

**Selected energy resources and reserves**

Million metric tons unless otherwise indicated

**Table Notes**

Based on country submissions and the publication *World Energy Resources - 2016*, World Energy Council (WEC), available at <https://www.worldenergy.org/publications/2016/world-energy-resources-2016/>.

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.

Table 36

## Selected energy resources and reserves

Million metric tons unless otherwise indicated

Country or area	Bituminous coal / Anthracite			Sub-bituminous coal / Lignite			Peat	
	Proved amount in place	Proved recoverable reserves	Estimated additional amount in place	Proved amount in place	Proved recoverable reserves	Estimated additional amount in place	Proved amount in place	Proved recoverable reserves
Afghanistan	66	66	400	..	..	..	..	..
Albania	..	..	..	727	522	..	..	155
Algeria	223	59	164	..	..	..	..	..
Angola	..	..	..	..	..	..	..	..
Argentina	800	500	..	7,300	500	273	90	*80
Armenia	317	163	..	..	..	..	..	..
Australia	1,598,761	62,095	125,000	443,431	44,164	215,000	..	..
Austria	1	..	3	333	25	61	..	..
Azerbaijan	..	..	..	..	..	..	..	..
Bahrain	..	..	..	..	..	..	..	..
Bangladesh	3,260	293	..	3	..	..	*138	..
Barbados	..	..	..	..	..	..	..	..
Belarus	..	..	..	1,500	100	..	323	323
Belgium	4,100	410	1,400	..	..	..	..	..
Belize	..	..	..	..	..	..	..	..
Benin	..	..	..	..	..	..	..	..
Bhutan	..	..	..	..	..	..	..	..
Bolivia (Plur. State of)	1	1	..	..	..	..	..	..
Bosnia and Herzegovina	..	484	..	5,274	2,264	..	..	..
Botswana	21,240	40	205,253	..	..	..	..	..
Brazil	6,212	1,547	..	17,636	5,049	15,319	..	..
Brunei Darussalam	..	..	..	..	..	..	..	..
Bulgaria	4,112	192	1,200	4,574	2,174	2,618	5	5
Burkina Faso	..	..	..	..	..	..	..	..
Burundi	..	..	..	..	..	..	56	56
Cambodia	..	..	..	..	..	..	..	..
Cameroon	..	..	..	..	..	..	..	..
Canada	187,606	4,346	26,045	120,506	2,236	31,990	1,092	..
Central African Rep.	..	..	..	3	3	..	..	..
Chad	..	..	..	..	..	..	..	..
Chile	5,316	1,181	125	7	155	5,000	..	..
China	5,462,672	124,059	363,200	332,652	7,555	304,700	4,687	328
Colombia	14,809	4,881	13,173	411	380	3,176	..	..
Congo	..	..	..	..	..	..	..	..
Costa Rica	17	..	..	27	..	22	48	..
Côte d'Ivoire	..	..	..	..	..	..	..	..
Croatia	4	4	..	300	33	..	..	..
Cuba	..	..	..	..	..	..	..	..
Cyprus	..	..	..	..	..	..	..	..
Czechia	16,526	1,107	..	9,767	2,604	..	..	..
Dem. Rep. of the Congo	988	88	..	..	..	..	..	..
Denmark	..	..	..	63	..	..	..	..
Dominica	..	..	..	..	..	..	..	..
Dominican Republic	..	..	..	84	..	..	..	..
Ecuador	..	..	..	24	24	6	..	..
Egypt	182	16	..	27	22	52	..	..
El Salvador	..	..	..	..	..	..	..	..
Equatorial Guinea	..	..	..	..	..	..	..	..
Estonia	..	..	..	..	..	..	2,000	2,000
Eswatini	4,644	144	793	..	..	..	..	..
Ethiopia	..	..	..	23	11	..	..	..
Faeroe Islands	..	..	..	..	..	..	..	..
Falkland Is. (Malvinas)	..	..	..	..	..	..	..	..
Fiji	..	..	..	..	..	..	..	..
Finland	..	..	..	..	..	..	850	420
France	160	95	200	114	21	165	..	..
French Guiana	..	..	..	..	..	..	..	..
French Polynesia	..	..	..	..	..	..	..	..
Gabon	..	..	..	..	..	..	..	..
Georgia	901	201	..	..	..	..	..	..

Peat	Proved recoverable reserves				Uranium (metric tons)		Hydropower (Gross theoretical capability) (GWh/Year)	
	Estimated additional amount in place	Natural gas (billions cubic metres)	Crude oil and NGL	Oil shale	Bituminous sands	Reasonably assured resources		Inferred Resources
..	*50	..	..	..	..	..	..	394,000
..	*1	..	*26	..	5	..	..	40,000
..	4,504	1,537	..	..	..	19,500	..	12,000
..	*308	1,709	..	..	74	..	..	150,000
50	332	328	..	57	..	8,600	11,000	354,000
..	*18	..	..	44	..	..	..	22,000
..	3,471	442	4,531	..	..	1,174,000	558,700	265,000
..	*10	*7	1	..	..	..	..	150,000
..	1,148	959	..	..	20	..	..	44,000
..	172	15	..	..	..	..	..	..
*138	232	*4	..	..	..	..	..	4,000
..	0	0	..	..	..	..	..	..
1,479	*3	27	1,000	..	..	..	..	8,000
..	0	..	..	..	..	..	..	1,000
..	..	0	..	..	..	..	..	1,000
..	*1	1	..	..	..	..	..	2,000
..	..	..	..	..	..	..	..	263,000
..	281	*22	..	..	..	..	..	178,000
..	..	..	..	..	..	..	..	70,000
..	..	..	..	..	..	..	..	..
487	424	1,890	11,734	..	..	23,100	59,100	..
..	276	*150	..	..	..	155,100	121,000	3,040,000
..	*6	*2	18	..	..	..	..	..
..	..	..	..	..	..	..	..	27,000
..	..	..	..	..	..	..	..	1,000
..	..	..	..	..	..	..	..	6,000
..	..	..	..	..	..	..	..	88,000
..	*150	*18	..	..	..	..	..	294,000
336,908	1,987	27,755	2,192	27,134	..	357,500	192,500	2,067,000
..	..	..	..	..	..	12,000	..	7,000
..	..	216	..	..	..	..	..	150
..	*40	*20	3	..	..	700	1,200	227,000
952	3,841	2,521	47,600	..	120	120,000	56,600	6,083,000
..	135	333	..	..	5	..	..	1,000,000
..	115	*190	..	..	81	..	..	50,000
22	..	..	..	..	..	..	..	224,000
..	28	*14	..	..	..	..	..	46,000
..	*25	*7	..	..	..	..	..	20,000
280	*71	*3	..	..	8	..	..	3,000
..	*142	..	..	..	..	..	..	59,000
..	4	*2	..	..	..	1,300	100	13,000
..	*1	*24	14,310	..	5	1,400	1,300	1,397,000
..	31	74	..	..	..	..	..	120
..	..	..	..	..	..	..	..	200
..	..	..	..	..	..	..	..	50,000
..	*11	1,175	..	..	7	..	..	169,000
..	1,846	458	816	..	8	..	1,900	125,000
..	..	..	..	..	..	..	..	7,000
..	*37	149	..	..	..	..	..	..
..	..	..	2,494	..	..	..	..	2,000
..	..	..	..	..	..	..	..	4,000
..	*25	0	..	..	..	..	..	650,000
..	..	..	..	..	..	..	..	1,000
28	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	3,000
2,200	..	..	..	..	..	1,100	..	31,000
..	*10	*11	1,002	..	..	11,500	100	270,000
..	..	..	..	..	..	..	..	2,000
..	..	..	..	..	..	..	..	1,000
..	*28	274	..	..	..	4,800	1,000	200,000
..	*9	*5	..	..	0	..	..	136,000

Table 36

## Selected energy resources and reserves

Million metric tons unless otherwise indicated

Country or area	Bituminous coal / Anthracite			Sub-bituminous coal / Lignite			Peat	
	Proved amount in place	Proved recoverable reserves	Estimated additional amount in place	Proved amount in place	Proved recoverable reserves	Estimated additional amount in place	Proved amount in place	Proved recoverable reserves
Germany	82,982	21	8,065	76,800	36,300	34,100	157	96
Ghana	..	..	..	..	..	..	..	..
Greece	..	..	..	6,430	2,876	..	4,000	..
Greenland	383	183	..	183	183	200	..	..
Grenada	..	..	..	..	..	..	..	..
Guatemala	..	..	..	..	..	..	..	..
Guinea	..	..	..	..	..	..	..	..
Guinea-Bissau	..	..	..	..	..	..	..	..
Guyana	..	..	..	..	..	..	..	..
Haiti	..	..	..	40	..	27	..	..
Honduras	..	..	..	21	..	..	..	..
Hungary	5,351	276	298	5,337	2,633	2,630	..	..
Iceland	..	..	..	..	..	..	..	..
India	260,544	85,562	157,435	42,645	4,714	32,893	..	..
Indonesia	109,825	17,394	6,035	40,639	8,274	38,704	49,000	..
Iran (Islamic Rep. of)	41,203	1,203	..	2,295	..	..	..	..
Iraq	..	..	..	..	..	..	..	..
Ireland	40	14	26	..	9	..	154	106
Israel	..	..	..	..	..	..	500	386
Italy	610	10	..	29	7	600	..	..
Jamaica	..	..	..	..	..	..	200	32
Japan	13,883	340	6,298	1,036	10	7,122	..	..
Jordan	..	..	..	..	..	..	..	..
Kazakhstan	148,695	25,605	..	..	12,100	..	..	..
Kenya	..	..	..	..	..	..	..	..
Korea, Dem.Ppl's.Rep.	10,600	600	2,700	300	300	2,200	..	..
Korea, Republic of	1,686	326	272	209	126	812	..	..
Kuwait	..	..	..	..	..	..	..	..
Kyrgyzstan	28,499	971	..	..	812	..	..	..
Lao People's Dem. Rep.	62	4	..	521	499	..	..	..
Latvia	..	..	..	..	..	..	190	94
Lebanon	..	..	..	..	..	..	..	..
Lesotho	..	..	..	..	..	..	..	..
Liberia	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..
Lithuania	..	..	..	..	..	..	937	269
Madagascar	150	..	..	37	..	..	..	..
Malawi	802	2	..	..	2	..	..	..
Malaysia	1,209	141	78	451	39	575	..	..
Mali	..	..	..	3	..	3	..	..
Mauritania	..	..	..	..	..	..	..	..
Mauritius	..	..	..	..	..	..	..	..
Mexico	4,160	1,160	1,960	51	51	213	..	..
Mongolia	41,024	1,170	..	120,776	1,350	..	..	..
Montenegro	337	142	..	..	..	..	..	..
Morocco	96	14	..	40	..	2	..	..
Mozambique	23,636	1,792	155	..	..	..	..	..
Myanmar	252	3	120	5	3	80	..	..
Namibia	350	..	..	..	..	..	..	..
Nepal	8	1	..	1	1	7	..	..
Netherlands	3,247	497	2,750	..	..	..	120	120
New Caledonia	2	2	8	..	..	..	..	..
New Zealand	3,175	825	942	11,350	6,750	11,902	1,640	..
Nicaragua	..	..	..	..	..	..	..	..
Niger	90	70	..	6	6	..	..	..
Nigeria	2,144	287	21	377	57	1,000	..	..
Norway	93	2	..	64	5	100	745	350
Oman	..	..	..	..	..	..	..	..
Pakistan	5,996	207	5	179,596	2,857	68,068	..	..
Panama	..	..	..	..	..	..	..	..

Peat	Proved recoverable reserves				Uranium (metric tons)		Hydropower (Gross theoretical capability) (GWh/Year)
	Estimated additional amount in place	Natural gas (billions cubic metres)	Crude oil and NGL	Oil shale	Bituminous sands	Reasonably assured resources	
200	39	*31	286	..	3,000	4,000	120,000
..	*23	*90	..	..	..	..	28,000
..	*1	*1	..	..	1,000	6,000	80,000
..	..	..	..	..	..	134,700	550,000
..	..	..	..	..	..	..	38
..	3	*11	..	..	..	..	59,000
..	..	232	..	..	..	..	26,000
..	..	..	..	..	..	..	1,000
..	..	..	..	..	..	..	81,000
..	..	..	..	..	..	..	4,000
..	..	..	..	..	..	..	16,000
238	*8	*4	8	..	..	8,600	10,000
..	..	..	..	..	..	..	184,000
..	1,489	764	..	..	77,000	27,900	2,638,000
..	2,839	498	..	67	8,400	2,200	2,147,000
..	34,020	*21,433	..	..	700	1,800	448,000
..	3,694	19,308	..	..	..	..	225,000
140	*10	..	..	..	..	..	1,000
1,000	181	*2	550	0	..	..	0
2,500	45	82	10,446	48	4,800	1,300	190,000
..	..	..	..	..	..	..	1,000
..	*21	*4	..	..	6,600	..	718,000
..	*6	0	5,242	5	0	33,800	4,000
..	936	3,932	400	6,689	285,600	417,300	170,000
..	..	..	..	..	..	..	24,000
..	..	..	..	..	..	..	..
..	6	..	..	..	..	..	52,000
..	1,784	13,981	..	..	..	..	..
..	*6	*5	..	..	..	..	163,000
..	..	..	..	..	..	..	233,000
760	..	..	..	..	..	..	7,000
..	..	..	..	..	..	..	2,000
..	..	..	..	..	..	..	5,000
..	..	..	..	..	..	..	28,000
..	1,505	6,297	..	..	..	..	..
..	..	*1	..	..	..	..	6,000
..	2	..	5	35	..	..	321,000
..	..	..	..	..	8,200	5,700	15,000
..	*1,169	471	..	..	..	..	230,000
..	..	..	..	..	..	..	12,000
..	*28	*3	..	..	..	..	..
..	..	..	..	..	..	..	150
..	324	1,496	..	0	2,800	0	430,000
..	..	*35	42	..	30,600	25,100	57,000
..	..	..	..	..	..	..	27,000
..	*1	0	8,167	..	..	..	12,000
..	*2,832	*2	..	..	..	..	103,000
..	528	*3	286	..	..	..	348,000
..	*62	..	..	..	248,200	155,500	23,000
..	0	..	..	..	..	..	733,000
..	675	*30	..	..	..	..	11,000
..	..	..	..	..	..	..	2,000
..	*28	*17	3	..	..	..	205,000
..	..	..	..	..	..	..	33,000
..	..	*20	..	..	325,000	104,900	3,000
..	5,111	5,003	..	91	..	..	43,000
7,015	1,857	994	..	..	..	..	600,000
..	688	720	..	..	..	..	..
..	543	*50	..	..	..	..	475,000
..	..	..	..	..	..	..	26,000

Table 36

## Selected energy resources and reserves

Million metric tons unless otherwise indicated

Country or area	Bituminous coal / Anthracite			Sub-bituminous coal / Lignite			Peat	
	Proved amount in place	Proved recoverable reserves	Estimated additional amount in place	Proved amount in place	Proved recoverable reserves	Estimated additional amount in place	Proved amount in place	Proved recoverable reserves
Papua New Guinea	..	..	..	..	..	..	..	..
Paraguay	..	..	..	..	..	..	..	..
Peru	1,567	102	..	100	100	..	..	..
Philippines	1,223	211	8	1,017	105	37	..	..
Poland	178,913	16,203	27,405	227,886	5,429	11,837	890	..
Portugal	3	3	..	66	33	..	..	..
Qatar	..	..	..	..	..	..	..	..
Republic of Moldova	..	..	..	..	..	..	..	..
Romania	2,446	11	2,143	9,920	280	8,177	25	13
Russian Federation	2,727,915	69,634	200,000	1,379,623	90,730	200,000	17,680	11,554
Rwanda	..	..	..	..	..	..	..	..
Samoa	..	..	..	..	..	..	..	..
Saudi Arabia	..	..	..	..	..	..	..	..
Senegal	..	..	..	..	..	..	40	24
Serbia	855	402	..	20,186	7,112	..	..	..
Serbia and Montenegro	..	..	..	..	..	..	..	..
Sierra Leone	..	..	..	2	..	..	..	..
Slovakia	19	2	..	1,073	135	..	..	..
Slovenia	95	56	..	656	315	40	..	..
Solomon Islands	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..
South Africa	213,560	9,893	5,000	30	..	100	47	30
South Sudan	..	..	..	..	..	..	..	..
Spain	4,231	868	3,000	319	319	1,260	94	70
Sri Lanka	..	..	..	..	..	..	5	5
Sudan	..	..	..	..	..	..	..	..
Sudan (former)	..	..	..	..	..	..	..	..
Suriname	..	..	..	..	..	..	..	..
Sweden	5	1	..	4	1	20	700	70
Switzerland	..	..	..	..	..	..	..	..
Syrian Arab Republic	..	..	..	..	..	..	..	..
T.F.Yug.Rep. Macedonia	..	..	..	632	332	..	..	..
Tajikistan	4,075	375	..	..	..	..	..	..
Thailand	..	..	..	1,889	1,063	2,857	..	..
Timor-Leste	..	..	..	..	..	..	..	..
Togo	..	..	..	..	..	..	..	..
Trinidad and Tobago	..	..	..	..	..	..	..	..
Tunisia	..	..	..	..	..	..	..	..
Turkey	1,182	380	249	12,828	12,466	296	..	..
Turkmenistan	800	..	..	..	..	..	..	..
Uganda	800	..	..	..	..	..	..	..
Ukraine	81,045	32,039	5,170	7,717	2,336	6,174	2,160	684
United Arab Emirates	..	..	..	..	..	..	..	..
United Kingdom	186,770	70	190	1,000	500	..	..	..
United Rep. of Tanzania	1,410	269	*1,500	..	..	..	..	..
United States	6,680,329	222,641	445,346	1,398,360	30,483	667,415	26,000	13,000
Uruguay	..	..	..	..	..	..	..	..
Uzbekistan	10,852	1,375	..	..	1,853	..	..	..
Venezuela (Bolivar. Rep.)	6,712	731	4,528	..	..	..	..	..
Viet Nam	6,635	3,116	..	200,120	244	..	..	..
Yemen	..	..	..	..	..	..	..	..
Zambia	945	45	..	69	55	18	..	..
Zimbabwe	25,502	502	5,820	965	..	..	..	..

Peat	Proved recoverable reserves				Uranium (metric tons)		Hydropower (Gross theoretical capability) (GWh/Year)
	Estimated additional amount in place	Natural gas (billions cubic metres)	Crude oil and NGL	Oil shale	Bituminous sands	Reasonably assured resources	
..	141	*24	..	..	..	..	175,000
200	..	..	..	..	..	..	111,000
..	414	170	..	1	1,300	1,300	1,577,000
..	*99	*15	..	..	..	..	47,000
2,300	95	15	7	..	..	..	25,000
..	..	..	..	..	6,000	1,000	32,000
..	24,528	2,695	..	..	..	..	..
..	..	..	..	..	..	..	2,000
10	110	80	..	1	3,100	3,600	70,000
168,320	32,271	14,024	35,470	4,518	216,500	432,000	2,295,000
2,000	*57	..	..	..	..	..	2,000
..	..	..	..	..	..	..	140
..	8,325	36,618	..	..	..	..	..
52	10	0	..	..	..	..	11,000
..	31	*7	..	..	..	..	27,000
..	45	22	..	..	..	..	118,000
..	..	*60	..	..	..	..	11,000
..	*14	*1	..	..	0	9,000	10,000
..	0	0	..	..	1,700	7,500	19,000
..	..	..	..	..	..	..	3,000
..	*6	..	..	..	5,000	2,600	2,000
..	10	*2	19	..	175,300	179,200	73,000
..	..	472	..	..	..	..	..
..	*3	*19	40	..	14,000	0	162,000
46	..	..	..	..	..	..	21,000
..	..	202	..	..	..	..	..
..	85	682	..	..	..	..	48,000
..	..	*12	..	..	..	..	39,000
..	..	..	875	..	5,000	8,500	200,000
..	..	..	..	..	..	..	125,000
..	285	*340	..	..	..	..	11,000
..	..	..	..	..	..	..	9,000
..	*6	*2	..	..	..	..	527,000
..	220	49	916	..	..	..	18,000
..	..	*59	..	..	..	..	..
..	..	..	..	..	..	..	4,000
..	326	*113	..	1	..	..	..
..	*65	55	..	..	..	..	1,000
..	*7	*46	284	..	7,300	..	433,000
..	17,479	82	1,100	..	..	..	24,000
..	*14	*136	..	..	..	..	33,000
1,846	604	*54	600	..	84,800	81,300	45,000
..	6,091	12,976	..	..	..	..	..
..	206	374	501	12	..	..	35,000
..	*1,317	..	..	..	30,100	15,600	39,000
..	10,441	*6,857	536,931	3	207,400	..	2,040,000
46	..	..	..	..	..	..	32,000
..	1,086	81	1,200	..	59,400	31,900	88,000
..	5,617	*26,807	..	9,212	..	..	731,000
..	617	*599	..	..	1,000	5,400	300,000
..	266	409	..	..	..	..	..
..	..	..	..	..	9,900	5,700	53,000
..	..	..	..	..	1,400	..	44,000