

Table 33

Production of electricity - by type

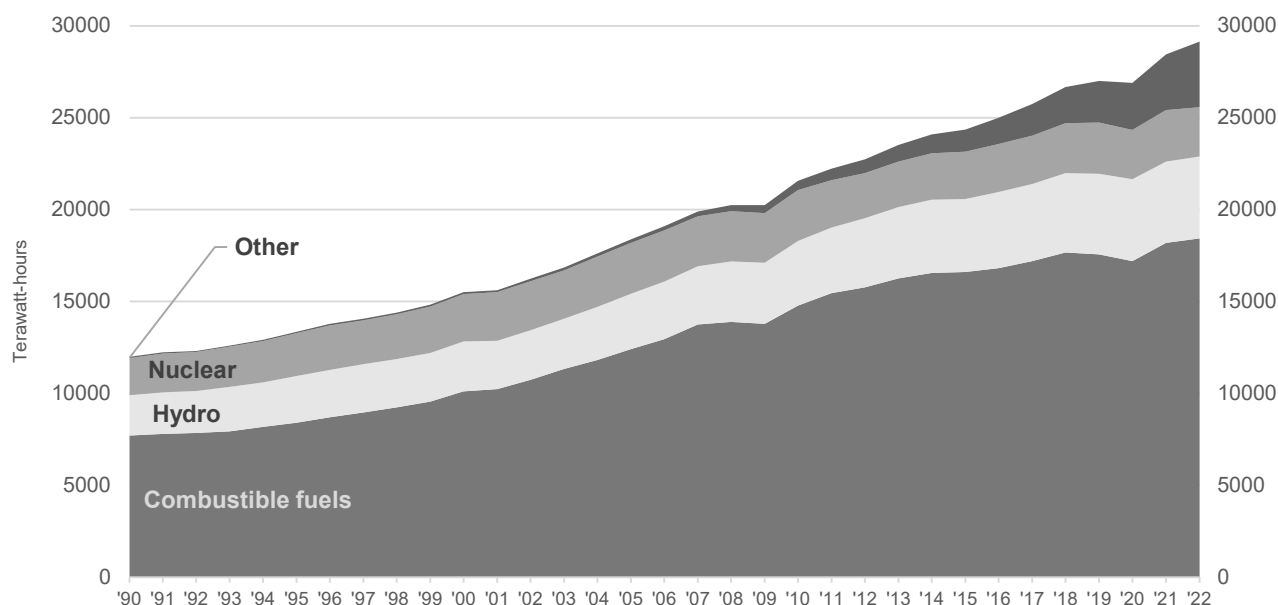
Gigawatt-hours

Table Notes

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

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 78: World electricity generation by source*, 1990-2022



**"Other" refers to wind, solar, geothermal, and other sources

Figure 79: World production of electricity by source* and region, 2022

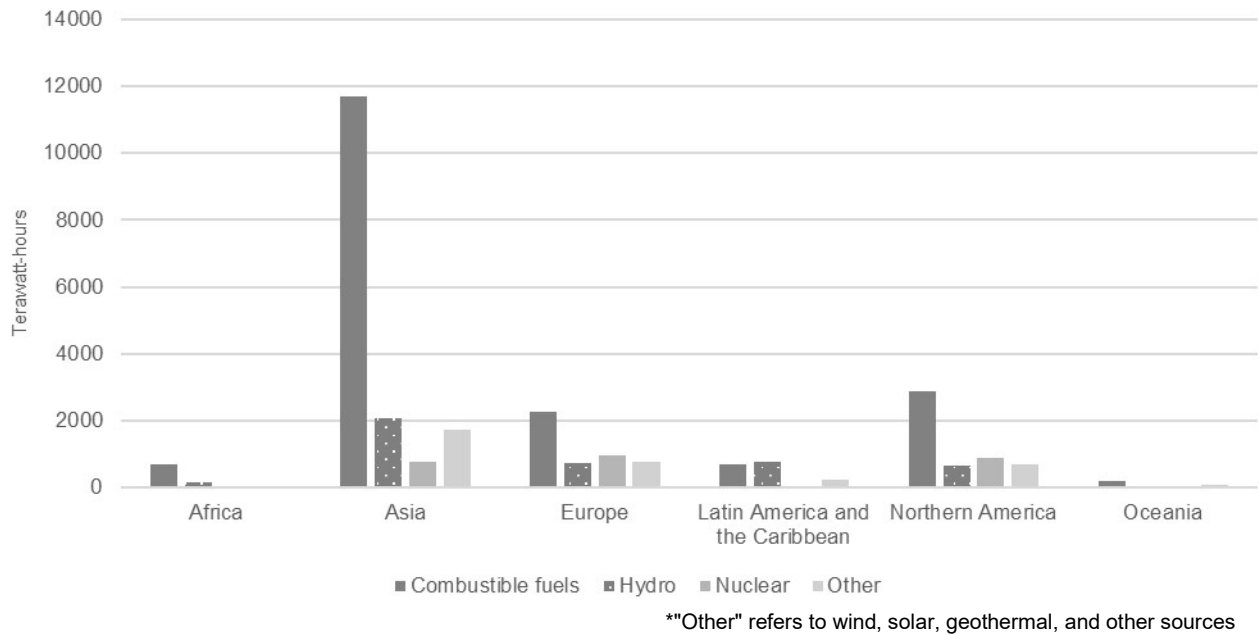


Figure 80: Major countries producing electricity from combustible fuels, 2022

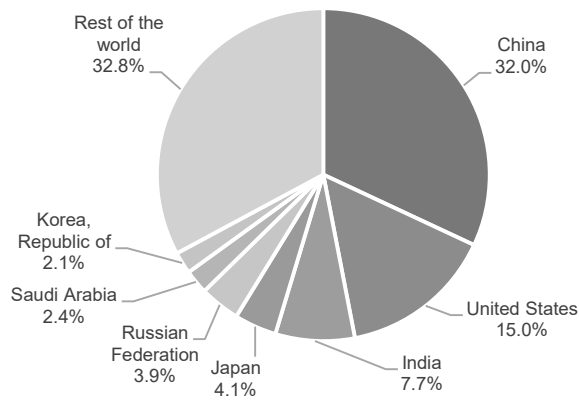


Figure 81: Major countries producing hydro electricity, 2022

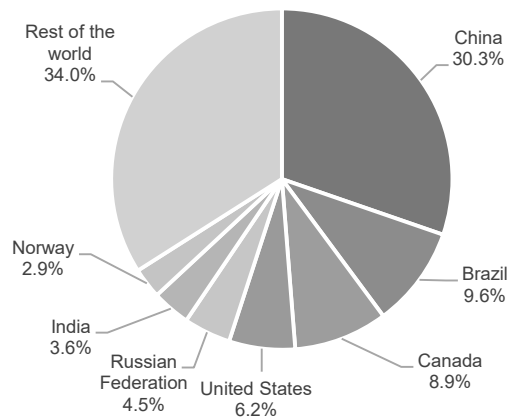


Figure 82: Major countries producing nuclear electricity, 2022

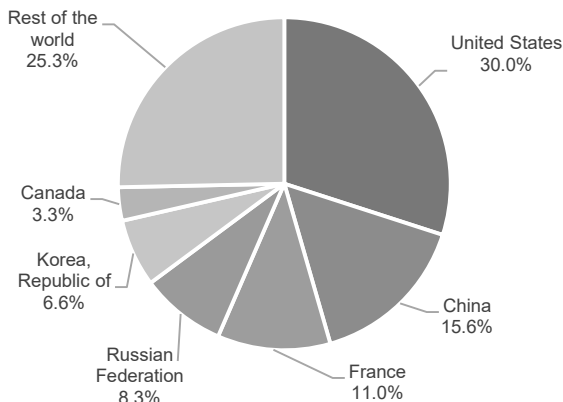


Figure 83: Major countries producing electricity from other sources, 2022

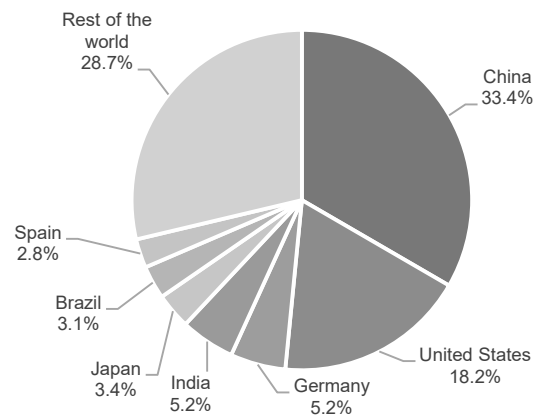


Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
World	2019	26,993,822	17,558,995	4,386,305	2,788,601	1,426,624	693,712	139,584
	2020	26,900,048	17,189,251	4,470,339	2,676,398	1,599,203	836,283	128,574
	2021	28,445,024	18,189,993	4,411,100	2,811,030	1,865,684	1,031,429	135,788
	2022	29,146,341	18,429,982	4,465,964	2,682,374	2,117,469	1,303,371	147,181
Africa	2019	863,430	670,384	144,230	13,252	18,001	10,677	6,885
	2020	851,704	649,093	152,878	9,903	18,553	14,656	6,621
	2021	890,542	673,689	158,461	12,355	22,450	16,988	6,598
	2022	912,310	686,181	167,411	9,803	24,563	17,282	7,070
Algeria	2019	81,531	80,691	152	..	10	678	..
	2020	79,155	78,432	50	..	8	665	..
	2021	85,391	84,729	9	..	11	642	..
	2022	91,231	90,550	16	..	16	649	..
Angola	2019	14,247	3,383	10,826	..	..	38	..
	2020	14,488	1,967	12,478	..	..	43	..
	2021	14,741	3,498	11,203	..	..	39	..
	2022	15,983	3,051	12,318	..	..	*613	..
Benin	2019	529	521	0	..	..	8	..
	2020	989	982	0	..	..	7	..
	2021	1,127	1,110	..	..	..	17	..
	2022	1,002	968	..	..	..	33	..
Botswana	2019	3,277	3,272	..	..	..	5	..
	2020	2,182	2,176	..	..	..	6	..
	2021	2,409	2,403	..	..	..	6	..
	2022	2,550	2,542	..	..	..	8	..
Burkina Faso	2019	*1,576	*1,388	105	..	..	82	..
	2020	*1,442	*1,273	112	..	..	57	..
	2021	1,672	*1,486	128	..	..	58	..
	2022	*1,532	*1,386	82	..	..	64	..
Burundi	2019	269	129	132	..	..	8	..
	2020	276	92	176	..	..	8	..
	2021	262	124	131	..	..	*8	..
	2022	305	125	167	..	..	13	..
Cabo Verde	2019	512	414	..	..	82	16	..
	2020	454	371	..	..	69	14	..
	2021	475	382	..	..	78	15	..
	2022	544	443	..	..	79	*22	..
Cameroon	2019	8,483	3,234	5,229	..	..	20	..
	2020	8,650	3,660	4,945	..	..	45	..
	2021	9,484	3,130	6,309	..	..	46	..
	2022	9,974	2,896	7,033	..	..	46	..
Central African Rep.	2019	142	2	140	..	..	0	..
	2020	141	1	140	..	..	0	..
	2021	141	1	140	..	..	0	..
	2022	142	*1	141	..	..	0	..
Chad	2019	317	308	..	..	9	0	..
	2020	336	326	..	..	9	1	..
	2021	336	326	..	..	9	1	..
	2022	*336	*326	..	..	*9	*1	..
Comoros	2019	*108	*108	..	..	..	..	..
	2020	*130	*130	..	..	..	..	..
	2021	*136	*132	..	..	..	*4	..
	2022	*139	*135	..	..	..	*4	..
Congo	2019	3,655	2,807	847	..	..	1	..
	2020	3,840	2,931	900	..	..	8	..
	2021	4,103	3,105	989	..	..	9	..
	2022	5,013	3,884	1,119	..	..	10	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
2,306,940	2,013,446	76,036	217,459	24,686,882	15,545,550	4,310,270	2,788,601	2,042,461
2,221,171	1,906,800	73,061	241,310	24,678,877	15,282,451	4,397,278	2,676,398	2,322,750
2,319,460	1,960,779	69,551	289,130	26,125,563	16,229,214	4,341,549	2,811,030	2,743,770
2,438,516	1,999,807	70,568	368,140	26,707,825	16,430,175	4,395,396	2,682,374	3,199,880
64,671	50,644	706	13,320	798,759	619,739	143,524	13,252	22,244
65,311	50,351	861	14,099	786,393	598,742	152,017	9,903	25,731
67,920	50,022	931	16,967	822,622	623,667	157,531	12,355	29,069
81,591	62,448	1,104	18,039	830,718	623,733	166,306	9,803	30,876
5,508	5,508	..	..	76,023	75,183	152	..	688
5,317	5,317	..	..	73,838	73,115	50	..	673
5,488	5,488	..	..	79,903	79,241	9	..	653
5,477	5,477	..	..	85,754	85,073	16	..	665
418	418	..	..	13,829	2,965	10,826	..	38
395	395	..	..	14,093	1,572	12,478	..	43
*400	*400	..	..	14,341	3,098	11,203	..	39
*400	*400	..	..	15,583	2,651	12,318	..	*613
163	162	..	1	366	359	0	..	6
166	165	..	1	823	817	0	..	6
195	193	..	1	932	917	..	..	15
215	214	..	2	786	755	..	..	31
..	..	..	..	3,277	3,272	..	..	5
..	..	..	..	2,182	2,176	..	..	6
..	..	..	..	2,409	2,403	..	..	6
..	..	..	..	2,550	2,542	..	..	8
*800	*800	..	..	776	588	105	..	82
*870	*870	..	..	572	403	112	..	57
*800	*800	..	..	872	686	128	..	58
*820	*820	..	..	712	566	82	..	64
5	5	..	..	264	124	132	..	8
6	6	..	..	270	87	176	..	8
*6	*6	..	..	257	118	131	..	*8
17	17	..	..	288	108	167	..	13
*1	*1	..	..	511	413	..	..	98
*1	*1	..	..	453	370	..	..	83
*1	*1	..	..	474	381	..	..	93
*1	*1	..	..	543	442	..	..	100
2,996	2,996	..	..	5,487	238	5,229	..	20
3,478	3,478	..	..	5,173	182	4,945	..	45
2,951	2,951	..	..	6,534	179	6,309	..	46
2,708	2,708	..	..	7,266	188	7,033	..	46
..	..	..	..	142	2	140	..	0
..	..	..	..	141	1	140	..	0
..	..	..	..	141	1	140	..	0
..	..	..	..	142	*1	141	..	0
..	..	..	..	317	308	..	..	9
..	..	..	..	336	326	..	..	10
..	..	..	..	336	326	..	..	10
..	..	..	..	*336	*326	..	..	*10
..	..	..	..	*108	*108	..	..	..
..	..	..	..	*130	*130	..	..	..
..	..	..	..	*136	*132	..	..	*4
..	..	..	..	*139	*135	..	..	*4
2,807	2,807	..	..	848	..	847	..	1
2,931	2,931	..	..	909	..	900	..	8
3,105	3,105	..	..	998	..	989	..	9
3,884	3,884	..	..	1,129	..	1,119	..	10

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Côte d'Ivoire	2019	10,697	7,197	3,481	..	..	18	..
	2020	11,274	7,887	3,376	..	..	11	..
	2021	11,579	8,935	2,626	..	..	18	..
	2022	12,460	9,602	2,846	..	..	13	..
Dem. Rep. of the Congo	2019	11,491	8	11,483	..	..	0	..
	2020	12,460	7	12,453	..	..	0	..
	2021	13,135	3	13,131	..	..	1	..
	2022	13,200	6	13,192	..	..	2	..
Djibouti	2019	126	126	..	..	..	1	..
	2020	102	102	..	..	..	1	..
	2021	196	126	..	..	69	1	..
	2022	*199	*128	..	..	*70	*1	..
Egypt	2019	194,279	175,998	13,121	..	3,689	1,471	..
	2020	197,201	173,500	15,038	..	4,233	4,430	..
	2021	204,637	179,666	14,769	..	5,257	4,945	..
	2022	214,050	188,867	14,646	..	5,784	4,753	..
Equatorial Guinea	2019	*1,912	*1,292	*620	..	..	..	..
	2020	*2,038	*1,418	*620	..	..	..	..
	2021	*1,770	*1,150	*620	..	..	..	..
	2022	*1,750	*1,150	*600	..	..	..	..
Eritrea	2019	362	350	..	..	2	10	..
	2020	372	361	..	..	2	10	..
	2021	383	371	..	..	2	10	..
	2022	400	388	..	..	2	9	..
Eswatini	2019	585	313	270	..	..	2	..
	2020	543	310	233	..	..	0	..
	2021	652	369	270	..	..	13	..
	2022	653	333	295	..	..	25	..
Ethiopia	2019	15,068	35	14,404	..	609	20	..
	2020	15,823	30	14,943	..	818	32	..
	2021	15,503	26	14,882	..	561	34	..
	2022	17,338	2	16,771	..	529	36	..
Gabon	2019	2,859	1,547	1,310	..	..	2	..
	2020	3,053	1,630	1,420	..	..	2	..
	2021	3,034	1,664	1,368	..	..	2	..
	2022	3,300	2,037	1,260	..	..	3	..
Gambia	2019	462	456	..	..	2	4	..
	2020	485	478	..	..	2	4	..
	2021	516	510	..	..	2	4	..
	2022	592	586	..	..	*2	*4	..
Ghana	2019	18,368	11,065	7,252	..	..	52	..
	2020	20,170	12,820	7,293	..	..	57	..
	2021	22,051	14,408	7,521	..	..	122	..
	2022	23,163	14,810	8,192	..	..	162	..
Guinea	2019	2,020	740	1,280	..	..	..	..
	2020	2,420	935	1,484	..	..	..	..
	2021	3,036	401	2,635	..	..	..	..
	2022	3,263	325	2,938	..	..	..	..
Guinea-Bissau	2019	*108	*97	..	..	..	11	..
	2020	*184	*171	..	..	..	13	..
	2021	*202	*188	..	..	..	14	..
	2022	*196	*181	..	..	..	*15	..
Kenya	2019	11,621	1,526	3,205	..	1,563	92	5,235
	2020	11,604	891	4,233	..	1,331	88	5,060
	2021	12,377	1,512	3,675	..	1,985	167	5,037
	2022	12,962	1,849	3,068	..	2,143	384	5,518

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Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
65	65	..	..	10,631	7,132	3,481	..	18
72	72	..	..	11,202	7,815	3,376	..	11
137	137	..	..	11,442	8,798	2,626	..	18
146	146	..	..	12,314	9,455	2,846	..	13
..	..	..	..	11,491	8	11,483	..	0
..	..	..	..	12,460	7	12,453	..	0
..	..	..	..	13,135	3	13,131	..	1
..	..	..	..	13,200	6	13,192	..	2
..	..	..	..	126	126	..	..	1
..	..	..	..	102	102	..	..	1
..	..	..	..	196	126	..	..	70
..	..	..	..	*199	*128	..	..	*71
11,554	11,554	..	..	182,725	164,444	13,121	..	5,160
11,408	11,408	..	..	185,793	162,092	15,038	..	8,663
11,188	11,188	..	..	193,449	168,478	14,769	..	10,202
8,890	8,890	..	..	205,160	179,977	14,646	..	10,537
..	..	..	..	*1,912	*1,292	*620	..	..
..	..	..	..	*2,038	*1,418	*620	..	..
..	..	..	..	*1,770	*1,150	*620	..	..
..	..	..	..	*1,750	*1,150	*600	..	..
19	19	..	..	343	331	..	..	12
19	19	..	..	354	342	..	..	12
19	19	..	..	363	352	..	..	12
20	20	..	..	380	368	..	..	11
316	313	*1	2	269	..	269	..	..
316	310	6	0	227	..	227	..	0
380	369	6	6	272	..	264	..	8
344	333	6	5	309	..	289	..	21
30	30	..	..	15,038	5	14,404	..	629
30	30	..	..	15,793	0	14,943	..	850
23	23	..	..	15,479	2	14,882	..	594
..	..	..	..	17,338	2	16,771	..	565
222	214	6	2	2,637	1,333	1,304	..	..
243	236	6	2	2,810	1,395	1,415	..	..
210	202	6	2	2,824	1,462	1,363	..	..
523	517	6	1	2,776	1,520	1,254	..	2
*38	*38	..	..	425	418	..	..	6
*38	*38	..	..	447	440	..	..	6
*38	*38	..	..	478	472	..	..	6
*38	*38	..	..	554	548	..	..	*6
*180	*180	..	..	18,188	10,885	7,252	..	52
..	..	..	..	20,170	12,820	7,293	..	57
..	..	..	..	22,051	14,408	7,521	..	122
..	..	..	..	23,163	14,810	8,192	..	162
..	..	..	..	2,020	740	1,280	..	..
..	..	..	..	2,420	935	1,484	..	..
..	..	..	..	3,036	401	2,635	..	..
..	..	..	..	3,263	325	2,938	..	..
*19	*19	..	..	*89	*78	..	..	11
*19	*19	..	..	*165	*152	..	..	13
*19	*19	..	..	*183	*169	..	..	14
*19	*19	..	..	*177	*162	..	..	*15
212	212	..	..	11,408	1,313	3,205	..	6,890
137	137	..	..	11,467	755	4,233	..	6,480
274	250	24	..	12,103	1,262	3,651	..	7,189
292	264	28	..	12,670	1,585	3,040	..	8,045

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Lesotho	2019	393	1	392	..	..	..	..
	2020	427	1	426	..	..	..	..
	2021	533	1	531	..	..	1	..
	2022	482	1	480	..	..	1	..
Liberia	2019	*418	*290	*124	..	..	*4	..
	2020	*446	*318	*124	..	..	*4	..
	2021	478	*249	223	..	..	*5	..
	2022	468	*236	228	..	..	*5	..
Libya	2019	34,629	34,621	..	..	..	8	..
	2020	29,499	29,491	..	..	..	8	..
	2021	34,786	34,776	..	..	..	9	..
	2022	35,106	35,097	..	..	..	10	..
Madagascar	2019	2,178	1,259	886	..	0	32	..
	2020	2,167	1,317	818	..	0	32	..
	2021	2,245	1,441	767	..	0	36	..
	2022	2,274	1,398	822	..	*1	53	..
Malawi	2019	1,937	*125	1,647	..	..	165	..
	2020	2,191	324	1,867	..	..	0	..
	2021	2,401	167	2,194	..	..	40	..
	2022	2,115	193	1,757	..	..	165	..
Mali	2019	3,535	*2,137	1,365	..	..	33	..
	2020	3,728	*2,191	1,444	..	..	93	..
	2021	*3,969	*2,381	*1,473	..	..	115	..
	2022	*4,209	*2,296	1,787	..	..	125	..
Mauritania	2019	1,477	1,216	..	..	*112	*149	..
	2020	*1,461	*1,178	..	..	138	145	..
	2021	*1,364	*1,080	..	..	*139	*145	..
	2022	1,510	1,277	..	..	114	119	..
Mauritius	2019	3,237	2,994	99	..	15	128	..
	2020	2,883	2,603	116	..	18	146	..
	2021	2,992	2,719	107	..	15	151	..
	2022	3,119	2,821	128	..	16	155	..
Morocco	2019	41,650	32,390	1,654	..	4,723	1,581	1,302
	2020	40,057	31,353	1,290	..	4,592	1,520	1,302
	2021	42,562	33,120	1,213	..	5,107	1,820	1,302
	2022	42,723	33,937	679	..	5,356	1,448	1,302
Mozambique	2019	18,981	4,021	14,930	..	..	31	..
	2020	19,026	3,253	15,703	..	..	70	..
	2021	18,863	3,326	15,468	..	..	69	..
	2022	19,559	3,313	16,173	..	..	72	..
Namibia	2019	1,402	52	954	..	22	375	..
	2020	2,012	65	1,505	..	22	421	..
	2021	1,467	41	968	..	22	437	..
	2022	1,180	20	781	..	23	356	..
Niger	2019	626	593	..	..	..	33	..
	2020	635	610	..	..	..	24	..
	2021	*658	*612	..	..	..	*46	..
	2022	*669	*644	..	..	..	24	..
Nigeria	2019	33,110	24,633	8,433	..	3	41	..
	2020	35,059	27,324	7,690	..	*3	42	..
	2021	36,038	28,046	7,943	..	..	49	..
	2022	37,916	28,611	9,204	..	..	101	..
Rwanda	2019	798	393	387	..	..	18	..
	2020	838	326	494	..	..	18	..
	2021	976	414	545	..	..	18	..
	2022	1,101	529	555	..	..	18	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	393	1	392	..	..
..	..	..	..	427	1	426	..	..
..	..	..	..	533	1	531	..	1
..	..	..	..	482	1	480	..	1
*204	*200	..	*4	*214	*90	*124	..	..
*204	*200	..	*4	*242	*118	*124	..	..
*205	*200	..	*5	273	49	223	..	0
*205	*200	..	*5	263	36	228	..	0
..	..	..	..	34,629	34,621	..	..	8
..	..	..	..	29,499	29,491	..	..	8
..	..	..	..	34,786	34,776	..	..	9
..	..	..	..	35,106	35,097	..	..	10
*285	*285	..	..	1,892	974	886	..	32
*298	*298	..	..	1,869	1,018	818	..	32
*334	*334	..	..	1,911	1,107	767	..	36
*340	*340	..	..	1,934	1,058	822	..	54
*125	*120	*5	..	1,812	*5	1,642	..	165
130	125	*5	..	2,061	199	1,862	..	0
130	125	*5	..	2,271	42	2,189	..	40
130	125	*5	..	1,985	68	1,752	..	165
*1,124	*1,093	..	31	2,411	1,044	1,365	..	2
*1,133	*1,101	..	32	2,595	1,090	1,444	..	61
*1,163	*1,131	..	*32	*2,806	*1,250	*1,473	..	83
*1,348	*1,285	..	63	2,860	*1,011	1,787	..	62
375	362	..	13	1,102	854	..	..	*248
379	368	..	12	*1,081	*810	..	..	271
384	370	..	14	*980	*710	..	..	*270
329	317	..	12	1,181	960	..	..	221
1,755	1,614	..	141	1,482	1,381	99	..	3
1,682	1,521	..	161	1,201	1,082	116	..	3
1,766	1,604	..	162	1,226	1,114	107	..	5
1,445	1,284	..	161	1,674	1,537	128	..	9
1,567	176	..	1,391	40,083	32,214	1,654	..	6,216
1,660	283	..	1,378	38,396	31,070	1,290	..	6,036
1,620	235	..	1,385	40,942	32,885	1,213	..	6,845
1,631	264	..	1,366	41,092	33,673	679	..	6,740
222	222	..	..	18,759	3,799	14,930	..	31
210	210	..	..	18,816	3,043	15,703	..	70
210	210	..	..	18,653	3,116	15,468	..	69
225	225	..	..	19,334	3,089	16,173	..	72
..	..	..	..	1,402	52	954	..	396
..	..	..	..	2,012	65	1,505	..	442
..	..	..	..	1,467	41	968	..	458
..	..	..	..	1,180	20	781	..	379
*91	*58	..	33	535	535	..	..	..
157	145	..	13	477	465	..	..	12
*96	*62	..	*34	*562	*550	..	..	12
*116	*103	..	13	*552	*541	..	..	11
5,599	5,383	172	44	27,511	19,250	8,261	..	..
6,173	5,971	157	45	28,886	21,353	7,533	..	..
6,339	6,129	162	49	29,698	21,917	7,781	..	..
21,619	21,331	187	101	16,297	7,280	9,017	..	..
*2	*2	..	..	796	391	387	..	18
*2	*2	..	..	836	324	494	..	18
*2	*2	..	..	974	412	545	..	18
*2	*2	..	..	1,099	527	555	..	18

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Sao Tome and Principe	2019	110	103	6	..	..	0	..
	2020	*110	*105	5	..	..	0	..
	2021	*106	*101	5	..	..	0	..
	2022	*110	*108	2	..	..	*1	..
Senegal	2019	*4,491	*4,081	..	..	23	329	58
	2020	5,804	5,159	..	..	217	385	43
	2021	6,380	5,392	..	..	400	552	36
	2022	7,550	6,524	..	..	396	594	36
Seychelles	2019	540	531	..	..	5	4	..
	2020	535	523	..	..	6	6	..
	2021	536	517	..	..	5	14	..
	2022	550	527	..	..	7	17	..
Sierra Leone	2019	378	*135	237	..	..	6	..
	2020	422	*180	236	..	..	6	..
	2021	467	*224	237	..	..	6	..
	2022	495	270	216	..	..	*9	..
Somalia	2019	522	505	..	..	6	11	..
	2020	520	490	..	..	6	24	..
	2021	534	491	..	..	6	37	..
	2022	*560	*494	..	..	*6	*60	..
South Africa	2019	252,644	222,168	5,791	13,252	6,624	4,809	..
	2020	239,521	211,067	6,246	9,903	6,611	5,694	..
	2021	244,381	210,233	6,784	12,355	8,356	6,653	..
	2022	234,850	201,891	7,245	9,803	9,689	6,222	..
South Sudan	2019	557	546	..	..	..	11	..
	2020	558	547	..	..	..	11	..
	2021	566	549	..	..	..	17	..
	2022	538	503	..	..	..	35	..
St. Helena and Depend.	2019	12	9	..	..	2	1	..
	2020	11	8	..	..	2	1	..
	2021	11	8	..	..	1	1	..
	2022	10	9	..	..	1	1	..
Sudan	2019	16,814	6,583	10,210	..	..	21	..
	2020	17,642	6,613	11,008	..	..	22	..
	2021	*16,781	*6,693	*10,061	..	..	28	..
	2022	16,771	4,842	11,804	..	..	126	..
Togo	2019	718	476	236	..	..	6	..
	2020	699	547	144	..	..	8	..
	2021	618	482	86	..	..	51	..
	2022	821	651	78	..	..	91	..
Tunisia	2019	22,014	21,038	66	..	500	119	291
	2020	21,449	20,572	46	..	465	150	216
	2021	21,890	20,999	28	..	425	215	223
	2022	21,422	20,552	15	..	322	319	214
Uganda	2019	4,364	300	3,986	..	..	78	..
	2020	4,447	246	4,083	..	..	118	..
	2021	4,769	334	4,334	..	..	101	..
	2022	5,502	438	4,965	..	..	99	..
United Rep. of Tanzania	2019	7,775	5,270	2,477	..	..	27	..
	2020	7,834	4,664	3,139	..	..	31	..
	2021	8,650	5,533	3,086	..	..	31	..
	2022	9,626	6,775	2,821	..	..	31	..
Zambia	2019	15,115	2,669	12,329	..	..	118	..
	2020	15,237	2,294	12,793	..	..	150	..
	2021	17,718	1,498	16,073	..	..	148	..
	2022	19,783	2,551	17,089	..	..	143	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	110	103	6	..	0
..	..	..	..	*110	*105	5	..	0
..	..	..	..	*106	*101	5	..	0
..	..	..	..	*110	*108	2	..	*1
926	869	..	58	*3,564	*3,212	..	..	352
675	631	..	43	5,130	4,528	..	..	602
794	745	..	49	5,586	4,647	..	..	939
840	791	..	49	6,709	5,733	..	..	976
*92	*92	..	..	448	439	..	..	9
*93	*93	..	..	442	430	..	..	12
*93	*93	..	..	443	424	..	..	19
*93	*93	..	..	457	434	..	..	23
4	4	..	..	374	*131	237	..	6
*4	*4	..	..	418	*176	236	..	6
*4	*4	..	..	463	*220	237	..	6
*5	*5	..	..	490	265	216	..	*9
*145	*145	..	..	377	360	..	..	17
*120	*120	..	..	400	370	..	..	30
*110	*110	..	..	424	381	..	..	43
*110	*110	..	..	*450	*384	..	..	*66
24,164	12,971	43	11,150	228,480	209,197	5,748	13,252	283
24,329	12,265	64	12,000	215,192	198,802	6,182	9,903	305
26,731	11,877	98	14,756	217,650	198,356	6,686	12,355	253
26,263	10,462	104	15,697	208,587	191,429	7,141	9,803	214
49	43	..	6	508	503	..	..	5
50	44	..	6	508	503	..	..	5
55	46	..	9	511	503	..	..	8
69	45	..	24	469	458	..	..	11
..	..	..	..	12	9	..	..	3
..	..	..	..	11	8	..	..	3
..	..	..	..	11	8	..	..	2
..	..	..	..	10	9	..	..	2
109	109	..	..	16,705	6,474	10,210	..	21
*108	*108	..	..	17,534	6,505	11,008	..	22
*107	*107	..	..	*16,674	*6,585	*10,061	..	28
107	107	..	..	16,665	4,735	11,804	..	126
12	7	..	5	706	469	236	..	0
10	4	..	7	688	543	144	..	1
8	2	..	6	610	480	86	..	45
8	2	..	6	812	650	78	..	84
1,465	1,055	..	410	20,549	19,983	66	..	500
1,411	1,045	..	366	20,039	19,527	46	..	465
1,500	1,074	..	426	20,391	19,925	28	..	437
1,622	1,119	..	503	19,801	19,433	15	..	353
677	197	480	..	3,687	103	3,506	..	78
812	188	624	..	3,635	58	3,459	..	118
913	282	631	..	3,856	52	3,703	..	101
1,132	363	769	..	4,370	75	4,196	..	99
35	8	..	27	7,739	5,262	2,477	..	..
39	8	..	31	7,795	4,656	3,139	..	..
39	8	..	31	8,612	5,525	3,086	..	..
39	8	..	31	9,587	6,767	2,821	..	..
78	78	..	..	15,037	2,591	12,329	..	118
78	78	..	..	15,159	2,216	12,793	..	150
*83	*83	..	..	17,636	1,415	16,073	..	148
*83	*83	..	..	19,700	2,468	17,089	..	143

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Zimbabwe	2019	8,402	4,236	4,166	..	..	..	..
	2020	6,673	2,843	3,805	..	..	24	..
	2021	8,454	2,508	5,928	..	..	18	..
	2022	9,016	3,103	5,897	..	..	16	..
Asia	2019	14,241,164	10,605,104	2,002,350	655,650	521,416	398,056	58,589
	2020	14,492,608	10,683,488	2,030,034	659,028	585,745	473,781	60,533
	2021	15,552,174	11,344,077	2,006,778	744,709	798,714	592,620	65,276
	2022	16,255,971	11,680,682	2,069,351	774,899	920,235	746,918	63,886
Afghanistan	2019	1,626	183	1,388	..	..	55	..
	2020	1,371	124	1,181	..	..	66	..
	2021	*1,409	*130	*1,215	..	..	*64	..
	2022	*1,414	*130	*1,220	..	..	*64	..
Armenia	2019	7,680	3,047	2,371	2,198	3	61	..
	2020	7,839	3,166	1,778	2,756	2	137	..
	2021	7,879	3,384	2,202	1,998	1	294	..
	2022	9,190	3,879	1,940	2,846	2	524	..
Azerbaijan	2019	26,073	24,359	1,565	..	105	44	..
	2020	25,839	24,627	1,070	..	96	47	..
	2021	27,889	26,464	1,277	..	91	56	..
	2022	29,041	27,300	1,596	..	83	62	..
Bahrain	2019	34,445	34,430	..	..	..	16	..
	2020	34,769	34,752	..	..	..	17	..
	2021	35,444	35,407	..	..	0	36	..
	2022	36,954	36,879	..	..	2	73	..
Bangladesh	2019	85,046	83,925	769	..	6	347	..
	2020	85,500	84,207	875	..	6	413	..
	2021	90,847	90,026	657	..	6	158	..
	2022	94,886	93,811	746	..	6	323	..
Bhutan	2019	8,858	0	8,857	..	1	0	..
	2020	11,371	0	11,370	..	1	0	..
	2021	11,371	0	11,370	..	0	0	..
	2022	10,961	0	10,960	..	0	0	..
Brunei Darussalam	2019	4,933	4,931	..	..	..	2	..
	2020	5,736	5,734	..	..	..	2	..
	2021	5,700	5,695	..	..	..	4	..
	2022	5,602	5,597	..	..	..	5	..
Cambodia	2019	8,995	4,872	4,025	..	..	98	..
	2020	9,092	4,739	4,048	..	..	304	..
	2021	10,208	4,324	5,249	..	..	635	..
	2022	10,643	3,759	6,157	..	..	726	..
China	2019	7,503,458	5,220,150	1,304,440	348,350	406,030	224,460	28
	2020	7,779,060	5,330,250	1,355,210	366,250	466,470	260,857	23
	2021	8,534,273	5,805,870	1,339,000	407,520	656,100	325,760	*23
	2022	8,848,707	5,888,795	1,352,195	417,775	762,672	427,270	..
China, Hong Kong SAR	2019	36,911	36,911	..	..	..	..	..
	2020	35,189	35,189	..	..	..	..	..
	2021	37,071	37,071	..	..	..	..	..
	2022	36,186	36,186	..	..	..	..	..
China, Macao SAR	2019	830	830	..	..	..	0	..
	2020	562	562	..	..	..	0	..
	2021	496	496	..	..	..	0	..
	2022	609	609	..	..	..	0	..
Cyprus	2019	5,141	4,685	..	..	239	218	..
	2020	4,849	4,313	..	..	240	296	..
	2021	5,119	4,405	..	..	246	468	..
	2022	5,268	4,442	..	..	224	602	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
210	210	..	..	8,192	4,026	4,166	..	..
109	109	..	..	6,564	2,734	3,805	..	24
0	0	..	..	8,454	2,508	5,928	..	18
35	35	..	..	8,980	3,068	5,897	..	16
1,297,810	1,185,782	10,631	101,396	12,943,354	9,419,322	1,991,719	655,650	876,664
1,204,458	1,087,623	9,970	106,865	13,288,150	9,595,865	2,020,063	659,028	1,013,194
1,247,023	1,114,230	13,866	118,927	14,305,151	10,229,847	1,992,912	744,709	1,337,683
1,308,727	1,168,014	11,750	128,963	14,947,244	10,512,668	2,057,600	774,899	1,602,077
*340	*6	*300	34	1,286	177	1,088	..	21
*340	*6	*300	34	1,031	118	881	..	32
*335	*6	*295	*34	*1,074	*124	*920	..	*30
*330	*6	*290	*34	*1,084	*124	*930	..	*30
47	..	..	47	7,632	3,047	2,371	2,198	17
115	..	..	115	7,723	3,166	1,778	2,756	23
204	..	..	204	7,675	3,384	2,202	1,998	91
282	..	..	282	8,908	3,879	1,940	2,846	243
2,069	2,069	..	0	24,004	22,290	1,565	..	150
2,158	2,155	3	0	23,681	22,471	1,067	..	143
2,158	2,155	2	*1	25,731	24,309	1,276	..	147
2,164	2,163	1	*1	26,876	25,137	1,595	..	144
15,252	15,236	..	16	19,194	19,194	..	..	..
15,444	15,427	..	17	19,325	19,325	..	..	..
15,574	15,538	..	36	19,870	19,869	..	..	1
16,365	16,298	..	67	20,588	20,581	..	..	7
17,161	17,161	..	..	67,885	66,764	769	..	353
16,517	16,517	..	..	68,983	67,690	875	..	419
18,507	18,507	..	..	72,340	71,519	657	..	164
16,969	16,969	..	..	77,917	76,842	746	..	329
..	..	..	..	8,858	0	8,857	..	2
..	..	..	..	11,371	0	11,370	..	2
..	..	..	..	11,371	0	11,370	..	1
..	..	..	..	10,961	0	10,960	..	1
912	912	..	..	4,021	4,019	..	..	2
1,662	1,662	..	..	4,074	4,073	..	..	2
1,652	1,648	..	4	4,048	4,047	..	..	1
1,594	1,590	..	4	4,008	4,007	..	..	1
..	..	..	..	8,995	4,872	4,025	..	98
..	..	..	..	9,092	4,739	4,048	..	304
..	..	..	..	10,208	4,324	5,249	..	635
..	..	..	..	10,643	3,759	6,157	..	726
423,354	423,354	..	..	7,080,104	4,796,796	1,304,440	348,350	630,518
432,283	432,283	..	..	7,346,777	4,897,967	1,355,210	366,250	727,350
470,856	470,856	..	..	8,063,417	5,335,014	1,339,000	407,520	981,883
477,581	477,581	..	..	8,371,126	5,411,214	1,352,195	417,775	1,189,942
..	..	..	..	36,911	36,911	..	..	..
..	..	..	..	35,189	35,189	..	..	..
..	..	..	..	37,071	37,071	..	..	..
..	..	..	..	36,186	36,186	..	..	..
217	217	..	0	613	613	..	..	..
189	189	..	0	373	373	..	..	..
209	209	..	0	287	287	..	..	..
203	203	..	0	406	406	..	..	..
138	51	..	87	5,003	4,633	..	..	370
150	52	..	98	4,699	4,261	..	..	438
225	53	..	172	4,894	4,352	..	..	542
292	50	..	241	4,976	4,391	..	..	585

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Georgia	2019	11,857	2,840	8,932	..	85	..	..
	2020	11,160	2,821	8,248	..	91	..	..
	2021	12,645	2,380	10,182	..	83	..	..
	2022	14,247	3,388	10,771	..	88	..	..
India	2019	1,576,740	1,253,707	156,049	46,472	*69,949	*50,563	..
	2020	*1,533,307	*1,200,660	*160,909	*43,029	*67,418	*61,291	..
	2021	*1,610,082	*1,247,823	*162,441	*47,112	77,140	*75,566	..
	2022	1,816,815	1,423,001	162,499	45,861	*80,714	*104,740	..
Indonesia	2019	281,248	247,723	20,435	..	..	10	13,080
	2020	276,504	240,582	21,624	..	..	9	14,289
	2021	289,471	252,870	19,580	..	..	120	16,901
	2022	344,244	301,613	25,013	..	..	218	17,400
Iran (Islamic Rep. of)	2019	326,672	287,539	31,087	6,757	616	673	..
	2020	342,427	313,487	22,076	5,527	754	584	..
	2021	355,912	337,927	12,267	4,358	737	622	..
	2022	367,669	345,417	12,619	8,085	813	736	..
Iraq	2019	87,370	82,350	4,963	..	..	57	..
	2020	85,433	81,214	4,162	..	..	57	..
	2021	86,164	82,761	3,346	..	..	57	..
	2022	115,530	112,818	2,651	..	..	61	..
Israel	2019	72,351	68,796	..	..	190	3,115	250
	2020	72,285	67,702	..	..	204	4,163	216
	2021	73,796	68,054	..	..	178	5,351	214
	2022	75,964	69,347	..	..	317	6,084	217
Japan	2019	1,038,532	788,485	87,653	63,779	7,617	69,382	21,615
	2020	1,016,901	782,680	87,548	38,752	8,970	79,087	19,864
	2021	1,049,662	773,669	88,825	70,805	9,412	86,081	20,869
	2022	1,018,606	755,458	86,038	56,070	9,297	92,614	19,129
Jordan	2019	20,995	18,016	18	..	875	2,086	..
	2020	20,952	16,675	18	..	1,407	2,852	..
	2021	21,289	16,168	19	..	1,596	3,507	..
	2022	22,065	16,425	19	..	1,748	3,873	..
Kazakhstan	2019	106,878	95,346	9,994	..	707	831	..
	2020	110,890	98,711	9,660	..	1,029	1,490	..
	2021	115,078	102,493	9,208	..	1,747	1,629	..
	2022	113,461	100,130	9,201	..	2,372	1,758	..
Korea, Dem.Ppl's.Rep.	2019	23,853	12,800	11,000	..	..	53	..
	2020	24,053	11,200	12,800	..	..	53	..
	2021	25,565	9,400	16,100	..	..	65	..
	2022	26,465	9,800	16,600	..	..	65	..
Korea, Republic of	2019	568,414	397,708	6,249	145,910	2,681	12,996	2,870
	2020	574,095	381,567	7,148	160,184	3,151	17,967	4,077
	2021	609,460	412,992	6,737	158,015	3,182	23,395	5,138
	2022	613,888	394,082	7,256	176,054	3,372	28,918	4,205
Kuwait	2019	75,203	75,071	..	..	36	96	..
	2020	74,956	74,743	..	..	33	180	..
	2021	80,757	80,569	..	..	29	159	..
	2022	83,529	83,366	..	..	34	129	..
Kyrgyzstan	2019	15,100	1,256	13,844	..	..	..	..
	2020	15,404	1,425	13,979	..	..	..	..
	2021	14,815	1,858	12,957	..	..	..	..
	2022	13,883	1,954	11,929	..	..	..	..
Lao People's Dem. Rep.	2019	31,133	12,194	18,899	..	..	40	..
	2020	*39,971	*13,665	*26,262	..	..	*45	..
	2021	*44,931	*13,798	*31,072	..	..	61	..
	2022	51,031	12,216	38,736	..	..	79	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	11,857	2,840	8,932	..	85
..	..	..	..	11,160	2,821	8,248	..	91
..	..	..	..	12,645	2,380	10,182	..	83
..	..	..	..	14,247	3,388	10,771	..	88
217,942	210,869	280	*6,793	1,358,798	1,042,838	155,769	46,472	*113,719
*182,041	*173,533	*351	*8,157	*1,351,266	*1,027,127	*160,558	*43,029	*120,552
*136,055	*125,123	*350	*10,582	*1,474,027	*1,122,700	*162,091	*47,112	*142,124
228,726	216,700	400	*11,626	1,588,089	1,206,301	162,099	45,861	*173,828
44,799	44,113	686	..	236,449	203,610	19,749	..	13,089
37,555	36,735	820	..	238,950	203,848	20,804	..	14,298
39,805	37,975	1,830	..	249,666	214,895	17,750	..	17,021
33,491	33,491	..	..	310,753	268,122	25,013	..	17,618
5,879	5,879	..	..	320,793	281,660	31,087	6,757	1,288
6,120	6,120	..	..	336,307	307,367	22,076	5,527	1,338
6,595	6,595	..	..	349,317	331,333	12,267	4,358	1,359
6,772	6,772	..	..	360,897	338,645	12,619	8,085	1,548
57	..	..	57	87,313	82,350	4,963	..	..
57	..	..	57	85,376	81,214	4,162	..	..
57	..	..	57	86,107	82,761	3,346	..	..
61	..	..	61	115,469	112,818	2,651	..	..
6,845	3,796	..	3,049	65,506	65,000	..	..	505
8,072	4,128	..	3,945	64,212	63,574	..	..	638
9,322	4,355	..	4,966	64,475	63,698	..	..	776
9,963	4,076	..	5,886	66,002	65,270	..	..	731
160,233	80,449	3,328	76,456	878,298	708,036	84,325	63,779	22,158
159,038	74,622	2,999	81,417	857,863	708,059	84,549	38,752	26,504
173,192	82,958	3,041	87,194	876,470	690,712	85,784	70,805	29,169
172,656	80,332	3,083	89,241	845,950	675,126	82,955	56,070	31,799
1,940	1,222	..	718	19,056	16,794	18	..	2,244
2,114	907	..	1,207	18,838	15,768	18	..	3,052
2,251	907	..	1,344	19,038	15,261	19	..	3,758
2,558	*907	..	1,651	19,508	15,518	19	..	3,971
1,148	708	..	440	105,730	94,638	9,994	..	1,098
2,261	2,008	..	253	108,629	96,703	9,660	..	2,266
16,248	13,217	3,016	16	98,830	89,276	6,193	..	3,361
15,462	12,719	2,729	13	97,999	87,410	6,472	..	4,117
..	..	..	..	23,853	12,800	11,000	..	53
..	..	..	..	24,053	11,200	12,800	..	53
..	..	..	..	25,565	9,400	16,100	..	65
..	..	..	..	26,465	9,800	16,600	..	65
37,070	35,725	..	1,345	531,344	361,983	6,249	145,910	17,202
39,452	37,944	..	1,507	534,643	343,623	7,148	160,184	23,688
42,203	40,479	..	1,723	567,257	372,512	6,737	158,015	29,992
32,907	30,838	..	2,069	580,981	363,244	7,256	176,054	34,427
..	..	..	..	75,203	75,071	..	..	132
..	..	..	..	74,956	74,743	..	..	213
..	..	..	..	80,757	80,569	..	..	188
..	..	..	..	83,529	83,366	..	..	163
32	32	..	..	15,068	1,224	13,844	..	..
26	26	..	..	15,378	1,399	13,979	..	..
23	23	..	..	14,792	1,835	12,957	..	..
23	23	..	..	13,860	1,931	11,929	..	..
..	..	..	..	31,133	12,194	18,899	..	40
..	..	..	..	*39,971	*13,665	*26,262	..	*45
..	..	..	..	*44,931	*13,798	*31,072	..	61
..	..	..	..	51,031	12,216	38,736	..	79

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						Other
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	
Lebanon	2019	23,869	22,791	965	..	..	112	..
	2020	19,772	18,797	843	..	..	133	..
	2021	15,879	*14,958	612	..	..	309	..
	2022	*11,419	*9,462	695	..	..	1,262	..
Malaysia	2019	178,440	150,783	26,167	..	..	1,490	..
	2020	174,224	144,794	27,295	..	..	2,136	..
	2021	180,070	146,849	31,101	..	..	2,120	..
	2022	187,398	154,005	31,101	..	..	2,292	..
Maldives	2019	830	797	..	..	2	31	..
	2020	745	703	..	..	2	40	..
	2021	1,195	1,151	..	..	3	42	..
	2022	1,227	1,178	..	..	3	46	..
Mongolia	2019	6,900	6,416	*85	..	*340	*59	..
	2020	6,970	6,486	85	..	340	59	..
	2021	7,825	7,061	138	..	568	59	..
	2022	8,035	7,387	68	..	503	78	..
Myanmar	2019	23,778	14,328	9,369	..	..	81	..
	2020	23,643	15,194	8,370	..	..	79	..
	2021	22,075	12,350	9,590	..	..	135	..
	2022	21,539	12,275	9,070	..	..	194	..
Nepal	2019	6,134	0	6,061	..	0	73	..
	2020	6,189	0	6,092	..	1	96	..
	2021	9,668	0	9,534	..	1	133	..
	2022	10,583	0	10,536	..	0	47	..
Oman	2019	37,550	37,534	..	..	..	17	..
	2020	38,449	38,322	..	..	..	128	..
	2021	41,122	40,992	..	..	..	*130	..
	2022	41,374	41,239	..	..	..	*135	..
Other Asia	2019	274,179	227,194	8,753	32,323	1,892	4,016	1
	2020	279,974	233,970	6,178	31,440	2,309	6,075	2
	2021	290,936	246,308	6,653	27,788	2,209	7,969	9
	2022	288,154	241,255	8,899	23,755	3,543	10,677	25
Pakistan	2019	134,818	82,533	38,802	9,861	2,914	708	..
	2020	144,049	90,212	38,936	11,090	2,900	911	..
	2021	144,435	86,550	35,069	17,045	4,800	971	..
	2022	127,875	63,567	35,273	23,857	4,086	1,092	..
Philippines	2019	106,057	85,036	8,043	..	1,042	1,246	10,691
	2020	101,773	81,408	7,209	..	1,026	1,373	10,757
	2021	106,131	84,173	9,202	..	1,270	1,470	10,017
	2022	111,533	88,154	10,102	..	1,030	1,822	10,425
Qatar	2019	49,873	49,873	..	..	..	..	..
	2020	49,259	49,259	..	..	..	..	..
	2021	51,641	51,641	..	..	..	..	..
	2022	54,623	54,623	..	..	..	..	..
Saudi Arabia	2019	367,816	367,341	..	..	6	*469	..
	2020	367,498	366,563	..	..	*6	*929	..
	2021	379,045	377,682	..	..	409	*954	..
	2022	437,654	435,126	..	..	1,588	940	..
Singapore	2019	54,552	54,142	..	..	..	410	..
	2020	53,582	53,080	..	..	..	502	..
	2021	56,524	55,789	..	..	..	735	..
	2022	58,349	57,113	..	..	..	1,236	..
Sri Lanka	2019	16,630	11,102	4,812	..	350	366	..
	2020	15,801	10,260	4,976	..	344	221	..
	2021	17,363	8,923	7,227	..	657	557	..
	2022	16,680	8,459	6,759	..	742	720	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
9,111	8,999	..	112	14,757	13,792	965	..	..
*9,299	*9,167	..	133	10,473	9,630	843	..	..
*8,164	*7,855	..	309	7,715	7,103	612	..	..
*8,599	*7,336	..	1,262	2,821	2,126	695	..	..
7,170	7,084	..	*86	171,270	143,699	26,167	..	1,404
6,758	6,666	..	*92	167,466	138,128	27,295	..	2,044
6,769	6,676	..	*93	173,301	140,173	31,101	..	2,027
7,296	7,197	..	*99	180,102	146,808	31,101	..	2,193
*250	*250	..	..	580	547	..	..	33
*210	*210	..	..	535	493	..	..	43
*160	*160	..	..	1,035	991	..	..	45
*130	*130	..	..	1,097	1,048	..	..	49
*85	..	*85	..	6,815	6,416	..	..	*399
85	..	85	..	6,885	6,486	..	..	399
138	..	138	..	7,687	7,061	..	..	627
68	..	68	..	7,967	7,387	..	..	580
14,415	10,929	3,405	81	9,363	3,399	5,964	..	..
16,421	13,243	3,099	79	7,222	1,951	5,271	..	..
14,859	11,379	3,345	134	7,216	971	6,245	..	1
14,918	11,072	3,652	194	6,621	1,202	5,418	..	1
191	..	121	70	5,942	0	5,939	..	3
222	..	143	79	5,966	0	5,949	..	17
227	..	146	81	9,441	0	9,388	..	53
0	..	0	0	10,583	0	10,536	..	47
..	..	..	..	37,550	37,534	..	..	17
..	..	..	..	38,449	38,322	..	..	128
..	..	..	..	41,122	40,992	..	..	*130
..	..	..	..	41,374	41,239	..	..	*135
42,082	38,319	..	3,763	232,097	188,875	8,753	32,323	2,146
42,351	37,169	0	5,181	237,623	196,801	6,178	31,440	3,204
45,399	39,037	1	6,361	245,537	207,271	6,652	27,788	3,826
40,493	32,069	6	8,418	247,661	209,186	8,893	23,755	5,827
2,434	2,434	..	..	132,384	80,099	38,802	9,861	3,622
1,538	1,538	..	..	142,511	88,674	38,936	11,090	3,811
3,066	3,066	..	..	141,369	83,484	35,069	17,045	5,771
927	927	..	..	126,948	62,640	35,273	23,857	5,178
1,032	1,015	*17	..	105,025	84,021	8,026	..	12,979
1,259	1,242	*17	..	100,513	80,166	7,192	..	13,156
1,447	1,430	*17	..	104,684	82,743	9,185	..	12,756
1,315	1,298	*17	..	110,218	86,856	10,085	..	13,277
47,942	47,942	..	..	1,930	1,930	..	..	..
46,500	46,500	..	..	2,759	2,759	..	..	..
50,005	50,005	..	..	1,637	1,637	..	..	..
51,917	51,917	..	..	2,706	2,706	..	..	..
*129,601	*129,601	..	..	238,215	237,740	..	..	*475
*127,936	*127,936	..	..	239,562	238,627	..	..	*935
*129,546	*129,546	..	..	249,499	248,136	..	..	*1,363
*117,022	*117,022	..	..	320,632	318,104	..	..	2,528
4,497	4,497	..	..	50,055	49,645	..	..	410
4,661	4,661	..	..	48,921	48,419	..	..	502
4,599	4,599	..	..	51,925	51,190	..	..	735
4,432	4,432	..	..	53,917	52,681	..	..	1,236
1,233	118	1,011	105	15,396	10,984	3,801	..	611
1,269	*118	1,047	*105	14,532	10,142	3,929	..	460
1,924	93	1,568	263	15,439	8,830	5,659	..	951
2,010	*100	1,377	534	14,670	8,359	5,383	..	928

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
State of Palestine	2019	811	691	..	..	..	120	..
	2020	840	662	..	..	..	178	..
	2021	917	693	..	..	..	224	..
	2022	1,021	679	..	..	..	342	..
Syrian Arab Republic	2019	22,300	21,541	754	..	1	4	..
	2020	21,000	20,225	754	..	1	20	..
	2021	21,677	20,864	754	..	1	58	..
	2022	20,062	19,205	754	..	1	102	..
Tajikistan	2019	20,676	1,507	19,169	..	..	..	..
	2020	19,734	1,620	18,114	..	..	..	..
	2021	20,624	1,657	18,967	..	..	..	..
	2022	21,399	1,475	19,924	..	..	..	..
Thailand	2019	191,576	176,313	6,446	..	3,670	5,146	1
	2020	189,645	177,227	4,656	..	3,124	4,636	1
	2021	*187,758	*174,966	4,687	..	3,462	4,641	1
	2022	199,382	184,533	6,834	..	2,988	5,026	1
Timor-Leste	2019	518	515	2	..	..	1	..
	2020	505	503	2	..	..	1	..
	2021	510	508	2	..	..	1	..
	2022	*522	*520	*2	..	..	*1	..
Türkiye	2019	303,898	174,041	88,823	..	21,731	9,250	10,053
	2020	306,703	181,526	78,094	..	24,828	10,950	11,304
	2021	334,723	221,312	55,927	..	31,437	13,943	12,105
	2022	328,379	197,261	66,802	..	34,945	16,888	12,483
Turkmenistan	2019	22,500	22,497	3	..	..	..	..
	2020	25,763	25,759	3	..	..	..	..
	2021	28,400	28,394	6	..	..	..	..
	2022	32,600	32,594	6	..	..	..	..
United Arab Emirates	2019	*138,454	*134,674	..	..	..	3,780	..
	2020	*137,310	*131,835	..	..	..	5,475	..
	2021	149,053	133,234	..	10,067	..	5,752	..
	2022	156,120	127,781	..	20,596	..	7,743	..
Uzbekistan	2019	63,021	56,544	6,462	..	16	0	..
	2020	66,516	61,502	4,999	..	16	0	..
	2021	71,414	66,391	4,972	..	1	49	..
	2022	74,268	67,348	6,484	..	0	436	..
Viet Nam	2019	*232,602	*142,200	85,097	..	312	4,993	..
	2020	240,543	156,672	73,461	..	976	9,434	..
	2021	253,498	143,728	78,633	..	3,346	27,791	..
	2022	276,372	143,000	97,894	..	9,064	26,414	..
Yemen	2019	3,041	2,557	..	..	..	484	..
	2020	2,606	2,116	..	..	..	490	..
	2021	2,359	1,869	..	..	..	490	..
	2022	2,544	2,043	..	..	..	502	..
Europe	2019	4,847,797	2,342,187	763,381	1,139,926	440,654	142,608	19,040
	2020	4,695,775	2,143,080	825,930	1,050,101	489,756	168,017	18,892
	2021	4,904,913	2,275,095	839,081	1,112,327	471,526	188,007	18,878
	2022	4,757,241	2,277,078	727,399	973,400	526,221	234,499	18,643
Albania	2019	5,206	..	5,184	..	..	22	..
	2020	5,313	..	5,281	..	..	32	..
	2021	8,963	..	8,922	..	..	41	..
	2022	7,003	..	6,842	..	..	161	..
Andorra	2019	118	32	85	..	..	1	..
	2020	153	29	124	..	..	1	..
	2021	109	29	79	..	..	1	..
	2022	100	29	70	..	..	2	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
160	100	..	60	651	591	..	..	60
163	74	..	89	677	588	..	..	89
183	71	..	112	733	621	..	..	112
242	71	..	171	779	608	..	..	171
5,289	5,289	..	..	17,011	16,252	754	..	5
5,200	5,200	..	..	15,800	15,025	754	..	21
5,269	5,269	..	..	16,408	15,595	754	..	59
5,322	5,322	..	..	14,740	13,883	754	..	103
..	..	..	..	20,676	1,507	19,169	..	..
..	..	..	..	19,734	1,620	18,114	..	..
..	..	..	..	20,624	1,657	18,967	..	..
..	..	..	..	21,399	1,475	19,924	..	..
68,932	64,358	35	4,538	122,644	111,954	6,411	..	4,279
..	..	..	..	189,645	177,227	4,656	..	7,761
..	..	..	..	*187,758	*174,966	4,687	..	8,105
..	..	..	..	199,382	184,533	6,834	..	8,015
..	..	..	..	518	515	2	..	1
..	..	..	..	505	503	2	..	1
..	..	..	..	510	508	2	..	1
..	..	..	..	*522	*520	*2	..	*1
22,934	18,598	1,282	3,053	280,964	155,443	87,540	..	37,980
25,677	20,842	1,026	3,808	281,027	160,684	77,068	..	43,274
30,106	25,321	37	4,748	304,617	195,992	55,889	..	52,736
25,591	18,939	47	6,604	302,789	178,321	66,755	..	57,712
..	..	..	..	22,500	22,497	3	..	..
..	..	..	..	25,763	25,759	3	..	..
..	..	..	..	28,400	28,394	6	..	..
..	..	..	..	32,600	32,594	6	..	..
..	..	..	..	*138,454	*134,674	..	..	3,780
..	..	..	..	*137,310	*131,835	..	..	5,475
..	..	..	..	149,053	133,234	..	10,067	5,752
..	..	..	..	156,120	127,781	..	20,596	7,743
..	..	..	..	63,021	56,544	6,462	..	16
..	..	..	..	66,516	61,502	4,999	..	16
297	297	..	..	71,117	66,094	4,972	..	50
308	308	..	..	73,960	67,040	6,484	..	436
*4,282	*4,200	*80	*2	*228,320	*138,000	85,017	..	5,303
8,596	8,514	*80	*2	231,947	148,158	73,381	..	10,408
8,679	8,597	*80	*2	244,820	135,132	78,553	..	31,135
9,007	8,925	*80	*2	267,365	134,075	97,814	..	35,476
734	250	..	484	2,307	2,307	..	..	..
719	229	..	490	1,888	1,888	..	..	..
717	226	..	490	1,643	1,643	..	..	..
731	230	..	502	1,813	1,813	..	..	..
418,414	365,504	10,403	42,508	4,429,384	1,976,684	752,979	1,139,926	559,795
417,096	356,169	10,974	49,953	4,278,679	1,786,911	814,956	1,050,101	626,711
468,453	389,650	10,668	68,135	4,436,460	1,885,445	828,413	1,112,327	610,276
473,011	372,142	9,544	91,325	4,284,230	1,904,935	717,855	973,400	688,039
..	..	..	..	5,206	..	5,184	..	22
..	..	..	..	5,313	..	5,281	..	32
..	..	..	..	8,963	..	8,922	..	41
..	..	..	..	7,003	..	6,842	..	161
27	27	..	..	91	6	85	..	1
25	25	..	..	128	4	124	..	1
22	22	..	..	87	7	79	..	1
24	24	..	..	77	6	70	..	2

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Austria	2019	74,234	20,865	44,204	..	7,450	1,702	13
	2020	72,558	18,368	45,344	..	6,792	2,043	12
	2021	70,757	18,678	42,540	..	6,740	2,783	16
	2022	69,228	18,955	39,221	..	7,245	3,792	15
Belarus	2019	40,465	39,756	350	..	178	181	..
	2020	38,548	37,441	399	338	194	176	..
	2021	41,240	34,749	371	5,780	168	172	..
	2022	39,400	31,734	371	6,828	180	287	..
Belgium	2019	93,646	34,497	1,181	43,524	9,755	4,253	436
	2020	89,455	35,277	1,315	34,435	12,819	5,112	498
	2021	100,465	30,667	1,350	50,326	11,998	5,618	507
	2022	95,944	30,773	1,646	43,879	12,353	6,876	418
Bosnia and Herzegovina	2019	17,493	11,037	6,172	..	254	30	..
	2020	16,874	11,904	4,663	..	262	45	..
	2021	18,536	11,286	6,796	..	382	72	..
	2022	16,384	11,140	4,739	..	391	114	..
Bulgaria	2019	44,277	21,573	3,383	16,555	1,317	1,417	31
	2020	40,754	17,827	3,320	16,626	1,477	1,469	36
	2021	47,568	23,079	5,067	16,487	1,434	1,467	35
	2022	50,499	26,583	3,833	16,462	1,499	2,094	28
Croatia	2019	12,760	5,185	5,933	..	1,467	83	92
	2020	13,385	5,665	5,810	..	1,721	96	94
	2021	15,210	5,681	7,229	..	2,062	149	90
	2022	14,221	6,284	5,574	..	2,138	152	73
Czechia	2019	87,035	50,474	3,175	30,246	700	2,316	124
	2020	81,525	44,933	3,437	30,043	699	2,294	118
	2021	85,016	47,677	3,620	30,731	602	2,250	136
	2022	84,848	47,346	3,083	31,022	641	2,626	130
Denmark	2019	29,517	12,387	17	..	16,150	963	..
	2020	28,729	11,201	17	..	16,330	1,181	..
	2021	33,051	15,671	16	..	16,054	1,309	..
	2022	35,129	13,884	15	..	19,028	2,203	..
Estonia	2019	7,616	6,836	19	..	687	74	..
	2020	6,078	4,959	30	..	844	245	..
	2021	7,204	6,095	23	..	733	354	..
	2022	8,937	7,650	23	..	668	596	..
Faeroe Islands	2019	386	230	104	..	53	..	..
	2020	407	251	109	..	47	0	..
	2021	424	269	100	..	54	0	0
	2022	434	213	131	..	90	0	0
Finland	2019	68,650	25,923	12,421	23,870	6,025	147	264
	2020	69,268	21,392	15,883	23,291	8,256	218	227
	2021	72,121	23,671	15,792	23,598	8,507	298	255
	2022	72,221	20,693	13,491	25,336	12,022	392	286
France	2019	570,775	62,148	61,572	399,012	34,722	12,165	1,156
	2020	532,255	56,864	67,094	353,833	40,045	13,189	1,229
	2021	555,082	58,149	63,947	379,361	37,119	15,357	1,149
	2022	474,744	70,176	51,049	294,731	38,004	19,628	1,156
Germany	2019	606,917	334,214	25,671	75,071	125,894	44,383	1,684
	2020	575,462	302,330	25,275	64,382	132,102	49,496	1,877
	2021	592,799	332,188	24,972	69,130	114,169	50,472	1,868
	2022	580,266	335,279	23,576	34,709	124,816	60,304	1,582
Gibraltar	2019	220	220	..	..	..	..	0
	2020	215	215	..	..	..	..	0
	2021	223	223	..	..	..	..	0
	2022	211	211	..	..	..	..	0

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
7,966	7,419	535	13	66,268	13,446	43,669	..	9,152
7,837	7,371	456	10	64,721	10,997	44,888	..	8,836
10,764	7,669	407	2,688	59,993	11,009	42,133	..	6,852
11,044	7,153	269	3,622	58,185	11,803	38,952	..	7,429
4,263	4,160	7	96	36,202	35,596	343	..	263
4,072	3,974	8	90	34,476	33,467	391	338	280
3,782	3,688	7	86	37,458	31,061	364	5,780	254
3,510	3,368	7	134	35,891	28,366	364	6,828	333
13,893	9,159	..	4,734	79,753	25,339	1,181	43,524	9,710
15,119	9,453	..	5,666	74,336	25,824	1,315	34,435	12,763
15,644	9,511	..	6,133	84,822	21,156	1,350	50,326	11,989
16,355	9,067	..	7,288	79,589	21,706	1,646	43,879	12,359
412	412	..	..	17,081	10,625	6,172	..	284
347	347	..	..	16,527	11,557	4,663	..	307
414	414	..	..	18,122	10,872	6,796	..	454
434	434	..	..	15,950	10,706	4,739	..	505
721	690	..	31	43,555	20,883	3,383	16,555	2,734
737	702	..	36	40,017	17,125	3,320	16,626	2,946
926	891	..	35	46,642	22,188	5,067	16,487	2,900
907	793	..	114	49,592	25,790	3,833	16,462	3,506
375	370	6	..	12,385	4,816	5,927	..	1,642
405	399	6	..	12,981	5,266	5,805	..	1,910
346	340	6	..	14,865	5,341	7,223	..	2,300
283	281	2	..	13,937	6,003	5,571	..	2,362
8,737	8,065	575	98	78,298	42,409	2,600	30,246	3,043
9,066	8,333	644	89	72,458	36,600	2,793	30,043	3,023
9,177	8,375	693	110	75,838	39,302	2,927	30,731	2,878
7,337	6,629	602	106	77,511	40,717	2,481	31,022	3,292
3,202	2,239	..	963	26,315	10,148	17	..	16,150
3,419	2,238	..	1,181	25,310	8,963	17	..	16,330
3,564	2,255	..	1,309	29,487	13,416	16	..	16,054
4,469	2,266	..	2,203	30,660	11,618	15	..	19,028
94	91	1	2	7,521	6,745	18	..	759
183	177	4	2	5,896	4,782	26	..	1,087
176	172	2	2	7,029	5,923	21	..	1,085
173	170	..	3	8,764	7,480	23	..	1,261
..	..	..	..	386	230	104	..	53
..	..	..	..	407	251	109	..	47
..	..	..	..	424	269	100	..	54
..	..	..	..	434	213	131	..	90
10,819	9,713	760	346	57,831	16,210	11,661	23,870	6,090
10,079	8,602	1,094	383	59,189	12,790	14,789	23,291	8,319
10,585	9,013	1,084	488	61,536	14,658	14,708	23,598	8,572
9,515	7,994	948	573	62,706	12,699	12,543	25,336	12,127
22,367	17,405	595	4,367	548,408	44,743	60,977	399,012	43,676
21,541	16,137	589	4,815	510,714	40,727	66,505	353,833	49,649
23,687	18,146	561	4,980	531,395	40,002	63,386	379,361	48,646
28,019	21,764	502	5,753	446,726	48,413	50,547	294,731	53,035
53,336	52,318	98	920	553,581	281,896	25,573	75,071	171,041
53,010	51,839	84	1,087	522,452	250,491	25,191	64,382	182,388
54,378	53,236	99	1,043	538,421	278,952	24,873	69,130	165,466
50,396	49,390	100	906	529,870	285,889	23,476	34,709	185,796
..	..	..	..	220	220	..	..	0
..	..	..	..	215	215	..	..	0
..	..	..	..	223	223	..	..	0
..	..	..	..	211	211	..	..	0

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Greece	2019	48,626	32,880	4,051	..	7,266	4,429	..
	2020	48,252	31,055	3,440	..	9,310	4,447	..
	2021	54,744	33,049	5,961	..	10,483	5,251	..
	2022	52,670	30,647	4,000	..	10,883	7,140	..
Guernsey	2019	165	164	..	..	..	0	..
	2020	23	23	..	..	..	0	..
	2021	27	27	..	..	..	0	..
	2022	29	29	..	..	..	0	..
Hungary	2019	34,291	15,429	219	16,288	729	1,497	129
	2020	34,930	15,358	244	16,055	655	2,459	159
	2021	36,120	15,301	212	15,990	664	3,796	157
	2022	35,775	14,365	178	15,812	610	4,732	77
Iceland	2019	19,489	3	13,461	..	7	..	6,018
	2020	19,127	3	13,157	..	7	..	5,961
	2021	19,614	2	13,804	..	6	..	5,802
	2022	20,120	3	14,196	..	6	..	5,916
Ireland	2019	30,956	19,771	1,132	..	10,019	33	..
	2020	32,267	19,440	1,224	..	11,549	53	..
	2021	31,862	20,968	1,036	..	9,778	79	..
	2022	33,856	21,551	948	..	11,208	148	..
Isle of Man	2019	581	578	3	..	..	..	..
	2020	552	548	4	..	..	..	..
	2021	360	356	4	..	..	..	..
	2022	577	575	2	..	..	..	..
Italy	2019	293,853	195,084	48,154	..	20,202	23,689	6,725
	2020	280,531	180,805	49,495	..	18,762	24,942	6,528
	2021	289,074	189,132	47,478	..	20,931	25,039	6,493
	2022	283,961	198,515	30,291	..	20,494	28,121	6,540
Jersey	2019	44	44	..	..	..	..	..
	2020	43	43	..	..	..	..	..
	2021	33	33	..	..	..	..	..
	2022	41	41	..	..	..	..	..
Kosovo	2019	6,348	6,037	210	..	91	11	..
	2020	6,713	6,348	263	..	90	12	..
	2021	6,892	6,453	297	..	126	16	..
	2022	6,998	6,361	260	..	363	14	..
Latvia	2019	6,438	4,174	2,108	..	154	3	..
	2020	5,725	2,940	2,603	..	177	5	..
	2021	5,846	2,990	2,708	..	141	7	..
	2022	4,997	2,016	2,750	..	190	41	..
Liechtenstein	2019	103	2	75	..	..	26	..
	2020	104	1	73	..	..	30	..
	2021	107	2	74	..	..	31	..
	2022	103	3	62	..	..	39	..
Lithuania	2019	3,972	1,210	948	..	1,499	91	223
	2020	5,518	2,550	1,080	..	1,552	129	207
	2021	5,079	2,240	1,094	..	1,362	191	193
	2022	4,783	1,845	1,021	..	1,512	342	63
Luxembourg	2019	1,908	547	949	..	281	130	..
	2020	2,234	628	1,094	..	351	161	..
	2021	2,211	632	1,085	..	314	180	..
	2022	2,238	526	1,124	..	312	276	..
Malta	2019	2,060	1,864	..	..	0	195	..
	2020	2,143	1,906	..	..	0	237	..
	2021	2,215	1,959	..	..	0	256	..
	2022	2,293	2,004	..	..	0	290	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
2,480	2,480	..	..	46,146	30,400	4,051	..	11,695
2,712	2,712	..	..	45,539	28,342	3,440	..	13,757
2,795	2,795	..	..	51,949	30,254	5,961	..	15,734
2,923	2,923	..	..	49,747	27,725	4,000	..	18,023
..	..	..	..	165	164	..	..	0
..	..	..	..	23	23	..	..	0
..	..	..	..	27	27	..	..	0
..	..	..	..	29	29	..	..	0
1,978	1,056	..	922	32,313	14,373	219	16,288	1,433
2,352	1,017	..	1,335	32,578	14,341	244	16,055	1,938
2,850	957	..	1,893	33,270	14,344	212	15,990	2,724
3,199	993	..	2,206	32,576	13,373	178	15,812	3,213
..	..	..	..	19,489	3	13,461	..	6,025
..	..	..	..	19,127	3	13,157	..	5,967
..	..	..	..	19,614	2	13,804	..	5,808
..	..	..	..	20,120	3	14,196	..	5,922
2,169	2,084	..	85	28,786	17,687	1,132	..	9,967
2,194	2,088	..	107	30,073	17,352	1,224	..	11,496
2,204	2,064	..	139	29,658	18,904	1,036	..	9,718
2,264	2,072	..	192	31,591	19,479	948	..	11,164
*33	*33	..	..	548	545	3	..	..
*33	*33	..	..	518	515	4	..	..
*32	*32	..	..	328	324	4	..	..
*33	*33	..	..	544	542	2	..	..
22,340	21,695	492	153	271,513	173,389	47,661	..	50,463
20,335	19,658	465	212	260,196	161,147	49,030	..	50,019
50,206	39,184	331	10,691	238,868	149,948	47,148	..	41,772
53,927	40,904	247	12,776	230,034	157,612	30,044	..	42,379
42	42	..	..	2	2	..	..	..
42	42	..	..	1	1	..	..	..
32	32	..	..	1	1	..	..	..
40	40	..	..	1	1	..	..	..
0	..	..	0	6,348	6,037	210	..	101
..	..	..	..	6,713	6,348	263	..	102
..	..	..	..	6,892	6,453	297	..	142
..	..	..	..	6,998	6,361	260	..	377
187	180	2	5	6,251	3,994	2,106	..	152
182	173	2	7	5,543	2,767	2,601	..	175
168	157	2	9	5,678	2,833	2,706	..	140
175	131	2	42	4,822	1,884	2,748	..	189
..	..	..	..	103	2	75	..	26
..	..	..	..	104	1	73	..	30
..	..	..	..	107	2	74	..	31
..	..	..	..	103	3	62	..	39
821	598	..	223	3,151	612	948	..	1,591
816	609	..	207	4,702	1,941	1,080	..	1,681
697	505	..	193	4,382	1,735	1,094	..	1,553
716	653	..	63	4,067	1,192	1,021	..	1,854
285	150	5	130	1,623	398	944	..	281
309	143	5	161	1,926	485	1,090	..	351
312	128	5	180	1,899	504	1,080	..	314
387	104	7	276	1,851	422	1,116	..	312
202	6	..	195	1,858	1,858	..	..	..
243	6	..	237	1,900	1,900	..	..	..
263	7	..	256	1,952	1,952	..	..	..
297	7	..	290	1,997	1,997	..	..	..

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Montenegro	2019	3,423	1,506	1,621	..	293	2	..
	2020	3,386	1,615	1,448	..	320	2	..
	2021	3,781	1,444	2,010	..	325	3	..
	2022	3,322	1,551	1,444	..	325	3	..
Netherlands (Kingd. of the)	2019	121,411	99,973	74	3,910	11,508	5,399	547
	2020	123,279	94,787	46	4,087	15,278	8,568	512
	2021	122,093	88,305	88	3,828	18,046	11,304	522
	2022	121,810	78,513	50	4,156	21,401	17,079	611
North Macedonia	2019	5,870	4,581	1,164	..	102	23	..
	2020	5,347	3,929	1,277	..	117	24	..
	2021	5,532	3,926	1,452	..	103	51	..
	2022	5,933	4,389	1,345	..	108	92	..
Norway	2019	134,907	3,011	126,030	..	5,525	13	328
	2020	155,196	2,441	142,471	..	9,913	82	289
	2021	157,922	1,292	144,368	..	11,770	109	383
	2022	146,731	1,918	129,366	..	14,810	173	464
Poland	2019	163,989	145,269	2,665	..	15,107	711	237
	2020	158,043	137,254	2,937	..	15,800	1,958	94
	2021	179,631	156,279	3,101	..	16,234	3,934	84
	2022	179,748	148,579	3,018	..	19,780	8,310	61
Portugal	2019	53,154	27,687	10,243	..	13,667	1,342	215
	2020	53,078	25,214	13,633	..	12,299	1,716	217
	2021	50,980	21,894	13,455	..	13,216	2,237	179
	2022	48,808	23,011	8,839	..	13,244	3,519	195
Republic of Moldova	2019	941	830	65	..	43	3	..
	2020	983	881	47	..	51	4	..
	2021	1,131	976	68	..	77	10	..
	2022	995	761	41	..	140	53	..
Romania	2019	59,623	23,787	16,006	11,280	6,773	1,778	..
	2020	55,935	20,088	15,701	11,466	6,945	1,733	..
	2021	59,470	22,162	17,745	11,284	6,576	1,703	..
	2022	56,003	21,569	14,360	11,089	6,997	1,988	..
Russian Federation	2019	1,121,492	713,955	196,510	208,984	331	1,279	433
	2020	1,089,668	655,850	214,388	215,745	1,241	2,022	421
	2021	1,159,417	713,687	216,392	223,372	3,311	2,225	430
	2022	1,151,156	719,871	199,361	223,372	5,547	2,556	449
Serbia	2019	37,600	26,490	10,198	..	898	14	..
	2020	37,956	27,219	9,749	..	976	13	..
	2021	38,236	25,153	11,984	..	1,085	14	..
	2022	35,510	25,271	9,274	..	949	16	..
Slovakia	2019	28,434	7,953	4,571	15,282	6	589	33
	2020	28,838	7,897	4,799	15,444	4	663	31
	2021	30,016	8,999	4,552	15,730	5	671	59
	2022	26,838	6,254	3,963	15,920	4	650	47
Slovenia	2019	16,100	5,287	4,683	5,821	6	303	..
	2020	17,191	5,239	5,225	6,353	6	368	..
	2021	15,877	4,715	4,997	5,706	6	453	..
	2022	13,616	3,958	3,401	5,606	6	646	..
Spain	2019	273,257	117,125	26,874	58,349	55,647	15,103	159
	2020	263,373	93,778	33,998	58,299	56,444	20,667	187
	2021	274,312	95,443	32,847	56,564	62,061	27,098	299
	2022	292,454	112,950	22,102	58,590	62,784	35,723	305
Sweden	2019	168,439	16,390	65,393	66,130	19,847	679	..
	2020	163,833	13,618	72,440	49,198	27,526	1,051	..
	2021	171,798	16,137	73,926	52,965	27,244	1,526	..
	2022	173,159	16,015	69,967	51,944	33,253	1,980	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	3,423	1,506	1,621	..	296
..	..	..	..	3,386	1,615	1,448	..	322
..	..	..	..	3,781	1,444	2,010	..	327
..	..	..	..	3,322	1,551	1,444	..	328
29,060	22,950	..	6,109	92,352	77,022	74	3,910	11,346
34,526	25,722	..	8,805	88,753	69,066	46	4,087	15,554
37,216	26,439	..	10,777	84,878	61,866	88	3,828	19,095
38,105	22,508	..	15,597	83,705	56,005	50	4,156	23,494
..	..	..	..	5,870	4,581	1,164	..	125
..	..	..	..	5,347	3,929	1,277	..	141
..	..	..	..	5,532	3,926	1,452	..	154
..	..	..	..	5,933	4,389	1,345	..	200
2,721	2,380	..	341	132,185	631	126,030	..	5,525
2,177	1,806	..	371	153,018	635	142,471	..	9,913
1,183	692	..	492	156,739	600	144,368	..	11,770
1,962	1,325	..	637	144,769	593	129,366	..	14,810
17,214	16,263	3	948	146,774	129,006	2,662	..	15,107
18,795	16,741	3	2,052	139,247	120,513	2,934	..	15,800
18,997	14,977	2	4,018	160,634	141,302	3,099	..	16,234
22,295	13,922	1	8,371	157,454	134,657	3,017	..	19,780
8,678	7,998	18	662	44,477	19,689	10,225	..	14,563
8,877	7,895	18	965	44,201	17,319	13,615	..	13,267
8,495	7,432	14	1,048	42,485	14,461	13,440	..	14,584
7,675	6,189	10	1,476	41,133	16,822	8,829	..	15,482
79	53	..	26	862	777	65	..	20
70	46	..	24	913	835	47	..	31
109	57	..	52	1,022	919	68	..	35
166	46	..	120	829	715	41	..	73
6,405	5,715	270	421	53,218	18,072	15,736	11,280	8,130
7,287	6,561	269	457	48,648	13,527	15,432	11,466	8,222
8,419	7,260	312	847	51,052	14,902	17,433	11,284	7,432
8,592	7,704	221	667	47,411	13,865	14,139	11,089	8,318
76,525	75,348	1,177	..	1,044,968	638,607	195,334	208,984	2,043
71,098	69,813	1,285	..	1,018,570	586,036	213,104	215,745	3,685
80,596	79,300	1,297	..	1,078,820	634,387	215,095	223,372	5,966
81,174	79,979	1,195	..	1,069,982	639,891	198,167	223,372	8,552
470	470	..	..	37,130	26,020	10,198	..	912
474	474	..	..	37,483	26,745	9,749	..	989
527	527	..	..	37,708	24,626	11,984	..	1,098
481	480	..	1	35,029	24,791	9,274	..	964
3,089	2,556	120	413	25,345	5,397	4,451	15,282	215
3,066	2,462	128	476	25,772	5,435	4,671	15,444	222
3,261	2,630	129	502	26,755	6,369	4,423	15,730	233
3,031	2,463	106	462	23,807	3,791	3,857	15,920	239
769	261	213	295	15,331	5,026	4,470	5,821	14
851	273	218	360	16,340	4,966	5,007	6,353	15
925	256	227	442	14,952	4,459	4,770	5,706	17
1,029	228	170	631	12,586	3,730	3,231	5,606	20
38,316	37,059	897	360	234,941	80,066	25,977	58,349	70,549
35,666	34,190	972	504	227,707	59,588	33,026	58,299	76,794
37,828	35,506	881	1,441	236,484	59,937	31,966	56,564	88,017
30,823	25,635	861	4,327	261,631	87,315	21,241	58,590	94,485
6,964	6,959	5	..	161,475	9,431	65,388	66,130	20,526
6,609	6,609	..	..	157,224	7,009	72,440	49,198	28,577
6,894	6,894	..	..	164,904	9,243	73,926	52,965	28,770
8,019	6,995	..	1,024	165,140	9,020	69,967	51,944	34,209

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Switzerland	2019	73,478	3,775	40,962	26,418	146	2,178	..
	2020	71,654	3,863	41,022	24,025	145	2,599	..
	2021	66,042	3,796	39,895	19,364	145	2,842	..
	2022	65,666	3,670	33,836	24,153	150	3,858	..
Ukraine	2019	154,141	58,201	7,855	83,003	2,020	2,933	129
	2020	148,408	55,258	7,564	76,203	3,271	5,969	144
	2021	157,915	51,835	10,333	86,206	2,833	6,565	144
	2022	113,394	34,349	10,905	62,069	1,813	4,201	57
United Kingdom	2019	323,391	183,202	7,689	56,184	63,835	12,418	63
	2020	310,467	163,845	8,408	50,278	75,380	12,504	52
	2021	307,810	177,796	7,292	45,904	64,663	12,075	79
	2022	324,085	175,020	7,632	47,723	80,257	13,283	169
Latin America & Carib.	2019	1,674,659	755,267	739,799	35,246	95,444	25,847	23,055
	2020	1,625,477	714,914	724,775	36,022	104,810	34,879	10,077
	2021	1,754,627	822,222	706,675	37,458	126,947	49,058	12,267
	2022	1,744,220	692,201	779,050	33,364	138,297	76,426	24,881
Anguilla	2019	100	97	..	..	..	3	..
	2020	90	88	..	..	..	3	..
	2021	98	95	..	..	..	3	..
	2022	106	103	..	..	..	*3	..
Antigua and Barbuda	2019	358	345	..	..	..	13	..
	2020	347	330	..	..	..	16	..
	2021	351	334	..	..	..	*17	..
	2022	*368	*351	..	..	..	*17	..
Argentina	2019	145,990	95,389	36,878	7,927	4,996	800	..
	2020	144,924	99,199	24,262	10,707	9,412	1,345	..
	2021	153,779	107,628	20,186	10,831	12,938	2,196	..
	2022	146,315	97,688	23,580	7,955	14,164	2,928	..
Aruba	2019	*973	*798	..	..	*165	*10	..
	2020	*912	*736	..	..	*165	*11	..
	2021	*955	*772	..	..	*172	*11	..
	2022	*964	*779	..	..	*174	*11	..
Bahamas	2019	1,897	1,892	..	..	1	4	..
	2020	1,798	1,793	..	..	1	5	..
	2021	1,968	1,960	..	..	1	8	..
	2022	2,175	2,167	..	..	*1	*8	..
Barbados	2019	1,083	1,031	..	..	..	52	..
	2020	1,016	947	..	..	..	69	..
	2021	1,025	940	..	..	..	85	..
	2022	1,068	959	..	..	..	108	..
Belize	2019	364	289	75	..	..	1	..
	2020	433	191	242	..	..	1	..
	2021	365	205	158	..	..	3	..
	2022	466	222	239	..	..	5	..
Bolivia (Plur. State of)	2019	10,259	6,749	3,251	..	70	188	..
	2020	9,978	6,640	2,942	..	64	332	..
	2021	10,879	7,172	3,237	..	120	351	..
	2022	11,408	7,767	2,852	..	439	351	..
Bonaire, St Eustatius, Saba	2019	145	104	..	..	33	*9	..
	2020	145	112	..	..	25	*8	..
	2021	156	119	..	..	*28	*10	..
	2022	*163	*126	..	..	*27	*10	..
Brazil	2019	626,329	149,682	397,877	16,129	55,986	6,655	..
	2020	621,198	143,017	396,328	14,053	57,050	10,750	..
	2021	656,109	189,301	362,818	14,705	72,286	16,752	247
	2022	677,372	123,467	427,114	14,559	81,632	30,126	474

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
8,218	3,158	2,883	2,178	65,260	617	38,079	26,418	146
8,640	3,187	2,854	2,599	63,014	676	38,168	24,025	145
8,849	3,078	2,929	2,842	57,192	718	36,966	19,364	145
9,435	3,030	2,547	3,858	56,231	640	31,289	24,153	150
2,262	2,124	..	138	151,880	56,077	7,855	83,003	4,944
3,328	3,161	..	167	145,080	52,097	7,564	76,203	9,217
3,407	3,238	..	169	154,508	48,597	10,333	86,206	9,372
2,414	2,341	..	74	110,979	32,008	10,905	62,069	5,998
60,894	41,818	1,743	17,333	262,497	141,384	5,946	56,184	58,983
60,573	41,151	1,871	17,551	249,894	122,694	6,537	50,278	70,385
58,726	41,771	1,682	15,272	249,084	136,024	5,610	45,904	61,545
61,383	42,106	1,746	17,531	262,702	132,914	5,886	47,723	76,179
222,248	182,871	23,968	15,409	1,452,412	572,397	715,832	35,246	128,937
227,451	187,091	21,937	18,423	1,398,026	527,822	702,838	36,022	131,343
230,908	186,273	20,867	23,768	1,523,719	635,949	685,808	37,458	164,504
253,675	170,928	25,354	57,393	1,490,545	521,273	753,696	33,364	182,212
..	..	..	..	100	97	..	..	3
..	..	..	..	90	88	..	..	3
..	..	..	..	98	95	..	..	3
..	..	..	..	106	103	..	..	*3
*1	*1	..	..	357	344	..	..	13
*1	*1	..	..	346	329	..	..	16
*1	*1	..	..	350	333	..	..	*17
*1	*1	..	..	*367	*350	..	..	*17
14,744	14,698	46	..	131,246	80,691	36,832	7,927	5,796
13,785	13,743	42	..	131,139	85,456	24,220	10,707	10,757
13,785	13,743	42	..	139,994	93,885	20,144	10,831	15,134
12,295	12,282	13	..	134,020	85,406	23,567	7,955	17,092
..	..	..	..	*973	*798	..	..	*175
..	..	..	..	*912	*736	..	..	*176
..	..	..	..	*955	*772	..	..	*183
..	..	..	..	*964	*779	..	..	*185
*92	*92	..	..	1,805	1,800	..	..	5
*98	*98	..	..	1,700	1,695	..	..	5
*105	*105	..	..	1,863	1,855	..	..	8
*100	*100	..	..	2,075	2,067	..	..	*9
18	18	..	..	1,065	1,013	..	..	52
17	17	..	..	1,000	931	..	..	69
17	17	..	..	1,008	924	..	..	85
18	18	..	..	1,050	942	..	..	108
228	228	..	..	136	61	75	..	1
152	152	..	..	281	38	242	..	1
162	162	..	..	203	43	158	..	3
175	175	..	..	291	47	239	..	5
428	422	7	..	9,830	6,327	3,245	..	258
499	496	3	..	9,480	6,144	2,939	..	397
663	659	4	..	10,217	6,514	3,233	..	470
708	704	4	..	10,700	7,063	2,848	..	790
..	..	..	..	145	104	..	..	41
..	..	..	..	145	112	..	..	33
..	..	..	..	156	119	..	..	*38
..	..	..	..	*163	*126	..	..	*37
102,385	81,249	19,427	1,709	523,944	68,433	378,450	16,129	60,932
106,451	83,876	17,745	4,830	514,747	59,141	378,583	14,053	62,970
113,968	88,564	16,002	9,402	542,141	100,737	346,816	14,705	79,883
125,619	87,119	20,461	18,038	551,753	36,348	406,653	14,559	94,194

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
British Virgin Islands	2019	201	198	..	..	1	2	..
	2020	*205	*201	..	..	2	2	..
	2021	*209	*205	..	..	2	2	..
	2022	*212	*209	..	..	2	2	..
Cayman Islands	2019	696	696	..	..	..	..	..
	2020	668	668	..	..	..	..	..
	2021	678	678	..	..	..	..	..
	2022	698	698	..	..	..	..	..
Chile	2019	84,558	50,564	22,477	..	4,897	6,419	202
	2020	83,994	48,331	21,873	..	5,602	7,971	216
	2021	88,019	50,154	19,348	..	7,628	10,565	324
	2022	91,019	45,261	20,684	..	8,893	15,714	467
Colombia	2019	80,415	25,622	54,594	..	63	137	..
	2020	79,550	29,361	49,977	..	10	201	..
	2021	86,872	23,337	62,318	..	62	333	821
	2022	87,056	24,204	62,248	..	74	518	13
Costa Rica	2019	11,508	295	7,827	..	1,796	77	1,513
	2020	11,730	217	8,294	..	1,459	70	1,689
	2021	12,737	194	9,286	..	1,573	82	1,602
	2022	12,583	66	9,449	..	1,369	81	1,619
Cuba	2019	20,706	20,331	125	..	*65	*186	..
	2020	19,071	18,698	112	..	*68	*193	..
	2021	17,966	17,581	120	..	*69	*196	..
	2022	15,874	15,512	120	..	28	214	..
Curaçao	2019	879	646	..	..	208	25	..
	2020	839	621	..	..	191	27	..
	2021	846	622	..	..	197	27	..
	2022	867	650	..	..	189	27	..
Dominica	2019	138	117	20	..	1	0	..
	2020	142	122	19	..	1	0	..
	2021	146	125	20	..	1	0	..
	2022	147	123	23	..	*1	0	..
Dominican Republic	2019	21,200	18,820	1,298	..	793	289	..
	2020	19,495	16,533	1,575	..	1,065	323	..
	2021	21,397	17,866	1,859	..	1,223	449	..
	2022	21,420	18,302	1,298	..	1,174	646	..
Ecuador	2019	32,284	7,520	24,641	..	86	38	..
	2020	31,248	6,800	24,333	..	77	38	..
	2021	32,214	6,541	25,575	..	62	37	..
	2022	33,008	8,274	24,635	..	61	39	..
El Salvador	2019	5,921	2,538	1,522	..	..	488	1,373
	2020	6,219	1,790	2,067	..	14	899	1,450
	2021	6,361	1,888	1,817	..	132	1,073	1,452
	2022	7,584	2,512	2,234	..	135	1,122	1,581
Falkland Is. (Malvinas)	2019	18	13	..	..	5	0	..
	2020	18	14	..	..	4	0	..
	2021	19	14	..	..	4	0	..
	2022	*19	*14	..	..	5	0	..
Grenada	2019	245	241	..	..	0	4	..
	2020	227	223	..	..	0	4	..
	2021	229	225	..	..	0	*4	..
	2022	238	233	..	..	0	*5	..
Guatemala	2019	13,563	8,335	4,497	..	221	199	312
	2020	12,013	5,182	5,966	..	317	222	326
	2021	13,061	6,594	5,646	..	325	230	265
	2022	12,852	5,069	6,970	..	315	220	277

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	201	198	..	..	3
..	..	..	..	*205	*201	..	..	3
..	..	..	..	*209	*205	..	..	4
..	..	..	..	*212	*209	..	..	4
..	..	..	..	696	696	..	..	..
..	..	..	..	668	668	..	..	..
..	..	..	..	678	678	..	..	..
..	..	..	..	698	698	..	..	..
6,525	6,488	30	8	78,033	44,076	22,447	..	11,510
6,625	6,548	58	19	77,369	41,783	21,816	..	13,770
6,628	6,402	168	59	81,391	43,752	19,180	..	18,458
6,485	6,065	189	231	84,534	39,196	20,495	..	24,843
11,039	10,872	157	10	69,377	14,749	54,437	..	191
11,008	10,858	140	10	68,541	18,503	49,837	..	201
11,309	11,080	206	23	75,563	12,257	62,113	..	1,193
11,798	11,560	195	42	75,259	12,643	62,053	..	563
267	200	..	67	11,241	96	7,827	..	3,319
254	193	..	61	11,476	24	8,294	..	3,158
264	191	..	73	12,473	3	9,286	..	3,184
137	64	..	73	12,447	2	9,449	..	2,996
844	844	..	..	19,861	19,486	125	..	*251
914	914	..	..	18,157	17,784	112	..	*261
861	861	..	..	17,105	16,720	120	..	*265
846	846	..	..	15,028	14,666	120	..	242
43	43	..	..	836	604	..	..	233
24	24	..	..	815	596	..	..	219
14	14	..	..	832	608	..	..	224
2	2	..	..	865	648	..	..	217
*44	*44	..	..	94	73	20	..	1
*44	*44	..	..	98	78	19	..	1
*44	*44	..	..	102	81	20	..	2
*45	*45	..	..	102	78	23	..	*2
3,271	3,122	..	148	17,929	15,697	1,298	..	933
1,518	1,369	..	148	17,978	15,164	1,575	..	1,240
1,592	1,414	..	178	19,805	16,452	1,859	..	1,494
1,840	1,530	..	310	19,579	16,771	1,298	..	1,510
5,914	4,254	1,660	..	26,369	3,266	22,980	..	123
5,636	4,049	1,587	..	25,612	2,751	22,747	..	115
6,243	4,451	1,792	..	25,971	2,089	23,783	..	99
6,205	4,507	1,698	..	26,804	3,767	22,937	..	99
382	29	81	273	5,538	2,508	1,442	..	1,588
510	26	81	402	5,709	1,763	1,985	..	1,961
618	21	86	510	5,744	1,867	1,731	..	2,147
693	23	87	583	6,891	2,489	2,147	..	2,255
..	..	..	..	18	13	..	..	5
..	..	..	..	18	14	..	..	4
..	..	..	..	19	14	..	..	5
..	..	..	..	*19	*14	..	..	5
7	3	..	4	238	238	..	..	..
8	3	..	4	220	220	..	..	..
*8	3	..	*5	221	221	..	..	..
*8	3	..	*5	230	230	..	..	..
1,335	1,308	27	..	12,228	7,027	4,470	..	732
891	859	32	..	11,122	4,323	5,934	..	865
1,117	1,085	32	..	11,943	5,509	5,614	..	820
827	795	32	..	12,025	4,274	6,938	..	812

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Guyana	2019	1,135	1,123	..	..	0	11	..
	2020	1,136	1,124	..	..	0	12	..
	2021	1,143	1,129	..	..	0	14	..
	2022	*1,152	*1,134	..	..	0	18	..
Haiti	2019	1,064	887	174	..	..	3	..
	2020	1,029	882	144	..	..	3	..
	2021	1,033	896	134	..	..	3	..
	2022	1,012	824	185	..	..	3	..
Honduras	2019	10,586	5,866	2,430	..	818	1,176	296
	2020	10,059	5,232	2,701	..	707	1,113	307
	2021	10,957	4,940	3,765	..	775	1,129	348
	2022	11,149	5,228	3,883	..	686	1,016	337
Jamaica	2019	4,465	3,948	155	..	272	90	..
	2020	4,939	4,399	136	..	280	124	..
	2021	4,705	4,170	139	..	264	132	..
	2022	5,243	4,652	116	..	265	209	..
Mexico	2019	344,839	267,416	23,716	11,190	16,880	7,057	18,580
	2020	317,680	245,464	26,817	11,262	19,702	9,115	5,320
	2021	381,364	294,525	34,537	11,923	20,896	13,010	6,473
	2022	343,847	236,550	35,851	10,850	20,629	20,542	19,425
Montserrat	2019	14	14	..	..	..	0	..
	2020	14	14	..	..	..	0	..
	2021	14	13	..	..	..	0	..
	2022	14	13	..	..	..	0	..
Nicaragua	2019	4,576	2,815	227	..	730	26	778
	2020	3,791	1,873	574	..	550	26	767
	2021	4,213	2,197	599	..	656	27	734
	2022	4,369	2,444	650	..	562	26	687
Panama	2019	13,667	7,423	5,196	..	725	324	..
	2020	13,394	4,963	7,502	..	584	346	..
	2021	14,289	4,522	8,625	..	530	612	..
	2022	14,166	4,743	8,116	..	579	727	..
Paraguay	2019	49,448	2	49,446	..	..	..	..
	2020	46,373	2	46,371	..	..	..	..
	2021	40,576	2	40,574	..	..	..	..
	2022	43,881	1	43,880	..	..	..	..
Peru	2019	57,038	23,088	31,462	..	1,655	833	..
	2020	52,803	19,624	30,510	..	1,814	856	..
	2021	56,833	22,261	31,890	..	1,821	861	..
	2022	59,772	27,216	29,744	..	1,932	881	..
Puerto Rico	2019	18,886	18,444	41	..	159	242	..
	2020	18,774	18,321	51	..	143	259	..
	2021	19,184	18,705	40	..	166	273	..
	2022	18,325	17,872	45	..	156	253	..
Saint Barthélemy	2019	116	116	..	..	..	0	..
	2020	121	121	..	..	..	0	..
	2021	133	133	..	..	..	0	..
	2022	140	140	..	..	..	0	..
Saint Martin (French Part)	2019	168	168	..	..	..	0	..
	2020	173	172	..	..	..	1	..
	2021	178	177	..	..	..	*1	..
	2022	182	181	..	..	..	*1	..
Sint Maarten (Dutch part)	2019	*296	*296	..	..	..	..	..
	2020	265	265	..	..	..	..	..
	2021	*286	*286	..	..	..	..	..
	2022	*291	*291	..	..	..	..	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
30	30	..	..	1,105	1,094	..	..	11
24	24	..	..	1,112	1,100	..	..	12
23	23	..	..	1,120	1,106	..	..	14
17	17	..	..	*1,135	*1,117	..	..	18
22	22	..	..	1,042	865	174	..	3
21	21	..	..	1,008	861	144	..	3
21	21	..	..	1,012	875	134	..	3
21	21	..	..	992	804	185	..	3
1,991	1,931	0	60	8,595	3,935	2,430	..	2,230
1,744	1,675	0	69	8,315	3,556	2,701	..	2,058
2,183	2,114	0	69	8,774	2,826	3,765	..	2,183
2,207	2,138	0	69	8,942	3,090	3,883	..	1,970
1,549	1,187	..	362	2,916	2,761	155	..	..
*964	*560	..	404	3,975	3,839	136	..	..
*1,019	*623	..	396	3,686	3,547	139	..	..
1,065	590	..	475	4,178	4,062	116	..	..
60,545	47,129	789	12,627	284,294	220,287	22,927	11,190	29,890
66,737	53,611	808	12,318	250,943	191,853	26,009	11,262	21,819
60,080	46,403	783	12,894	321,284	248,122	33,754	11,923	27,485
72,588	34,303	899	37,386	271,258	202,246	34,952	10,850	23,210
..	..	..	..	14	14	..	..	0
..	..	..	..	14	14	..	..	0
..	..	..	..	14	13	..	..	0
..	..	..	..	14	13	..	..	0
889	888	..	1	3,686	1,927	227	..	1,533
778	775	..	3	3,013	1,098	574	..	1,340
942	939	..	3	3,271	1,259	599	..	1,414
942	939	..	3	3,427	1,506	650	..	1,272
2,024	1,896	100	29	11,642	5,527	5,096	..	1,019
2,458	2,277	152	29	10,936	2,685	7,349	..	901
2,619	2,309	283	27	11,670	2,213	8,342	..	1,115
2,650	2,347	279	24	11,516	2,396	7,838	..	1,282
..	..	..	..	49,448	2	49,446	..	..
..	..	..	..	46,373	2	46,371	..	..
..	..	..	..	40,576	2	40,574	..	..
..	..	..	..	43,881	1	43,880	..	..
2,574	1,827	693	54	54,464	21,261	30,769	..	2,434
2,130	1,454	615	61	50,673	18,169	29,895	..	2,608
2,349	1,668	622	60	54,485	20,593	31,268	..	2,623
1,958	1,319	579	60	57,814	25,897	29,164	..	2,753
*230	*230	..	..	18,656	18,214	41	..	401
*232	*232	..	..	18,542	18,089	51	..	402
*233	*233	..	..	18,951	18,472	40	..	439
*235	*235	..	..	18,090	17,637	45	..	409
..	..	..	..	116	116	..	..	0
..	..	..	..	121	121	..	..	0
..	..	..	..	133	133	..	..	0
..	..	..	..	140	140	..	..	0
..	..	..	..	168	168	..	..	0
..	..	..	..	173	172	..	..	1
..	..	..	..	178	177	..	..	*1
..	..	..	..	182	181	..	..	*1
..	..	..	..	*296	*296	..	..	..
..	..	..	..	265	265	..	..	..
..	..	..	..	*286	*286	..	..	..
..	..	..	..	*291	*291	..	..	..

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
St. Kitts-Nevis	2019	250	242	..	..	6	3	..
	2020	234	224	..	..	6	5	..
	2021	228	218	..	..	6	5	..
	2022	235	225	..	..	*6	*5	..
St. Lucia	2019	408	401	..	..	..	7	..
	2020	372	365	..	..	..	7	..
	2021	391	384	..	..	..	7	..
	2022	409	402	..	..	..	7	..
St. Vincent-Grenadines	2019	154	130	22	..	..	3	..
	2020	152	125	22	..	..	5	..
	2021	145	122	19	..	..	4	..
	2022	*154	*128	*21	..	..	4	..
Suriname	2019	1,868	906	952	..	..	10	..
	2020	1,730	1,043	674	..	..	12	..
	2021	1,594	734	847	..	..	13	..
	2022	2,097	1,155	917	..	..	25	..
Trinidad and Tobago	2019	9,188	9,183	..	..	0	5	..
	2020	9,225	9,220	..	..	0	5	..
	2021	9,262	9,256	..	..	0	6	..
	2022	9,577	9,571	..	..	0	*6	..
Turks and Caicos Islands	2019	*261	*260	..	..	..	1	..
	2020	*256	*255	..	..	..	1	..
	2021	*267	*263	..	..	..	4	..
	2022	*265	*261	..	..	..	*4	..
United States Virgin Is.	2019	637	605	..	..	0	*32	..
	2020	666	635	..	..	0	*32	..
	2021	710	675	..	..	0	*34	..
	2022	692	658	..	..	0	35	..
Uruguay	2019	16,090	2,806	8,108	..	4,752	424	..
	2020	13,557	3,526	4,094	..	5,476	462	..
	2021	15,953	5,206	5,273	..	4,991	483	..
	2022	14,759	3,787	5,686	..	4,783	503	..
Venezuela (Bolivar. Rep.)	2019	79,676	16,819	62,789	..	60	6	*1
	2020	82,471	15,254	67,190	..	20	6	*1
	2021	84,730	16,858	67,845	..	19	6	*2
	2022	88,504	19,969	68,512	..	16	6	*2
Northern America	2019	5,045,070	2,951,806	692,823	944,527	331,073	101,232	23,609
	2020	4,912,714	2,771,119	695,260	921,345	377,579	123,403	24,008
	2021	5,020,580	2,858,469	658,492	904,180	418,820	156,439	24,180
	2022	5,147,943	2,886,794	677,261	890,908	476,123	192,810	24,047
Bermuda	2019	613	611	..	..	..	*2	..
	2020	*590	*588	..	..	..	*2	..
	2021	*595	*593	..	..	..	*2	..
	2022	*601	*598	..	..	..	*2	..
Canada	2019	652,113	132,277	381,843	101,197	32,873	3,752	171
	2020	651,463	126,506	386,617	98,195	35,761	4,072	312
	2021	644,689	126,562	383,963	92,629	36,006	5,113	416
	2022	651,311	123,332	397,727	87,239	36,853	5,737	423
Greenland	2019	531	*122	409	..	..	..	..
	2020	566	*136	431	..	..	..	..
	2021	569	*137	433	..	..	..	..
	2022	614	*147	467	..	..	..	..
St. Pierre-Miquelon	2019	52	52	..	..	..	..	..
	2020	51	51	..	..	..	..	..
	2021	51	51	..	..	..	..	..
	2022	50	50	..	..	..	..	..

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
*1	*1	..	..	249	241	..	..	9
*1	*1	..	..	233	223	..	..	10
*1	*1	..	..	227	217	..	..	10
*1	*1	..	..	234	224	..	..	*10
0	..	..	0	408	401	..	..	7
*1	..	..	*1	372	365	..	..	7
*1	..	..	*1	390	384	..	..	6
1	..	..	1	409	402	..	..	7
1	..	..	1	153	130	22	..	2
1	..	..	1	151	125	22	..	4
*1	..	..	*1	144	122	19	..	2
*1	..	..	*1	*152	*128	*21	..	3
1,471	519	952	..	397	387	..	..	10
1,246	572	674	..	484	471	..	..	12
1,322	475	847	..	272	259	..	..	13
1,650	721	917	12	447	435	..	..	13
76	76	..	..	9,112	9,108	..	..	5
76	76	..	..	9,149	9,144	..	..	5
76	76	..	..	9,185	9,180	..	..	6
78	78	..	..	9,499	9,493	..	..	*6
..	..	..	..	*261	*260	..	..	1
..	..	..	..	*256	*255	..	..	1
..	..	..	..	*267	*263	..	..	4
..	..	..	..	*265	*261	..	..	*4
*17	..	..	*17	620	605	..	..	15
*17	..	..	*17	649	635	..	..	14
*17	..	..	*17	693	675	..	..	17
*17	..	..	*17	675	658	..	..	18
1,702	1,668	..	34	14,388	1,138	8,108	..	5,142
1,733	1,693	..	40	11,825	1,833	4,094	..	5,898
1,768	1,723	..	46	14,185	3,483	5,273	..	5,429
1,589	1,531	..	58	13,170	2,256	5,686	..	5,228
1,556	1,552	..	4	78,120	15,267	62,789	..	63
854	849	..	4	81,618	14,405	67,190	..	23
854	849	..	4	83,876	16,009	67,845	..	22
854	849	..	4	87,651	19,120	68,512	..	19
260,433	198,170	30,115	32,149	4,784,637	2,753,636	662,708	944,527	423,765
260,751	194,489	29,010	37,253	4,651,963	2,576,630	666,251	921,345	487,737
255,094	189,869	22,910	42,315	4,765,486	2,668,600	635,582	904,180	557,123
266,414	194,956	22,603	48,855	4,881,530	2,691,838	654,658	890,908	644,126
*15	*13	..	*2	598	598	..	..	..
*15	*13	..	*2	*575	*575	..	..	..
*15	*13	..	*2	*580	*580	..	..	..
*15	*13	..	*2	*585	*585	..	..	..
60,921	29,908	28,876	2,137	591,192	102,369	352,967	101,197	34,659
60,658	30,560	27,778	2,320	590,805	95,946	358,839	98,195	37,825
53,913	30,047	21,692	2,174	590,776	96,515	362,271	92,629	39,361
54,714	30,928	21,418	2,368	596,597	92,404	376,309	87,239	40,645
..	..	..	..	531	*122	409	..	..
..	..	..	..	566	*136	431	..	..
..	..	..	..	569	*137	433	..	..
..	..	..	..	614	*147	467	..	..
..	..	..	..	52	52	..	..	..
..	..	..	..	51	51	..	..	..
..	..	..	..	51	51	..	..	..
..	..	..	..	50	50	..	..	..

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
United States	2019	4,391,761	2,818,743	310,571	843,330	298,200	97,478	23,438
	2020	4,260,044	2,643,838	308,213	823,150	341,818	119,329	23,696
	2021	4,374,676	2,731,127	274,096	811,551	382,814	151,324	23,764
	2022	4,495,368	2,762,666	279,067	803,669	439,270	187,071	23,624
Oceania	2019	321,702	234,248	43,722	..	20,036	15,291	8,406
	2020	321,769	227,557	41,462	..	22,759	21,548	8,442
	2021	322,188	216,442	41,613	..	27,226	28,318	8,589
	2022	328,657	207,046	45,492	..	32,029	35,436	8,654
American Samoa	2019	178	170	..	..	..	7	..
	2020	180	174	..	..	..	7	..
	2021	183	176	..	..	..	7	..
	2022	183	176	..	..	..	7	..
Australia	2019	264,025	215,498	15,967	..	17,712	14,848	..
	2020	265,178	208,599	15,150	..	20,396	21,033	..
	2021	265,554	198,102	15,200	..	24,535	27,717	..
	2022	271,532	190,726	17,011	..	29,108	34,687	..
Cook Islands	2019	39	29	..	..	..	10	..
	2020	34	26	..	..	..	8	..
	2021	34	27	..	..	..	7	..
	2022	38	30	..	..	..	7	..
Fiji	2019	1,074	498	559	..	3	13	..
	2020	989	417	558	..	1	*13	..
	2021	949	389	548	..	0	12	..
	2022	1,093	483	598	..	0	*12	..
French Polynesia	2019	695	494	159	..	0	43	..
	2020	668	464	159	..	0	44	..
	2021	672	482	142	..	0	47	..
	2022	680	436	194	..	0	50	..
Guam	2019	1,724	1,655	..	..	1	68	..
	2020	1,683	1,614	..	..	1	68	..
	2021	*1,712	*1,643	..	..	*1	*68	..
	2022	*1,703	*1,600	..	..	*1	*102	..
Kiribati	2019	38	33	..	..	..	5	..
	2020	*37	*32	..	..	..	*5	..
	2021	*38	*33	..	..	..	*5	..
	2022	*38	*33	..	..	..	*5	..
Marshall Islands	2019	*90	*88	..	..	..	2	..
	2020	*90	*88	..	..	..	2	..
	2021	*82	*80	..	..	..	2	..
	2022	*92	*90	..	..	..	*2	..
Micronesia (Fed. States of)	2019	*77	*71	1	..	*1	3	..
	2020	*85	*80	1	..	0	3	..
	2021	*90	*86	*1	..	0	3	..
	2022	*91	*86	*1	..	*1	*3	..
Nauru	2019	36	35	..	..	..	1	..
	2020	38	36	..	..	..	2	..
	2021	*42	*39	..	..	..	*3	..
	2022	*44	*41	..	..	..	*3	..
New Caledonia	2019	3,334	2,876	285	..	57	116	1
	2020	3,233	2,728	305	..	49	150	0
	2021	2,910	2,256	425	..	41	188	0
	2022	3,148	2,334	539	..	49	226	0
New Zealand	2019	45,148	8,859	25,596	..	2,255	128	8,310
	2020	44,531	9,454	24,266	..	2,305	161	8,346
	2021	44,611	9,035	24,232	..	2,642	208	8,493
	2022	44,691	6,714	26,274	..	2,865	281	8,557

Table 33

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
199,497	168,249	1,239	30,010	4,192,264	2,650,495	309,332	843,330	389,106
200,078	163,916	1,232	34,931	4,059,965	2,479,922	306,981	823,150	449,912
201,166	159,809	1,218	40,139	4,173,511	2,571,318	272,878	811,551	517,762
211,685	164,015	1,185	46,485	4,283,684	2,598,652	277,883	803,669	603,481
43,365	30,475	213	12,677	278,337	203,773	43,509	..	31,056
46,103	31,077	309	14,716	275,666	196,480	41,153	..	38,033
50,063	30,735	309	19,019	272,125	185,707	41,304	..	45,114
55,098	31,319	213	23,566	273,559	175,728	45,280	..	52,552
..	..	..	..	178	170	..	..	7
..	..	..	..	180	174	..	..	7
..	..	..	..	183	176	..	..	7
..	..	..	..	183	176	..	..	7
36,981	24,671	..	12,310	227,044	190,827	15,967	..	20,250
39,762	25,450	..	14,312	225,417	183,150	15,150	..	27,117
43,799	25,254	..	18,545	221,756	172,849	15,200	..	33,707
48,604	25,599	..	23,006	222,927	165,128	17,011	..	40,789
..	..	..	..	39	29	..	..	10
..	..	..	..	34	26	..	..	8
..	..	..	..	34	27	..	..	7
..	..	..	..	38	30	..	..	7
49	49	..	..	1,025	450	559	..	16
67	67	..	..	922	350	558	..	*14
61	61	..	..	888	328	548	..	12
73	73	..	..	1,020	410	598	..	*12
..	..	..	..	695	494	159	..	43
..	..	..	..	668	464	159	..	44
..	..	..	..	672	482	142	..	47
..	..	..	..	680	436	194	..	50
*16	..	..	*16	1,707	1,655	..	..	52
*16	..	..	*16	1,667	1,614	..	..	52
*16	..	..	*16	*1,695	*1,643	..	..	*52
*17	..	..	*17	*1,686	*1,600	..	..	*86
*2	*2	..	..	35	30	..	..	5
*2	*2	..	..	*35	*30	..	..	*5
*2	*2	..	..	*36	*31	..	..	*5
*2	*2	..	..	*36	*31	..	..	*5
..	..	..	..	*90	*88	..	..	2
..	..	..	..	*90	*88	..	..	2
..	..	..	..	*82	*80	..	..	2
..	..	..	..	*92	*90	..	..	*2
..	..	..	..	*77	*71	1	..	4
..	..	..	..	*85	*80	1	..	3
..	..	..	..	*90	*86	*1	..	3
..	..	..	..	*91	*86	*1	..	*4
..	..	..	..	36	35	..	..	1
..	..	..	..	38	36	..	..	2
..	..	..	..	*42	*39	..	..	*3
..	..	..	..	*44	*41	..	..	*3
2,008	1,989	..	19	1,325	886	285	..	154
1,943	1,913	..	30	1,290	815	305	..	170
1,578	1,524	..	53	1,332	731	425	..	176
1,729	1,657	..	72	1,419	677	539	..	204
1,637	1,397	4	236	43,511	7,462	25,592	..	10,457
1,562	1,296	4	262	42,969	8,158	24,262	..	10,549
1,690	1,378	4	308	42,921	7,657	24,228	..	11,035
1,651	1,272	4	375	43,039	5,442	26,270	..	11,328

Table 33

Production of electricity - by type

Gigawatt-hours

Country or area	Year	Total producers						
		Total	Combustible fuels	Hydro	Nuclear	Wind	Solar	Other
Niue	2019	*4	*3	..	..	..	0	..
	2020	*4	*3	..	..	..	0	..
	2021	*4	*3	..	..	..	0	..
	2022	*4	*4	..	..	..	0	..
Northern Mariana Islands	2019	*392	*392	..	..	..	..	..
	2020	*293	*290	..	..	..	*3	..
	2021	*305	*300	..	..	..	*5	..
	2022	*308	*303	..	..	..	*5	..
Palau	2019	95	91	..	..	..	*4	..
	2020	*96	*92	..	..	..	*4	..
	2021	97	93	..	..	..	4	..
	2022	*97	*93	..	..	..	*4	..
Papua New Guinea	2019	*4,299	*3,104	1,095	..	..	4	96
	2020	*4,169	*3,096	972	..	..	5	96
	2021	*4,446	*3,344	1,000	..	..	5	96
	2022	*4,447	*3,515	*830	..	..	6	96
Samoa	2019	169	96	50	..	0	24	..
	2020	172	107	41	..	0	24	..
	2021	171	94	55	..	0	21	..
	2022	172	114	35	..	0	22	..
Solomon Islands	2019	107	103	1	..	..	3	..
	2020	106	102	1	..	..	3	..
	2021	106	102	1	..	..	3	..
	2022	104	100	*1	..	..	*3	..
Tonga	2019	71	64	..	..	0	6	..
	2020	73	64	..	..	3	7	..
	2021	75	66	..	..	2	6	..
	2022	77	70	..	..	2	6	..
Tuvalu	2019	9	7	..	..	..	2	..
	2020	*10	*8	..	..	..	2	..
	2021	*10	*8	..	..	..	2	..
	2022	*10	*8	..	..	..	*2	..
Vanuatu	2019	80	63	8	..	6	3	..
	2020	76	58	8	..	6	3	..
	2021	75	59	8	..	4	3	..
	2022	79	64	9	..	3	3	..
Wallis and Futuna Is.	2019	*21	*20	0	..	..	0	..
	2020	*23	*23	0	..	..	0	..
	2021	*24	*24	0	..	..	0	..
	2022	*26	*26	0	..	..	0	..

Production of electricity - by type

Gigawatt-hours

Autoproducers				Main activity producers				
Total	Combustible fuels	Hydro	Other	Total	Combustible fuels	Hydro	Nuclear	Other
..	..	..	..	*4	*3	..	..	0
..	..	..	..	*4	*3	..	..	0
..	..	..	..	*4	*3	..	..	0
..	..	..	..	*4	*4	..	..	0
..	..	..	..	*392	*392	..	..	..
..	..	..	..	*293	*290	..	..	*3
..	..	..	..	*305	*300	..	..	*5
..	..	..	..	*308	*303	..	..	*5
*12	*12	..	..	83	79	..	..	*4
*12	*12	..	..	*84	*80	..	..	*4
*12	*12	..	..	85	81	..	..	4
*12	*12	..	..	*85	*81	..	..	*4
*2,657	*2,352	209	96	1,642	752	886	..	4
*2,735	*2,333	306	96	1,434	763	667	..	5
*2,902	*2,500	306	96	1,544	844	694	..	5
*3,005	*2,700	*209	96	*1,442	*815	*621	..	6
0	..	..	0	169	96	50	..	24
0	..	..	0	172	107	41	..	24
0	..	..	0	171	94	55	..	22
0	..	..	0	172	114	35	..	22
3	3	..	..	104	99	1	..	3
*3	*3	..	..	103	99	1	..	3
*4	*4	..	..	103	99	1	..	3
*3	*3	..	..	101	97	*1	..	*3
..	..	..	..	71	64	..	..	6
..	..	..	..	73	64	..	..	9
..	..	..	..	75	66	..	..	9
..	..	..	..	77	70	..	..	7
..	..	..	..	9	7	..	..	2
..	..	..	..	*10	*8	..	..	2
..	..	..	..	*10	*8	..	..	2
..	..	..	..	*10	*8	..	..	*2
..	..	..	..	80	63	8	..	10
..	..	..	..	76	58	8	..	9
..	..	..	..	75	59	8	..	7
..	..	..	..	79	64	9	..	5
..	..	..	..	*21	*20	0	..	0
..	..	..	..	*23	*23	0	..	0
..	..	..	..	*24	*24	0	..	0
..	..	..	..	*26	*26	0	..	0