33	11	49	..	34
24	23	..	..	47	37	56	..	17
23	22	..	..	41	36	47	..	22
22	21	..	..	36	28	46	..	21
21	21	..	..	35	27	44	..	0
36	40	16	17	44	50	36	47	16
37	42	10	18	42	47	36	48	17
42	51	8	18	42	48	36	52	17
42	51	6	16	43	49	36	56	18
18	1	26	..	36	24	40	..	..
19	1	27	..	38	24	42	..	..
19	1	28	..	39	27	42	..	..
17	1	25	..	34	31	35	..	..
..	..	..	..	25	17	20	78	11
..	..	..	..	23	16	20	67	9
13	..	..	13	25	18	20	73	5
16	..	..	16	25	21	20	58	7

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Azerbaijan	2015	36	39	17	..	7	12	..
	2016	36	39	20	..	17	16	..
	2017	35	38	18	..	16	15	..
	2018	37	40	18	..	14	13	..
Bahrain	2015	47	47	..	..	..	21	..
	2016	47	47	..	..	11	21	..
	2017	48	48	..	..	11	21	..
	2018	48	48	..	..	11	21	..
Bangladesh	2015	61	62	30	..	68	18	..
	2016	66	67	51	..	68	19	..
	2017	68	69	52	..	68	19	..
	2018	59	59	54	..	68	25	..
Bhutan	2015	55	0	55	..	..	63	..
	2016	56	0	56	..	14	63	..
	2017	54	0	55	..	21	63	..
	2018	49	0	49	..	21	15	..
Brunei Darussalam	2015	59	59	..	..	..	19	..
	2016	59	60	..	..	..	10	..
	2017	48	48	..	..	..	19	..
	2018	49	49	..	..	..	19	..
Cambodia	2015	30	38	25	..	..	17	..
	2016	38	45	32	..	..	17	..
	2017	43	55	32	..	..	6	..
	2018	43	46	41	..	..	18	..
China	2015	41	45	39	72	16	10	50
	2016	40	44	40	72	18	9	36
	2017	41	46	38	79	21	10	10
	2018	42	49	39	75	23	12	10
China, Hong Kong SAR	2015	34	34	..	..	..	..	..
	2016	34	34	..	..	..	..	..
	2017	34	34	..	..	..	..	..
	2018	34	34	..	..	..	..	..
China, Macao SAR	2015	21	21	..	..	..	..	..
	2016	22	22	..	..	..	..	..
	2017	33	33	..	..	..	..	..
	2018	17	17	..	..	..	..	..
Cyprus	2015	30	31	..	..	16	19	..
	2016	32	34	..	..	16	20	..
	2017	32	35	..	..	15	18	..
	2018	32	35	..	..	16	19	..
Georgia	2015	41	44	41	..	..	..	..
	2016	40	30	44	..	5	..	..
	2017	37	30	39	..	50	..	..
	2018	39	28	42	..	48	..	..
India	2015	54	63	34	74	14	15	..
	2016	44	51	31	64	11	11	49
	2017	42	50	32	65	12	11	54
	2018	42	50	34	64	19	16	..
Indonesia	2015	41	42	32	..	..	6	45
	2016	45	44	50	..	10	19	68
	2017	53	54	41	..	10	19	67
	2018	52	53	39	..	..	5	71
Iran (Islamic Rep. of)	2015	43	49	14	33	16	1	16
	2016	45	50	16	74	15	1	21
	2017	46	52	14	84	13	5	23
	2018	45	50	14	84	24	11	23

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
37	37	..	..	36	40	17	..	9
35	35	..	24	36	39	20	..	14
31	31	..	28	35	39	18	..	13
28	28	..	0	38	42	18	..	14
42	42	..	..	50	50	..	..	17
43	43	..	..	50	50	..	..	19
42	42	..	..	52	52	..	..	19
44	44	..	..	52	52	..	..	19
77	77	..	..	56	57	30	..	18
86	86	..	..	61	62	51	..	19
82	82	..	..	65	66	52	..	19
75	75	..	..	55	56	54	..	25
..	..	..	..	55	0	55	..	63
..	..	..	..	56	0	56	..	22
..	..	..	..	54	0	55	..	28
..	..	..	..	49	0	49	..	19
48	48	..	..	60	60	..	..	19
44	44	..	..	62	62	..	..	10
42	42	..	..	49	49	..	..	19
43	43	..	..	50	50	..	..	19
..	..	..	..	30	38	25	..	17
..	..	..	..	38	45	32	..	17
..	..	..	..	43	55	32	..	6
..	..	..	..	43	46	41	..	18
39	44	..	..	41	45	40	72	15
37	41	..	..	40	44	41	72	15
75	97	..	..	39	44	40	79	16
79	92	..	..	41	47	40	75	17
..	..	..	..	34	34	..	..	..
..	..	..	..	34	34	..	..	..
..	..	..	..	34	34	..	..	..
..	..	..	..	34	34	..	..	..
60	60	..	..	18	18	..	..	..
57	57	..	..	19	19	..	..	..
59	59	..	..	30	30	..	..	..
52	52	..	..	13	13	..	..	..
15	12	..	18	30	32	..	..	17
17	14	..	20	32	35	..	..	17
17	14	..	20	33	35	..	..	16
18	16	..	20	33	35	..	..	17
..	..	..	..	41	44	41	..	..
..	..	..	..	40	30	44	..	5
..	..	..	..	37	30	39	..	50
..	..	..	..	39	28	42	..	48
30	31	30	20	63	83	34	74	13
43	46	25	12	44	52	31	64	17
37	39	26	13	43	53	32	65	17
34	35	23	9	44	54	34	64	16
66	66	67	64	32	33	23	..	36
40	35	67	75	48	48	44	..	57
34	29	51	82	62	65	37	..	49
9	10	..	..	73	74	63	..	71
13	13	..	..	46	52	14	33	15
13	13	..	..	47	53	16	74	13
16	16	..	..	48	55	14	84	10
15	15	..	..	47	53	14	84	18

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Iraq	2015	25	26	12	..	..	18	..
	2016	28	30	15	..	..	18	..
	2017	37	38	14	..	..	18	..
	2018	34	36	12	..	..	20	..
Israel	2015	43	44	39	..	13	17	..
	2016	43	45	0	..	0	20	..
	2017	43	45	0	..	76	18	..
	2018	44	46	0	..	60	13	..
Japan	2015	37	53	21	3	23	12	88
	2016	36	51	20	5	22	12	87
	2017	36	50	21	10	21	13	89
	2018	35	47	20	19	24	13	83
Jordan	2015	49	50	50	..	12	4	..
	2016	50	54	40	..	22	19	..
	2017	49	54	36	..	26	17	..
	2018	45	53	22	..	29	14	..
Kazakhstan	2015	48	49	42	..	15	11	..
	2016	48	48	53	..	18	19	..
	2017	47	46	51	..	19	19	..
	2018	50	50	47	..	24	24	..
Korea, Dem.Ppl's.Rep.	2015	21	14	26	..	..	16	..
	2016	25	16	31	..	..	15	..
	2017	22	12	29	..	..	16	..
	2018	22	9	31	..	..	17	..
Korea, Republic of	2015	61	61	10	87	18	13	42
	2016	58	58	12	80	18	13	39
	2017	53	53	12	75	20	14	44
	2018	53	56	13	70	20	13	43
Kuwait	2015	43	43	..	..	..	..	..
	2016	42	42	..	..	..	0	..
	2017	44	44	..	..	..	11	..
	2018	45	45	..	..	..	11	..
Kyrgyzstan	2015	38	28	41	..	..	..	..
	2016	40	28	43	..	..	..	..
	2017	46	20	52	..	..	..	..
	2018	46	22	52	..	..	..	..
Lao People's Dem. Rep.	2015	33	15	42	..	..	16	..
	2016	44	42	45	..	..	16	..
	2017	52	70	45	..	..	16	..
	2018	55	75	47	..	..	20	..
Lebanon	2015	65	69	20	..	..	17	..
	2016	67	72	16	..	..	14	..
	2017	72	77	19	..	..	13	..
	2018	71	76	16	..	..	13	..
Malaysia	2015	56	66	28	..	..	14	..
	2016	54	60	37	..	..	13	..
	2017	56	59	50	..	..	11	..
	2018	57	62	49	..	..	7	..
Maldives	2015	26	26	..	..	23	17	..
	2016	28	28	..	..	23	16	..
	2017	30	30	..	..	23	16	..
	2018	32	32	..	..	23	16	..
Mongolia	2015	54	58	..	..	..	..	..
	2016	54	59	..	..	..	..	..
	2017	54	61	..	..	..	..	..
	2018	51	62	..	..	..	..	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Total	Autoproducers			Total	Main activity producers				
	Combustible fuels	Hydro	Other		Combustible fuels	Hydro	Nuclear	Other	
18	..	..	18	25	26	12	..	..
18	..	..	18	28	30	15	..	..
18	..	..	18	37	38	14	..	..
20	..	..	20	34	36	12	..	..
35	61	51	17	43	43	34	..	13	
33	55	0	20	44	44	0	..	0	
31	44	0	20	45	45	0	..	0	
29	55	0	15	46	46	0	..	0	
28	35	44	18	41	59	19	3	48	
27	40	72	18	38	52	19	5	18	
25	39	68	17	38	51	20	10	18	
24	39	83	16	38	48	20	19	18	
27	27	..	..	50	51	50	..	12
11	11	..	..	52	56	40	..	20
11	11	..	..	51	56	36	..	20
8	8	..	..	47	55	22	..	18
11	..	..	11	48	49	42	..	14
11	..	..	11	48	48	53	..	19
11	..	..	11	47	46	51	..	19
11	..	..	11	50	50	47	..	24
..	..	..	..	21	14	26	..	16
..	..	..	..	25	16	31	..	15
..	..	..	..	22	12	29	..	16
..	..	..	..	22	9	31	..	17
45	52	..	5	62	62	10	87	19	
54	59	..	9	58	58	12	80	17	
43	45	..	12	53	54	12	75	17	
41	45	..	12	54	57	13	70	16	
..	..	..	..	43	43	..	..	..
0	..	..	0	42	42	..	..	..
1	..	..	11	44	44	..	..	..
1	..	..	11	45	45	..	..	..
46	46	..	..	38	27	41	..	..
49	49	..	..	40	28	43	..	..
29	29	..	..	46	20	52	..	..
74	74	..	..	46	21	52	..	..
..	..	..	..	33	15	42	..	16
..	..	..	..	44	42	45	..	16
..	..	..	..	52	70	45	..	16
..	..	..	..	55	75	47	..	20
91	92	..	17	54	58	20	..	..
89	91	..	14	58	63	16	..	..
90	92	..	13	65	70	19	..	..
79	82	..	13	68	74	16	..	..
19	26	..	..	61	70	28	..	9
22	28	..	..	58	64	37	..	8
25	25	27	1	59	62	50	..	11	
31	42	..	1	59	64	49	..	6	
21	21	..	..	31	31	..	..	18
22	22	..	..	33	34	..	..	17
24	24	..	..	35	36	..	..	17
26	26	..	..	37	39	..	..	17
..	..	..	..	55	58	..	..	..
..	..	..	..	56	59	..	..	..
..	..	..	..	55	61	..	..	..
..	..	..	..	53	62	..	..	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Myanmar	2015	35	36	34	..	..	..	..
	2016	38	43	34	..	..	..	..
	2017	39	42	38	..	..	..	..
	2018	52	57	49	..	..	..	..
Nepal	2015	50	..	53	..	11	11	..
	2016	49	..	53	..	11	11	..
	2017	46	0	49	..	11	10	..
	2018	47	0	50	..	27	10	..
Oman	2015	48	48	..	..	..	21	..
	2016	48	48	..	..	..	21	..
	2017	50	50	..	..	..	5	..
	2018	49	49	..	..	..	6	..
Other Asia	2015	61	65	18	81	19	11	..
	2016	61	67	24	70	17	10	..
	2017	63	73	21	50	20	11	..
	2018	60	68	19	70	19	11	..
Pakistan	2015	51	49	53	88	21	..	31
	2016	49	48	55	70	27	6	32
	2017	45	43	52	72	21	19	34
	2018	44	44	44	79	23	19	31
Philippines	2015	50	55	27	..	20	10	66
	2016	48	53	26	..	26	16	66
	2017	47	51	30	..	29	15	61
	2018	48	52	29	..	31	16	61
Qatar	2015	55	55	..	..	..	..	..
	2016	56	56	..	..	..	..	..
	2017	51	51	..	..	..	..	..
	2018	52	52	..	..	..	..	..
Saudi Arabia	2015	56	56	..	..	..	17	..
	2016	53	53	..	..	..	16	..
	2017	50	50	..	..	14	14	..
	2018	51	51	..	..	14	23	..
Singapore	2015	44	44	..	..	..	17	..
	2016	44	44	..	..	..	17	..
	2017	44	44	..	..	..	17	..
	2018	45	45	..	..	..	17	..
Sri Lanka	2015	38	37	40	..	31	23	..
	2016	41	53	28	..	31	12	..
	2017	42	55	27	..	33	24	..
	2018	44	50	41	..	29	16	..
State of Palestine	2015	34	36	..	..	..	9	..
	2016	33	35	..	..	..	19	..
	2017	33	36	..	..	..	17	..
	2018	24	26	..	..	..	17	..
Syrian Arab Republic	2015	23	27	3	..	..	..	..
	2016	21	24	7	..	..	..	..
	2017	22	25	6	..	..	..	..
	2018	21	23	6	..	..	..	..
Tajikistan	2015	31	8	33	..	..	..	..
	2016	30	10	32	..	..	..	..
	2017	31	16	33	..	..	..	..
	2018	34	21	36	..	..	..	..
Thailand	2015	34	38	12	..	16	8	38
	2016	35	38	12	..	8	11	38
	2017	34	37	16	..	20	15	38
	2018	32	35	24	..	17	13	38

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Total	Autoproducers			Main activity producers				
	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
33	28	45	..	35	38	33	..	..
50	52	39	..	36	40	34	..	..
36	34	43	..	40	44	37	..	..
37	34	45	..	54	63	49	..	..
18	..	18	..	54	..	59	..	11
6	..	6	..	67	..	73	..	11
3	..	3	..	81	0	90	..	11
3	..	3	..	86	0	95	..	24
..	..	..	..	48	48	..	..	21
..	..	..	..	48	48	..	..	21
..	..	..	..	50	50	..	..	5
..	..	..	..	49	49	..	..	6
25	27	..	6	80	93	18	81	58
24	27	..	6	80	94	24	70	55
23	26	..	7	84	106	21	50	66
26	30	..	9	79	93	19	70	64
47	53	..	31	51	49	53	88	15
38	41	..	32	50	48	55	70	15
37	40	..	34	45	43	52	72	20
39	45	..	31	44	44	44	79	22
25	26	12	..	50	56	27	..	54
25	26	12	..	48	54	26	..	48
26	26	12	..	47	52	30	..	44
30	32	12	..	48	53	29	..	45
61	61	..	..	22	22	..	..	..
62	62	..	..	23	23	..	..	..
57	57	..	..	21	21	..	..	..
59	59	..	..	11	11	..	..	..
78	78	..	..	52	52	..	..	17
80	80	..	..	48	48	..	..	16
70	70	..	..	46	46	..	..	14
90	90	..	..	38	38	..	..	16
88	88	..	..	43	43	..	..	17
96	96	..	..	42	42	..	..	17
80	80	..	..	42	43	..	..	17
95	95	..	..	42	43	..	..	17
38	33	40	24	38	37	41	..	31
25	43	25	17	43	53	29	..	27
31	34	31	30	43	56	26	..	29
33	31	36	18	46	50	42	..	23
68	86	..	9	28	29	..	..	9
62	89	..	19	27	28	..	..	19
50	75	..	17	29	30	..	..	17
39	61	..	17	20	21	..	..	17
6	6	..	..	25	30	3	..	..
8	8	..	..	23	26	7	..	..
9	9	..	..	23	27	6	..	..
8	8	..	..	22	25	6	..	..
..	..	..	..	31	8	33	..	..
..	..	..	..	30	10	32	..	..
..	..	..	..	31	16	33	..	..
..	..	..	..	34	21	36	..	..
23	24	..	12	40	44	12	..	4
33	35	..	17	36	40	12	..	4
38	39	..	23	33	35	16	..	9
41	44	..	23	29	31	24	..	8

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Timor-Leste	2015	14	14	53	..	..	18	..
	2016	17	17	53	..	..	18	..
	2017	17	17	53	..	..	18	..
	2018	18	18	53	..	..	18	..
Turkey	2015	41	49	30	..	30	9	62
	2016	40	48	29	..	31	14	66
	2017	40	52	24	..	31	10	65
	2018	39	51	24	..	33	18	65
Turkmenistan	2015	58	58	..	..	..	..	..
	2016	55	55	..	..	..	..	..
	2017	49	49	..	..	..	..	..
	2018	49	49	..	..	..	..	..
United Arab Emirates	2015	51	51	..	..	..	27	..
	2016	51	52	..	..	..	29	..
	2017	51	51	..	..	..	28	..
	2018	50	51	..	..	..	25	..
Uzbekistan	2015	50	51	41	..	..	0	..
	2016	47	48	42	..	..	2	..
	2017	48	48	49	..	..	3	..
	2018	50	53	35	..	..	1	..
Viet Nam	2015	48	53	40	..	22	..	..
	2016	48	51	43	..	15	..	..
	2017	51	48	56	..	15	..	..
	2018	54	56	52	..	15	2	..
Yemen	2015	45	46	..	..	..	21	..
	2016	33	37	..	..	..	7	..
	2017	28	31	..	..	..	8	..
	2018	23	24	..	..	..	21	..
Europe	2015	40	39	33	80	25	13	54
	2016	39	40	34	78	23	12	53
	2017	39	40	31	78	25	12	52
	2018	38	39	34	78	24	12	53
Albania	2015	35	..	37	..	..	..	..
	2016	42	..	45	..	..	..	..
	2017	24	..	25	..	..	..	..
	2018	44	..	46	..	..	..	..
Andorra	2015	22	32	21	..	..	11	..
	2016	22	32	21	..	..	17	..
	2017	23	39	22	..	..	16	..
	2018	30	46	29	..	..	7	..
Austria	2015	30	28	34	..	22	11	0
	2016	31	30	35	..	22	11	0
	2017	33	37	34	..	26	11	..
	2018	31	35	32	..	22	11	..
Belarus	2015	40	40	36	..	42	13	..
	2016	38	39	22	..	14	7	..
	2017	39	39	45	..	13	13	..
	2018	43	44	35	..	11	9	..
Belgium	2015	38	44	11	50	29	11	31
	2016	45	42	12	84	26	11	31
	2017	45	44	11	81	27	10	31
	2018	38	46	11	55	26	11	26
Bosnia and Herzegovina	2015	41	53	30	..	..	..	..
	2016	46	63	30	..	..	30	..
	2017	41	62	21	..	..	15	..
	2018	49	67	33	..	23	13	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	14	14	53	..	18
..	..	..	..	17	17	53	..	18
..	..	..	..	17	17	53	..	18
..	..	..	..	18	18	53	..	18
48	51	26	59	40	49	30	..	32
45	50	18	27	40	47	29	..	34
37	46	20	15	40	52	24	..	30
35	42	22	20	40	52	24	..	32
..	..	..	..	58	58	..	..	..
..	..	..	..	55	55	..	..	..
..	..	..	..	49	49	..	..	..
..	..	..	..	49	49	..	..	..
..	..	..	..	51	51	..	..	27
..	..	..	..	51	52	..	..	29
..	..	..	..	51	51	..	..	28
..	..	..	..	50	51	..	..	25
..	..	..	..	50	51	41	..	0
..	..	..	..	47	48	42	..	2
..	..	..	..	48	48	49	..	3
..	..	..	..	50	53	35	..	1
14	16	3	4	51	58	41	..	22
10	11	3	4	53	61	43	..	15
9	9	3	4	57	58	57	..	14
9	9	3	4	61	68	53	..	11
28	32	..	21	48	48	..	..	..
13	27	..	7	38	38	..	..	..
14	26	..	8	31	31	..	..	..
22	25	..	21	24	24	..	..	..
37	44	40	13	40	39	33	80	21
37	45	37	13	40	39	34	78	20
35	43	35	13	39	40	31	78	21
35	43	37	13	39	38	34	78	21
..	..	..	..	35	..	37	..	..
..	..	..	..	43	..	45	..	..
..	..	..	..	24	..	25	..	..
..	..	..	..	44	..	46	..	..
..	..	..	..	22	32	21	..	11
..	..	..	..	22	32	21	..	17
..	..	..	..	23	39	22	..	16
..	..	..	..	30	46	29	..	7
40	49	10	..	29	22	35	..	19
40	49	11	..	30	24	36	..	19
53	66	13	..	31	29	35	..	22
53	66	13	..	29	27	33	..	19
48	49	11	25	39	39	41	..	30
46	46	27	14	38	38	21	..	11
50	53	17	13	38	38	47	..	13
50	55	13	10	43	43	37	..	9
26	56	..	11	41	42	11	50	29
25	53	..	11	51	40	12	84	26
26	59	..	10	50	41	11	81	27
25	57	..	11	42	44	11	55	26
21	21	..	..	43	56	30	..	..
20	20	..	..	48	68	30	..	30
22	22	..	..	43	66	21	..	15
71	71	..	..	49	67	33	..	21

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Bulgaria	2015	51	71	22	89	24	15	..
	2016	47	66	16	92	23	15	..
	2017	47	71	12	90	25	15	..
	2018	47	64	18	94	22	15	..
Croatia	2015	27	21	34	..	24	11	..
	2016	31	26	37	..	24	14	..
	2017	27	28	29	..	24	15	..
	2018	31	24	40	..	26	13	23
Czechia	2015	44	45	16	71	23	12	..
	2016	43	46	16	64	20	12	..
	2017	45	45	15	75	22	12	..
	2018	45	45	14	80	22	13	..
Denmark	2015	24	20	29	..	32	9	..
	2016	25	24	24	..	28	10	..
	2017	25	22	23	..	31	9	..
	2018	23	22	19	..	26	11	..
Estonia	2015	42	43	51	..	27	..	..
	2016	54	59	67	..	22	11	..
	2017	58	63	42	..	26	11	..
	2018	50	54	24	..	23	11	..
Faeroe Islands	2015	28	21	39	..	32	..	..
	2016	28	26	31	..	30	..	..
	2017	30	27	32	..	42	..	..
	2018	32	30	31	..	45	..	..
Finland	2015	47	31	59	96	26	7	..
	2016	48	35	56	96	22	6	..
	2017	45	32	52	92	27	7	..
	2018	47	36	46	93	33	7	..
France	2015	50	23	27	79	24	12	63
	2016	48	29	29	73	21	13	56
	2017	48	38	24	72	21	13	67
	2018	50	33	31	75	22	13	62
Germany	2015	36	48	25	97	21	11	52
	2016	36	50	27	89	18	11	62
	2017	35	49	27	81	22	11	53
	2018	32	43	25	80	21	12	49
Gibraltar	2015	59	59	..	..	..	..	..
	2016	57	57	..	..	..	..	11
	2017	48	48	..	..	..	..	11
	2018	57	57	..	..	..	..	11
Greece	2015	31	39	21	..	25	17	..
	2016	32	42	19	..	25	17	..
	2017	32	44	14	..	24	17	..
	2018	31	40	19	..	25	16	..
Guernsey	2015	16	16	..	..	..	..	..
	2016	9	9	..	..	..	..	..
	2017	7	7	..	..	..	..	..
	2018	5	5	..	..	..	..	..
Hungary	2015	40	25	47	90	24	9	51
	2016	42	27	52	92	24	12	24
	2017	42	29	44	92	26	12	24
	2018	40	28	44	89	21	10	42
Iceland	2015	77	0	79	..	42	..	86
	2016	76	0	77	..	34	..	87
	2017	78	0	80	..	46	..	83
	2018	76	0	75	..	23	..	91

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
18	30	..	..	52	72	22	89	19
16	28	..	..	48	68	16	92	19
18	32	..	..	48	74	12	90	19
19	33	..	..	48	66	18	94	18
22	21	34	..	28	21	34	..	22
23	23	40	..	31	26	37	..	23
30	30	25	..	27	28	29	..	23
26	26	25	..	31	23	40	..	25
56	59	34	..	43	43	14	71	14
57	59	36	..	42	45	14	64	13
54	55	38	..	44	44	13	75	13
52	54	31	..	44	43	12	80	14
23	41	..	9	24	18	29	..	32
22	38	..	10	25	23	24	..	28
21	38	..	9	25	21	23	..	31
22	38	..	11	23	21	19	..	26
58	65	..	27	41	43	51	..	27
88	103	..	25	54	58	67	..	21
51	55	..	..	58	63	42	..	26
52	54	..	11	50	54	24	..	22
..	..	..	..	28	21	39	..	32
..	..	..	..	28	26	31	..	30
..	..	..	..	30	27	32	..	42
..	..	..	..	32	30	31	..	45
56	54	66	8	46	25	58	96	27
53	51	64	8	48	30	55	96	22
49	48	61	7	44	27	51	92	28
52	53	57	7	46	31	46	93	33
27	41	33	14	51	19	27	79	21
25	38	37	14	50	28	29	73	20
26	40	32	14	50	37	24	72	19
25	41	38	13	52	32	31	75	20
53	54	42	54	35	48	25	97	16
59	59	47	62	34	49	27	89	15
56	56	47	56	33	48	27	81	17
52	52	31	55	31	41	25	80	17
..	..	..	..	59	59	..	..	..
..	..	..	..	57	57	..	..	11
..	..	..	..	48	48	..	..	11
..	..	..	..	57	57	..	..	11
48	48	..	..	31	39	21	..	21
39	39	..	..	32	42	19	..	21
39	39	..	..	32	44	14	..	21
45	45	..	..	31	40	19	..	21
..	..	..	..	16	16	..	..	..
..	..	..	..	9	9	..	..	..
..	..	..	..	7	7	..	..	..
..	..	..	..	5	5	..	..	..
24	33	..	14	41	25	47	90	23
25	37	..	13	43	27	52	92	23
24	39	..	13	44	28	44	92	24
21	44	..	12	42	27	44	89	18
..	..	..	..	77	0	79	..	86
..	..	..	..	76	0	77	..	87
..	..	..	..	78	0	80	..	83
..	..	..	..	76	0	75	..	91

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Ireland	2015	34	35	24	..	31	..	..
	2016	35	40	21	..	25	..	..
	2017	33	38	19	..	26	..	..
	2018	32	36	20	..	27	..	..
Isle of Man	2015	26	26	40	..	..	..	..
	2016	27	27	28	..	..	..	..
	2017	28	28	36	..	..	..	..
	2018	30	30	29	..	..	..	..
Italy	2015	28	33	24	..	19	14	71
	2016	29	37	23	..	22	13	73
	2017	30	39	19	..	21	14	71
	2018	29	36	26	..	20	13	69
Jersey	2015	7	7	..	..	..	..	..
	2016	10	10	..	..	..	..	..
	2017	7	7	..	..	..	..	..
	2018	7	7	..	..	..	..	..
Kosovo	2015	73	75	38	..	..	..	..
	2016	68	72	33	..	..	..	..
	2017	48	51	25	..	0	1	..
	2018	48	50	39	..	10	3	..
Latvia	2015	22	32	13	..	25	..	..
	2016	25	33	18	..	21	..	..
	2017	29	26	32	..	22	..	..
	2018	26	38	18	..	18	6	..
Liechtenstein	2015	50	25	56	..	..	43	..
	2016	64	27	77	..	..	45	..
	2017	66	26	78	..	..	50	..
	2018	63	22	71	..	..	58	..
Lithuania	2015	16	14	13	..	21	12	..
	2016	13	9	14	..	25	11	..
	2017	14	8	15	..	30	10	..
	2018	12	7	12	..	25	12	..
Luxembourg	2015	16	23	13	..	18	10	..
	2016	15	39	13	..	10	9	..
	2017	15	40	12	..	22	10	..
	2018	15	42	11	..	24	10	..
Malta	2015	22	23	..	..	..	14	..
	2016	17	17	..	..	..	16	..
	2017	27	29	..	..	7	16	..
	2018	31	34	..	..	7	17	..
Montenegro	2015	39	79	26	..	..	..	..
	2016	41	68	32	..	..	..	..
	2017	30	68	18	..	15	..	..
	2018	42	73	37	..	14	8	..
Netherlands	2015	37	39	29	96	25	8	46
	2016	38	42	31	93	22	9	43
	2017	40	44	19	80	29	9	39
	2018	37	43	22	83	27	9	32
North Macedonia	2015	36	38	32	..	37	15	58
	2016	35	37	33	..	34	16	82
	2017	35	45	19	..	34	16	84
	2018	35	38	30	..	30	15	88
Norway	2015	49	24	50	..	33	..	..
	2016	50	34	51	..	27	..	..
	2017	50	34	51	..	27	..	..
	2018	47	34	49	..	26	..	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Total	Autoproducers			Main activity producers				
	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
69	72	..	23	32	33	24	..	31
69	73	..	17	33	38	21	..	25
66	71	..	11	32	36	19	..	26
62	69	..	10	31	35	20	..	27
35	35	..	..	25	25	40	..	..
37	37	..	..	26	26	28	..	..
36	36	..	..	28	28	36	..	..
49	49	..	..	29	29	29	..	..
41	41	57	32	27	33	24	..	17
44	43	55	42	28	36	22	..	18
45	45	47	31	29	38	19	..	18
47	47	51	34	28	35	26	..	17
17	17	..	..	2	2	..	..	..
18	18	..	..	6	6	..	..	..
18	18	..	..	1	1	..	..	..
17	17	..	..	1	1	..	..	..
..	..	..	..	73	75	38	..	..
..	..	..	..	68	72	33	..	..
..	..	..	..	48	51	25	..	0
..	..	..	..	48	50	39	..	9
70	70	23	..	21	30	13	..	24
55	58	23	11	25	32	18	..	21
65	69	46	11	29	25	32	..	22
62	71	11	8	26	37	18	..	18
..	..	..	..	50	25	56	..	43
..	..	..	..	64	27	77	..	45
..	..	..	..	66	26	78	..	50
..	..	..	..	63	22	71	..	58
39	31	..	..	14	12	13	..	20
36	28	..	..	11	7	14	..	24
34	26	..	..	13	5	15	..	28
26	19	..	..	11	5	12	..	23
17	30	34	10	15	22	13	..	18
16	26	46	9	14	54	13	..	10
17	33	23	10	15	46	12	..	22
17	33	23	10	14	48	11	..	24
15	27	..	14	23	23	..	..	..
16	20	..	16	17	17	..	..	..
17	25	..	16	29	29	..	..	..
17	23	..	17	34	34	..	..	..
..	..	..	..	39	79	26	..	..
..	..	..	..	41	68	32	..	..
..	..	..	..	30	68	18	..	15
..	..	..	..	42	73	37	..	13
37	47	..	13	37	38	29	96	25
35	47	..	12	39	41	31	93	22
35	51	..	11	41	43	19	80	29
30	47	..	11	40	42	22	83	26
..	..	..	..	36	38	32	..	32
..	..	..	..	35	37	33	..	33
..	..	..	..	35	45	19	..	35
..	..	..	..	35	38	30	..	33
57	54	..	..	49	7	50	..	33
56	54	..	..	50	13	51	..	27
57	53	..	..	50	14	51	..	27
57	53	..	1	47	13	49	..	26

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Poland	2015	50	58	12	..	25	6	51
	2016	50	58	13	..	25	8	57
	2017	45	51	14	..	30	7	46
	2018	45	51	11	..	25	6	57
Portugal	2015	30	43	18	..	27	20	93
	2016	33	43	28	..	28	19	79
	2017	32	55	12	..	27	20	85
	2018	32	45	22	..	28	17	91
Republic of Moldova	2015	10	21	36	..	23	23	..
	2016	10	22	28	..	17	11	..
	2017	9	21	34	..	9	11	..
	2018	10	24	31	..	8	4	..
Romania	2015	32	29	29	94	26	17	..
	2016	32	28	31	91	25	15	..
	2017	31	30	25	93	28	15	..
	2018	31	28	31	92	24	15	..
Russian Federation	2015	47	45	38	85	17	9	67
	2016	47	43	42	83	18	10	65
	2017	47	43	42	83	16	11	67
	2018	47	43	43	80	16	12	66
Serbia	2015	59	73	41	..	..	14	..
	2016	61	73	43	..	17	12	..
	2017	57	72	37	..	22	15	..
	2018	53	61	44	..	6	10	..
Slovakia	2015	39	29	19	89	23	11	38
	2016	40	30	21	87	23	11	46
	2017	41	32	21	89	17	11	57
	2018	40	32	18	87	17	14	43
Slovenia	2015	51	51	36	94	14	13	..
	2016	53	50	42	95	14	13	..
	2017	51	48	35	104	14	13	..
	2018	49	41	42	96	13	12	..
Spain	2015	28	26	18	88	25	23	27
	2016	28	23	22	90	24	22	13
	2017	28	28	12	93	24	23	11
	2018	28	25	21	89	25	21	11
Sweden	2015	45	18	53	66	32	11	..
	2016	43	20	43	74	27	11	..
	2017	47	24	45	83	30	11	..
	2018	45	21	43	90	26	11	..
Switzerland	2015	39	40	33	79	21	9	..
	2016	35	46	28	72	17	9	..
	2017	33	47	28	70	20	10	..
	2018	36	45	28	87	19	10	..
Ukraine	2015	33	22	14	72	29	13	..
	2016	33	23	17	67	25	13	..
	2017	34	21	19	71	24	11	..
	2018	35	23	22	70	28	11	..
United Kingdom	2015	40	42	22	85	32	9	3
	2016	40	44	20	86	26	10	0
	2017	35	36	21	86	29	10	3
	2018	35	37	19	80	30	11	5
Oceania	2015	43	50	32	..	32	10	94
	2016	45	52	35	..	33	11	94
	2017	45	53	35	..	30	13	94
	2018	44	53	35	..	31	13	93

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Total	Autoproducers			Main activity producers				
	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
50	52	34	7	50	58	12	..	25
57	62	34	8	49	58	13	..	25
49	54	46	7	45	50	14	..	30
46	53	34	7	45	51	11	..	25
46	49	29	20	29	41	18	..	27
46	50	38	17	32	41	28	..	28
46	51	21	18	31	56	12	..	27
43	48	36	16	31	45	21	..	28
3	3	..	..	11	29	36	..	0
4	4	..	..	10	28	28	..	0
5	5	..	6	10	27	34	..	0
7	7	..	6	11	29	31	..	0
25	31	42	8	33	29	29	94	27
26	33	41	6	32	26	31	91	26
26	33	34	7	32	29	25	93	28
28	36	33	5	32	26	31	92	24
33	33	36	..	49	47	38	85	17
35	35	34	..	48	45	42	83	17
33	33	30	..	48	44	42	83	17
34	34	29	..	48	44	43	80	17
47	47	..	..	60	73	41	..	14
40	40	..	..	61	74	43	..	15
50	50	..	..	57	72	37	..	20
44	44	..	..	53	61	44	..	7
31	45	36	11	41	24	19	89	16
32	47	36	13	41	25	21	87	17
33	45	38	13	43	28	21	89	14
36	43	40	19	41	28	17	87	11
20	65	15	13	55	51	38	94	13
22	66	22	13	57	49	44	95	13
21	66	19	13	55	47	37	104	13
21	63	22	12	52	40	43	96	12
52	53	43	28	26	22	17	88	24
53	54	46	17	26	19	22	90	24
56	58	27	15	26	24	12	93	24
58	59	52	21	26	20	20	89	24
55	56	16	..	45	12	53	66	32
54	55	10	..	43	14	43	74	27
55	56	8	..	47	17	45	83	30
48	49	7	..	45	15	43	90	25
30	47	64	9	41	19	32	79	21
26	49	43	9	36	36	28	72	17
26	53	41	10	35	29	27	70	20
25	52	44	10	38	26	27	87	19
9	9	39	8	35	23	14	72	21
19	19	53	34	34	23	17	67	19
20	20	7	10	34	21	19	71	16
14	14	5	2	36	24	22	70	16
32	62	50	14	42	39	20	85	30
30	62	44	13	42	41	18	86	25
24	33	48	15	39	37	18	86	26
25	33	46	16	39	38	17	80	27
28	45	38	11	46	51	32	..	41
27	44	39	11	48	53	35	..	41
30	51	41	13	48	54	35	..	38
31	51	25	15	47	53	35	..	34

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
American Samoa	2015	40	41	..	..	..	11	..
	2016	39	41	..	..	..	9	..
	2017	38	40	..	..	..	13	..
	2018	38	41	..	..	..	11	..
Australia	2015	42	51	19	..	31	10	11
	2016	44	53	21	..	32	11	0
	2017	44	54	22	..	30	13	11
	2018	43	54	21	..	30	13	0
Cook Islands	2015	26	30	..	..	..	12	..
	2016	26	30	..	..	..	13	..
	2017	27	31	..	..	..	16	..
	2018	27	31	..	..	..	20	..
Fiji	2015	34	37	34	..	6	15	..
	2016	33	29	44	..	2	15	..
	2017	32	30	41	..	1	15	..
	2018	33	27	47	..	1	11	..
French Polynesia	2015	32	32	41	..	..	13	..
	2016	30	30	45	..	..	12	..
	2017	30	30	43	..	..	12	..
	2018	30	30	40	..	9	12	..
Guam	2015	39	41	..	..	..	10	..
	2016	39	40	..	..	21	23	..
	2017	45	46	..	..	21	23	..
	2018	44	45	..	..	21	23	..
Kiribati	2015	34	39	..	..	..	19	..
	2016	33	38	..	..	..	19	..
	2017	33	38	..	..	..	19	..
	2018	33	38	..	..	..	19	..
Marshall Islands	2015	27	27	..	..	..	11	..
	2016	26	27	..	..	..	11	..
	2017	26	27	..	..	..	11	..
	2018	26	27	..	..	..	11	..
Micronesia (Fed. States of)	2015	22	24	1	..	..	16	..
	2016	22	24	1	..	..	16	..
	2017	22	24	1	..	..	16	..
	2018	22	23	1	..	16	16	..
Nauru	2015	58	59	..	..	..	13	..
	2016	54	60	..	..	..	6	..
	2017	51	55	..	..	..	19	..
	2018	30	31	..	..	..	16	..
New Caledonia	2015	33	33	50	..	19	11	..
	2016	36	37	34	..	14	13	..
	2017	36	36	53	..	10	25	..
	2018	38	40	46	..	10	16	..
New Zealand	2015	53	45	52	..	39	11	94
	2016	54	39	55	..	39	12	95
	2017	54	46	53	..	35	12	95
	2018	54	41	56	..	34	13	93
Niue	2015	16	18	..	..	..	2	..
	2016	16	18	..	..	..	2	..
	2017	16	18	..	..	..	2	..
	2018	18	18	..	..	..	16	..
Northern Mariana Islands	2015	52	52	..	..	..	..	..
	2016	47	47	..	..	..	..	..
	2017	46	46	..	..	..	..	..
	2018	47	47	..	..	..	..	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	40	41	..	..	11
..	..	..	..	39	41	..	..	9
..	..	..	..	38	40	..	..	13
..	..	..	..	38	41	..	..	11
25	43	..	10	45	51	19	..	31
24	42	..	10	47	54	21	..	31
28	50	..	12	48	55	22	..	29
29	51	..	14	46	54	21	..	26
..	..	..	..	26	30	..	..	12
..	..	..	..	26	30	..	..	13
..	..	..	..	27	31	..	..	16
..	..	..	..	27	31	..	..	20
6	6	..	..	39	48	34	..	9
3	3	..	..	37	37	44	..	5
5	5	..	..	37	40	41	..	5
9	9	..	..	37	35	47	..	5
..	..	..	..	32	32	41	..	13
..	..	..	..	30	30	45	..	12
..	..	..	..	30	30	43	..	12
..	..	..	..	30	30	40	..	12
..	..	..	..	39	41	..	..	9
..	..	..	..	39	40	..	..	23
..	..	..	..	45	46	..	..	23
..	..	..	..	44	45	..	..	23
23	23	..	..	36	41	..	..	19
21	21	..	..	34	41	..	..	19
21	21	..	..	34	41	..	..	19
21	21	..	..	34	41	..	..	19
..	..	..	..	27	27	..	..	11
..	..	..	..	26	27	..	..	11
..	..	..	..	26	27	..	..	11
..	..	..	..	26	27	..	..	11
..	..	..	..	22	24	1	..	16
..	..	..	..	22	24	1	..	16
..	..	..	..	22	24	1	..	16
..	..	..	..	22	23	1	..	16
..	..	..	..	58	59	..	..	13
..	..	..	..	54	60	..	..	6
..	..	..	..	51	55	..	..	19
..	..	..	..	30	31	..	..	16
..	..	..	..	35	35	50	..	18
..	..	..	..	38	40	34	..	14
..	..	..	..	38	39	53	..	13
..	..	..	..	41	43	46	..	13
58	66	15	30	53	43	52	..	71
53	63	15	27	54	36	55	..	71
52	65	15	24	54	44	53	..	70
48	61	15	22	54	39	56	..	69
..	..	..	..	16	18	..	..	2
..	..	..	..	16	18	..	..	2
..	..	..	..	16	18	..	..	2
..	..	..	..	18	18	..	..	16
..	..	..	..	52	52	..	..	..
..	..	..	..	47	47	..	..	..
..	..	..	..	46	46	..	..	..
..	..	..	..	47	47	..	..	..

Table 31

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Palau	2015	33	34	..	..	..	..	..
	2016	27	28	..	..	..	2	..
	2017	27	28	..	..	..	2	..
	2018	27	28	..	..	..	2	..
Papua New Guinea	2015	58	60	45	..	..	17	86
	2016	56	59	45	..	..	17	86
	2017	54	55	45	..	..	17	86
	2018	53	55	39	..	..	13	87
Samoa	2015	35	47	34	..	6	9	..
	2016	33	50	34	..	4	10	..
	2017	33	53	25	..	3	13	..
	2018	33	44	41	..	3	13	..
Solomon Islands	2015	30	30	30	..	..	15	..
	2016	31	32	30	..	..	11	..
	2017	32	33	30	..	..	15	..
	2018	32	33	30	..	..	13	..
Tonga	2015	38	40	..	..	11	23	..
	2016	35	36	..	..	10	22	..
	2017	30	37	..	..	10	8	..
	2018	32	41	..	..	11	8	..
Tuvalu	2015	15	23	..	..	..	5	..
	2016	18	22	..	..	..	11	..
	2017	18	23	..	..	..	11	..
	2018	19	24	..	..	..	12	..
Vanuatu	2015	25	23	67	..	26	16	..
	2016	27	28	48	..	17	17	..
	2017	28	28	64	..	17	19	..
	2018	28	28	62	..	17	22	..
Wallis and Futuna Is.	2015	24	24	16	..	..	10	..
	2016	26	26	17	..	..	10	..
	2017	25	26	19	..	..	10	..
	2018	26	27	19	..	..	10	..

Utilization of installed electricity capacity - by type

Kilowatt-hours per kilowatt divided by 8760

Total	Autoproducers			Main activity producers				
	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
35	35	..	..	33	34	..	..	..
35	35	..	..	27	28	..	..	2
40	40	..	..	26	27	..	..	2
40	40	..	..	26	27	..	..	2
64	67	39	86	44	40	49	..	17
66	70	40	86	40	34	48	..	17
63	64	42	86	40	34	47	..	17
61	65	25	87	40	34	47	..	13
10	..	..	10	35	47	34	..	9
10	..	..	10	33	50	34	..	10
10	..	..	10	33	53	25	..	13
10	..	..	10	33	44	41	..	13
21	21	..	..	31	32	30	..	15
21	21	..	..	33	34	30	..	11
21	21	..	..	33	35	30	..	15
21	21	..	..	34	35	30	..	13
..	..	..	..	38	40	..	..	23
..	..	..	..	35	36	..	..	22
..	..	..	..	30	37	..	..	8
..	..	..	..	32	41	..	..	8
..	..	..	..	15	23	..	..	5
..	..	..	..	18	22	..	..	11
..	..	..	..	18	23	..	..	11
..	..	..	..	19	24	..	..	12
..	..	..	..	25	23	67	..	26
..	..	..	..	27	28	48	..	17
..	..	..	..	28	28	64	..	18
..	..	..	..	28	28	62	..	19
..	..	..	..	24	24	16	..	10
..	..	..	..	26	26	17	..	10
..	..	..	..	25	26	19	..	10
..	..	..	..	26	27	19	..	10