

## 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 77: Utilization of installed electric generating capacity by source and region, 2022**

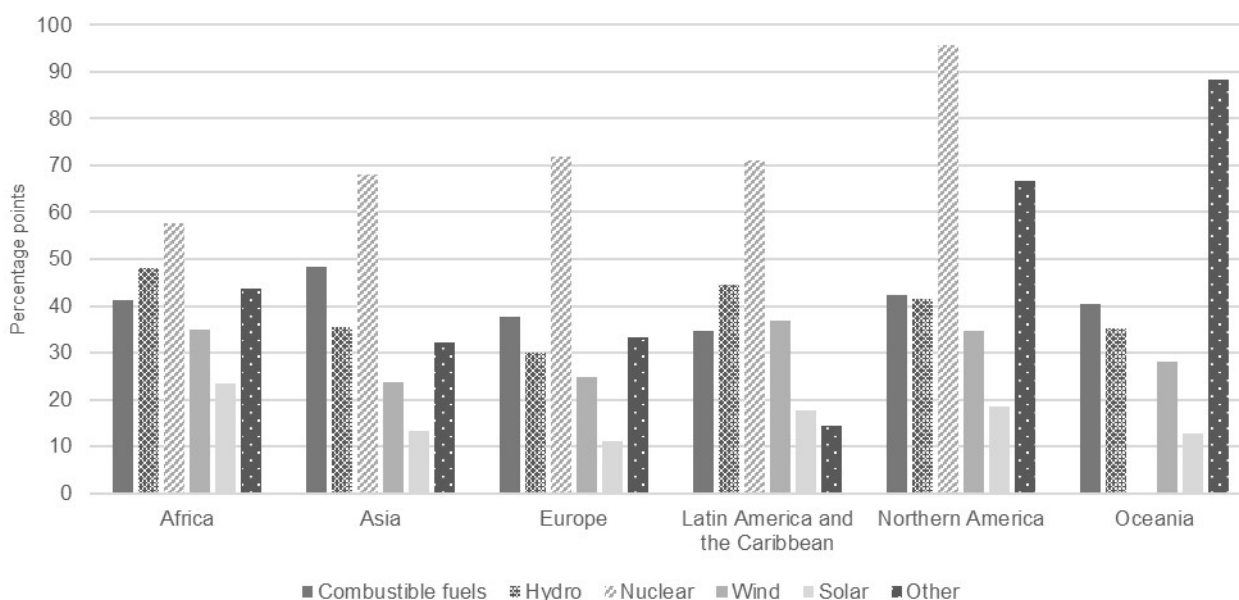


Table 32

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
World	2019	41	44	38	79	26	13	41
	2020	39	43	38	76	25	13	34
	2021	40	44	37	80	26	13	34
	2022	39	45	37	77	27	14	30
Africa	2019	42	42	45	78	35	20	45
	2020	41	40	46	58	32	24	43
	2021	42	41	47	73	35	26	43
	2022	42	41	48	58	35	24	44
Algeria	2019	43	44	8	..	11	17	..
	2020	42	43	3	..	9	17	..
	2021	43	44	1	..	13	16	..
	2022	46	47	1	..	18	16	..
Angola	2019	27	15	37	..	..	33	..
	2020	27	9	39	..	..	37	..
	2021	27	16	35	..	..	34	..
	2022	27	13	38	..	..	25	..
Benin	2019	12	14	0	..	..	13	..
	2020	22	26	0	..	..	12	..
	2021	25	29	..	..	..	28	..
	2022	21	25	..	..	..	11	..
Botswana	2019	49	50	..	..	..	9	..
	2020	33	33	..	..	..	12	..
	2021	36	36	..	..	..	12	..
	2022	38	39	..	..	..	12	..
Burkina Faso	2019	32	34	37	..	..	17	..
	2020	28	29	40	..	..	12	..
	2021	31	32	45	..	..	12	..
	2022	28	30	29	..	..	11	..
Burundi	2019	28	27	31	..	..	18	..
	2020	29	19	42	..	..	18	..
	2021	27	26	31	..	..	10	..
	2022	27	26	30	..	..	16	..
Cabo Verde	2019	30	30	..	..	39	14	..
	2020	29	29	..	..	33	12	..
	2021	30	31	..	..	37	13	..
	2022	33	35	..	..	37	12	..
Cameroon	2019	56	40	73	..	..	16	..
	2020	57	46	69	..	..	36	..
	2021	62	39	89	..	..	20	..
	2022	65	36	99	..	..	20	..
Central African Rep.	2019	37	1	64	..	..	15	..
	2020	36	0	64	..	..	15	..
	2021	36	0	64	..	..	15	..
	2022	37	0	65	..	..	15	..
Chad	2019	22	22	..	..	93	5	..
	2020	23	23	..	..	93	14	..
	2021	23	23	..	..	93	15	..
	2022	23	23	..	..	93	7	..
Comoros	2019	45	47	..	..	..	..	..
	2020	54	56	..	..	..	..	..
	2021	49	57	..	..	..	11	..
	2022	50	58	..	..	..	11	..
Congo	2019	63	72	45	..	..	15	..
	2020	52	54	48	..	..	13	..
	2021	56	58	53	..	..	14	..
	2022	68	72	60	..	..	16	..

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
39	47	46	14	41	44	38	79	21
36	46	44	14	39	42	38	76	20
35	47	39	13	40	44	37	80	21
34	47	39	14	40	45	37	77	21
26	26	31	24	44	44	45	78	33
26	26	38	24	43	42	46	58	33
27	26	40	27	43	43	47	73	34
32	32	40	27	43	43	48	58	32
10	10	..	..	58	60	8	..	17
9	9	..	..	56	58	3	..	17
10	10	..	..	56	58	1	..	16
10	10	..	..	60	62	1	..	16
16	16	..	..	28	15	37	..	33
15	15	..	..	27	8	39	..	37
15	15	..	..	28	16	35	..	34
15	15	..	..	28	13	38	..	25
40	41	..	10	9	10	0	..	13
41	42	..	9	20	24	0	..	13
48	49	..	11	23	27	..	..	33
47	54	..	3	18	22	..	..	14
..	..	..	..	51	51	..	..	9
..	..	..	..	34	34	..	..	12
..	..	..	..	37	37	..	..	12
..	..	..	..	39	40	..	..	12
53	53	..	..	23	23	37	..	17
64	64	..	..	15	13	40	..	12
50	50	..	..	23	22	45	..	12
51	51	..	..	18	18	29	..	11
15	15	..	..	29	28	31	..	18
16	16	..	..	30	20	42	..	18
17	17	..	..	27	27	31	..	10
49	49	..	..	27	24	30	..	16
18	18	..	..	30	30	..	..	30
18	18	..	..	29	30	..	..	26
18	18	..	..	30	31	..	..	28
18	18	..	..	33	35	..	..	26
53	53	..	..	57	10	73	..	16
61	61	..	..	54	8	69	..	36
52	52	..	..	67	8	89	..	20
48	48	..	..	75	8	99	..	20
..	..	..	..	37	1	64	..	15
..	..	..	..	36	0	64	..	15
..	..	..	..	36	0	64	..	15
..	..	..	..	37	0	65	..	15
..	..	..	..	22	22	..	..	51
..	..	..	..	23	23	..	..	55
..	..	..	..	23	23	..	..	56
..	..	..	..	23	23	..	..	38
..	..	..	..	47	47	..	..	..
..	..	..	..	56	56	..	..	..
..	..	..	..	51	57	..	..	11
..	..	..	..	52	58	..	..	11
79	79	..	..	38	..	45	..	15
58	58	..	..	40	..	48	..	13
62	62	..	..	43	..	53	..	14
77	77	..	..	49	..	60	..	16

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Côte d'Ivoire	2019	55	62	45	..	..	26	..
	2020	58	67	44	..	..	16	..
	2021	58	73	34	..	..	25	..
	2022	56	66	37	..	..	16	..
Dem. Rep. of the Congo	2019	50	3	51	..	..	4	..
	2020	50	3	51	..	..	4	..
	2021	50	1	51	..	..	8	..
	2022	50	2	51	..	..	12	..
Djibouti	2019	11	11	..	..	..	17	..
	2020	9	9	..	..	..	17	..
	2021	15	11	..	..	39	17	..
	2022	15	11	..	..	40	17	..
Egypt	2019	38	38	53	..	37	17	..
	2020	38	37	61	..	35	33	..
	2021	40	39	60	..	43	35	..
	2022	39	39	59	..	40	33	..
Equatorial Guinea	2019	39	66	22	..	..	..	..
	2020	42	73	22	..	..	..	..
	2021	36	59	22	..	..	..	..
	2022	36	59	21	..	..	..	..
Eritrea	2019	18	19	..	..	28	6	..
	2020	18	20	..	..	28	5	..
	2021	18	20	..	..	28	5	..
	2022	19	20	..	..	28	4	..
Eswatini	2019	39	33	50	..	..	15	..
	2020	36	33	43	..	..	3	..
	2021	41	39	50	..	..	13	..
	2022	41	36	54	..	..	24	..
Ethiopia	2019	40	3	43	..	21	20	..
	2020	40	3	42	..	29	18	..
	2021	39	2	42	..	20	18	..
	2022	37	0	40	..	15	19	..
Gabon	2019	42	39	45	..	..	22	..
	2020	44	41	49	..	..	22	..
	2021	44	42	47	..	..	22	..
	2022	48	52	43	..	..	30	..
Gambia	2019	38	39	..	..	20	18	..
	2020	39	40	..	..	20	18	..
	2021	36	37	..	..	20	18	..
	2022	42	42	..	..	20	17	..
Ghana	2019	39	34	52	..	..	14	..
	2020	44	40	53	..	..	11	..
	2021	46	44	54	..	..	12	..
	2022	48	45	59	..	..	16	..
Guinea	2019	43	43	43	..	..	..	..
	2020	32	33	31	..	..	..	..
	2021	36	16	46	..	..	..	..
	2022	36	8	56	..	..	..	..
Guinea-Bissau	2019	27	28	..	..	..	24	..
	2020	45	48	..	..	..	24	..
	2021	49	53	..	..	..	23	..
	2022	46	51	..	..	..	21	..
Kenya	2019	42	16	44	..	53	21	72
	2020	42	9	58	..	45	19	67
	2021	42	17	50	..	52	11	67
	2022	43	21	41	..	56	21	66

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
32	32	..	..	55	63	45	..	26
36	36	..	..	58	68	44	..	16
68	68	..	..	58	73	34	..	25
73	73	..	..	55	66	37	..	16
..	..	..	..	50	3	51	..	4
..	..	..	..	50	3	51	..	4
..	..	..	..	50	1	51	..	8
..	..	..	..	50	2	51	..	12
..	..	..	..	11	11	..	..	17
..	..	..	..	9	9	..	..	17
..	..	..	..	15	11	..	..	39
..	..	..	..	15	11	..	..	40
64	64	..	..	37	37	53	..	28
64	64	..	..	37	36	61	..	34
62	62	..	..	39	38	60	..	39
50	50	..	..	39	38	59	..	37
..	..	..	..	39	66	22	..	..
..	..	..	..	42	73	22	..	..
..	..	..	..	36	59	22	..	..
..	..	..	..	36	59	21	..	..
21	21	..	..	18	19	..	..	6
18	18	..	..	19	20	..	..	6
18	18	..	..	18	20	..	..	5
19	19	..	..	19	21	..	..	5
32	33	15	15	50	..	50	..	..
33	33	72	2	43	..	43	..	..
39	39	69	35	44	..	49	..	9
36	36	68	29	50	..	54	..	24
11	11	..	..	40	1	43	..	21
11	11	..	..	40	0	42	..	28
11	11	..	..	39	0	42	..	19
..	..	..	..	37	0	40	..	15
29	29	32	22	43	42	45	..	..
32	32	32	22	46	44	49	..	..
27	27	32	22	46	46	47	..	..
68	69	33	6	45	47	43	..	..
12	12	..	..	48	49	..	..	19
12	12	..	..	48	49	..	..	19
12	12	..	..	43	44	..	..	19
12	12	..	..	50	51	..	..	18
10	10	..	..	40	35	52	..	14
..	..	..	..	44	40	53	..	11
..	..	..	..	46	44	54	..	12
..	..	..	..	48	45	59	..	16
..	..	..	..	43	43	43	..	..
..	..	..	..	32	33	31	..	..
..	..	..	..	36	16	46	..	..
..	..	..	..	36	8	56	..	..
40	40	..	..	25	26	..	..	24
40	40	..	..	46	50	..	..	24
40	40	..	..	50	55	..	..	23
41	41	..	..	47	53	..	..	21
7	7	..	..	47	20	44	..	65
5	5	..	..	46	11	58	..	59
9	8	54	..	46	21	50	..	56
10	9	63	..	46	27	41	..	57

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Lesotho	2019	60	12	60	..	..	..	..
	2020	65	12	66	..	..	..	..
	2021	81	17	82	..	..	17	..
	2022	73	18	74	..	..	7	..
Liberia	2019	24	33	15	..	..	15	..
	2020	28	36	18	..	..	15	..
	2021	34	29	43	..	..	19	..
	2022	32	26	43	..	..	18	..
Libya	2019	38	38	..	..	..	18	..
	2020	32	32	..	..	..	18	..
	2021	38	38	..	..	..	17	..
	2022	36	36	..	..	..	18	..
Madagascar	2019	42	35	61	..	30	16	..
	2020	38	32	57	..	30	15	..
	2021	37	32	53	..	29	17	..
	2022	34	31	49	..	32	12	..
Malawi	2019	31	5	50	..	..	24	..
	2020	34	14	53	..	..	0	..
	2021	38	7	62	..	..	7	..
	2022	32	8	49	..	..	23	..
Mali	2019	37	39	35	..	..	18	..
	2020	37	40	36	..	..	15	..
	2021	39	43	37	..	..	18	..
	2022	37	39	39	..	..	15	..
Mauritania	2019	28	29	..	..	37	19	..
	2020	27	27	..	..	46	19	..
	2021	25	24	..	..	46	19	..
	2022	28	29	..	..	38	15	..
Mauritius	2019	44	50	19	..	17	16	..
	2020	38	44	22	..	20	16	..
	2021	40	45	20	..	16	16	..
	2022	41	47	24	..	17	16	..
Morocco	2019	33	36	11	..	43	25	..
	2020	32	36	8	..	36	23	..
	2021	33	38	8	..	40	24	..
	2022	33	39	4	..	39	19	..
Mozambique	2019	78	94	77	..	..	4	..
	2020	78	76	81	..	..	8	..
	2021	78	77	81	..	..	8	..
	2022	80	77	84	..	..	8	..
Namibia	2019	27	5	31	..	47	32	..
	2020	37	7	50	..	47	32	..
	2021	27	4	31	..	47	33	..
	2022	21	2	26	..	53	28	..
Niger	2019	22	23	..	..	..	14	..
	2020	22	23	..	..	..	10	..
	2021	23	23	..	..	..	19	..
	2022	22	25	..	..	..	6	..
Nigeria	2019	32	29	45	..	11	13	..
	2020	33	32	40	..	11	9	..
	2021	31	29	41	..	..	8	..
	2022	32	29	48	..	..	11	..
Rwanda	2019	40	37	47	..	..	17	..
	2020	40	31	54	..	..	17	..
	2021	47	39	59	..	..	17	..
	2022	45	42	52	..	..	16	..

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Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	60	12	60	..	..
..	..	..	..	65	12	66	..	..
..	..	..	..	81	17	82	..	17
..	..	..	..	73	18	74	..	7
32	33	..	15	20	34	15	..	..
32	33	..	15	25	42	18	..	..
32	33	..	19	35	20	43	..	4
32	33	..	19	32	12	43	..	3
..	..	..	..	38	38	..	..	18
..	..	..	..	32	32	..	..	18
..	..	..	..	38	38	..	..	17
..	..	..	..	36	36	..	..	18
31	31	..	..	44	37	61	..	16
33	33	..	..	39	32	57	..	15
37	37	..	..	37	31	53	..	17
37	37	..	..	34	29	49	..	12
7	7	11	..	41	1	51	..	24
7	7	11	..	44	43	53	..	0
7	7	11	..	51	9	63	..	7
7	7	11	..	42	14	50	..	23
46	48	..	19	34	32	35	..	13
46	48	..	19	34	34	36	..	13
48	50	..	19	37	39	37	..	18
44	48	..	18	34	31	39	..	13
44	46	..	20	25	25	..	..	25
42	44	..	18	24	23	..	..	27
43	44	..	22	21	20	..	..	27
37	38	..	18	26	27	..	..	22
61	80	..	16	33	35	19	..	6
55	75	..	16	27	27	22	..	8
58	78	..	17	27	28	20	..	8
47	63	..	16	37	39	24	..	15
5	1	..	2	43	53	11	..	37
5	1	..	2	41	53	8	..	31
5	1	..	2	43	56	8	..	34
5	1	..	2	43	57	4	..	32
51	51	..	..	78	99	77	..	4
48	48	..	..	78	79	81	..	8
48	48	..	..	78	81	81	..	8
51	51	..	..	81	80	84	..	8
..	..	..	..	27	5	31	..	32
..	..	..	..	37	7	50	..	32
..	..	..	..	27	4	31	..	33
..	..	..	..	21	2	26	..	28
13	12	..	14	25	25	..	..	..
22	31	..	5	22	22	..	..	..
14	13	..	14	26	26	..	..	..
13	22	..	3	26	25	..	..	..
20	19	49	13	37	35	45	..	..
22	21	45	9	37	36	40	..	..
21	21	46	7	34	32	41	..	..
71	73	54	11	19	11	48	..	..
23	23	..	..	40	37	47	..	17
23	23	..	..	40	31	54	..	17
23	23	..	..	47	39	59	..	17
23	23	..	..	45	42	52	..	16

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Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Sao Tome and Principe	2019	44	45	29	..	..	14	..
	2020	32	32	24	..	..	14	..
	2021	31	31	25	..	..	14	..
	2022	31	33	9	..	..	8	..
Senegal	2019	38	45	..	..	2	34	..
	2020	47	54	..	..	16	41	..
	2021	46	52	..	..	29	38	..
	2022	52	60	..	..	28	39	..
Seychelles	2019	39	41	..	..	9	11	..
	2020	43	45	..	..	11	16	..
	2021	40	44	..	..	10	13	..
	2022	41	45	..	..	13	14	..
Sierra Leone	2019	30	20	44	..	..	17	..
	2020	49	60	44	..	..	17	..
	2021	54	75	44	..	..	16	..
	2022	26	22	40	..	..	11	..
Somalia	2019	15	15	..	..	9	18	..
	2020	14	14	..	..	7	18	..
	2021	14	14	..	..	6	25	..
	2022	14	14	..	..	5	25	..
South Africa	2019	49	52	19	78	31	21	..
	2020	46	50	20	58	29	25	..
	2021	45	47	22	73	30	30	..
	2022	45	48	24	58	32	28	..
South Sudan	2019	48	52	..	..	..	12	..
	2020	48	52	..	..	..	12	..
	2021	48	52	..	..	..	16	..
	2022	42	47	..	..	..	19	..
St. Helena and Depend.	2019	11	14	..	..	8	7	..
	2020	11	13	..	..	8	7	..
	2021	13	18	..	..	6	7	..
	2022	12	18	..	..	4	7	..
Sudan	2019	47	35	61	..	..	3	..
	2020	49	35	67	..	..	2	..
	2021	46	36	61	..	..	2	..
	2022	45	26	71	..	..	8	..
Togo	2019	36	34	41	..	..	12	..
	2020	31	34	25	..	..	12	..
	2021	22	28	15	..	..	10	..
	2022	26	33	13	..	..	16	..
Tunisia	2019	42	43	12	..	24	16	..
	2020	39	40	8	..	22	15	..
	2021	40	41	5	..	20	15	..
	2022	37	40	3	..	16	9	..
Uganda	2019	40	17	45	..	..	17	..
	2020	40	14	46	..	..	22	..
	2021	40	18	46	..	..	19	..
	2022	45	22	52	..	..	18	..
United Rep. of Tanzania	2019	58	65	49	..	..	12	..
	2020	56	53	62	..	..	11	..
	2021	57	56	61	..	..	10	..
	2022	61	64	56	..	..	10	..
Zambia	2019	57	58	59	..	..	15	..
	2020	57	47	61	..	..	19	..
	2021	59	27	68	..	..	19	..
	2022	58	45	62	..	..	18	..



Table 32

## 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
..	..	..	..	44	45	29	..	14
..	..	..	..	32	32	24	..	14
..	..	..	..	31	31	25	..	14
..	..	..	..	31	33	9	..	8
26	30	..	..	43	53	..	..	16
19	22	..	0	58	69	..	..	26
22	26	..	2	54	62	..	..	33
24	27	..	2	61	72	..	..	33
36	36	..	..	40	42	..	..	10
36	36	..	..	44	47	..	..	13
36	36	..	..	41	46	..	..	12
36	36	..	..	42	48	..	..	14
23	23	..	..	30	20	44	..	17
23	23	..	..	49	63	44	..	17
23	23	..	..	54	78	44	..	16
29	29	..	..	26	21	40	..	11
17	17	..	..	14	14	..	..	13
14	14	..	..	14	15	..	..	13
13	13	..	..	15	15	..	..	17
13	13	..	..	15	14	..	..	18
38	62	8	27	51	52	19	78	16
37	58	12	28	48	49	21	58	17
39	56	18	31	46	47	22	73	10
37	50	19	31	47	48	24	58	8
13	12	..	22	64	72	..	..	8
13	13	..	22	64	72	..	..	8
14	13	..	21	64	72	..	..	12
14	12	..	20	59	65	..	..	17
..	..	..	..	11	14	..	..	8
..	..	..	..	11	13	..	..	7
..	..	..	..	13	18	..	..	6
..	..	..	..	12	18	..	..	5
6	6	..	..	49	38	61	..	3
6	6	..	..	51	38	67	..	2
6	6	..	..	48	39	61	..	2
6	6	..	..	47	28	71	..	8
10	9	..	11	37	36	41	..	..
8	5	..	11	32	35	25	..	..
1	2	..	1	28	30	15	..	..
1	3	..	1	33	34	13	..	..
61	61	..	18	41	43	12	..	23
53	60	..	16	39	40	8	..	21
50	61	..	16	39	40	5	..	19
47	64	..	17	36	39	3	..	9
31	23	37	..	42	12	47	..	18
38	22	48	..	41	7	46	..	22
42	33	48	..	40	5	46	..	19
41	37	44	..	46	7	53	..	18
2	0	..	12	67	81	49	..	..
2	1	..	11	64	65	62	..	..
2	0	..	10	65	67	61	..	..
2	0	..	10	69	77	56	..	..
26	26	..	..	58	60	59	..	15
26	26	..	..	57	48	61	..	19
8	8	..	..	61	31	68	..	19
8	8	..	..	60	54	62	..	18

Table 32

## 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
Zimbabwe	2019	41	38	44	..	..	..	..
	2020	32	26	40	..	..	20	..
	2021	41	23	63	..	..	7	..
	2022	43	28	62	..	..	4	..
<b>Asia</b>	<b>2019</b>	<b>42</b>	<b>48</b>	<b>38</b>	<b>63</b>	<b>22</b>	<b>13</b>	<b>31</b>
	<b>2020</b>	<b>39</b>	<b>46</b>	<b>38</b>	<b>62</b>	<b>19</b>	<b>12</b>	<b>26</b>
	<b>2021</b>	<b>40</b>	<b>48</b>	<b>36</b>	<b>68</b>	<b>23</b>	<b>13</b>	<b>26</b>
	<b>2022</b>	<b>40</b>	<b>48</b>	<b>35</b>	<b>68</b>	<b>24</b>	<b>13</b>	<b>32</b>
Afghanistan	2019	34	15	41	..	..	20	..
	2020	28	11	35	..	..	24	..
	2021	29	11	35	..	..	24	..
	2022	24	11	28	..	..	22	..
Armenia	2019	24	19	20	62	9	16	..
	2020	24	20	15	77	5	17	..
	2021	22	19	19	51	4	18	..
	2022	26	25	16	72	7	15	..
Azerbaijan	2019	39	43	16	..	18	15	..
	2020	39	44	11	..	17	15	..
	2021	40	45	13	..	16	13	..
	2022	42	47	16	..	15	14	..
Bahrain	2019	56	56	..	..	..	18	..
	2020	57	57	..	..	..	19	..
	2021	51	51	..	..	5	16	..
	2022	52	52	..	..	11	19	..
Bangladesh	2019	54	55	38	..	24	14	..
	2020	50	51	43	..	23	14	..
	2021	49	50	33	..	18	4	..
	2022	50	51	37	..	18	8	..
Bhutan	2019	43	0	43	..	21	16	..
	2020	55	0	56	..	21	16	..
	2021	56	0	56	..	7	16	..
	2022	54	0	54	..	7	16	..
Brunei Darussalam	2019	51	51	..	..	..	15	..
	2020	58	58	..	..	..	12	..
	2021	57	57	..	..	..	10	..
	2022	56	56	..	..	..	12	..
Cambodia	2019	42	55	35	..	..	11	..
	2020	35	40	35	..	..	12	..
	2021	38	37	45	..	..	19	..
	2022	35	32	42	..	..	19	..
China	2019	41	48	42	82	22	13	1
	2020	39	47	42	84	19	12	1
	2021	40	49	39	87	23	12	0
	2022	39	49	37	86	24	12	..
China, Hong Kong SAR	2019	34	34	..	..	..	..	..
	2020	31	31	..	..	..	..	..
	2021	32	32	..	..	..	..	..
	2022	31	31	..	..	..	..	..
China, Macao SAR	2019	24	24	..	..	..	11	..
	2020	16	16	..	..	..	9	..
	2021	14	14	..	..	..	11	..
	2022	18	18	..	..	..	11	..
Cyprus	2019	32	35	..	..	17	16	..
	2020	29	33	..	..	17	15	..
	2021	29	33	..	..	18	17	..
	2022	29	34	..	..	16	16	..

## 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
53	53	..	..	40	38	44	..	..
28	28	..	..	32	26	40	..	20
0	0	..	..	41	23	63	..	7
9	9	..	..	44	29	62	..	4
<b>40</b>	<b>48</b>	<b>35</b>	<b>14</b>	<b>42</b>	<b>48</b>	<b>38</b>	<b>63</b>	<b>18</b>
<b>38</b>	<b>46</b>	<b>32</b>	<b>13</b>	<b>40</b>	<b>46</b>	<b>38</b>	<b>62</b>	<b>16</b>
<b>38</b>	<b>48</b>	<b>34</b>	<b>13</b>	<b>40</b>	<b>48</b>	<b>36</b>	<b>68</b>	<b>18</b>
<b>38</b>	<b>49</b>	<b>28</b>	<b>13</b>	<b>40</b>	<b>48</b>	<b>35</b>	<b>68</b>	<b>18</b>
18	1	26	20	44	29	49	..	20
18	1	26	20	35	19	40	..	30
18	1	26	20	36	20	40	..	29
17	1	25	18	28	20	29	..	29
16	..	..	16	24	19	20	62	13
17	..	..	17	24	20	15	77	13
17	..	..	17	22	19	19	51	19
16	..	..	16	27	25	16	72	13
29	29	..	0	40	46	16	..	17
31	31	37	0	40	46	11	..	16
33	34	21	3	41	47	13	..	15
33	34	13	3	42	48	16	..	15
57	57	..	18	56	56	..	..	..
58	58	..	19	56	56	..	..	..
58	58	..	19	46	46	..	..	2
60	61	..	19	47	47	..	..	16
30	30	..	..	67	69	38	..	14
26	26	..	..	65	66	43	..	14
26	26	..	..	63	66	33	..	4
23	23	..	..	68	71	37	..	8
..	..	..	..	43	0	43	..	20
..	..	..	..	55	0	56	..	20
..	..	..	..	56	0	56	..	10
..	..	..	..	54	0	54	..	10
44	44	..	..	52	53	..	..	15
81	81	..	..	52	52	..	..	12
79	80	..	10	51	51	..	..	9
76	78	..	13	51	51	..	..	8
..	..	..	..	42	55	35	..	11
..	..	..	..	35	40	35	..	12
..	..	..	..	38	37	45	..	19
..	..	..	..	35	32	42	..	19
88	88	..	..	40	46	42	82	17
87	87	..	..	38	45	42	84	16
108	108	..	..	39	47	39	87	18
109	109	..	..	37	46	37	86	18
..	..	..	..	34	34	..	..	..
..	..	..	..	31	31	..	..	..
..	..	..	..	32	32	..	..	..
..	..	..	..	31	31	..	..	..
85	85	..	11	19	19	..	..	..
74	74	..	9	12	12	..	..	..
82	82	..	11	9	9	..	..	..
79	80	..	11	13	13	..	..	..
17	20	..	16	33	36	..	..	17
14	20	..	12	30	33	..	..	17
16	20	..	16	31	34	..	..	18
16	25	..	15	30	34	..	..	17

Table 32

## 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
Georgia	2019	36	29	39	..	46	..	..
	2020	34	33	35	..	49	..	..
	2021	36	27	39	..	45	..	..
	2022	39	34	40	..	48	..	..
India	2019	41	47	39	78	20	17	..
	2020	38	45	40	72	18	17	..
	2021	39	47	40	79	19	17	..
	2022	43	53	39	77	20	18	..
Indonesia	2019	49	50	42	..	..	1	70
	2020	48	48	43	..	..	1	72
	2021	45	46	35	..	..	7	61
	2022	53	54	43	..	..	12	63
Iran (Islamic Rep. of)	2019	46	49	30	76	23	21	..
	2020	47	51	21	62	28	17	..
	2021	48	54	11	49	27	15	..
	2022	44	48	13	90	27	16	..
Iraq	2019	37	37	32	..	..	18	..
	2020	36	36	26	..	..	18	..
	2021	36	37	21	..	..	18	..
	2022	48	51	17	..	..	17	..
Israel	2019	43	47	..	..	16	16	..
	2020	41	46	..	..	17	18	..
	2021	39	45	..	..	17	17	..
	2022	38	46	..	..	18	14	..
Japan	2019	33	46	20	22	22	11	88
	2020	31	45	20	13	25	11	88
	2021	32	45	20	24	25	11	88
	2022	30	44	20	19	24	11	86
Jordan	2019	45	54	35	..	27	22	..
	2020	36	45	35	..	31	18	..
	2021	36	43	59	..	29	21	..
	2022	37	45	61	..	32	23	..
Kazakhstan	2019	49	54	41	..	28	6	..
	2020	49	55	40	..	24	8	..
	2021	49	53	37	..	30	14	..
	2022	47	52	37	..	24	14	..
Korea, Dem.Ppl's.Rep.	2019	33	43	26	..	..	14	..
	2020	33	38	30	..	..	14	..
	2021	35	32	38	..	..	14	..
	2022	36	33	39	..	..	14	..
Korea, Republic of	2019	49	51	11	72	20	12	43
	2020	47	49	13	79	22	12	52
	2021	48	52	12	78	21	13	58
	2022	47	50	13	82	20	14	41
Kuwait	2019	46	46	..	..	33	25	..
	2020	42	42	..	..	30	47	..
	2021	46	46	..	..	27	42	..
	2022	47	47	..	..	31	45	..
Kyrgyzstan	2019	45	20	50	..	..	..	..
	2020	45	22	51	..	..	..	..
	2021	44	29	47	..	..	..	..
	2022	41	30	43	..	..	..	..
Lao People's Dem. Rep.	2019	44	73	35	..	..	13	..
	2020	46	60	41	..	..	11	..
	2021	44	56	40	..	..	12	..
	2022	47	50	47	..	..	15	..

Table 32

## 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
..	..	..	..	36	29	39	..	46
..	..	..	..	34	33	35	..	49
..	..	..	..	36	27	39	..	45
..	..	..	..	39	34	40	..	48
32	32	24	24	43	52	39	78	16
27	27	30	25	40	50	40	72	15
21	21	30	26	42	54	40	79	15
34	34	33	28	44	58	39	77	17
41	42	46	..	51	52	41	..	70
34	35	46	..	51	51	43	..	71
31	31	42	..	49	50	34	..	60
25	27	..	..	61	62	47	..	61
11	11	..	..	49	53	30	76	22
12	12	..	..	50	55	21	62	22
13	13	..	..	50	58	11	49	20
13	13	..	..	46	51	13	90	20
18	..	..	18	37	37	32	..	..
18	..	..	18	36	36	26	..	..
18	..	..	18	36	37	21	..	..
17	..	..	17	48	51	17	..	..
28	66	..	15	45	46	..	..	21
28	63	..	17	44	45	..	..	26
25	67	..	16	43	44	..	..	34
20	62	..	13	44	45	..	..	31
21	37	95	14	37	47	19	22	16
19	34	86	13	36	47	19	13	17
20	39	88	13	36	46	20	24	16
18	36	89	12	35	45	19	19	15
31	56	..	18	48	54	35	..	25
21	41	..	15	40	45	35	..	25
20	38	..	15	39	44	59	..	28
23	38	..	19	40	45	61	..	29
24	40	..	15	50	54	41	..	9
28	40	..	9	49	55	40	..	12
48	60	34	1	49	52	39	..	23
46	58	31	0	48	51	41	..	21
..	..	..	..	33	43	26	..	14
..	..	..	..	33	38	30	..	14
..	..	..	..	35	32	38	..	14
..	..	..	..	36	33	39	..	14
42	51	..	7	49	52	11	72	15
43	54	..	6	47	48	13	79	16
44	58	..	6	49	52	12	78	16
33	44	..	7	48	50	13	82	16
..	..	..	..	46	46	..	..	27
..	..	..	..	42	42	..	..	44
..	..	..	..	46	46	..	..	38
..	..	..	..	47	47	..	..	41
61	61	..	..	45	19	50	..	..
49	49	..	..	45	22	51	..	..
44	44	..	..	44	29	47	..	..
44	44	..	..	41	30	43	..	..
..	..	..	..	44	73	35	..	13
..	..	..	..	46	60	41	..	11
..	..	..	..	44	56	40	..	12
..	..	..	..	47	50	47	..	15

Table 32

## 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
Lebanon	2019	72	76	39	..	..	16	..
	2020	60	63	34	..	..	19	..
	2021	45	47	25	..	..	19	..
	2022	26	28	28	..	..	17	..
Malaysia	2019	60	66	48	..	..	19	..
	2020	55	61	50	..	..	16	..
	2021	56	60	57	..	..	13	..
	2022	54	57	57	..	..	14	..
Maldives	2019	23	23	..	..	20	17	..
	2020	21	21	..	..	20	17	..
	2021	33	34	..	..	20	16	..
	2022	32	34	..	..	20	15	..
Mongolia	2019	53	61	31	..	25	8	..
	2020	53	60	31	..	25	7	..
	2021	59	66	51	..	42	7	..
	2022	61	69	25	..	37	10	..
Myanmar	2019	38	43	33	..	..	23	..
	2020	40	49	29	..	..	22	..
	2021	35	37	34	..	..	22	..
	2022	34	36	32	..	..	12	..
Nepal	2019	57	0	61	..	0	20	..
	2020	51	0	54	..	0	22	..
	2021	50	0	52	..	0	28	..
	2022	45	0	47	..	0	6	..
Oman	2019	37	37	..	..	..	22	..
	2020	37	37	..	..	..	13	..
	2021	39	40	..	..	..	11	..
	2022	41	43	..	..	..	2	..
Other Asia	2019	56	62	21	95	19	11	29
	2020	55	64	15	93	23	11	73
	2021	56	65	16	110	23	12	23
	2022	53	64	22	94	26	13	53
Pakistan	2019	39	35	45	79	27	15	..
	2020	40	38	45	72	27	19	..
	2021	39	38	37	68	32	20	..
	2022	36	29	37	95	27	22	..
Philippines	2019	46	51	24	..	28	15	63
	2020	43	47	22	..	26	15	64
	2021	49	54	30	..	34	16	65
	2022	45	49	31	..	28	14	61
Qatar	2019	54	54	..	..	..	..	..
	2020	53	53	..	..	..	..	..
	2021	56	56	..	..	..	..	..
	2022	59	59	..	..	..	..	..
Saudi Arabia	2019	38	38	..	..	20	49	..
	2020	37	37	..	..	21	97	..
	2021	37	37	..	..	12	28	..
	2022	43	43	..	..	45	28	..
Singapore	2019	48	49	..	..	..	17	..
	2020	50	51	..	..	..	17	..
	2021	52	53	..	..	..	17	..
	2022	53	54	..	..	..	22	..
Sri Lanka	2019	42	52	30	..	31	28	..
	2020	40	48	32	..	30	14	..
	2021	40	39	46	..	56	18	..
	2022	35	37	41	..	57	12	..

## 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
88	93	..	16	65	68	39	..	..
90	95	..	19	46	48	34	..	..
72	82	..	19	32	32	25	..	..
50	76	..	17	11	9	28	..	..
33	46	..	1	62	67	48	..	17
31	43	..	2	57	62	50	..	14
32	43	..	2	57	61	57	..	12
35	47	..	2	55	58	57	..	12
14	14	..	..	33	35	..	..	17
11	11	..	..	30	32	..	..	17
9	9	..	..	56	64	..	..	16
7	7	..	..	58	66	..	..	15
24	..	31	..	54	61	..	..	19
24	..	31	..	54	61	..	..	19
38	..	51	..	60	66	..	..	29
19	..	25	..	62	69	..	..	27
44	49	35	23	31	31	32	..	..
52	62	32	22	25	21	28	..	..
43	47	34	22	25	10	33	..	8
42	46	38	12	23	13	29	..	8
13	..	11	20	63	0	67	..	2
12	..	10	23	57	0	61	..	8
5	..	3	28	64	0	67	..	17
0	..	0	0	56	0	58	..	14
..	..	..	..	37	37	..	..	3
..	..	..	..	37	37	..	..	9
..	..	..	..	39	40	..	..	8
..	..	..	..	41	43	..	..	2
23	28	..	9	75	82	21	95	56
22	27	5	9	76	85	15	93	62
21	27	9	9	81	90	16	110	63
17	22	46	9	82	91	22	94	95
27	27	..	..	39	35	45	79	23
18	18	..	..	41	39	45	72	24
48	48	..	..	39	37	37	68	29
17	17	..	..	36	30	37	95	26
18	18	12	..	47	52	24	..	45
22	22	12	..	44	48	22	..	44
25	26	12	..	50	55	30	..	45
24	24	12	..	46	50	31	..	39
61	61	..	..	14	14	..	..	..
59	59	..	..	20	20	..	..	..
63	63	..	..	12	12	..	..	..
66	66	..	..	20	20	..	..	..
44	44	..	..	36	36	..	..	48
43	43	..	..	34	34	..	..	95
44	44	..	..	34	34	..	..	20
40	40	..	..	44	44	..	..	36
93	93	..	..	46	47	..	..	17
96	96	..	..	47	48	..	..	17
95	95	..	..	50	51	..	..	17
92	92	..	..	51	53	..	..	22
18	5	28	13	47	58	31	..	38
17	4	29	12	45	55	32	..	25
18	2	43	12	47	48	47	..	46
17	2	31	20	41	45	44	..	19

Table 32

## 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
State of Palestine	2019	39	49	..	..	..	17	..
	2020	34	47	..	..	..	17	..
	2021	31	49	..	..	..	14	..
	2022	31	48	..	..	..	18	..
Syrian Arab Republic	2019	25	29	6	..	11	20	..
	2020	24	27	6	..	11	20	..
	2021	26	29	6	..	11	20	..
	2022	23	25	6	..	3	19	..
Tajikistan	2019	37	24	38	..	..	..	..
	2020	34	26	35	..	..	..	..
	2021	36	26	37	..	..	..	..
	2022	37	23	38	..	..	..	..
Thailand	2019	48	57	20	..	28	12	49
	2020	44	48	17	..	23	18	42
	2021	41	45	17	..	26	18	42
	2022	45	49	25	..	22	19	38
Timor-Leste	2019	21	21	53	..	..	18	..
	2020	20	20	53	..	..	18	..
	2021	21	21	53	..	..	18	..
	2022	22	22	53	..	..	18	..
Türkiye	2019	38	42	36	..	33	18	61
	2020	37	44	29	..	32	19	64
	2021	38	53	20	..	34	20	66
	2022	36	46	24	..	35	20	67
Turkmenistan	2019	39	39	30	..	..	..	..
	2020	45	45	30	..	..	..	..
	2021	50	50	55	..	..	..	..
	2022	57	57	55	..	..	..	..
United Arab Emirates	2019	48	49	..	..	..	25	..
	2020	43	46	..	..	..	30	..
	2021	46	46	..	83	..	26	..
	2022	47	46	..	85	..	29	..
Uzbekistan	2019	43	46	39	..	33	0	..
	2020	43	48	28	..	33	1	..
	2021	49	52	28	..	18	5	..
	2022	48	50	33	..	0	20	..
Viet Nam	2019	46	53	47	..	9	10	..
	2020	35	45	40	..	21	6	..
	2021	35	41	41	..	9	19	..
	2022	37	41	50	..	22	16	..
Yemen	2019	20	19	..	..	..	22	..
	2020	17	16	..	..	..	22	..
	2021	15	14	..	..	..	22	..
	2022	16	16	..	..	..	22	..
<b>Europe</b>	<b>2019</b>	<b>37</b>	<b>37</b>	<b>32</b>	<b>78</b>	<b>26</b>	<b>12</b>	<b>49</b>
	<b>2020</b>	<b>35</b>	<b>35</b>	<b>34</b>	<b>73</b>	<b>27</b>	<b>12</b>	<b>54</b>
	<b>2021</b>	<b>36</b>	<b>37</b>	<b>35</b>	<b>79</b>	<b>24</b>	<b>11</b>	<b>48</b>
	<b>2022</b>	<b>34</b>	<b>38</b>	<b>30</b>	<b>72</b>	<b>25</b>	<b>11</b>	<b>33</b>
Albania	2019	26	..	27	..	..	18	..
	2020	24	..	25	..	..	18	..
	2021	38	..	41	..	..	5	..
	2022	28	..	31	..	..	9	..
Andorra	2019	25	55	21	..	..	11	..
	2020	33	49	31	..	..	10	..
	2021	23	49	20	..	..	11	..
	2022	21	50	17	..	..	19	..



Table 32

## 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
30	57	..	17	41	48	..	..	17
24	42	..	17	39	48	..	..	17
19	41	..	14	37	51	..	..	14
21	41	..	18	36	50	..	..	18
62	62	..	..	21	24	6	..	18
61	61	..	..	20	23	6	..	20
62	62	..	..	22	25	6	..	20
63	63	..	..	18	21	6	..	19
..	..	..	..	37	24	38	..	..
..	..	..	..	34	26	35	..	..
..	..	..	..	36	26	37	..	..
..	..	..	..	37	23	38	..	..
46	49	27	26	49	63	20	..	11
..	..	..	..	44	48	17	..	20
..	..	..	..	41	45	17	..	20
..	..	..	..	45	49	25	..	20
..	..	..	..	21	21	53	..	18
..	..	..	..	20	20	53	..	18
..	..	..	..	21	21	53	..	18
..	..	..	..	22	22	53	..	18
35	41	27	19	38	42	36	..	32
36	45	21	19	37	44	29	..	32
42	54	29	20	38	53	20	..	34
32	40	40	20	37	46	24	..	34
..	..	..	..	39	39	30	..	..
..	..	..	..	45	45	30	..	..
..	..	..	..	50	50	55	..	..
..	..	..	..	57	57	55	..	..
..	..	..	..	48	49	..	..	25
..	..	..	..	43	46	..	..	30
..	..	..	..	46	46	..	83	26
..	..	..	..	47	46	..	85	29
..	..	..	..	43	46	39	..	0
..	..	..	..	43	48	28	..	0
33	33	..	..	49	52	28	..	5
..	..	..	..	48	50	33	..	20
9	9	3	4	50	62	48	..	10
18	19	3	4	36	49	40	..	7
18	19	3	4	36	45	42	..	17
19	20	3	4	38	44	51	..	18
23	24	..	22	19	19	..	..	..
22	22	..	22	16	16	..	..	..
22	22	..	22	14	14	..	..	..
22	22	..	22	15	15	..	..	..
36	45	34	12	37	36	32	78	21
33	44	35	12	35	33	34	73	22
31	46	35	11	37	36	35	79	20
28	42	28	11	35	37	30	72	20
..	..	..	..	26	..	27	..	18
..	..	..	..	24	..	25	..	18
..	..	..	..	39	..	41	..	20
..	..	..	..	30	..	31	..	18
61	61	..	..	21	37	21	..	11
57	57	..	..	30	26	31	..	10
49	49	..	..	20	46	20	..	11
54	54	..	..	18	37	17	..	19

Table 32

## 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
Austria	2019	33	37	35	..	26	11	2
	2020	31	33	35	..	24	11	2
	2021	29	33	33	..	23	11	6
	2022	28	37	30	..	23	11	7
Belarus	2019	45	46	41	..	18	13	..
	2020	39	44	47	3	20	13	..
	2021	42	40	44	56	17	12	..
	2022	39	37	44	67	17	12	..
Belgium	2019	45	49	10	84	29	10	41
	2020	40	50	11	66	31	10	41
	2021	43	44	11	98	28	10	34
	2022	41	43	13	103	27	11	3
Bosnia and Herzegovina	2019	45	59	31	..	33	16	..
	2020	43	64	24	..	34	15	..
	2021	46	60	34	..	32	15	..
	2022	40	59	24	..	33	13	..
Bulgaria	2019	44	60	11	94	21	15	..
	2020	42	53	11	95	24	15	..
	2021	48	68	17	94	23	13	..
	2022	48	75	13	94	24	14	..
Croatia	2019	31	33	31	..	26	11	105
	2020	33	42	30	..	25	10	107
	2021	36	42	38	..	24	12	102
	2022	33	46	29	..	25	8	83
Czechia	2019	45	44	16	80	24	13	..
	2020	43	41	17	80	24	12	..
	2021	46	46	18	82	20	12	..
	2022	46	46	15	83	22	12	..
Denmark	2019	22	18	27	..	30	10	..
	2020	22	17	27	..	30	10	..
	2021	23	24	26	..	26	8	..
	2022	22	21	26	..	31	7	..
Estonia	2019	32	34	36	..	25	7	..
	2020	25	26	43	..	30	13	..
	2021	34	41	44	..	26	10	..
	2022	40	51	33	..	24	12	..
Faeroe Islands	2019	34	34	31	..	42	..	..
	2020	28	25	32	..	38	7	..
	2021	29	27	30	..	44	8	1
	2022	24	17	38	..	46	7	1
Finland	2019	45	33	45	98	30	8	..
	2020	46	29	57	95	36	8	..
	2021	46	33	57	96	30	8	..
	2022	40	29	49	104	24	7	15
France	2019	48	34	27	72	24	13	57
	2020	44	31	30	66	26	13	44
	2021	45	32	28	71	23	12	21
	2022	36	38	22	55	21	13	6
Germany	2019	30	38	27	90	24	10	18
	2020	28	35	27	91	24	11	34
	2021	28	38	26	97	20	10	30
	2022	26	38	25	94	22	10	28
Gibraltar	2019	50	50	..	..	..	..	11
	2020	49	49	..	..	..	..	11
	2021	51	51	..	..	..	..	11
	2022	48	48	..	..	..	..	3

Table 32

## 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
41	47	14	..	32	33	35	..	21
40	46	12	..	31	27	36	..	19
24	45	11	11	31	28	34	..	22
23	53	7	11	29	31	31	..	23
50	53	40	14	45	46	41	..	16
46	49	46	13	38	43	47	3	17
43	45	42	12	41	40	44	56	15
40	41	42	19	39	36	44	67	12
25	65	..	10	52	45	10	84	29
23	64	..	10	46	46	11	66	31
23	64	..	10	52	38	11	98	28
21	55	..	11	51	39	13	103	26
66	66	..	..	44	59	31	..	30
57	57	..	..	43	64	24	..	29
61	61	..	..	46	60	34	..	27
64	64	..	..	40	59	24	..	24
23	49	..	..	45	61	11	94	18
23	52	..	..	42	54	11	95	19
28	59	..	..	48	69	17	94	17
21	42	..	4	49	77	13	94	17
26	26	25	..	31	34	31	..	25
28	28	28	..	33	44	30	..	24
28	28	28	..	36	44	38	..	23
23	23	12	..	33	49	29	..	22
52	53	36	..	44	43	14	80	14
57	58	40	..	42	39	15	80	14
59	60	43	..	45	44	16	82	13
47	47	37	..	46	46	13	83	14
22	45	..	10	23	16	27	..	30
20	45	..	10	22	15	27	..	30
17	46	..	8	24	22	26	..	26
13	47	..	7	25	19	26	..	31
45	45	..	23	31	34	34	..	20
87	88	..	23	25	25	37	..	23
84	85	..	23	33	40	40	..	17
60	63	..	17	39	51	33	..	17
..	..	..	..	34	34	31	..	42
..	..	..	..	28	25	32	..	37
..	..	..	..	29	27	30	..	43
..	..	..	..	24	17	38	..	45
50	54	42	8	44	27	45	98	30
46	49	61	8	46	23	57	95	36
48	53	68	8	46	26	56	96	30
39	47	59	7	40	23	48	104	24
34	52	35	14	48	30	27	72	21
32	49	35	14	45	27	29	66	22
33	58	33	13	45	26	28	71	19
37	67	29	14	36	32	22	55	17
55	55	32	58	29	36	27	90	18
54	54	27	77	27	33	27	91	18
55	55	32	83	27	36	26	97	15
48	48	33	72	25	37	24	94	16
..	..	..	..	50	50	..	..	11
..	..	..	..	49	49	..	..	11
..	..	..	..	51	51	..	..	11
..	..	..	..	48	48	..	..	3

Table 32

## 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
Greece	2019	27	35	14	..	23	18	..
	2020	26	36	11	..	26	15	..
	2021	28	39	20	..	26	14	..
	2022	25	34	13	..	26	15	..
Guernsey	2019	14	14	..	..	..	4	..
	2020	2	2	..	..	..	13	..
	2021	2	2	..	..	..	13	..
	2022	3	2	..	..	..	13	..
Hungary	2019	39	29	43	92	26	11	36
	2020	37	29	48	91	23	12	45
	2021	35	28	40	90	23	13	45
	2022	31	27	34	89	21	11	22
Iceland	2019	75	0	73	..	31	..	91
	2020	73	0	71	..	42	..	90
	2021	75	0	75	..	39	..	88
	2022	76	0	76	..	36	..	89
Ireland	2019	32	35	24	..	28	7	..
	2020	33	35	26	..	31	7	..
	2021	33	39	22	..	26	7	..
	2022	34	41	20	..	28	7	..
Isle of Man	2019	36	36	30	..	..	..	..
	2020	34	34	33	..	..	..	..
	2021	22	22	38	..	..	..	..
	2022	36	36	21	..	..	..	..
Italy	2019	29	36	24	..	22	13	72
	2020	28	34	25	..	20	13	70
	2021	28	36	24	..	21	13	70
	2022	27	38	15	..	20	13	70
Jersey	2019	7	7	..	..	..	..	..
	2020	7	7	..	..	..	..	..
	2021	5	5	..	..	..	..	..
	2022	7	7	..	..	..	..	..
Kosovo	2019	51	54	28	..	31	12	..
	2020	53	56	27	..	31	14	..
	2021	54	57	31	..	43	13	..
	2022	52	56	27	..	30	11	..
Latvia	2019	25	38	15	..	23	11	..
	2020	22	26	19	..	26	11	..
	2021	23	27	19	..	21	11	..
	2022	19	19	20	..	26	4	..
Liechtenstein	2019	44	24	85	..	..	19	..
	2020	41	16	83	..	..	19	..
	2021	42	27	84	..	..	19	..
	2022	36	29	64	..	..	21	..
Lithuania	2019	13	8	12	..	32	10	..
	2020	18	15	14	..	33	9	..
	2021	16	14	14	..	23	9	..
	2022	13	11	13	..	18	7	..
Luxembourg	2019	12	42	8	..	24	9	..
	2020	14	52	9	..	26	10	..
	2021	13	54	9	..	26	7	..
	2022	13	41	10	..	22	10	..
Malta	2019	31	36	..	..	7	14	..
	2020	31	37	..	..	7	14	..
	2021	32	38	..	..	7	14	..
	2022	36	46	..	..	7	15	..

Table 32

## 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	50	..	..	26	34	14	..	21
55	55	..	..	26	34	11	..	21
56	56	..	..	28	38	20	..	20
59	59	..	..	24	32	13	..	20
..	..	..	..	14	14	..	..	4
..	..	..	..	2	2	..	..	13
..	..	..	..	2	2	..	..	13
..	..	..	..	3	2	..	..	13
21	42	..	13	41	28	43	92	15
19	42	..	13	39	28	48	91	14
18	39	..	14	38	28	40	90	15
14	29	..	11	35	27	34	89	13
..	..	..	..	75	0	73	..	91
..	..	..	..	73	0	71	..	90
..	..	..	..	75	0	75	..	87
..	..	..	..	76	0	76	..	89
55	65	..	12	31	33	24	..	28
52	65	..	10	32	33	26	..	31
47	64	..	10	32	37	22	..	26
44	64	..	10	34	40	20	..	28
49	49	..	..	36	36	30	..	..
49	49	..	..	34	34	33	..	..
48	48	..	..	21	21	38	..	..
49	49	..	..	35	35	21	..	..
47	47	53	25	28	35	24	..	18
45	45	59	29	27	33	25	..	17
28	46	37	11	28	34	24	..	20
27	47	27	12	27	36	15	..	19
22	22	..	..	0	0	..	..	..
22	22	..	..	0	0	..	..	..
17	17	..	..	0	0	..	..	..
21	21	..	..	0	0	..	..	..
8	..	..	8	51	54	28	..	26
..	..	..	..	53	56	27	..	27
..	..	..	..	54	57	31	..	34
..	..	..	..	52	56	27	..	28
63	71	15	17	25	37	15	..	22
54	62	16	15	22	25	19	..	26
51	62	14	13	22	26	19	..	21
16	54	15	5	19	18	20	..	22
..	..	..	..	44	24	85	..	19
..	..	..	..	41	16	83	..	19
..	..	..	..	42	27	84	..	19
..	..	..	..	36	29	64	..	21
33	27	..	..	12	4	12	..	29
33	27	..	..	17	14	14	..	27
28	23	..	..	15	12	14	..	19
29	29	..	..	12	8	13	..	14
15	32	28	9	12	48	8	..	24
15	37	26	10	14	59	9	..	26
11	33	26	7	14	64	9	..	26
12	20	53	10	13	55	10	..	22
14	16	..	14	36	36	..	..	..
14	15	..	14	37	37	..	..	..
14	18	..	14	38	38	..	..	..
15	30	..	15	46	46	..	..	..

Table 32

## 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
Montenegro	2019	39	76	28	..	28	11	..
	2020	37	82	24	..	31	10	..
	2021	41	73	33	..	31	11	..
	2022	36	79	24	..	31	11	..
Netherlands (Kingd. of the)	2019	38	47	23	87	29	9	15
	2020	33	45	14	91	26	9	14
	2021	29	41	27	85	27	9	15
	2022	26	37	15	93	28	10	13
North Macedonia	2019	36	47	20	..	32	11	..
	2020	33	40	21	..	36	9	..
	2021	30	34	24	..	32	13	..
	2022	31	38	22	..	33	7	..
Norway	2019	42	32	44	..	22	1	..
	2020	46	29	48	..	28	8	0
	2021	45	17	48	..	27	7	0
	2022	41	30	43	..	33	6	..
Poland	2019	43	49	13	..	30	5	74
	2020	37	43	14	..	29	6	70
	2021	39	49	15	..	27	6	..
	2022	37	51	14	..	28	8	..
Portugal	2019	28	39	16	..	30	15	84
	2020	28	35	21	..	27	16	85
	2021	27	36	21	..	28	13	70
	2022	24	42	12	..	27	13	76
Republic of Moldova	2019	22	22	46	..	14	7	..
	2020	23	23	33	..	14	11	..
	2021	24	26	48	..	13	10	..
	2022	18	18	29	..	16	10	..
Romania	2019	33	32	27	91	25	15	..
	2020	31	28	27	93	26	14	..
	2021	36	40	30	91	25	14	..
	2022	33	38	25	90	26	13	..
Russian Federation	2019	42	38	43	79	6	11	61
	2020	41	34	46	81	15	16	59
	2021	44	38	47	84	19	15	61
	2022	43	38	44	84	29	16	63
Serbia	2019	54	67	38	..	26	14	..
	2020	54	69	36	..	28	13	..
	2021	55	64	44	..	31	13	..
	2022	49	61	34	..	27	8	..
Slovakia	2019	42	34	21	90	17	11	16
	2020	43	34	22	89	11	13	22
	2021	46	43	21	90	14	13	42
	2022	41	30	18	91	11	13	34
Slovenia	2019	48	40	40	97	21	12	..
	2020	50	39	44	105	22	11	..
	2021	44	34	42	95	19	11	..
	2022	37	29	29	93	20	12	..
Spain	2019	29	29	15	94	25	17	31
	2020	28	26	19	94	24	20	36
	2021	28	27	19	91	25	19	58
	2022	27	33	13	94	24	15	59
Sweden	2019	45	22	45	88	26	10	..
	2020	43	18	50	72	31	10	..
	2021	44	24	51	88	26	10	..
	2022	41	20	49	86	27	20	..

Table 32

## 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
..	..	..	..	39	76	28	..	28
..	..	..	..	37	82	24	..	31
..	..	..	..	41	73	33	..	31
..	..	..	..	36	79	24	..	31
26	44	..	10	44	48	23	87	25
24	45	..	10	38	44	14	91	22
22	46	..	10	34	40	27	85	21
19	38	..	11	31	36	15	93	22
..	..	..	..	36	47	20	..	23
..	..	..	..	33	40	21	..	23
..	..	..	..	30	34	24	..	21
..	..	..	..	31	38	22	..	13
46	49	..	1	42	14	44	..	21
36	37	..	8	46	18	48	..	28
22	18	..	7	45	16	48	..	26
29	34	..	6	42	23	43	..	33
42	60	71	6	43	48	13	..	30
31	62	63	6	38	41	14	..	29
21	55	41	6	43	49	15	..	27
16	48	25	8	45	52	14	..	28
40	49	33	13	26	36	16	..	29
39	48	33	16	26	31	21	..	27
35	45	26	14	26	32	21	..	26
28	43	19	11	24	42	12	..	25
7	6	..	13	27	27	46	..	13
7	5	..	14	28	29	33	..	14
8	6	..	12	31	32	48	..	13
9	5	..	14	22	23	29	..	14
32	38	37	10	33	31	27	91	23
33	41	35	8	31	24	27	93	25
36	45	41	13	36	38	30	91	23
38	55	27	9	32	33	25	90	24
34	34	29	..	43	38	43	79	12
32	32	32	..	42	35	46	81	17
36	36	32	..	44	38	47	84	18
36	36	30	..	44	38	44	84	24
38	38	..	..	54	68	38	..	25
37	37	..	..	55	70	36	..	28
40	40	..	..	55	65	44	..	31
36	36	..	7	50	62	34	..	26
29	38	42	11	44	33	20	90	11
30	37	44	14	45	33	21	89	13
32	41	45	15	48	44	20	90	13
30	38	35	13	43	27	18	91	13
20	67	20	12	52	39	41	97	15
18	68	20	11	55	39	46	105	15
17	62	21	11	49	33	44	95	13
15	59	16	12	42	28	30	93	15
67	71	28	29	26	23	15	94	23
62	66	30	21	26	19	19	94	23
60	68	27	17	26	20	18	91	23
36	49	27	14	26	30	12	94	20
56	57	3	..	44	15	45	88	25
54	54	..	..	42	11	50	72	29
54	54	..	..	43	17	51	88	24
32	28	..	..	42	16	49	86	25

Table 32

## 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
Switzerland	2019	37	46	30	90	22	10	..
	2020	36	46	30	93	19	10	..
	2021	32	45	29	75	19	9	..
	2022	30	43	23	93	19	9	..
Ukraine	2019	34	23	14	68	29	17	..
	2020	29	21	18	63	27	9	..
	2021	32	21	19	71	29	12	..
	2022	31	24	26	51	19	8	..
United Kingdom	2019	35	40	18	69	31	9	32
	2020	34	37	20	62	35	9	26
	2021	34	40	17	67	29	9	40
	2022	35	39	18	93	32	9	86
Latin America & Carib.	2019	40	39	43	74	37	18	47
	2020	38	36	42	75	36	18	20
	2021	39	40	40	78	37	17	24
	2022	37	35	45	71	37	18	14
Anguilla	2019	45	46	..	..	..	20	..
	2020	40	42	..	..	..	20	..
	2021	44	45	..	..	..	20	..
	2022	47	49	..	..	..	20	..
Antigua and Barbuda	2019	46	50	..	..	..	14	..
	2020	43	48	..	..	..	20	..
	2021	27	30	..	..	..	13	..
	2022	29	31	..	..	..	13	..
Argentina	2019	39	39	37	52	35	21	..
	2020	36	39	24	70	41	20	..
	2021	38	42	20	70	45	24	..
	2022	36	38	25	52	48	31	..
Aruba	2019	38	35	..	..	63	15	..
	2020	35	33	..	..	63	17	..
	2021	37	34	..	..	65	17	..
	2022	37	34	..	..	66	17	..
Bahamas	2019	37	38	..	..	30	12	..
	2020	34	35	..	..	30	13	..
	2021	33	33	..	..	30	10	..
	2022	36	37	..	..	30	9	..
Barbados	2019	40	44	..	..	..	15	..
	2020	37	41	..	..	..	16	..
	2021	37	43	..	..	..	14	..
	2022	37	42	..	..	..	18	..
Belize	2019	30	41	16	..	..	12	..
	2020	38	29	51	..	..	10	..
	2021	31	31	33	..	..	6	..
	2022	39	33	50	..	..	14	..
Bolivia (Plur. State of)	2019	32	28	49	..	30	18	..
	2020	31	27	44	..	27	31	..
	2021	30	27	49	..	11	23	..
	2022	31	28	43	..	38	23	..
Bonaire, St Eustatius, Saba	2019	44	59	..	..	33	15	..
	2020	44	64	..	..	26	13	..
	2021	47	68	..	..	28	17	..
	2022	48	68	..	..	28	17	..
Brazil	2019	42	41	42	93	42	17	..
	2020	40	38	41	81	38	15	..
	2021	39	48	38	84	40	14	..
	2022	37	30	44	84	39	14	..



Table 32

## 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
24	53	45	10	40	27	29	90	22
22	53	38	10	40	29	30	93	19
20	52	47	9	36	29	28	75	19
17	52	27	9	34	24	23	93	19
12	12	..	1	35	24	14	68	21
17	17	..	2	30	21	18	63	12
17	17	..	1	33	21	19	71	15
12	12	..	1	32	25	26	51	10
26	40	42	14	38	41	16	69	27
26	39	44	14	37	36	17	62	31
25	39	39	12	37	41	15	67	26
25	38	41	13	38	39	16	93	29
<b>44</b>	<b>47</b>	<b>45</b>	<b>25</b>	<b>40</b>	<b>37</b>	<b>43</b>	<b>74</b>	<b>33</b>
<b>42</b>	<b>47</b>	<b>40</b>	<b>20</b>	<b>37</b>	<b>34</b>	<b>42</b>	<b>75</b>	<b>30</b>
<b>39</b>	<b>46</b>	<b>39</b>	<b>18</b>	<b>39</b>	<b>39</b>	<b>40</b>	<b>78</b>	<b>30</b>
<b>35</b>	<b>40</b>	<b>47</b>	<b>23</b>	<b>37</b>	<b>33</b>	<b>44</b>	<b>71</b>	<b>25</b>
..	..	..	..	45	46	..	..	20
..	..	..	..	40	42	..	..	20
..	..	..	..	44	45	..	..	20
..	..	..	..	47	49	..	..	20
11	11	..	..	46	50	..	..	14
11	11	..	..	43	48	..	..	14
11	11	..	..	28	30	..	..	11
11	11	..	..	29	32	..	..	11
47	47	26	..	38	38	37	52	32
44	44	24	..	36	38	24	70	36
44	44	24	..	37	42	20	70	40
35	36	2	..	36	39	25	52	44
..	..	..	..	38	35	..	..	53
..	..	..	..	35	33	..	..	54
..	..	..	..	37	34	..	..	56
..	..	..	..	37	34	..	..	56
27	27	..	..	38	38	..	..	14
29	29	..	..	35	35	..	..	14
27	27	..	..	34	34	..	..	10
26	26	..	..	37	37	..	..	10
20	20	..	..	41	45	..	..	15
19	19	..	..	37	41	..	..	16
19	19	..	..	37	44	..	..	14
20	20	..	..	38	43	..	..	18
100	100	..	..	14	13	16	..	12
81	81	..	..	29	8	51	..	10
86	86	..	..	20	9	33	..	6
93	93	..	..	29	10	50	..	14
15	15	50	..	33	29	49	..	20
17	17	41	..	32	28	44	..	30
49	49	45	..	29	25	49	..	18
37	37	46	..	31	27	43	..	29
..	..	..	..	44	59	..	..	26
..	..	..	..	44	64	..	..	21
..	..	..	..	47	68	..	..	24
..	..	..	..	48	68	..	..	24
44	46	44	15	41	37	42	93	37
41	47	39	12	39	30	42	81	35
37	48	35	12	40	48	38	84	36
33	46	46	12	39	17	44	84	35

Table 32

## 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
British Virgin Islands	2019	38	38	..	..	18	18	..
	2020	36	36	..	..	23	16	..
	2021	37	37	..	..	29	17	..
	2022	37	38	..	..	29	17	..
Cayman Islands	2019	49	49	..	..	..	..	..
	2020	47	47	..	..	..	..	..
	2021	48	48	..	..	..	..	..
	2022	48	48	..	..	..	..	..
Chile	2019	35	35	40	..	28	27	58
	2020	32	31	37	..	28	28	62
	2021	30	32	32	..	28	21	72
	2022	28	29	31	..	27	21	64
Colombia	2019	48	43	52	..	39	10	..
	2020	54	76	47	..	6	10	..
	2021	58	60	59	..	39	8	..
	2022	55	59	56	..	46	10	..
Costa Rica	2019	36	6	38	..	50	15	66
	2020	37	4	41	..	42	12	74
	2021	40	4	44	..	46	13	70
	2022	40	1	46	..	40	13	70
Cuba	2019	36	37	22	..	18	18	..
	2020	33	33	20	..	13	13	..
	2021	30	31	21	..	13	13	..
	2022	29	30	21	..	27	10	..
Curaçao	2019	43	43	..	..	51	24	..
	2020	41	41	..	..	47	24	..
	2021	42	41	..	..	48	24	..
	2022	43	43	..	..	46	24	..
Dominica	2019	37	38	35	..	28	6	..
	2020	37	38	33	..	28	6	..
	2021	38	39	34	..	57	13	..
	2022	41	42	39	..	60	14	..
Dominican Republic	2019	40	43	24	..	48	16	..
	2020	39	43	29	..	33	14	..
	2021	43	47	34	..	38	17	..
	2022	43	49	24	..	32	18	..
Ecuador	2019	46	29	56	..	46	16	..
	2020	44	26	55	..	42	16	..
	2021	45	25	58	..	33	16	..
	2022	46	32	55	..	14	16	..
El Salvador	2019	30	27	30	..	..	13	77
	2020	30	19	41	..	4	22	81
	2021	30	20	36	..	28	23	81
	2022	30	20	45	..	29	23	88
Falkland Is. (Malvinas)	2019	24	22	..	..	30	16	..
	2020	24	24	..	..	25	16	..
	2021	30	32	..	..	26	16	..
	2022	31	32	..	..	27	16	..
Grenada	2019	49	51	..	..	32	13	..
	2020	46	49	..	..	32	13	..
	2021	44	46	..	..	32	14	..
	2022	45	48	..	..	32	14	..
Guatemala	2019	38	43	33	..	23	25	73
	2020	33	25	43	..	34	27	72
	2021	36	33	41	..	35	28	61
	2022	36	25	52	..	34	26	83

Table 32

## 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
..	..	..	..	38	38	..	..	18
..	..	..	..	36	36	..	..	19
..	..	..	..	37	37	..	..	22
..	..	..	..	37	38	..	..	22
..	..	..	..	49	49	..	..	..
..	..	..	..	47	47	..	..	..
..	..	..	..	48	48	..	..	..
..	..	..	..	48	48	..	..	..
22	22	40	2	37	38	40	..	28
17	17	13	6	35	36	37	..	28
17	16	38	17	32	38	32	..	24
16	16	43	17	29	34	31	..	23
77	81	19	9	46	32	52	..	13
76	81	17	5	52	73	48	..	10
78	83	25	11	56	48	60	..	29
81	86	23	10	53	46	57	..	11
24	30	..	14	37	2	38	..	56
21	27	..	12	38	1	41	..	55
21	27	..	12	40	0	44	..	55
11	9	..	12	41	0	46	..	52
21	21	..	..	37	38	22	..	18
18	18	..	..	34	35	20	..	13
17	17	..	..	32	32	21	..	13
10	10	..	..	33	34	21	..	11
9	9	..	..	54	58	..	..	46
5	5	..	..	52	58	..	..	42
3	3	..	..	54	59	..	..	43
0	0	..	..	56	63	..	..	41
34	34	..	..	39	41	35	..	16
34	34	..	..	39	41	33	..	16
34	34	..	..	41	43	34	..	32
35	35	..	..	45	47	39	..	34
27	28	..	15	44	48	24	..	39
20	21	..	15	42	47	29	..	27
23	23	..	20	46	51	34	..	30
26	25	..	34	45	53	24	..	24
50	43	83	..	45	20	54	..	29
48	42	76	..	43	17	54	..	27
52	45	86	..	44	13	56	..	24
51	45	82	..	45	23	53	..	15
8	1	48	15	36	37	30	..	44
10	1	48	18	37	26	41	..	49
11	1	51	19	36	28	36	..	50
12	1	52	20	36	25	44	..	53
..	..	..	..	24	22	..	..	29
..	..	..	..	24	24	..	..	24
..	..	..	..	30	32	..	..	25
..	..	..	..	31	32	..	..	27
22	96	..	13	50	50	..	..	..
21	89	..	14	48	48	..	..	..
22	89	..	14	46	46	..	..	..
21	86	..	14	47	47	..	..	..
23	23	61	..	41	51	33	..	34
16	15	74	..	36	29	43	..	39
19	19	74	..	39	38	41	..	37
14	14	74	..	41	30	52	..	38

Table 32

## 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
Guyana	2019	39	39	..	..	50	16	..
	2020	38	39	..	..	50	18	..
	2021	36	37	..	..	50	16	..
	2022	35	36	..	..	50	16	..
Haiti	2019	26	26	26	..	..	15	..
	2020	25	26	21	..	..	15	..
	2021	25	26	20	..	..	15	..
	2022	25	24	27	..	..	15	..
Honduras	2019	42	51	38	..	40	24	87
	2020	38	45	37	..	34	22	90
	2021	41	43	50	..	38	22	90
	2022	40	43	48	..	33	20	87
Jamaica	2019	44	47	61	..	30	18	..
	2020	49	52	53	..	31	25	..
	2021	46	49	55	..	30	26	..
	2022	52	55	45	..	30	42	..
Mexico	2019	41	48	21	74	29	13	44
	2020	37	44	23	75	32	16	13
	2021	41	47	30	79	32	18	15
	2022	34	42	32	77	31	21	12
Montserrat	2019	29	30	..	..	..	14	..
	2020	28	29	..	..	..	21	..
	2021	28	33	..	..	..	4	..
	2022	28	34	..	..	..	2	..
Nicaragua	2019	32	29	16	..	45	18	58
	2020	27	19	42	..	34	18	57
	2021	30	23	43	..	40	19	55
	2022	31	25	47	..	34	18	47
Panama	2019	38	46	33	..	31	19	..
	2020	37	30	47	..	25	19	..
	2021	40	33	54	..	22	16	..
	2022	38	34	51	..	20	19	..
Paraguay	2019	64	46	64	..	..	..	..
	2020	60	44	60	..	..	..	..
	2021	53	45	53	..	..	..	..
	2022	57	30	57	..	..	..	..
Peru	2019	43	29	67	..	51	29	..
	2020	40	25	64	..	51	30	..
	2021	42	28	66	..	51	30	..
	2022	43	33	62	..	41	30	..
Puerto Rico	2019	35	36	5	..	18	17	..
	2020	35	36	6	..	16	18	..
	2021	36	37	5	..	19	19	..
	2022	34	36	5	..	18	17	..
Saint Barthélemy	2019	39	39	..	..	..	20	..
	2020	40	40	..	..	..	11	..
	2021	44	44	..	..	..	11	..
	2022	47	47	..	..	..	13	..
Saint Martin (French Part)	2019	34	34	..	..	..	9	..
	2020	34	35	..	..	..	14	..
	2021	35	36	..	..	..	15	..
	2022	36	37	..	..	..	16	..
Sint Maarten (Dutch part)	2019	35	35	..	..	..	..	..
	2020	30	30	..	..	..	..	..
	2021	33	33	..	..	..	..	..
	2022	33	33	..	..	..	..	..

Table 32

## 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
8	8	..	..	43	44	..	..	17
7	7	..	..	43	44	..	..	18
6	6	..	..	40	41	..	..	17
5	5	..	..	39	40	..	..	17
2	2	..	..	36	39	26	..	15
2	2	..	..	35	39	21	..	15
2	2	..	..	35	39	20	..	15
2	2	..	..	34	36	27	..	15
50	55	9	12	40	49	38	..	32
35	39	10	12	39	49	37	..	30
44	49	10	12	41	39	50	..	31
45	49	10	12	39	39	48	..	28
36	39	..	31	50	51	61	..	..
22	18	..	34	68	72	53	..	..
24	20	..	33	63	66	55	..	..
25	19	..	40	72	76	45	..	..
58	80	40	29	39	44	20	74	27
64	91	41	28	34	39	23	75	18
52	69	40	28	39	45	29	79	21
43	46	46	41	32	41	32	77	10
..	..	..	..	29	30	..	..	14
..	..	..	..	28	29	..	..	21
..	..	..	..	28	33	..	..	4
..	..	..	..	28	34	..	..	2
46	46	..	..	30	25	17	..	49
41	41	..	..	25	14	42	..	43
49	49	..	..	27	16	43	..	45
49	49	..	..	28	19	47	..	39
60	67	19	..	35	41	33	..	25
71	78	29	..	33	20	48	..	21
70	72	53	..	36	21	54	..	18
65	68	52	27	35	23	51	..	19
..	..	..	..	64	46	64	..	..
..	..	..	..	60	44	60	..	..
..	..	..	..	53	45	53	..	..
..	..	..	..	57	30	57	..	..
19	16	60	15	46	31	67	..	42
17	13	54	17	42	27	65	..	43
18	14	55	16	45	30	66	..	43
14	11	51	15	46	37	62	..	38
44	44	..	..	35	36	5	..	17
44	44	..	..	35	36	6	..	17
44	44	..	..	36	37	5	..	19
45	45	..	..	34	35	5	..	18
..	..	..	..	39	39	..	..	20
..	..	..	..	40	40	..	..	11
..	..	..	..	44	44	..	..	11
..	..	..	..	47	47	..	..	13
..	..	..	..	34	34	..	..	9
..	..	..	..	34	35	..	..	14
..	..	..	..	35	36	..	..	15
..	..	..	..	36	37	..	..	16
..	..	..	..	35	35	..	..	..
..	..	..	..	30	30	..	..	..
..	..	..	..	33	33	..	..	..
..	..	..	..	33	33	..	..	..

Table 32

## 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
St. Kitts-Nevis	2019	40	41	..	..	29	18	..
	2020	37	38	..	..	29	18	..
	2021	36	37	..	..	29	18	..
	2022	37	38	..	..	29	18	..
St. Lucia	2019	50	52	..	..	..	20	..
	2020	46	47	..	..	..	19	..
	2021	48	50	..	..	..	18	..
	2022	50	52	..	..	..	18	..
St. Vincent-Grenadines	2019	35	37	44	..	..	7	..
	2020	31	32	43	..	..	10	..
	2021	29	31	38	..	..	7	..
	2022	30	31	42	..	..	8	..
Suriname	2019	42	33	60	..	..	16	..
	2020	40	39	43	..	..	16	..
	2021	34	24	54	..	..	16	..
	2022	41	34	58	..	..	13	..
Trinidad and Tobago	2019	50	50	..	..	67	18	..
	2020	42	42	..	..	67	13	..
	2021	50	50	..	..	67	15	..
	2022	51	51	..	..	68	17	..
Turks and Caicos Islands	2019	33	33	..	..	..	18	..
	2020	32	32	..	..	..	18	..
	2021	33	33	..	..	..	18	..
	2022	33	33	..	..	..	14	..
United States Virgin Is.	2019	21	22	..	..	31	14	..
	2020	22	23	..	..	0	14	..
	2021	24	24	..	..	0	14	..
	2022	23	24	..	..	0	15	..
Uruguay	2019	37	20	60	..	36	19	..
	2020	32	25	30	..	41	20	..
	2021	37	37	39	..	38	21	..
	2022	34	27	42	..	36	20	..
Venezuela (Bolivar. Rep.)	2019	27	11	47	..	14	8	0
	2020	28	10	51	..	5	8	0
	2021	27	10	45	..	4	8	0
	2022	31	14	50	..	4	8	0
<b>Northern America</b>	<b>2019</b>	<b>45</b>	<b>42</b>	<b>43</b>	<b>97</b>	<b>32</b>	<b>18</b>	<b>67</b>
	<b>2020</b>	<b>43</b>	<b>40</b>	<b>43</b>	<b>96</b>	<b>33</b>	<b>18</b>	<b>68</b>
	<b>2021</b>	<b>43</b>	<b>41</b>	<b>41</b>	<b>96</b>	<b>33</b>	<b>18</b>	<b>67</b>
	<b>2022</b>	<b>43</b>	<b>42</b>	<b>41</b>	<b>96</b>	<b>35</b>	<b>19</b>	<b>67</b>
Bermuda	2019	40	41	..	..	..	6	..
	2020	38	39	..	..	..	6	..
	2021	38	39	..	..	..	6	..
	2022	39	40	..	..	..	6	..
Canada	2019	50	40	53	87	28	13	24
	2020	49	37	54	90	30	13	32
	2021	48	37	53	85	30	13	32
	2022	48	37	54	86	28	13	32
Greenland	2019	32	15	51	..	..	..	..
	2020	35	16	54	..	..	..	..
	2021	35	16	54	..	..	..	..
	2022	37	18	58	..	..	..	..
St. Pierre-Miquelon	2019	23	23	..	..	..	..	..
	2020	22	22	..	..	..	..	..
	2021	22	22	..	..	..	..	..
	2022	22	22	..	..	..	..	..

Table 32

## 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
3	3	..	..	42	44	..	..	24
3	3	..	..	39	40	..	..	23
3	3	..	..	38	39	..	..	23
3	3	..	..	39	41	..	..	23
5	..	..	5	51	52	..	..	26
5	..	..	5	46	47	..	..	25
5	..	..	5	49	50	..	..	24
5	..	..	5	51	52	..	..	25
23	..	..	23	35	37	44	..	5
8	..	..	8	32	32	43	..	10
8	..	..	8	30	31	38	..	6
8	..	..	8	30	31	42	..	8
61	62	60	..	20	20	..	..	16
52	68	43	..	26	26	..	..	16
55	56	54	..	12	12	..	..	16
65	82	58	14	17	17	..	..	13
9	9	..	..	51	51	..	..	18
9	9	..	..	43	43	..	..	13
9	9	..	..	52	52	..	..	16
9	9	..	..	53	53	..	..	17
..	..	..	..	33	33	..	..	18
..	..	..	..	32	32	..	..	18
..	..	..	..	33	33	..	..	18
..	..	..	..	33	33	..	..	14
13	..	..	13	22	22	..	..	17
12	..	..	12	23	23	..	..	16
11	..	..	11	24	24	..	..	19
11	..	..	11	24	24	..	..	20
41	46	..	6	37	11	60	..	34
41	46	..	7	31	18	30	..	39
41	47	..	7	37	34	39	..	36
36	42	..	8	34	22	42	..	35
18	18	..	17	28	10	47	..	7
10	10	..	17	29	10	51	..	2
10	10	..	17	27	10	45	..	2
10	10	..	17	32	14	50	..	2
<b>44</b>	<b>64</b>	<b>63</b>	<b>14</b>	<b>45</b>	<b>41</b>	<b>42</b>	<b>97</b>	<b>31</b>
<b>41</b>	<b>62</b>	<b>60</b>	<b>13</b>	<b>43</b>	<b>39</b>	<b>42</b>	<b>96</b>	<b>30</b>
<b>37</b>	<b>60</b>	<b>47</b>	<b>13</b>	<b>43</b>	<b>40</b>	<b>40</b>	<b>96</b>	<b>30</b>
<b>35</b>	<b>61</b>	<b>46</b>	<b>13</b>	<b>44</b>	<b>41</b>	<b>41</b>	<b>96</b>	<b>31</b>
20	33	..	6	41	41	..	..	..
18	27	..	6	39	39	..	..	..
18	27	..	6	40	40	..	..	..
18	27	..	6	40	40	..	..	..
56	60	64	15	49	37	53	87	26
53	59	61	15	49	33	54	90	28
47	57	47	13	48	33	54	85	27
47	60	46	13	48	32	55	86	25
..	..	..	..	35	17	51	..	..
..	..	..	..	38	19	54	..	..
..	..	..	..	38	19	54	..	..
..	..	..	..	41	21	58	..	..
..	..	..	..	23	23	..	..	..
..	..	..	..	22	22	..	..	..
..	..	..	..	22	22	..	..	..
..	..	..	..	22	22	..	..	..

Table 32

## 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
United States	2019	44	42	35	98	33	18	68
	2020	42	40	34	97	33	18	69
	2021	42	42	30	97	33	18	69
	2022	43	43	31	97	35	19	68
Oceania	2019	38	47	34	..	26	11	89
	2020	35	45	33	..	24	12	87
	2021	33	42	33	..	27	12	88
	2022	32	40	35	..	28	13	88
American Samoa	2019	43	46	..	..	..	18	..
	2020	44	47	..	..	..	16	..
	2021	42	45	..	..	..	16	..
	2022	42	45	..	..	..	16	..
Australia	2019	36	48	21	..	26	10	..
	2020	33	45	20	..	23	12	..
	2021	31	42	20	..	27	12	..
	2022	30	41	23	..	28	13	..
Cook Islands	2019	28	30	..	..	..	24	..
	2020	24	26	..	..	..	20	..
	2021	24	27	..	..	..	17	..
	2022	27	31	..	..	..	17	..
Fiji	2019	34	29	46	..	2	15	..
	2020	31	25	46	..	1	15	..
	2021	29	22	45	..	0	14	..
	2022	34	27	49	..	0	14	..
French Polynesia	2019	25	25	37	..	4	12	..
	2020	24	23	37	..	4	11	..
	2021	23	23	33	..	4	11	..
	2022	23	20	45	..	4	12	..
Guam	2019	43	45	..	..	21	20	..
	2020	42	44	..	..	21	19	..
	2021	42	45	..	..	21	18	..
	2022	37	43	..	..	21	11	..
Kiribati	2019	37	43	..	..	..	19	..
	2020	37	43	..	..	..	19	..
	2021	37	43	..	..	..	19	..
	2022	37	43	..	..	..	19	..
Marshall Islands	2019	32	33	..	..	..	11	..
	2020	32	33	..	..	..	11	..
	2021	29	30	..	..	..	11	..
	2022	33	34	..	..	..	11	..
Micronesia (Fed. States of)	2019	25	25	20	..	16	18	..
	2020	23	24	20	..	4	14	..
	2021	24	26	16	..	1	14	..
	2022	25	26	20	..	15	14	..
Nauru	2019	29	31	..	..	..	10	..
	2020	24	26	..	..	..	12	..
	2021	27	28	..	..	..	14	..
	2022	27	29	..	..	..	12	..
New Caledonia	2019	37	41	42	..	17	14	4
	2020	35	39	45	..	15	14	3
	2021	30	32	60	..	13	13	3
	2022	31	31	76	..	10	14	3
New Zealand	2019	54	45	54	..	37	13	93
	2020	52	46	51	..	38	13	90
	2021	51	44	51	..	33	12	92
	2022	50	36	53	..	33	12	92



Table 32

## 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
42	65	49	14	45	41	34	98	31
38	62	49	13	43	39	34	97	30
35	60	46	13	43	41	30	97	30
33	61	46	13	43	42	31	97	32
<b>23</b>	<b>36</b>	<b>25</b>	<b>13</b>	<b>42</b>	<b>50</b>	<b>34</b>	..	<b>24</b>
<b>22</b>	<b>34</b>	<b>44</b>	<b>12</b>	<b>39</b>	<b>47</b>	<b>33</b>	..	<b>22</b>
<b>21</b>	<b>33</b>	<b>44</b>	<b>13</b>	<b>37</b>	<b>44</b>	<b>33</b>	..	<b>24</b>
<b>20</b>	<b>33</b>	<b>30</b>	<b>13</b>	<b>36</b>	<b>42</b>	<b>35</b>	..	<b>24</b>
..	..	..	..	43	46	..	..	18
..	..	..	..	44	47	..	..	16
..	..	..	..	42	45	..	..	16
..	..	..	..	42	45	..	..	16
22	33	..	13	40	51	21	..	18
20	32	..	12	37	48	20	..	18
19	31	..	13	35	45	20	..	20
19	30	..	13	34	43	23	..	20
..	..	..	..	28	30	..	..	24
..	..	..	..	24	26	..	..	20
..	..	..	..	24	27	..	..	17
..	..	..	..	27	31	..	..	17
10	10	..	..	38	37	46	..	6
14	14	..	..	34	29	46	..	5
11	11	..	..	33	27	45	..	5
14	14	..	..	38	33	49	..	5
..	..	..	..	25	25	37	..	12
..	..	..	..	24	23	37	..	11
..	..	..	..	23	23	33	..	11
..	..	..	..	23	20	45	..	12
13	..	..	13	44	45	..	..	23
12	..	..	12	43	44	..	..	23
11	..	..	11	43	45	..	..	23
11	..	..	11	38	43	..	..	11
21	21	..	..	38	46	..	..	19
21	21	..	..	39	46	..	..	19
21	21	..	..	38	46	..	..	19
22	22	..	..	39	46	..	..	19
..	..	..	..	32	33	..	..	11
..	..	..	..	32	33	..	..	11
..	..	..	..	29	30	..	..	11
..	..	..	..	33	34	..	..	11
..	..	..	..	25	25	20	..	17
..	..	..	..	23	24	20	..	12
..	..	..	..	24	26	16	..	11
..	..	..	..	25	26	20	..	15
..	..	..	..	29	31	..	..	10
..	..	..	..	24	26	..	..	12
..	..	..	..	27	28	..	..	14
..	..	..	..	27	29	..	..	12
39	40	..	13	35	43	42	..	15
37	38	..	12	33	39	45	..	15
29	30	..	13	32	35	60	..	13
29	31	..	14	32	33	76	..	13
47	63	15	19	54	43	54	..	71
42	59	15	18	53	44	51	..	70
41	63	15	16	52	42	51	..	65
35	58	14	15	51	33	53	..	64

Table 32

## 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
Niue	2019	15	18	..	..	..	6	..
	2020	15	18	..	..	..	6	..
	2021	15	18	..	..	..	6	..
	2022	15	19	..	..	..	6	..
Northern Mariana Islands	2019	72	72	..	..	..	..	..
	2020	52	53	..	..	..	17	..
	2021	52	55	..	..	..	11	..
	2022	52	55	..	..	..	11	..
Palau	2019	26	27	..	..	..	18	..
	2020	26	27	..	..	..	18	..
	2021	27	27	..	..	..	18	..
	2022	27	27	..	..	..	18	..
Papua New Guinea	2019	39	39	42	..	..	38	22
	2020	45	47	43	..	..	40	22
	2021	48	51	44	..	..	46	22
	2022	48	54	36	..	..	43	22
Samoa	2019	35	47	40	..	4	15	..
	2020	34	51	33	..	5	14	..
	2021	33	45	44	..	2	12	..
	2022	33	53	28	..	4	12	..
Solomon Islands	2019	35	36	30	..	..	16	..
	2020	35	36	30	..	..	15	..
	2021	35	36	30	..	..	14	..
	2022	32	36	30	..	..	9	..
Tonga	2019	32	41	..	..	2	12	..
	2020	33	41	..	..	20	12	..
	2021	33	43	..	..	20	10	..
	2022	27	46	..	..	14	4	..
Tuvalu	2019	15	27	..	..	..	6	..
	2020	16	31	..	..	..	5	..
	2021	17	32	..	..	..	5	..
	2022	17	32	..	..	..	5	..
Vanuatu	2019	28	28	68	..	21	16	..
	2020	26	26	74	..	19	14	..
	2021	26	26	74	..	15	13	..
	2022	27	28	79	..	10	11	..
Wallis and Futuna Is.	2019	27	27	20	..	..	10	..
	2020	30	31	20	..	..	10	..
	2021	31	32	21	..	..	11	..
	2022	34	34	21	..	..	11	..

## 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
..	..	..	..	15	18	..	..	6
..	..	..	..	15	18	..	..	6
..	..	..	..	15	18	..	..	6
..	..	..	..	15	19	..	..	6
..	..	..	..	72	72	..	..	..
..	..	..	..	52	53	..	..	17
..	..	..	..	52	55	..	..	11
..	..	..	..	52	55	..	..	11
68	68	..	..	24	24	..	..	18
68	68	..	..	24	25	..	..	18
68	68	..	..	25	25	..	..	18
68	68	..	..	25	25	..	..	18
51	60	25	22	28	18	51	..	38
63	73	46	22	29	23	42	..	40
67	78	46	22	31	25	44	..	46
70	84	31	22	29	24	38	..	43
10	..	..	10	35	47	40	..	15
11	..	..	11	34	51	33	..	13
11	..	..	11	33	45	44	..	12
11	..	..	11	33	53	28	..	12
39	39	..	..	35	36	30	..	16
37	37	..	..	35	36	30	..	15
40	40	..	..	34	36	30	..	14
34	34	..	..	32	36	30	..	9
..	..	..	..	32	41	..	..	10
..	..	..	..	33	41	..	..	14
..	..	..	..	33	43	..	..	12
..	..	..	..	27	46	..	..	5
..	..	..	..	15	27	..	..	6
..	..	..	..	16	31	..	..	5
..	..	..	..	17	32	..	..	5
..	..	..	..	17	32	..	..	5
..	..	..	..	28	28	68	..	18
..	..	..	..	26	26	74	..	17
..	..	..	..	26	26	74	..	14
..	..	..	..	27	28	79	..	11
..	..	..	..	27	27	20	..	10
..	..	..	..	30	31	20	..	10
..	..	..	..	31	32	21	..	11
..	..	..	..	34	34	21	..	11