

RENEWABLE CAPACITY STATISTICS 2023

STATISTIQUES DE CAPACITÉ RENOUVELABLE 2023

ESTADÍSTICAS DE CAPACIDAD RENOVABLE 2023

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The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international co-operation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy, in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.

www.irena.org

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FOREWORD

Highlighting the continued progress toward the energy transition in the global power generation mix, this latest edition of *Renewable capacity statistics* reaffirms renewables as the *de-facto* energy choice for new power generation, despite the effects of recent global crises and geopolitical shocks on the energy sector.

By the end of 2022, renewables accounted for 40% of global installed power capacity. Yet, as we draw closer to a world in which renewable energy accounts for half of total capacity, many energy planning questions must be addressed to establish renewables as the most significant source of electricity generation - including in the context of grid flexibility and adaptation to variable renewable power.

2022 has seen the largest increase in renewable energy capacity to date – the world added almost 295 gigawatts (GW) of renewables, increasing the stock of renewable power by 9.6% and contributing an unprecedented 83% of global power additions, largely due to the growth of solar and wind power, and the further decommissioning of fossil fuel power plants in several large economies. Solar power alone accounted for almost two-thirds of the renewable additions with a record 192 GW, while 75 GW of wind energy was added, slowing from the 111 GW added in 2020.

A record year for renewable capacity additions is encouraging for countries around the world redesigning their national energy planning strategies to favour renewables. There is, however, much more potential to increase the role of renewables; to stay on the pathway to limit global temperature increases to 1.5°C of pre-industrial levels, the world needs to see more than 1 000 GW of annual renewable capacity additions until 2050, with solar power representing more than half of this figure. While this is an ambitious target - as the gap between what is needed and what is implemented widens - the capacity progress reported here for 2022 reflects ongoing global efforts to transform the power sector.

Looking ahead, we hope to see a much faster pace of growth in the stock of renewable power plants and distributed electricity generation around the world.

This report should serve not only as a valuable resource to track progress, but also as a glaring reminder of the work that lies ahead to achieve a just, inclusive and sustainable future for all.

Francesco La Camera
Director-General
International Renewable Energy Agency

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The renewable power capacity data shown in these tables represents the maximum net generating capacity of power plants and other installations that use renewable energy sources to produce electricity. For most countries and technologies, the data reflects the capacity installed and connected at the end of the calendar year. The data is presented in megawatts (MW) rounded to the nearest one megawatt, with figures between zero and 0.5MW shown as a 0.

Data has been obtained from a variety of sources, including: the IRENA questionnaire; official statistics; industry association reports; and other reports and news articles. Numbers followed by the letter "o" are figures that have been obtained from official sources such as national statistical offices, government departments, regulators and power companies. The letter "u" follows figures that have been obtained from unofficial sources, such as industry associations and news articles. The letter "e" follows figures that have been estimated by IRENA from a variety of different data sources. All data from the IRENA questionnaire is presented without any indicator.

Data are available for download at www.irena.org/statistics.

NOTES À PROPOS DES TABLEAUX

Les données sur les capacités électriques renouvelables présentées dans ces tableaux représentent la capacité maximale nette de génération des centrales électriques et autres installations utilisant des sources d'énergie renouvelables pour produire de l'électricité. Pour la plupart des pays et technologies, les données reflètent la capacité installée et connectée à la fin de l'année civile. Les données sont exprimées en mégawatts (MW) arrondies à l'unité la plus proche ; les valeurs inférieures à 0,5 MW apparaissent comme 0.

Les données proviennent de sources multiples, y compris : le questionnaire IRENA ; les statistiques officielles ; des rapports d'associations de l'industrie ; et d'autres rapports et articles de presse. Les valeurs suivies de la lettre "o" ont été obtenues à partir de sources officielles (par exemple instituts statistiques nationaux, agences gouvernementales, régulateurs, compagnies d'électricité). La lettre "u" correspond à des valeurs venant de sources non officielles comme des rapports d'associations de l'industrie ou des articles de journaux. La lettre "e" correspond à des valeurs qui ont été estimées par l'IRENA à partir de sources diverses. Toutes les données venant du questionnaire IRENA sont présentées sans indication.

Les données sont téléchargeables sur le site www.irena.org/statistics.

NOTAS A LAS TABLAS

Los datos de capacidad de generación eléctrica con energías renovables que se muestran en estas tablas representan la capacidad máxima de generación neta de las centrales eléctricas y otras instalaciones que utilizan fuentes de energías renovables para producir electricidad. Para la mayoría de los países y las tecnologías, los datos reflejan la capacidad instalada y conectada al final del año natural. Los datos se presentan en megavatios (MW) redondeados al megavatio entero más cercano, con cifras entre cero y 0,5 MW representadas como un 0.

Los datos se han obtenido a partir de una variedad de fuentes, incluyendo: el cuestionario de IRENA; estadísticas oficiales; informes de las asociaciones industriales; y otros informes y artículos de noticias. Los números acompañados de la letra "o" son cifras que se han obtenido a partir de fuentes oficiales, como oficinas nacionales de estadística, departamentos gubernamentales, reguladores y compañías eléctricas. La letra "u" acompaña a cifras que se han obtenido a partir de fuentes no oficiales, tales como asociaciones industriales y artículos de noticias. La letra "e" acompaña a números que han sido estimados por IRENA a partir de diversas fuentes de datos. Todos los datos provenientes del cuestionario de IRENA se presentan sin ningún indicador.

Los datos están disponibles para su descarga en www.irena.org/statistics.

COUNTRIES, AREAS AND REGIONS SHOWN IN THE TABLES

PAYS, ZONES ET RÉGIONS FIGURANT DANS LES TABLEAUX

PAÍSES, ZONAS Y REGIONES MOSTRADAS EN LAS TABLAS

Label/En-tête/Rótulo	English	Français	Español
WORLD	WORLD	MONDE	MUNDO
AFRICA	AFRICA	AFRIQUE	ÁFRICA
Algeria	Algeria	Algérie	Argelia
Angola	Angola	Angola	Angola
Benin	Benin	Bénin	Benín
Botswana	Botswana	Botswana	Botsuana
Burkina Faso	Burkina Faso	Burkina Faso	Burkina Faso
Burundi	Burundi	Burundi	Burundi
Cabo Verde	Cabo Verde	Cabo Verde	Cabo Verde
Cameroon	Cameroon	Cameroun	Camerún
Cent Afr Rep	Central African Republic	République centrafricaine	República Centroatricana
Chad	Chad	Tchad	Chad
Comoros	Comoros	Comores	Comoras
Congo DR	Democratic Republic of the Congo	République démocratique du Congo	República Democrática del Congo
Congo Rep	Congo	Congo	República del Congo
Cote d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire
Djibouti	Djibouti	Djibouti	Djibouti
Egypt	Egypt	Égypte	Egipto
Eq Guinea	Equatorial Guinea	Guinée équatoriale	Guinea Ecuatorial
Eritrea	Eritrea	Érythrée	Eritrea
Eswatini	Eswatini	Eswatini	Eswatini
Ethiopia	Ethiopia	Éthiopie	Etiopía
Gabon	Gabon	Gabon	Gabón
Gambia	Gambia	Gambia	Gambia
Ghana	Ghana	Ghana	Ghana
Guinea	Guinea	Guinée	Guinea
Guinea Bissau	Guinea-Bissau	Guinée-Bissau	Guinea-Bisáu
Kenya	Kenya	Kenya	Kenia
Lesotho	Lesotho	Lesotho	Lesoto
Liberia	Liberia	Libéria	Liberia
Libya	Libya	Libye	Libia
Madagascar	Madagascar	Madagascar	Madagascar
Malawi	Malawi	Malawi	Malawi
Mali	Mali	Mali	Malí
Mauritania	Mauritania	Mauritanie	Mauritania
Mauritius	Mauritius	Maurice	Mauricio
Mayotte	Mayotte	Mayotte	Mayotte
Morocco	Morocco	Maroc	Marruecos
Mozambique	Mozambique	Mozambique	Mozambique
Namibia	Namibia	Namibie	Namibia
Niger	Niger	Niger	Níger
Nigeria	Nigeria	Nigéria	Nigeria
Reunion	Réunion	Réunion	Reunión
Rwanda	Rwanda	Rwanda	Rwanda
Saint Helena	Saint Helena, Ascension and Tristan da Cunha	Sainte-Hélène, Ascension et Tristan de Cunha	Santa Helena, Ascensión y Tristán de Acuña
Sao Tome Prn	Sao Tome and Principe	Sao Tomé-et-Príncipe	Santo Tomé y Príncipe
Senegal	Senegal	Sénégal	Senegal
Seychelles	Seychelles	Seychelles	Seychelles
Sierra Leone	Sierra Leone	Sierra Leone	Sierra Leona
Somalia	Somalia	Somalie	Somalia
South Africa	South Africa	Afrique du Sud	Sudáfrica
South Sudan	South Sudan	Soudan du Sud	Sudán del Sur
Sudan	Sudan	Soudan	Sudán

Label/En-tête/Rótulo	English	Français	Español
Tanzania	United Republic of Tanzania	République-Unie de Tanzanie	República Unida de Tanzania
Togo	Togo	Togo	Togo
Tunisia	Tunisia	Tunisie	Túnez
Uganda	Uganda	Ouganda	Uganda
Westn Sahara	Western Sahara	Sahara occidental	Sahara occidental
Zambia	Zambia	Zambie	Zambia
Zimbabwe	Zimbabwe	Zimbabwe	Zimbabue
ASIA	ASIA	ASIE	ASIA
Afghanistan	Afghanistan	Afghanistan	Afganistán
Bangladesh	Bangladesh	Bangladesh	Bangladesh
Bhutan	Bhutan	Bhoutan	Bután
Brunei Darism	Brunei Darussalam	Brunéi Darussalam	Brunei Darussalam
Cambodia	Cambodia	Cambodge	Camboya
China	China	Chine	China
China HK SAR	China, Hong Kong Special Administrative Region	Chine, région administrative spéciale de Hong Kong	China, región administrativa especial de Hong Kong
China Mac SAR	China, Macao Special Administrative Region	Chine, région administrative spéciale de Macao	China, región administrativa especial de Macao
Chinese Taipei	Chinese Taipei	Taipei chinois	China Taipéi
India	India	Inde	India
Indonesia	Indonesia	Indonésie	Indonesia
Japan	Japan	Japon	Japón
Kazakhstan	Kazakhstan	Kazakhstan	Kazajstán
Korea DPR	Democratic People's Republic of Korea	République démocratique populaire de Corée	República Popular Democrática de Corea
Korea Rep	Republic of Korea	République de Corée	República de Corea
Kyrgyzstan	Kyrgyzstan	Kirghizistan	Kirguistán
Lao PDR	Lao People's Democratic Republic	République démocratique populaire lao	República Democrática Popular Lao
Malaysia	Malaysia	Malaisie	Malasia
Maldives	Maldives	Maldives	Maldivas
Mongolia	Mongolia	Mongolie	Mongolia
Myanmar	Myanmar	Myanmar	Myanmar
Nepal	Nepal	Népal	Nepal
Pakistan	Pakistan	Pakistan	Pakistán
Philippines	Philippines	Philippines	Filipinas
Singapore	Singapore	Singapour	Singapur
Sri Lanka	Sri Lanka	Sri Lanka	Sri Lanka
Tajikistan	Tajikistan	Tadjikistan	Tayikistán
Thailand	Thailand	Thaïlande	Tailandia
Timor Leste	Timor-Leste	Timor-Leste	Timor-Leste
Turkmenistan	Turkmenistan	Turkménistan	Turkmenistán
Uzbekistan	Uzbekistan	Ouzbékistan	Uzbekistán
Viet Nam	Viet Nam	Viet Nam	Viet Nam
C AMERICA + CARIB	CENTRAL AMERICA AND THE CARIBBEAN	AMÉRIQUE CENTRALE ET CARAÏBES	CENTROAMÉRICA Y EL CARIBE
Anguilla	Anguilla	Anguilla	Anguila
Antigua Barb	Antigua and Barbuda	Antigua-et-Barbuda	Antigua y Barbuda
Aruba	Aruba	Aruba	Aruba
Bahamas	Bahamas	Bahamas	Bahamas
Barbados	Barbados	Barbade	Barbados
Belize	Belize	Belize	Belice
BES Islands	Bonaire, Sint Eustatius and Saba	Bonaire, Saint-Eustache et Saba	Bonaire, San Eustaquio y Saba
Br Virgin Is	British Virgin Islands	Îles Vierges britanniques	Islas Vírgenes Británicas
Cayman Is	Cayman Islands	Îles Caïmanes	Islas Caimán
Costa Rica	Costa Rica	Costa Rica	Costa Rica
Cuba	Cuba	Cuba	Cuba
Curacao	Curacao	Curaçao	Curacao
Dominica	Dominica	Dominique	Dominica
Dominican Rep	Dominican Republic	République dominicaine	República Dominicana

Label/En-tête/Rótulo	English	Français	Español
El Salvador	El Salvador	El Salvador	El Salvador
Grenada	Grenada	Grenade	Granada
Guadeloupe	Guadeloupe	Guadeloupe	Guadalupe
Guatemala	Guatemala	Guatemala	Guatemala
Haiti	Haiti	Haïti	Haití
Honduras	Honduras	Honduras	Honduras
Jamaica	Jamaica	Jamaïque	Jamaica
Martinique	Martinique	Martinique	Martinica
Montserrat	Montserrat	Montserrat	Montserrat
Nicaragua	Nicaragua	Nicaragua	Nicaragua
Panama	Panama	Panama	Panamá
Puerto Rico	Puerto Rico	Porto Rico	Puerto Rico
St Barth	Saint Barthélemy	Saint Barthélemy	San Bartolomé
St Kitts Nevis	Saint Kitts and Nevis	Saint-Kitts-et-Nevis	Saint Kitts y Nevis
St Lucia	Saint Lucia	Sainte-Lucie	Santa Lucía
St Maarten	Sint Maarten	Saint Martin (partie néerlandaise)	San Martín (parte neerlandesa)
St Martin	Saint Martin	Saint Martin (partie française)	San Martín (parte francesa)
St Vincent Gren	Saint Vincent and the Grenadines	Saint-Vincent-et-les Grenadines	San Vicente y las Granadinas
Trinidad Tobago	Trinidad and Tobago	Trinité-et-Tobago	Trinidad y Tabago
Turks Caicos	Turks and Caicos Islands	Îles Turques-et-Caïques	Islas Turcas y Caicos
US Virgin Is	United States Virgin Islands	Îles Vierges américaines	Islas Vírgenes Estadounidenses

EURASIA

EURASIA

EURASIE

EURASIA

Armenia	Armenia	Arménie	Armenia
Azerbaijan	Azerbaijan	Azerbaïdjan	Azerbaiyán
Georgia	Georgia	Géorgie	Georgia
Russian Fed	Russian Federation	Fédération de Russie	Federación de Rusia
Türkiye	Türkiye	Türkiye	Türkiye

EUROPE

EUROPE

EUROPE

EUROPA

Albania	Albania	Albanie	Albania
Andorra	Andorra	Andorre	Andorra
Austria	Austria	Autriche	Austria
Belarus	Belarus	Bélarus	Belarús
Belgium	Belgium	Belgique	Bélgica
Bosnia Herzg	Bosnia and Herzegovina	Bosnie-Herzégovine	Bosnia-Herzegovina
Bulgaria	Bulgaria	Bulgarie	Bulgaria
Croatia	Croatia	Croatie	Croacia
Cyprus	Cyprus	Chypre	Chipre
Czechia	Czech Republic	République tchèque	República Checa
Denmark	Denmark	Danemark	Dinamarca
Estonia	Estonia	Estonie	Estonia
Faroe Islands	Faroe Islands	Îles Féroé	Islas Feroe
Finland	Finland	Finlande	Finlandia
France	France	France	Francia
Germany	Germany	Allemagne	Alemania
Gibraltar	Gibraltar	Gibraltar	Gibraltar
Greece	Greece	Grèce	Grecia
Holy See	Holy See	Saint-Siège	Santa Sede
Hungary	Hungary	Hongrie	Hungría
Iceland	Iceland	Islande	Islandia
Ireland	Ireland	Irlande	Irlanda
Italy	Italy	Italie	Italia
Kosovo*	Kosovo*	Kosovo*	Kosovo*
Latvia	Latvia	Lettonie	Letonia
Liechtenstein	Liechtenstein	Liechtenstein	Liechtenstein
Lithuania	Lithuania	Lituanie	Lituania
Luxembourg	Luxembourg	Luxembourg	Luxemburgo
Malta	Malta	Malte	Malta
Moldova Rep	Republic of Moldova	République de Moldova	República de Moldavia
Monaco	Monaco	Monaco	Mónaco

Label/En-tête/Rótulo	English	Français	Español
Montenegro	Montenegro	Monténégro	Montenegro
Netherlands	Netherlands	Pays-Bas	Países Bajos
North Macedonia	North Macedonia	Macédoine du Nord	Macedonia del Norte
Norway	Norway	Norvège	Noruega
Poland	Poland	Pologne	Polonia
Portugal	Portugal	Portugal	Portugal
Romania	Romania	Roumanie	Rumania
San Marino	San Marino	Saint-Marin	San Marino
Serbia	Serbia	Serbie	Serbia
Slovakia	Slovakia	Slovaquie	Eslovaquia
Slovenia	Slovenia	Slovénie	Eslovenia
Spain	Spain	Espagne	España
Sweden	Sweden	Suède	Suecia
Switzerland	Switzerland	Suisse	Suiza
UK	United Kingdom of Great Britain and Northern Ireland	Royaume-Uni de Grande-Bretagne et d'Irlande du Nord	Reino Unido de Gran Bretaña e Irlanda del Norte
Ukraine	Ukraine	Ukraine	Ucrania
MIDDLE EAST	MIDDLE EAST	MOYEN-ORIENT	MEDIO ESTE
Bahrain	Bahrain	Bahreïn	Bahréin
Iran IR	Iran (Islamic Republic of)	République islamique d'Iran	Irán (República Islámica del)
Iraq	Iraq	Iraq	Iraq
Israel	Israel	Israël	Israel
Jordan	Jordan	Jordanie	Jordania
Kuwait	Kuwait	Koweït	Kuwait
Lebanon	Lebanon	Liban	Líbano
Oman	Oman	Oman	Omán
Qatar	Qatar	Qatar	Qatar
Saudi Arabia	Saudi Arabia	Arabie saoudite	Arabia Saudita
Palestine	State of Palestine	État de Palestine	Estado de Palestina
Syrian AR	Syrian Arab Republic	République arabe syrienne	República Árabe Siria
United Arab Em	United Arab Emirates	Émirats arabes unis	Emiratos Árabes Unidos
Yemen	Yemen	Yémen	Yemen
N AMERICA	NORTH AMERICA	AMÉRIQUE DU NORD	NORTEAMÉRICA
Bermuda	Bermuda	Bermudes	Bermudas
Canada	Canada	Canada	Canadá
Greenland	Greenland	Groenland	Groenlandia
Mexico	Mexico	Mexique	México
St Pierre Mq	Saint Pierre and Miquelon	Saint-Pierre-et-Miquelon	San Pedro y Miquelón
USA	United States of America	États-Unis d'Amérique	Estados Unidos de América
OCEANIA	OCEANIA	OCÉANIE	OCEANÍA
Amer Samoa	American Samoa	Samoa américaines	Samoa americana
Australia	Australia	Australie	Australia
Christmas Is	Christmas Island	Île Christmas	Isla de Navidad
Cocos Is	Cocos (Keeling) Islands	Îles Cocos	Islas Cocos
Cook Is	Cook Islands	Îles Cook	Islas Cook
Fiji	Fiji	Fidji	Fidji
Fr Polynesia	French Polynesia	Polynésie française	Polinesia francesa
Guam	Guam	Guam	Guam
Kiribati	Kiribati	Kiribati	Kiribati
Marshall Is	Marshall Islands	Îles Marshall	Islas Marshall
Micronesia	Micronesia (Federated States of)	Micronésie (États fédérés de)	Micronesia (Estados Federados de)
Nauru	Nauru	Nauru	Nauru
New Caledon	New Caledonia	Nouvelle-Calédonie	Nueva Caledonia
New Zealand	New Zealand	Nouvelle-Zélande	Nueva Zelandia
Niue	Niue	Nioué	Niue
Norfolk Is	Norfolk Island	Ile Norfolk	Isla Norfolk
Nth Mariana Is	Northern Mariana Islands	Îles Mariannes du Nord	Islas Marianas del Norte
Palau	Palau	Palaos	Palau

Label/En-tête/Rótulo	English	Français	Español
Papua N Guin	Papua New Guinea	Papouasie-Nouvelle-Guinée	Papua Nueva Guinea
Pitcairn	Pitcairn	Pitcairn	Pitcairn
Samoa	Samoa	Samoa	Samoa
Solomon Is	Solomon Islands	Îles Salomon	Islas Salomón
Tokelau	Tokelau	Tokelau	Tokelau
Tonga	Tonga	Tonga	Tonga
Tuvalu	Tuvalu	Tuvalu	Tuvalu
Vanuatu	Vanuatu	Vanuatu	Vanuatu
Wallis Fut Is	Wallis and Futuna Islands	Wallis-et-Futuna	Wallis y Futuna
S AMERICA	SOUTH AMERICA	AMÉRIQUE DU SUD	SUDAMERICA
Argentina	Argentina	Argentine	Argentina
Bolivia	Bolivia (Plurinational State of)	Bolivie (État plurinational de)	Bolivia (Estado Plurinacional de)
Brazil	Brazil	Brésil	Brasil
Chile	Chile	Chili	Chile
Colombia	Colombia	Colombie	Colombia
Ecuador	Ecuador	Equateur	Ecuador
Falklands Malv	Falkland Islands (Malvinas)	Îles Falkland (Malvinas)	Islas Malvinas (Falkland)
Fr Guiana	French Guiana	Guyane française	Guayana Francesa
Guyana	Guyana	Guyana	Guyana
Paraguay	Paraguay	Paraguay	Paraguay
Peru	Peru	Pérou	Perú
South Georgia	South Georgia and the South Sandwich Islands	Géorgie du Sud-et-les Îles Sandwich du Sud	Georgia del Sur y las Islas Sandwich del Sur
Suriname	Suriname	Suriname	Surinam
Uruguay	Uruguay	Uruguay	Uruguay
Venezuela	Venezuela (Bolivarian Republic of)	Venezuela (République bolivarienne du)	La República Bolivariana de Venezuela

Source: UN Standard Country or Area Codes for Statistical Use (M49 List)
<http://unstats.un.org/unsd/methods/m49/m49.htm>.

Note: (*) Throughout this publication, the designation Kosovo* is without prejudice to positions on status and in line with the United Nations Security Council Resolution 1244 (1999).

Total capacity

Capacité totale

Capacidad total

Total renewable energy

Total énergies renouvelables

Total energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	1 566 487	1 699 064	1 852 777	2 018 264	2 186 038	2 359 398	2 543 378	2 813 159	3 077 238	3 371 793
Africa	30 718	32 653	34 971	37 716	43 064	48 437	50 553	53 877	56 111	58 783
Algeria	253	266	329	568	662	686	686	667	587	599
Angola	964	1 032	1 033	1 765	2 458	3 126	3 460	3 794	3 794	4 078
Benin	1	1	2	3	3	3	3	3	3	28
Botswana	2	2	2	3	3	4	6	6	6	6
Burkina Faso	38	39	41	43	80	95	98	98	98	128
Burundi	57	58	58	59	57	57	57	57	65	80
Cabo Verde	33	33	33	33	33	35	35	35	35	35
Cameroon	736	738	740	742	744	746	826	827	827	827
Cent Afr Rep	19	19	19	19	19	19	19	19	19	19
Chad	2	2	2	3	3	3	3	4	4	4
Comoros	1	1	1	1	1	1	1	1	1	5
Congo DR	2 515	2 516	2 529	2 543	2 558	2 732	2 741	2 741	2 741	2 742
Congo Rep	206	207	207	213	227	227	227	227	227	227
Cote d'Ivoire	607	608	609	609	887	892	892	892	892	892
Djibouti	0	0	0	0	0	0	0	0	20	20
Egypt	3 457	3 457	3 658	3 681	3 802	4 793	5 690	5 934	6 258	6 322
Eq Guinea	126	126	126	126	126	127	127	127	127	127
Eritrea	1	9	9	10	12	12	12	12	12	12
Eswatini	186	169	169	169	169	169	169	169	179	179
Ethiopia	2 224	2 230	2 619	2 649	4 366	4 451	4 451	4 713	4 759	5 589
Gabon	332	332	333	333	333	333	333	333	333	333
Gambia	3	3	3	3	3	3	4	4	4	4
Ghana	1 590	1 593	1 623	1 627	1 632	1 658	1 665	1 688	1 691	1 691
Guinea	129	129	369	369	370	370	366	591	817	816
Guinea Bissau			0	0	0	1	1	1	1	1
Kenya	1 096	1 267	1 563	1 632	1 674	2 060	2 086	2 303	2 475	2 659
Lesotho	75	75	75	75	75	75	75	75	75	75
Liberia	4	4	4	26	95	95	95	95	95	95
Libya	5	5	5	5	5	5	5	5	6	6
Madagascar	167	170	173	175	177	197	197	197	197	197
Malawi	396	399	403	403	410	418	472	473	552	553
Mali	351	359	360	361	362	363	364	414	445	585
Mauritania	22	23	53	69	69	121	122	122	122	123
Mauritius	145	145	171	187	194	236	261	269	271	271
Mayotte	13	13	13	13	15	16	17	19	30	30
Morocco	1 837	2 143	2 307	2 417	2 539	3 272	3 272	3 522	3 638	3 727
Mozambique	2 209	2 211	2 214	2 217	2 219	2 260	2 260	2 266	2 272	2 316
Namibia	345	347	351	383	427	452	504	508	508	533
Niger	5	6	7	8	9	27	27	27	27	62
Nigeria	2 133	2 135	2 137	2 139	2 140	2 140	2 149	2 150	2 154	2 158
Reunion	348	359	380	383	384	428	436	445	463	463
Rwanda	62	77	106	111	116	121	136	146	146	151
Sao Tome Prn	2	2	2	2	3	3	3	3	3	3
Senegal	32	34	34	63	134	175	253	357	423	446
Seychelles	6	7	7	8	9	10	11	13	19	24
Sierra Leone	55	90	90	91	99	99	99	99	99	104
Somalia	2	2	3	7	10	11	11	19	27	51
South Africa	1 501	2 711	3 430	4 652	6 552	7 911	8 014	9 523	10 288	10 445
South Sudan	0	0	0	0	0	1	1	1	1	14
Sudan	1 536	1 538	1 541	1 547	1 557	1 740	1 761	1 798	1 817	1 871
Tanzania	641	652	659	664	667	670	675	677	677	677
Togo	67	67	67	67	68	70	72	74	124	124
Tunisia	272	312	330	340	349	375	391	406	406	508
Uganda	746	766	782	784	827	907	1 178	1 195	1 197	1 222
Zambia	2 302	2 302	2 311	2 431	2 441	2 442	2 538	2 539	2 844	3 303
Zimbabwe	860	861	876	880	886	1 190	1 193	1 195	1 209	1 222
Asia	553 519	632 769	722 330	813 555	921 587	1 026 685	1 126 196	1 301 702	1 455 365	1 630 282
Afghanistan	294	299	303	349	371	371	380	380	388	492
Bangladesh	329	356	385	402	434	456	507	555	718	775
Bhutan	1 488	1 488	1 615	1 615	1 615	1 615	2 335	2 335	2 335	2 335
Brunei Darism	1	1	1	1	1	1	1	1	5	5
Cambodia	717	975	977	981	1 061	1 412	1 507	1 690	1 749	1 840
China	359 516	414 651	479 103	541 016	620 856	695 463	758 844	899 625	1 020 234	1 160 799
China HK SAR		1	1	17	47	47	143	145	149	149
Chinese Taipei	3 501	3 751	4 015	4 411	4 944	5 940	7 480	9 248	11 240	13 813
India	63 589	71 889	78 579	90 411	105 253	118 195	128 428	134 455	147 122	162 963
Indonesia	8 261	8 417	8 574	9 064	9 459	9 805	10 300	10 507	11 537	12 481
Japan	46 084	56 103	67 486	76 219	84 187	91 309	99 272	106 858	111 856	117 528
Kazakhstan	2 608	2 805	2 893	2 951	3 015	3 369	4 214	4 997	5 422	5 954
Korea DPR	4 289	4 304	4 490	4 733	4 796	4 828	4 832	4 907	4 917	4 917
Korea Rep	4 330	5 716	7 217	9 354	11 442	13 951	18 054	20 411	24 365	27 241
Kyrgyzstan	3 572	3 671	3 677	3 677	3 689	3 673	3 673	3 674	3 674	3 674
Lao PDR	2 968	3 253	4 355	4 931	5 184	5 554	6 381	8 165	8 932	9 622
Malaysia	5 718	6 397	7 563	7 991	7 339	7 521	7 962	8 571	8 898	9 044
Maldives	3	5	6	9	12	18	22	28	32	37
Mongolia	85	85	85	97	180	251	276	280	280	380
Myanmar	2 865	3 043	3 267	3 346	3 400	3 409	3 452	3 448	3 444	3 466
Nepal	761	778	834	854	1 000	1 121	1 241	1 378	2 095	2 342
Pakistan	7 564	7 915	8 126	8 807	9 223	12 203	12 345	12 565	12 887	13 943

Total renewable energy

Total énergies renouvelables

Total energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Philippines	4 857	5 281	5 625	6 272	6 424	6 596	6 772	6 986	7 314	7 670
Singapore	172	209	251	307	327	380	479	531	694	846
Sri Lanka	1 729	1 834	1 878	1 963	2 061	2 195	2 334	2 454	2 720	2 857
Tajikistan	4 814	5 035	5 033	5 039	5 039	5 153	5 273	5 273	5 274	5 274
Thailand	6 677	7 373	7 902	9 369	10 147	11 215	11 700	11 845	12 197	12 197
Timor Leste	1	1	1	1	1	1	1	1	1	1
Turkmenistan	1	1	1	1	1	1	1	1	2	2
Uzbekistan	1 823	1 872	1 882	1 883	1 861	1 919	1 912	2 009	2 156	2 305
Viet Nam	14 901	15 263	16 208	17 485	18 217	18 715	26 077	38 379	42 727	45 326
C America + Carib	9 825	10 405	11 862	13 457	14 272	15 064	16 234	16 797	17 646	18 052
Anguilla	0	1	1	2	2	1	2	2	2	2
Antigua Barb	0	0	3	4	4	9	9	17	17	17
Aruba	32	37	38	38	38	46	46	46	46	46
Bahamas	1	1	1	1	1	1	2	2	2	3
Barbados	0	1	3	15	16	17	33	49	64	70
Belize	65	66	66	66	74	93	99	99	99	99
BES Islands	11	11	11	13	16	17	18	18	18	18
Br Virgin Is	1	1	1	1	1	1	2	2	2	2
Cayman Is				3	9	10	11	13	14	14
Costa Rica	2 174	2 245	2 359	2 894	3 010	3 075	3 144	3 124	3 189	3 138
Cuba	555	596	629	610	675	758	1 085	1 252	1 281	1 293
Curacao	33	38	40	41	58	59	62	63	63	63
Dominica	7	7	7	8	8	7	7	7	7	7
Dominican Rep	723	734	745	872	906	1 053	1 350	1 428	1 637	1 833
El Salvador	974	1 010	924	982	1 169	1 281	1 486	1 593	1 775	1 796
Grenada	1	1	1	2	2	3	3	4	4	4
Guadeloupe	144	141	148	148	153	158	185	188	199	203
Guatemala	1 646	1 775	2 178	2 667	2 753	2 863	2 870	2 870	2 872	2 878
Haiti	58	58	58	58	59	80	81	81	81	81
Honduras	839	905	1 369	1 476	1 604	1 701	1 742	1 861	1 877	1 877
Jamaica	103	105	108	189	217	217	254	254	254	254
Martinique	65	66	70	71	73	112	129	131	132	132
Montserrat							0	0	1	1
Nicaragua	556	596	613	661	674	676	733	733	734	734
Panama	1 548	1 715	2 053	2 164	2 227	2 292	2 314	2 343	2 554	2 614
Puerto Rico	272	276	407	443	502	505	537	583	690	841
St Barth				0	0	0	0	0	0	0
St Kitts Nevis	3	3	3	3	3	3	3	4	4	4
St Lucia	0	0	1	1	1	4	4	4	4	4
St Martin	1	2	3	2	0	0	1	1	1	1
St Vincent Gren	6	6	6	7	7	7	8	9	9	9
Trinidad Tobago	4	4	4	4	4	4	4	4	4	4
Turks Caicos			0	0	0	0	1	1	1	1
US Virgin Is	1	5	9	9	5	10	10	10	10	10
Eurasia	81 301	84 322	88 118	91 182	96 186	100 194	103 586	109 909	115 570	118 989
Armenia	1 292	1 301	1 289	1 316	1 332	1 357	1 389	1 446	1 556	1 645
Azerbaijan	1 125	1 120	1 154	1 184	1 194	1 277	1 289	1 296	1 316	1 339
Georgia	2 705	2 380	2 378	2 450	2 744	2 716	2 607	2 753	3 006	3 127
Russian Fed	50 629	51 581	51 781	51 787	52 170	52 614	53 913	55 219	56 462	56 880
Türkiye	25 551	27 940	31 516	34 446	38 746	42 230	44 389	49 195	53 230	55 998
Europe	418 916	439 891	465 018	491 344	512 865	537 352	574 571	609 048	651 292	708 582
Albania	1 782	1 726	1 799	1 914	2 049	2 107	2 177	2 409	2 531	2 537
Andorra	51	51	51	51	51	52	53	54	55	55
Austria	17 192	17 839	18 473	19 336	19 596	20 376	20 774	21 156	22 110	23 424
Belarus	74	81	97	222	300	390	415	491	488	597
Belgium	5 754	5 982	6 368	6 695	7 419	8 300	9 511	11 273	11 888	13 089
Bosnia Herzg	1 703	1 719	1 725	1 776	1 808	1 886	1 930	1 953	2 030	2 081
Bulgaria	4 095	4 123	4 136	4 145	4 289	4 316	4 319	4 364	4 532	5 205
Croatia	2 475	2 577	2 713	2 793	2 916	2 979	3 068	3 255	3 490	3 593
Cyprus	192	221	244	252	278	289	322	400	485	635
Czechia	4 095	4 170	4 214	4 212	4 278	4 271	4 373	4 451	4 552	4 934
Denmark	6 584	6 750	7 109	7 410	8 194	8 902	9 180	9 664	10 882	11 734
Estonia	519	561	594	607	615	609	716	829	1 012	1 178
Faroe Islands	48	60	60	60	60	56	53	59	63	63
Finland	5 516	5 747	6 142	6 746	7 512	7 563	7 890	8 774	9 564	12 095
France	38 914	40 784	43 027	45 058	48 036	50 743	53 625	55 964	60 394	65 381
Germany	83 766	90 325	97 851	104 436	112 514	118 905	125 068	131 686	138 567	148 378
Greece	7 672	8 010	8 138	8 424	8 686	9 020	9 923	10 921	12 456	13 968
Hungary	749	1 024	1 077	1 048	1 224	1 630	2 288	3 024	3 906	3 926
Iceland	2 652	2 653	2 658	2 659	2 711	2 862	2 869	2 879	2 880	2 880
Ireland	2 227	2 592	2 760	3 117	3 676	4 046	4 528	4 741	4 819	5 099
Italy	48 857	49 526	50 417	51 195	52 128	53 161	54 373	55 493	56 856	59 891
Kosovo*	44	44	44	81	121	121	139	154	259	259
Latvia	1 761	1 778	1 782	1 778	1 796	1 779	1 826	1 826	1 823	1 965
Lithuania	527	545	693	768	787	836	859	937	1 159	1 617
Luxembourg	211	225	239	301	318	324	386	430	504	572

Total renewable energy

Total énergies renouvelables

Total energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Malta	32	58	78	98	116	137	160	193	210	210
Moldova Rep	67	69	69	71	82	106	110	116	158	197
Montenegro	631	655	665	671	750	752	800	821	821	841
Netherlands	4 169	4 661	5 748	7 203	7 937	9 867	12 567	18 661	23 598	32 839
North Macedonia	624	682	716	720	731	740	751	829	831	831
Norway	32 002	32 252	32 394	32 814	33 251	34 396	35 912	37 999	39 406	39 650
Poland	5 116	5 638	6 919	7 881	7 982	8 301	9 360	12 275	16 457	21 242
Portugal	11 143	11 573	12 153	13 208	13 541	13 753	14 118	14 208	15 074	16 329
Romania	10 098	11 152	11 212	11 162	11 145	11 169	11 169	11 121	11 120	11 141
Serbia	2 331	2 422	2 439	2 460	2 480	2 694	2 910	2 928	2 957	3 054
Slovakia	2 359	2 380	2 384	2 397	2 385	2 330	2 431	2 377	2 406	2 406
Slovenia	1 367	1 404	1 419	1 409	1 479	1 474	1 512	1 612	1 704	1 878
Spain	46 819	46 850	47 708	47 798	47 948	48 283	54 601	57 313	62 011	67 909
Sweden	24 645	25 528	26 869	27 805	28 179	29 180	31 156	32 049	34 603	38 044
Switzerland	14 409	14 638	15 040	16 259	17 049	17 470	17 826	18 337	18 813	19 514
UK	19 878	24 770	30 690	38 108	39 918	43 726	46 337	47 261	48 896	52 418
Ukraine	5 769	6 048	6 105	6 199	6 530	7 455	12 189	13 764	14 921	14 921
European Union (27)	337 579	352 754	371 245	388 062	405 763	423 418	451 036	479 954	517 184	569 689
Middle East	14 498	15 962	15 859	16 732	17 093	18 567	21 616	22 944	25 296	28 539
Bahrain	1	6	6	7	7	7	10	10	12	12
Iran IR	10 380	10 954	10 411	10 783	11 367	11 638	11 803	11 901	11 929	12 045
Iraq	2 304	2 311	2 311	2 311	1 594	1 594	1 594	1 594	1 594	1 599
Israel	473	686	837	968	1 068	1 408	2 200	2 711	3 650	4 470
Jordan	17	17	153	514	624	1 009	1 588	1 996	2 169	2 555
Kuwait	3	4	6	33	44	55	106	106	106	106
Lebanon	288	292	298	318	331	347	368	382	482	732
Oman	1	1	2	2	8	8	59	162	188	688
Palestine	1	3	12	25	35	40	82	118	178	192
Qatar	21	23	23	24	24	24	24	24	24	824
Saudi Arabia	22	24	24	24	37	87	113	113	443	443
Syrian AR	857	1 501	1 579	1 501	1 497	1 499	1 500	1 509	1 530	1 557
United Arab Em	128	136	136	142	356	599	1 919	2 062	2 734	3 058
Yemen	2	5	60	80	100	250	250	257	257	257
N America	272 514	287 223	309 137	332 863	349 336	368 701	390 682	422 895	460 098	489 226
Canada	86 766	89 508	95 612	97 484	98 638	99 945	100 650	100 890	103 190	105 775
Greenland	91	91	91	91	91	91	91	92	92	92
Mexico	15 229	16 647	17 423	19 114	19 892	23 068	26 121	28 522	30 669	31 683
St Pierre Mq	1									
USA	170 427	180 976	196 010	216 174	230 714	245 596	263 820	293 392	326 147	351 676
Oceania	24 051	25 572	26 729	27 685	28 909	31 121	36 381	43 811	49 376	54 620
Amer Samoa	2	2	2	4	4	5	5	5	5	5
Australia	16 068	17 370	18 415	19 339	20 492	22 645	27 826	35 177	40 410	45 516
Cook Is	1	2	3	3	3	5	6	6	6	6
Fiji	191	191	193	195	210	211	211	211	219	219
Fr Polynesia	65	72	76	79	83	85	89	92	94	94
Guam	1	1	32	35	37	38	40	42	43	105
Kiribati	1	1	2	3	3	3	3	3	3	3
Marshall Is	1	1	1	2	2	2	2	2	2	2
Micronesia	1	2	2	2	2	4	4	4	4	4
Nauru	0	0	0	1	1	1	2	2	3	3
New Caledon	119	120	123	125	142	144	175	193	196	194
New Zealand	7 272	7 473	7 520	7 529	7 550	7 595	7 629	7 684	8 000	8 066
Niue	0	0	0	0	0	0	1	1	1	1
Palau	1	1	1	2	2	3	3	3	4	4
Papua N Guin	308	309	327	328	328	328	329	329	330	333
Samoa	9	13	14	17	27	27	28	29	29	29
Solomon Is	1	2	2	3	4	4	4	4	4	5
Tokelau	1	1	1	1	1	1	1	1	1	1
Tonga	3	3	4	4	7	7	8	8	8	15
Tuvalu	0	0	2	2	2	2	2	2	2	2
Vanuatu	7	8	8	9	10	11	12	12	12	12
S America	161 146	170 267	178 754	193 728	202 725	213 278	223 559	232 176	246 485	264 719
Argentina	10 580	10 589	10 657	10 709	10 749	11 477	12 690	14 069	15 020	15 076
Bolivia	592	628	638	669	796	923	1 057	1 068	1 244	1 299
Brazil	99 835	106 445	112 641	121 374	128 417	136 579	144 575	150 493	161 136	175 262
Chile	7 678	8 329	8 452	9 299	10 289	10 856	11 498	12 619	14 890	17 910
Colombia	10 075	11 134	11 757	11 888	12 071	12 194	12 291	12 387	12 557	13 435
Ecuador	2 388	2 440	2 599	4 640	4 714	5 266	5 277	5 298	5 300	5 394
Falklands Malv	1	1	1	1	1	1	3	3	3	3
Fr Guiana	158	158	168	168	168	168	171	179	179	179
Guyana	55	55	55	46	48	51	53	53	53	53
Paraguay	8 849	8 849	8 849	8 849	8 849	8 849	8 832	8 832	8 832	8 832
Peru	3 784	4 055	4 647	5 725	5 820	6 100	6 289	6 345	6 431	6 431

Total renewable energy
Total énergies renouvelables
Total energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
South Georgia	0	0	0	0	0	0	0	0	0	0
Suriname	181	186	188	188	189	190	190	191	191	193
Uruguay	2 016	2 441	2 888	3 267	3 708	3 719	3 728	3 732	3 741	3 745
Venezuela	14 954	14 955	15 214	16 905	16 905	16 904	16 906	16 906	16 906	16 906

Hydropower Hydroélectricité Hidroeléctrica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	1 137 292	1 175 663	1 210 331	1 245 935	1 270 950	1 293 744	1 312 084	1 334 078	1 362 715	1 392 598
Africa	28 655	28 679	29 207	31 131	34 221	35 585	36 290	37 111	37 592	38 851
Algeria	228	228	228	228	228	228	228	209	129	129
Angola	953	969	969	1 700	2 393	3 061	3 395	3 729	3 729	3 729
Benin	1	1	1	1	1	1	1	1	1	1
Burkina Faso	32	32	32	32	32	32	35	35	35	35
Burundi	51	51	51	51	48	48	48	48	48	63
Cameroon	733	733	733	733	732	732	812	812	812	812
Cent Afr Rep	19	19	19	19	19	19	19	19	19	19
Comoros	1	1	1	1	1	1	1	1	1	1
Congo DR	2 515	2 515	2 528	2 540	2 551	2 709	2 719	2 719	2 719	2 719
Congo Rep	194	194	194	201	214	214	214	214	214	214
Cote d'Ivoire	604	604	604	604	879	879	879	879	879	879
Egypt	2 800	2 800	2 800	2 800	2 800	2 832	2 832	2 832	2 832	2 832
Eq Guinea	126	126	126	126	126	127	127	127	127	127
Eswatini	62	62	62	62	62	62	62	62	62	62
Ethiopia	1 972	1 972	2 159	2 159	3 817	3 817	3 817	4 071	4 071	4 821
Gabon	330	330	330	330	330	330	330	330	330	330
Ghana	1 580	1 580	1 584	1 584	1 584	1 584	1 584	1 584	1 584	1 584
Guinea	129	129	369	369	369	369	364	589	814	814
Kenya	822	822	828	832	843	846	851	858	860	868
Lesotho	75	75	75	75	75	75	75	75	75	75
Liberia	4	4	4	26	92	92	92	92	92	92
Madagascar	162	163	164	164	164	164	164	164	164	164
Malawi	372	372	372	373	373	373	373	373	392	392
Mali	315	315	315	315	315	315	315	315	315	315
Mauritius	61	61	61	60	60	60	60	61	61	61
Morocco	1 770	1 770	1 770	1 770	1 770	1 770	1 770	1 770	1 770	1 770
Mozambique	2 190	2 190	2 190	2 190	2 190	2 190	2 190	2 190	2 194	2 194
Namibia	330	330	330	347	347	347	351	351	351	351
Nigeria	2 110	2 110	2 111	2 111	2 111	2 111	2 111	2 111	2 111	2 111
Reunion	134	134	134	133	133	133	133	133	134	134
Rwanda	60	66	94	98	99	99	110	120	120	125
Sao Tome Prn	2	2	2	2	2	2	2	2	2	2
Sierra Leone	54	56	56	56	61	61	61	61	61	61
South Africa	2 135	2 133	2 148	3 147	3 480	3 480	3 480	3 480	3 484	3 484
Sudan	1 322	1 322	1 322	1 322	1 322	1 482	1 482	1 482	1 482	1 482
Tanzania	571	571	576	582	583	583	589	589	589	589
Togo	67	67	67	67	67	67	67	67	67	67
Tunisia	62	62	62	62	62	66	66	66	66	66
Uganda	692	692	695	695	707	744	1 004	1 011	1 011	1 032
Zambia	2 260	2 260	2 268	2 388	2 398	2 398	2 399	2 400	2 705	3 164
Zimbabwe	758	758	773	777	781	1 081	1 081	1 081	1 081	1 081
Asia	451 249	479 637	500 109	516 272	531 237	544 221	554 632	570 238	594 474	619 681
Afghanistan	277	280	284	329	349	349	349	349	357	459
Bangladesh	230	230	230	230	230	230	230	230	230	230
Bhutan	1 488	1 488	1 614	1 614	1 614	1 614	2 334	2 334	2 334	2 334
Cambodia	683	929	930	930	980	1 330	1 330	1 330	1 330	1 332
China	280 440	304 860	319 530	332 070	343 775	352 261	358 040	370 280	390 920	413 500
China HK SAR		1	1	1	1	1	1	1	1	1
Chinese Taipei	4 683	4 683	4 691	4 691	4 691	4 694	4 695	4 695	4 696	4 696
India	44 174	45 406	47 104	47 622	49 521	50 102	50 279	50 764	51 565	52 002
Indonesia	5 177	5 242	5 322	5 666	5 703	5 773	5 976	6 141	6 602	6 689
Japan	48 932	49 597	50 035	50 117	50 014	50 037	50 033	50 041	50 019	50 025
Kazakhstan	2 588	2 675	2 678	2 696	2 726	2 756	2 778	2 785	2 807	2 807
Korea DPR	4 283	4 293	4 467	4 701	4 761	4 790	4 790	4 865	4 865	4 865
Korea Rep	6 452	6 467	6 471	6 485	6 489	6 490	6 509	6 506	6 541	6 512
Kyrgyzstan	3 572	3 671	3 677	3 677	3 689	3 673	3 673	3 674	3 674	3 674
Lao PDR	2 928	3 212	4 313	4 889	5 136	5 414	6 241	8 025	8 793	9 483
Malaysia	4 535	4 761	5 742	6 121	6 145	6 165	6 185	6 197	6 211	6 211
Mongolia	29	29	29	31	31	31	31	29	29	29
Myanmar	2 812	2 985	3 198	3 264	3 304	3 304	3 304	3 304	3 304	3 304
Nepal	744	759	814	834	939	1 059	1 180	1 302	1 992	2 219
Pakistan	7 089	7 220	7 220	7 252	7 404	9 904	9 921	10 043	10 043	10 833
Philippines	3 579	3 594	3 613	3 623	3 632	3 719	3 761	3 780	3 783	3 773
Sri Lanka	1 622	1 670	1 689	1 728	1 747	1 798	1 815	1 799	1 799	1 846
Tajikistan	4 814	5 035	5 033	5 039	5 039	5 153	5 273	5 273	5 274	5 274
Thailand	3 575	3 608	3 639	3 649	3 649	3 667	3 667	3 669	3 670	3 670
Timor Leste	0	0	0	0	0	0	0	0	0	0
Turkmenistan	1	1	1	1	1	1	1	1	2	2
Uzbekistan	1 822	1 871	1 880	1 880	1 858	1 915	1 908	2 005	2 052	2 052
Viet Nam	14 718	15 069	15 905	17 131	17 809	17 989	20 326	20 817	21 582	21 857
C America + Carib	6 338	6 561	6 833	7 650	7 886	8 073	8 146	8 271	8 310	8 265
Belize	38	38	38	38	38	57	57	57	57	57
Costa Rica	1 762	1 782	1 811	2 256	2 350	2 373	2 343	2 332	2 379	2 331
Cuba	63	63	63	66	66	64	72	72	72	72
Dominica	7	7	7	7	7	7	7	7	7	7

Hydropower Hydroélectricité Hidroeléctrica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dominican Rep	614	617	617	617	617	617	618	625	625	627
El Salvador	487	488	494	494	574	574	573	573	572	572
Guadeloupe	9	9	9	9	11	11	11	11	11	11
Guatemala	997	1 001	1 087	1 392	1 438	1 502	1 574	1 577	1 579	1 581
Haiti	56	56	56	56	56	78	78	78	78	78
Honduras	558	624	656	670	676	714	729	837	849	849
Jamaica	30	30	30	30	30	30	30	30	30	30
Nicaragua	120	120	138	142	142	142	157	157	159	159
Panama	1 494	1 623	1 725	1 769	1 777	1 801	1 792	1 811	1 789	1 789
Puerto Rico	98	98	98	98	98	98	98	98	98	98
St Vincent Gren	6	6	6	6	6	6	6	6	6	6
Eurasia	77 923	79 731	82 111	82 994	84 131	85 248	85 862	88 811	89 707	89 919
Armenia	1 289	1 298	1 287	1 312	1 327	1 336	1 336	1 336	1 336	1 336
Azerbaijan	1 084	1 078	1 103	1 105	1 106	1 131	1 145	1 149	1 157	1 177
Georgia	2 705	2 380	2 378	2 430	2 723	2 695	2 583	2 727	2 967	3 080
Russian Fed	50 556	51 332	51 475	51 466	51 702	51 795	52 295	52 614	52 754	52 754
Türkiye	22 289	23 643	25 868	26 681	27 273	28 291	28 503	30 984	31 493	31 572
Europe	211 126	211 876	214 429	217 888	219 572	220 610	221 536	223 065	224 498	225 280
Albania	1 781	1 725	1 798	1 913	2 047	2 105	2 162	2 387	2 507	2 507
Andorra	46	46	46	46	46	46	46	46	46	46
Austria	13 383	13 532	13 650	14 116	14 150	14 516	14 597	14 635	14 748	14 969
Belarus	32	33	34	74	95	95	95	96	96	96
Belgium	1 426	1 428	1 419	1 416	1 414	1 415	1 411	1 413	1 418	1 419
Bosnia Herzg	2 122	2 131	2 137	2 180	2 211	2 236	2 239	2 249	2 257	2 257
Bulgaria	3 203	3 219	3 219	3 223	3 372	3 379	3 378	3 376	3 369	3 369
Croatia	2 178	2 180	2 195	2 192	2 193	2 200	2 200	2 200	2 201	2 201
Czechia	2 252	2 252	2 260	2 262	2 265	2 264	2 265	2 265	2 285	2 286
Denmark	9	9	7	9	7	7	7	7	7	5
Estonia	8	5	6	6	7	7	6	8	6	10
Faroe Islands	39	39	39	39	39	40	40	40	40	40
Finland	3 108	3 132	3 133	3 133	3 156	3 152	3 157	3 164	3 171	3 171
France	25 645	25 576	25 552	25 621	25 707	25 727	25 868	25 955	26 291	26 291
Germany	11 239	11 234	11 255	11 207	11 120	10 684	10 733	10 808	10 844	10 937
Greece	3 238	3 389	3 392	3 392	3 392	3 409	3 412	3 417	3 421	3 423
Hungary	57	57	57	57	57	57	58	58	60	60
Iceland	1 984	1 984	1 987	1 987	1 995	2 099	2 104	2 114	2 114	2 114
Ireland	529	529	529	529	529	529	529	529	529	529
Italy	22 009	22 098	22 220	22 298	22 426	22 499	22 541	22 695	22 750	22 781
Kosovo*	43	43	43	78	80	80	95	110	110	110
Latvia	1 587	1 588	1 588	1 564	1 564	1 565	1 587	1 586	1 587	1 608
Lithuania	876	877	877	877	877	877	877	877	877	877
Luxembourg	1 134	1 330	1 330	1 330	1 331	1 330	1 330	1 331	1 331	1 328
Moldova Rep	64	64	64	64	64	64	64	64	64	64
Montenegro	630	653	662	668	675	676	676	697	697	697
Netherlands	37	37	37	37	37	37	37	37	37	36
North Macedonia	617	630	658	661	671	674	678	687	689	689
Norway	31 033	31 240	31 372	31 817	31 912	32 530	32 797	33 732	34 075	34 118
Poland	2 355	2 364	2 370	2 385	2 390	2 391	2 397	2 400	2 398	2 401
Portugal	5 661	5 715	6 168	6 960	7 226	7 236	7 262	7 241	7 255	7 592
Romania	6 610	6 613	6 730	6 734	6 692	6 701	6 686	6 652	6 662	6 661
Serbia	2 931	3 017	3 022	3 030	3 038	3 043	3 074	3 082	3 085	3 097
Slovakia	2 523	2 523	2 522	2 524	2 523	2 528	2 527	2 529	2 531	2 531
Slovenia	1 299	1 296	1 295	1 293	1 347	1 343	1 351	1 352	1 352	1 354
Spain	19 185	19 223	20 053	20 080	20 079	20 080	20 114	20 117	20 132	20 132
Sweden	16 494	15 996	16 329	16 466	16 502	16 431	16 462	16 406	16 407	16 407
Switzerland	13 817	13 744	13 815	14 806	15 353	15 542	15 574	15 594	15 594	15 610
UK	4 453	4 474	4 677	4 733	4 770	4 773	4 773	4 776	4 794	4 795
Ukraine	5 489	5 851	5 883	6 079	6 213	6 243	6 325	6 334	6 662	6 662
European Union (27)	146 307	146 464	148 454	149 973	150 625	150 627	151 056	151 320	151 933	152 642
Middle East	13 930	15 094	15 669	15 891	15 545	15 691	15 774	16 084	16 082	16 082
Iran IR	10 265	10 785	11 278	11 578	11 953	12 099	12 182	12 193	12 193	12 193
Iraq	2 514	2 514	2 514	2 514	1 797	1 797	1 797	1 797	1 797	1 797
Israel	7	7	7	7	7	7	7	306	306	306
Jordan	12	12	16	16	16	16	16	16	14	14
Lebanon	282	282	282	282	282	282	282	282	282	282
Syrian AR	850	1 494	1 572	1 494	1 490	1 490	1 490	1 490	1 490	1 490
N America	188 928	190 300	194 081	195 823	196 402	197 092	197 605	197 886	199 194	200 085
Canada	75 511	75 474	79 405	80 304	80 831	81 396	81 399	81 404	82 740	83 553
Greenland	91	91	91	91	91	91	91	91	91	91
Mexico	11 633	12 464	12 223	12 580	12 628	12 643	13 301	13 301	13 303	13 303
USA	101 693	102 270	102 361	102 848	102 851	102 962	102 814	103 090	103 060	103 139

Hydropower Hydroélectricité Hidroeléctrica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Oceania	14 211	14 211	14 229	14 230	14 234	14 486	14 496	14 499	14 499	14 502
Australia	8 271	8 271	8 271	8 271	8 271	8 523	8 523	8 523	8 523	8 523
Fiji	138	138	138	138	138	138	138	138	138	138
Fr Polynesia	47	47	47	47	48	48	48	48	48	48
Micronesia	1	1	1	1	1	1	1	1	1	1
New Caledon	78	78	78	78	78	78	78	81	81	81
New Zealand	5 427	5 426	5 426	5 426	5 426	5 426	5 434	5 434	5 434	5 434
Papua N Guin	240	240	258	258	258	258	258	258	258	261
Samoa	9	9	9	9	12	13	14	14	14	14
Solomon Is	0	0	0	0	0	0	0	0	0	0
Vanuatu	1	1	1	1	1	1	1	1	1	1
S America	144 931	149 575	153 663	164 056	167 722	172 737	177 744	178 112	178 358	179 934
Argentina	11 110	11 112	11 182	11 244	11 247	11 292	11 314	11 348	11 350	11 359
Bolivia	501	494	495	495	620	666	736	736	736	736
Brazil	86 019	89 194	91 651	96 930	100 333	104 482	109 143	109 318	109 426	109 814
Chile	6 095	6 446	6 500	6 672	6 685	6 680	6 683	6 773	6 807	7 289
Colombia	9 868	10 900	11 501	11 611	11 731	11 842	11 926	11 954	11 958	12 563
Ecuador	2 264	2 248	2 408	4 447	4 516	5 066	5 076	5 098	5 099	5 191
Fr Guiana	119	119	119	119	119	119	119	119	119	119
Guyana	2	2	2	2	2	2	2	2	2	2
Paraguay	8 810	8 810	8 810	8 810	8 810	8 810	8 810	8 810	8 810	8 810
Peru	3 544	3 651	4 139	5 179	5 112	5 230	5 387	5 406	5 503	5 503
South Georgia	0	0	0	0	0	0	0	0	0	0
Suriname	180	180	180	180	180	180	180	180	180	180
Uruguay	1 538	1 538	1 538	1 538	1 538	1 538	1 538	1 538	1 538	1 538
Venezuela	14 881	14 881	15 138	16 829	16 829	16 829	16 829	16 829	16 829	16 829

Renewable hydropower (including mixed plants)

Hydroélectricité renouvelable (y compris les centrales mixtes)

Hidroeléctrica renovable (incluidas las plantas mixtas)

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	1 029 562	1 066 193	1 098 429	1 129 001	1 151 109	1 173 386	1 191 478	1 212 899	1 235 010	1 255 540
Africa	26 791	26 815	27 343	28 268	31 025	32 389	33 094	33 915	34 396	35 655
Algeria	228	228	228	228	228 e	228 e	228 e	209 o	129 e	129 e
Angola	953 u	969 u	969 e	1 700 u	2 393 u	3 061 e	3 395 e	3 729 e	3 729 e	3 729 e
Benin	1	1	1	1	1	1	1 e	1 e	1 e	1 e
Burkina Faso	32 o	32 o	32 o	32 o	32 o	32 e	35 e	35 e	35 e	35 e
Burundi	51 o	51 o	51 o	51 o	48 e	48 e	48 e	48 e	48 e	63 e
Cameroon	733 o	733 e	733 e	733 e	732 e	732 e	812 e	812 e	812 e	812 e
Cent Afr Rep	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e
Comoros	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Congo DR	2 515 e	2 515 e	2 528 e	2 540 e	2 551 e	2 709 u	2 719 e	2 719 e	2 719 e	2 719 e
Congo Rep	194 e	194 e	194 e	201 u	214 u	214 u	214 e	214 e	214 e	214 e
Cote d'Ivoire	604 o	604 o	604 o	604 o	879 u	879 e	879 e	879 e	879 e	879 o
Egypt	2 800 o	2 800 o	2 800 o	2 800 o	2 800 o	2 832 o	2 832 o	2 832 e	2 832 e	2 832 e
Eq Guinea	126 o	126 o	126 o	126 o	126 o	127 o	127 e	127 e	127 e	127 e
Eswatini	62	62	62	62 e	62 e	62 e	62 e	62 e	62 e	62 e
Ethiopia	1 972 e	1 972 e	2 159 e	2 159	3 817	3 817 e	3 817 e	4 071	4 071	4 821 e
Gabon	330 e	330 e	330 e	330 e	330 e	330 e	330 e	330 e	330 e	330 e
Ghana	1 580 o	1 580 o	1 584 o	1 584 o	1 584 o	1 584 e	1 584 e	1 584 o	1 584 e	1 584 o
Guinea	129 o	129 o	369 o	369 o	369 e	369 e	364 e	589 e	814 e	814 e
Kenya	822 e	822 e	828 e	832 e	843 e	846 e	851 e	858 e	860 e	868 e
Lesotho	75	75	75 e	75 e	75 e	75 e	75 e	75 e	75 e	75 e
Liberia	4 e	4 e	4 e	26 e	92 e	92 e	92 e	92 e	92 e	92 e
Madagascar	162 o	163 o	164 o	164 o	164 e	164 e	164 e	164 e	164 e	164 e
Malawi	372 e	372 e	372 e	373 e	373 e	373 e	373 e	373 e	392 e	392 e
Mali	315 e	315 e	315 e	315 e	315 e	315 e	315 e	315 e	315 e	315 e
Mauritius	61	61	61	60 o	60 o	60 o	60 o	61 o	61 o	61 e
Morocco	1 306	1 306	1 306	1 306	1 306	1 306	1 306 e	1 306 e	1 306 e	1 306 o
Mozambique	2 190 e	2 190 e	2 190 e	2 190 e	2 190 e	2 190 e	2 190 e	2 190 e	2 194 o	2 194 o
Namibia	330	330	330	347	347 o	347 o	347	351 u	351 e	351 e
Nigeria	2 110 o	2 110 o	2 111 o	2 111 o	2 111 o	2 111 o	2 111 e	2 111 e	2 111 e	2 111 e
Reunion	134 o	134 o	134 o	133 o	133 o	133 o	133 o	133 o	134 o	134 e
Rwanda	60 o	66 o	94 o	98 o	99 e	99 e	110 e	120 e	120 e	125 e
Sao Tome Prn	2 o	2 o	2 o	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Sierra Leone	54 e	56 e	56 e	56 e	61 e	61 e	61 e	61 e	61 e	61 e
South Africa	735 e	733 e	748 e	748 e	748 e	748 e	748 e	748 e	752 e	752 e
Sudan	1 322 o	1 322 o	1 322 o	1 322 o	1 322 o	1 482 o	1 482 o	1 482 o	1 482 e	1 482 e
Tanzania	571 e	571 e	576 e	582 e	583 e	583 e	589 e	589 e	589 e	589 e
Togo	67 o	67 o	67 o	67 o	67 o	67 o	67 e	67 e	67 e	67 e
Tunisia	62 o	62 o	62 o	62 o	62 o	66 o	66 o	66 o	66 o	66 e
Uganda	692 e	692 e	695 e	695 e	707 e	744 e	1 004 e	1 011 e	1 011 o	1 032 e
Zambia	2 260 o	2 260 o	2 268 o	2 388 o	2 398 o	2 398 o	2 399 e	2 400 e	2 705 e	3 164 e
Zimbabwe	758	758	773 e	777 e	781 e	1 081 e	1 081 e	1 081 e	1 081 e	1 081 e
Asia	395 214	422 420	441 772	454 274	466 570	478 954	489 064	504 641	522 807	538 693
Afghanistan	277 e	280 e	284 e	329 e	349 e	349 e	349 e	349 e	357 u	459 u
Bangladesh	230 o	230 o	230 o	230 o	230 o	230 e	230 o	230 o	230 o	230 o
Bhutan	1 488 o	1 488 o	1 614 o	1 614 o	1 614 o	1 614 o	2 334 u	2 334 e	2 334 o	2 334 e
Cambodia	683 o	929 o	930 o	930 o	980 o	1 330 o	1 330 o	1 330 o	1 330 o	1 332 o
China	258 908	282 750	296 500	305 380	314 385	322 271	327 750 o	339 960 o	354 530 o	367 710 o
China HK SAR	1	1	1	1	1	1	1	1	1	1 e
Chinese Taipei	2 081 o	2 081 o	2 089 o	2 089 o	2 089 o	2 092 o	2 093 o	2 093 o	2 094 o	2 094 o
India	39 388 e	40 621 e	42 319 e	42 836 e	44 735 e	45 316 e	45 494 o	45 979 e	46 779 e	47 217 e
Indonesia	5 177 e	5 242 e	5 322 e	5 666 e	5 703 e	5 773 o	5 976 o	6 141 e	6 602 o	6 689 o
Japan	27 813	27 873	28 111	28 193	28 120 e	28 143 e	28 139 o	28 147 o	28 125 o	28 211 o
Kazakhstan	2 588 o	2 675	2 678	2 696	2 726	2 756 u	2 778 e	2 785	2 807	2 807
Korea DPR	4 283 o	4 293 o	4 467 o	4 701 o	4 761 o	4 790 o	4 790 o	4 865 o	4 865 o	4 865 e
Korea Rep	1 752	1 767	1 771	1 785	1 789	1 790	1 809	1 806 o	1 841 o	1 812 o
Kyrgyzstan	3 572	3 671	3 677	3 677	3 689	3 673 o	3 673 e	3 674	3 674	3 674
Lao PDR	2 928 u	3 212 u	4 313 u	4 889 u	5 136 u	5 414 u	6 241 e	8 025 e	8 793 e	9 483 e
Malaysia	4 535 e	4 761 e	5 742 e	6 121 e	6 145 e	6 165 e	6 185 e	6 197 e	6 211 e	6 211 e
Mongolia	29 e	29 e	29 e	31 e	31 e	31 o	31 e	29	29	29
Myanmar	2 812 e	2 985 e	3 198 e	3 264 e	3 304 e	3 304 e	3 304 e	3 304 e	3 304 e	3 304 e
Nepal	744 o	759 o	814 o	834 o	939 o	1 059 e	1 180 e	1 302 e	1 992 e	2 219 e
Pakistan	7 089 e	7 220 e	7 220 e	7 252 e	7 404 e	9 904 e	9 921 e	10 043 e	10 043 e	10 833 e
Philippines	2 843 o	2 858 o	2 877 o	2 887 o	2 896 o	2 983 o	3 025 o	3 044 o	3 047 e	3 037 o
Sri Lanka	1 622 e	1 670 e	1 689 e	1 728 e	1 747 e	1 798 e	1 815 e	1 799 e	1 799 e	1 846 e
Tajikistan	4 814	5 035	5 033 o	5 039	5 039	5 153 e	5 273 e	5 273	5 274 e	5 274
Thailand	3 015 o	3 048 o	3 079 o	3 089 o	3 089 o	3 107 o	3 107 o	3 109 o	3 110 e	3 110 e
Timor Leste	0 o	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Turkmenistan	1	1	1	1	1	1	1 e	1	2 e	2
Uzbekistan	1 822	1 871	1 880	1 880	1 858	1 915 o	1 908	2 005	2 052	2 052
Viet Nam	14 718 e	15 069 e	15 905 e	17 131 e	17 809 e	17 989 e	20 326 e	20 817 e	21 582 e	21 857 e
C America + Carib	6 338	6 561	6 833	7 650	7 886	8 073	8 146	8 271	8 310	8 265
Belize	38 u	38 u	38 u	38 u	38 u	57 u	57 u	57 u	57 u	57 u
Costa Rica	1 762	1 782	1 811	2 256	2 350	2 373 o	2 343 o	2 332 o	2 379 o	2 331 o
Cuba	63	63	63	66	66	64 o	72 o	72 u	72	72 e
Dominica	7 o	7 o	7 o	7 o	7 o	7 o	7 o	7 o	7 o	7 e

Renewable hydropower (including mixed plants)

Hydroélectricité renouvelable (y compris les centrales mixtes)

Hidroeléctrica renovable (incluidas las plantas mixtas)

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dominican Rep	614 o	617 o	617 o	617 o	617 o	617 e	618 e	625 o	625 e	627 e
El Salvador	487 e	488 e	494 e	494 e	574 e	574 e	573 o	573 e	572 e	572 e
Guadeloupe	9	9	9	9	11	11 e	11 o	11 e	11 e	11 e
Guatemala	997	1 001	1 087	1 392 o	1 438 o	1 502 o	1 574 o	1 577 o	1 579 o	1 581 o
Haiti	56 e	56 e	56 e	56 e	56 e	78 u	78 e	78 e	78 e	78 e
Honduras	558 o	624 o	656 o	670 e	676 e	714 e	729 e	837 e	849 e	849 e
Jamaica	30	30	30	30	30	30 e	30 e	30 e	30 e	30 e
Nicaragua	120	120	138	142 o	142 o	142 o	157 o	157 o	159 o	159 e
Panama	1 494	1 623	1 725	1 769	1 777 o	1 801	1 792	1 811	1 789	1 789
Puerto Rico	98 o	98 o	98 o	98 o	98 o	98 o	98 o	98 o	98 o	98 o
St Vincent Gren	6	6	6	6	6	6 e	6 e	6 u	6 u	6 e
Eurasia	76 707	78 515	80 895	81 778	82 915	84 032	84 646	87 595	88 351	88 563
Armenia	1 289 o	1 298 o	1 287 o	1 312 o	1 327	1 336 o	1 336 e	1 336 e	1 336 e	1 336
Azerbaijan	1 084	1 078	1 103	1 105	1 106 u	1 131 o	1 145	1 149 o	1 157	1 177
Georgia	2 705	2 380	2 378	2 430	2 723	2 695	2 583	2 727	2 967	3 080
Russian Fed	49 340	50 116	50 259	50 250	50 486	50 579	51 079	51 398	51 398	51 398
Türkiye	22 289	23 643	25 868	26 681	27 273 o	28 291	28 503	30 984	31 493	31 572
Europe	183 396	183 677	186 049	189 296	191 108	192 249	193 176	194 700	195 809	196 590
Albania	1 781	1 725	1 798	1 913	2 047	2 105	2 162	2 387	2 507	2 507
Andorra	46 o	46 o	46 o	46 o	46 o	46 o	46 o	46 e	46 e	46
Austria	13 383	13 532	13 650	14 116	14 150	14 516	14 597	14 635	14 748	14 969
Belarus	32	33	34	74	95	95 o	95 e	96	96 e	96
Belgium	119	121	112	109	107	108	104	106	111	112
Bosnia Herzg	1 702 o	1 711 o	1 717 o	1 760 o	1 791	1 816	1 819	1 829	1 837	1 837
Bulgaria	2 339	2 355	2 355	2 359	2 508 e	2 515 o	2 514 e	2 512 o	2 505 o	2 505
Croatia	2 178	2 180	2 195	2 192	2 193	2 200	2 200 o	2 200 o	2 201 o	2 201
Czechia	1 080	1 080	1 088	1 090	1 093	1 093	1 094	1 094	1 113	1 114
Denmark	9	9	7	9	7	7	7	7	7	5
Estonia	8	5	6	6	7	7 e	6	8	6	10
Faroe Islands	39 o	39 o	39 o	39 o	39 o	40 o	40 o	40 e	40 e	40
Finland	3 108	3 132	3 133	3 133	3 156	3 152	3 157	3 164	3 171	3 171
France	23 838	23 849	23 824	23 893	23 979	23 999	24 141	24 227	24 564	24 564
Germany	5 589	5 580	5 589	5 629	5 627	5 329	5 378	5 454	5 490	5 583
Greece	3 238	3 389	3 392	3 392	3 392 e	3 409 o	3 412	3 417 o	3 421 o	3 423
Hungary	57	57	57	57	57 e	57 o	58	58 o	60	60
Iceland	1 984	1 984	1 987	1 987	1 995	2 099	2 104	2 114	2 114 e	2 114
Ireland	237	237	237	237	237 e	237 o	237	237	237	237
Italy	18 052	18 116	18 238	18 316	18 486	18 558 o	18 601	18 755	18 809	18 840
Kosovo*	43	43	43	78	80	80	95	110	110	110
Latvia	1 587	1 588	1 588	1 564	1 564	1 565	1 587	1 586	1 587	1 608
Lithuania	116	117	117	117	117 e	117 o	117 o	117 o	117	117
Luxembourg	34	34	34	34	35	34	34 e	35	35 o	32
Moldova Rep	64	64	64	64	64 o	64 o	64 e	64	64 e	64
Montenegro	630	653	662	668	675	676	676	697	697 o	697
Netherlands	37	37	37	37	37 e	37 e	37 o	37 o	37	36
North Macedonia	617	630	658	661	671	674	678	687	689	689
Norway	31 033	31 240	31 372	31 817	31 912	32 530	32 797 o	33 732	34 075	34 118
Poland	949	958	964	972	967	968	974 e	977 e	975	978
Portugal	5 661	5 715	6 168	6 960	7 226	7 236	7 262	7 241	7 255 o	7 592
Romania	6 518	6 521	6 638	6 642	6 600	6 609	6 595	6 561	6 571	6 570
Serbia	2 317	2 403	2 408	2 416	2 424	2 429	2 460	2 468 e	2 471 e	2 483
Slovakia	1 607	1 607	1 606	1 608	1 607	1 612	1 611	1 613	1 615	1 615
Slovenia	1 119	1 116	1 115	1 113	1 167	1 163	1 171	1 172	1 172	1 174
Spain	15 854	15 892	16 722	16 749	16 748	16 748	16 782	16 785	16 801	16 801
Sweden	16 395	15 897	16 230	16 367	16 502 e	16 431	16 462 e	16 406 e	16 407 e	16 407
Switzerland	13 361	13 288	13 346	14 279	14 826	14 980 o	15 012	15 032 o	15 032 o	15 048
UK	2 009	2 030	2 077	2 133	2 170 e	2 173	2 173 o	2 176 o	2 194 o	2 195
Ukraine	4 627	4 665	4 697	4 658	4 704	4 734	4 816	4 819	4 823 u	4 823 e
European Union (27)	123 373	123 385	125 363	126 963	127 831	127 972	128 401	128 665	129 278	129 987
Middle East	13 690	14 854	14 389	14 611	14 265	14 411	14 494	14 504	14 502	14 502
Iran IR	10 265	10 785	10 238 e	10 538 e	10 913 e	11 059 e	11 142 e	11 153 e	11 153 e	11 153 e
Iraq	2 274 e	2 274 e	2 274 e	2 274 e	1 557 e	1 557 e	1 557 e	1 557 e	1 557 e	1 557 e
Israel	7 e	7 o	7 e	7 e	7 e	7 e	7 e	6 o	6 e	6 e
Jordan	12 o	12 o	16 u	16 u	16 u	16 u	16 u	16 e	14 e	14 e
Lebanon	282 e	282 e	282 e	282 e	282 e	282 e	282 e	282 e	282 e	282 e
Syrian AR	850 o	1 494 o	1 572 o	1 494 o	1 490 o	1 490 o	1 490 e	1 490 e	1 490 e	1 490 e
N America	170 068	171 350	175 041	176 622	177 169	177 839	178 403	178 446	179 763	180 621
Canada	75 337	75 300	79 231	80 130	80 657	81 222	81 222	81 227 u	82 563 u	83 376 e
Greenland	91 o	91 o	91 o	91 o	91 o	91 e	91 o	91 e	91 e	91 e
Mexico	11 633	12 464	12 223	12 580	12 628	12 643	13 301	13 301	13 303 o	13 303 e
USA	83 007 o	83 494 o	83 495 o	83 821 o	83 792 o	83 883 o	83 789 o	83 827 o	83 806 o	83 851 o

Renewable hydropower (including mixed plants) Hydroélectricité renouvelable (y compris les centrales mixtes) Hidroeléctrica renovable (incluidas las plantas mixtas)

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Oceania	13 401	13 401	13 419	13 420	13 424	13 676	13 686	13 689	13 689	13 692
Australia	7 461	7 461	7 461	7 461	7 461	7 713 o	7 713 o	7 713 o	7 713 o	7 713 e
Fiji	138 u	138 u	138 u	138 u	138 u	138 u	138 e	138 e	138 e	138 e
Micronesia		1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 e	1 e
New Caledon	78 o	78 o	78 o	78 o	78 o	78 o	78 e	81 o	81 e	81 e
New Zealand	5 427	5 426	5 426	5 426	5 426	5 426	5 434	5 434	5 434 o	5 434 e
Papua N Guin	240 u	240 e	258 e	258 e	258 e	258 e	258 e	258 e	258 e	261 e
Samoa	9 o	9 o	9 o	9 o	12 o	13 e	14 u	14 e	14 e	14 e
Solomon Is	0 o	0 o	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e
Vanuatu	1 o	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
S America	143 957	148 601	152 689	163 082	166 748	171 763	176 770	177 138	177 384	178 960
Argentina	10 136 o	10 138 o	10 208 o	10 270 o	10 273 e	10 318 e	10 340 e	10 374 e	10 376 e	10 385
Bolivia	501 o	494 o	495 o	495 o	620 o	666 e	736 o	736 e	736 e	736 e
Brazil	86 019	89 194 o	91 651 o	96 930 o	100 333 o	104 482 o	109 143 o	109 318 o	109 426 o	109 814 o
Chile	6 095 o	6 446 o	6 500 o	6 672 o	6 685 e	6 680 o	6 683 o	6 773 o	6 807 o	7 289 o
Colombia	9 868	10 900	11 501 e	11 611 e	11 731 o	11 842 o	11 926 e	11 954 e	11 958 o	12 563 e
Ecuador	2 264 o	2 248 o	2 408 o	4 447 o	4 516 e	5 066 o	5 076 o	5 098 o	5 099 o	5 191
Fr Guiana	119 o	119 o	119 o	119 o	119 o	119 o	119 o	119 e	119 o	119
Guyana	2 e	2 e	2 o	2 e	2 e	2 e	2 o	2 e	2 e	2 e
Paraguay	8 810	8 810	8 810	8 810	8 810	8 810 o	8 810	8 810 o	8 810 e	8 810 e
Peru	3 544 o	3 651 o	4 139 o	5 179 o	5 112 o	5 230 o	5 387 o	5 406 o	5 503 o	5 503 o
South Georgia	0	0	0	0	0	0	0	0 e	0 e	0 e
Suriname	180	180	180	180	180 e	180 e	180 e	180 e	180 e	180 e
Uruguay	1 538	1 538	1 538	1 538	1 538	1 538 o	1 538 e	1 538 o	1 538 e	1 538 o
Venezuela	14 881 o	14 881 u	15 138 u	16 829 e	16 829 e	16 829 e	16 829 e	16 829 e	16 829 e	16 829 e

Pure pumped storage Accumulation par pompage Hidroeléctrica de bombeo pura

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	107 729	109 471	111 902	116 934	119 841	120 357	120 606	121 179	127 705	137 058
Africa	1 864	1 864	1 864	2 863	3 196	3 196	3 196	3 196	3 196	3 196
Morocco	464	464	464	464	464 o	464	464 e	464 e	464 e	464 o
South Africa	1 400 u	1 400 u	1 400 u	2 399 u	2 732 u	2 732 e	2 732 e	2 732 e	2 732 u	2 732 e
Asia	56 035	57 218	58 338	61 998	64 668	65 268	65 568	65 598	71 668	80 988
China	21 533	22 110	23 030	26 690	29 390 e	29 990	30 290	30 320 u	36 390 o	45 790 o
Chinese Taipei	2 602 o	2 602 o	2 602 o	2 602 o	2 602 o	2 602 o	2 602 o	2 602 o	2 602 o	2 602 o
India	4 786 o	4 786 o	4 786 o	4 786 o	4 786 o	4 786 e	4 786 o	4 786 e	4 786 e	4 786 e
Japan	21 119	21 724	21 924	21 924	21 894	21 894 e	21 894 o	21 894 o	21 894 o	21 814 o
Korea Rep	4 700	4 700	4 700	4 700	4 700 o	4 700 o	4 700 o	4 700 o	4 700 o	4 700 o
Mongolia	0	0	0	0	0	0	0 e	0	0	0
Philippines	736 o	736 o	736 o	736 o	736 o	736 o	736 o	736 o	736 e	736 o
Thailand	560 o	560 o	560 o	560 o	560 o	560 o	560 o	560 o	560 e	560 e
Eurasia	1 216	1 216	1 216	1 216	1 216	1 216	1 216	1 216	1 356	1 356
Russian Fed	1 216	1 216	1 216	1 216	1 216	1 216	1 216	1 216	1 356 e	1 356
Europe	27 730	28 199	28 380	28 592	28 464	28 360	28 360	28 365	28 689	28 689
Belgium	1 307	1 307	1 307	1 307	1 307	1 307	1 307	1 307	1 307	1 307
Bosnia Herzg	420 o	420 o	420 o	420 o	420 o	420 e	420 o	420 o	420 o	420
Bulgaria	864	864	864	864	864 e	864 o	864 e	864 o	864 o	864
Czechia	1 172	1 172	1 172	1 172	1 172	1 172	1 172	1 172 o	1 172 o	1 172
France	1 808	1 728	1 728	1 728	1 728	1 728 o	1 728	1 728	1 728 o	1 728
Germany	5 650	5 654	5 666	5 578	5 493	5 355	5 355	5 354	5 354	5 354
Ireland	292	292	292	292	292 e	292 o	292	292 o	292 e	292
Italy	3 957	3 982	3 982	3 982	3 940	3 940 o	3 940	3 940 e	3 940 e	3 940
Lithuania	760	760	760	760	760 e	760 o	760 o	760 o	760 o	760
Luxembourg	1 100	1 296	1 296	1 296	1 296 e	1 296 e	1 296 e	1 296 o	1 296 o	1 296
Poland	1 406	1 406	1 406	1 413	1 423	1 423	1 423 e	1 423 e	1 423	1 423
Romania	92	92	92	92	92	92	92 e	92 o	92 e	92
Serbia	614	614	614	614	614	614 o	614 e	614 e	614 e	614
Slovakia	916	916	916	916	916 e	916	916 e	916 e	916 e	916
Slovenia	180	180	180	180	180 e	180	180 e	180	180 o	180
Spain	3 331	3 331	3 331	3 331	3 331	3 331	3 331	3 331	3 331	3 331
Sweden	99	99	99	99	99	99	99	99	99	99
Switzerland	456	456	469	527	527 e	562	562	562 e	562 o	562
UK	2 444	2 444	2 600	2 600	2 600	2 600	2 600 o	2 600 o	2 600 o	2 600
Ukraine	862	1 186	1 186	1 421	1 509 o	1 509 o	1 509 e	1 515	1 839	1 839 e
European Union (27)	22 934	23 079	23 091	23 010	22 794	22 655	22 655	22 654	22 654	22 654
Middle East	240	240	1 280	1 280	1 280	1 280	1 280	1 580	1 580	1 580
Iran IR			1 040	1 040	1 040	1 040 o	1 040 e	1 040 e	1 040 o	1 040 e
Iraq	240	240	240	240 e	240 e	240 e	240 e	240 e	240 e	240 e
Israel								300 u	300 e	300 e
N America	18 860	18 950	19 040	19 201	19 233	19 253	19 202	19 440	19 431	19 465
Canada	174	174	174	174 o	174 e	174 e	177	177 e	177 e	177 e
USA	18 686	18 776	18 866	19 027	19 059	19 079	19 025	19 263 o	19 254 o	19 288 o
Oceania	810	810	810	810	810	810	810	810	810	810
Australia	810	810	810	810	810	810	810 o	810 o	810 o	810 e
S America	974	974	974	974	974	974	974	974	974	974
Argentina	974 o	974 o	974 o	974 o	974 o	974 o	974 o	974 o	974 o	974

Marine energy Énergie marine Energía marina

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	510	513	512	523	527	527	525	523	523	524
Asia	259	259	259	259	259	259	260	260	260	260
China	4	4	4	4	4	4	4 e	5 u	5 e	5 e
Korea Rep	255 o	255 o	255	255	255 o	255 o	256	256 o	256 o	256 o
Singapore	0	0	0	0	0 e	0 o	0 e	0 e	0 e	0 e
Eurasia	2	2	2	2	2	2	2	2	2	2
Russian Fed	2 u	2 u	2 u	2 u	2 u	2 o	2 e	2	2 e	2
Europe	228	231	230	241	245	246	243	241	241	241
Faroe Islands			0 u					0 o	0 e	0
France	218	220	218	220	219	218	214	212	211	211
Italy	0 u	0 u	0 u	0 u	0 e	0 e	0 e	0 u	0 e	0
Netherlands	u	0 u	2 u	2 e	2 e	2 e	2 u	2 e	2 e	2
Norway	0 u	0 u	0 u	0 u	0 e	0 e	0 e	0 e	0 e	0
Portugal	0	1			0	0				
Spain	0 u	0 u	0 u	5	5	5	5 e	5 e	5 e	5
Sweden	0 u	0 u	0 u	0 u	0 e	0 e				
UK	8	9	9	13	18	20	22	22	22	22
European Union (27)	219	222	221	227	227	226	221	219	218	218
N America	20	20	20	20	20	20	20	20	20	21
Canada	20	20	20	20	20	20 e	20 e	20 e	20 e	21 e
USA	0 u	0 e	0 u	0 u	0 o					
Oceania	1	1	1	1	1		0	0	0	0
Australia	1	1	1	1	1 e		o		e	
New Zealand							0 o	0 o	0 e	0 e
S America	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0	0 o	0 o	0 o	0 o	0 o

Wind energy Énergie éolienne Energía eólica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	300 027	349 466	416 347	467 028	514 423	564 513	620 841	731 656	824 171	898 824
Africa	1 742	2 399	3 320	3 831	4 578	5 472	5 529	6 515	7 370	7 685
Algeria		10	10	10	10	10	10	10	10	10
Cabo Verde	27	27	27	27	27	28	28	28	28	28
Chad				1	1	1	1	1	1	1
Djibouti									20	20
Egypt	555	555	755	755	755	1130	1132	1380	1640	1643
Eritrea	1	1	1	1	1	1	1	1	1	1
Ethiopia	171	171	324	324	324	324	324	324	324	404
Gambia	1	1	1	1	1	1	1	1	1	1
Ghana			0	0	0	0	0	0	0	0
Kenya	6	6	26	26	26	336	336	336	436	436
Madagascar	0	0	0	0	0	0	0	0	0	0
Mauritania	4	4	34	34	34	34	34	34	34	34
Mauritius	1	1	1	11	11	11	11	11	11	11
Morocco	495	797	797	902	1 022	1 225	1 225	1 435	1 471	1 556
Namibia	0	0	0	0	5	5	5	5	5	5
Reunion	15	15	15	17	17	17	17	17	17	17
Senegal							55	159	159	159
Seychelles	6	6	6	6	6	6	6	6	6	6
Somalia	2	2	3	3	4	4	4	4	4	4
South Africa	257	569	1 079	1 473	2 094	2 094	2 094	2 516	2 956	3 103
Tanzania								2	2	2
Tunisia	200	233	240	240	240	245	245	245	245	245
Asia	99 542	124 336	161 804	184 185	205 016	229 094	257 671	332 298	384 945	425 674
Afghanistan	0	0	0	0	0	0	0	0	0	0
Bangladesh	2	2	3	3	3	3	3	3	3	3
Bhutan			1	1	1	1	1	1	1	1
Cambodia	0	0	0	0	0	0	0	0	0	0
China	76 731	96 819	131 048	148 517	164 374	184 665	209 582	282 113	328 973	365 964
China HK SAR					1	1	1	1	1	1
Chinese Taipei	614	637	647	682	692	713	845	937	1 033	1 581
India	18 420	22 465	25 088	28 700	32 848	35 288	37 505	38 559	40 067	41 930
Indonesia	1	1	1	1	1	144	154	154	154	154
Japan	2 646	2 753	2 808	3 247	3 483	3 498	3 954	4 367	4 467	4 577
Kazakhstan	4	53	72	98	112	121	284	486	684	1 108
Korea DPR	0	0	0	0	1	1	1	1	1	1
Korea Rep	576	612	847	1 067	1 215	1 420	1 494	1 636	1 708	1 893
Maldives	1	1	1	1	1	1	1	1	1	1
Mongolia	51	51	51	51	101	156	156	156	156	156
Myanmar			0	0	0	0	0	0	0	0
Nepal	0	0	0	0	0	0	0	0	0	0
Pakistan	106	206	308	591	789	1 186	1 236	1 236	1 335	1 435
Philippines	33	337	427	427	427	427	443	443	443	443
Singapore					0	0	0	0	0	0
Sri Lanka	81	121	131	131	131	128	128	179	252	252
Thailand	223	225	234	507	628	1 103	1 507	1 507	1 545	1 545
Uzbekistan					1	1	1	1	1	1
Viet Nam	53	53	136	160	205	237	375	518	4 118	4 628
C America + Carib	797	920	1 282	1 523	1 603	1 712	1 940	1 965	1 992	2 036
Antigua Barb								4	4	4
Aruba	30	30	30	30	30	30	30	30	30	30
Barbados	0	0	0	0	0	0	0	0	0	1
Belize	0	0	0	0	0	0	0	0	0	0
BES Islands	11	11	11	11	11	11	11	11	11	11
Br Virgin Is	1	1	1	1	1	1	1	1	1	1
Costa Rica	144	193	272	365	378	408	411	394	394	390
Cuba	12	12	12	12	12	12	12	12	12	12
Curacao	30	30	30	30	47	47	47	47	47	47
Dominica	0	0	0	0	0	0	0	0	0	0
Dominican Rep	85	85	85	135	135	183	370	370	370	417
El Salvador								36	54	54
Grenada	0	0	0	0	0	0	0	0	0	0
Guadeloupe	23	23	27	26	26	26	42	42	52	52
Guatemala			76	76	76	107	107	107	107	107
Haiti						0	0	0	0	0
Honduras	152	152	156	179	229	229	239	239	239	239
Jamaica	39	39	39	99	99	99	99	99	99	99
Martinique	1	1	1	1	1	1	13	15	14	14
Nicaragua	147	186	186	186	186	186	186	186	186	186
Panama	20	55	253	270	270	270	270	270	270	270
Puerto Rico	100	99	100	99	99	99	99	99	99	99
St Kitts Nevis	2	2	2	2	2	2	2	2	2	2
Trinidad Tobago			0	0	0	0	0	0	0	0
US Virgin Is	0	0	0	0	0	0	0	0	0	0

Wind energy

Énergie éolienne

Energía eólica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Eurasia	2 775	3 645	4 525	5 801	6 566	7 146	7 783	9 868	12 652	13 712
Armenia	3	3	3	3	3	3	3	3	3	3
Azerbaijan	3	3	8	16	16	66	66	66	66	66
Georgia				20	20	20	21	21	21	29
Russian Fed	10	10	11	11	11	52	102	945	1 955	2 218
Türkiye	2 760	3 630	4 503	5 751	6 516	7 005	7 591	8 832	10 607	11 396
Europe	118 170	130 198	143 015	155 727	170 616	181 787	196 104	207 910	222 034	240 624
Austria	1 675	2 110	2 489	2 730	2 887	3 133	3 224	3 226	3 408	3 736
Belarus	7	9	22	62	84	92	112	112	112	112
Belgium	1 769	1 933	2 181	2 334	2 779	3 305	3 864	4 673	4 948	5 251
Bosnia Herzg	0	0	0	0	0	51	87	87	135	135
Bulgaria	683	699	699	699	698	699	703	703	704	704
Croatia	254	339	418	483	576	586	646	801	987	1 043
Cyprus	147	147	158	158	158	158	158	158	158	158
Czechia	262	278	281	282	308	316	339	339	339	339
Denmark	4 819	4 886	5 077	5 245	5 489	6 123	6 111	6 267	7 021	7 088
Estonia	248	275	300	310	312	310	316	317	315	315
Faroe Islands	9	20	20	20	20	16	13	19	23	23
Finland	447	627	1 005	1 565	2 044	2 041	2 284	2 586	3 257	5 614
France	8 156	9 201	10 298	11 567	13 499	14 900	16 427	17 514	18 740	21 120
Germany	33 477	38 614	44 580	49 435	55 580	58 721	60 742	62 201	63 833	66 315
Greece	1 809	1 978	2 091	2 370	2 624	2 877	3 589	4 119	4 649	4 879
Hungary	329	329	329	329	329	329	323	323	324	324
Iceland	2	3	3	3	2	2	2	2	2	2
Ireland	1 923	2 283	2 451	2 802	3 319	3 674	4 126	4 307	4 339	4 619
Italy	8 542	8 683	9 137	9 384	9 737	10 230	10 679	10 871	11 254	11 780
Kosovo*	1	1	1	1	34	34	34	34	139	139
Latvia	66	69	68	70	77	78	78	78	77	136
Lithuania	279	288	436	509	518	533	534	540	671	814
Luxembourg	58	58	64	120	120	123	136	153	136	165
Malta	0	0	0	0	0	0	0	0	0	0
Moldova Rep	1	1	1	2	9	33	35	41	73	102
Montenegro					72	72	118	118	118	118
Netherlands	2 713	2 865	3 391	4 257	4 202	4 393	4 484	6 648	7 769	9 309
North Macedonia		37	37	37	37	37	37	37	37	37
Norway	818	859	867	883	1 207	1 710	2 914	4 030	5 049	5 134
Poland	3 429	3 836	4 886	5 747	5 759	5 766	5 837	6 298	6 967	7 987
Portugal	4 610	4 857	4 937	5 124	5 124	5 172	5 223	5 122	5 427	5 455
Romania	2 773	3 244	3 130	3 025	3 030	3 032	3 038	3 013	3 015	3 015
Serbia	1	1	10	17	25	227	398	398	398	398
Slovakia	5	3	3	3	4	3	4	4	4	4
Slovenia	2	3	3	3	3	3	3	3	3	3
Spain	22 958	22 925	22 943	22 990	23 124	23 405	25 590	26 819	27 908	29 308
Sweden	4 194	5 088	5 819	6 435	6 611	7 300	8 681	9 976	12 116	14 557
Switzerland	60	60	60	75	75	75	75	87	87	87
UK	11 282	13 074	14 306	16 126	19 585	21 605	23 882	24 485	25 730	28 537
Ukraine	362	514	514	526	553	621	1 258	1 402	1 761	1 761
European Union (27)	105 667	115 659	127 217	138 019	148 956	157 255	167 211	177 132	188 453	204 122
Middle East	122	165	286	423	504	609	775	923	1 029	1 053
Bahrain	1	1	1	1	1	1	1	1	1	1
Iran IR	108	149	153	191	259	282	305	308	310	342
Israel	6	6	6	27	27	27	27	27	27	27
Jordan	1	1	118	198	198	280	373	518	622	614
Kuwait	2	2	2	2	12	12	12	12	12	12
Lebanon	2	3	3	3	3	3	3	3	3	3
Oman							50	50	50	50
Saudi Arabia					3	3	3	3	3	3
Syrian AR	1	1	1	1	1	1	1	1	1	1
United Arab Em	1	2	2							
N America	70 122	76 693	87 252	97 526	104 261	113 369	123 322	138 795	154 477	163 469
Canada	7 801	9 694	11 214	11 973	12 250	12 816	13 413	13 627	14 304	15 295
Greenland						0	0	0	0	0
Mexico	2 122	2 569	3 271	4 051	4 180	5 887	6 073	6 504	7 154	7 312
St Pierre Mq	1									
USA	60 198	64 430	72 767	81 502	87 831	94 666	103 836	118 664	133 019	140 862
Oceania	3 894	4 530	4 921	5 065	5 553	6 184	7 022	9 346	9 917	11 100
Australia	3 221	3 797	4 181	4 324	4 812	5 442	6 279	8 603	8 951	10 134
Cook Is	0	0	0	0	0	0	0	0	0	0
Fiji	10	10	10	10	10	10	10	10	10	10
Fr Polynesia	0	0	0	0	0	0	0	0	0	0
Guam				0	0	0	0	0	0	0
Marshall Is						0	0	0	0	0

Wind energy Énergie éolienne Energía eólica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Micronesia						1	1	1	1	1
New Caledon	38	38	38	38	38	38	38	38	38	38
New Zealand	622	681	688	689	689	689	689	689	912	912
Samoa		1	1	1	1	1	1	1	1	1
Tokelau							0	0	0	0
Tonga	0	0	0	0	0	0	1	1	1	1
Vanuatu	3	4	4	4	3	3	3	3	3	3
S America	2 863	6 579	9 942	12 946	15 726	19 140	20 695	24 035	29 755	33 471
Argentina	190	215	187	187	227	750	1 609	2 624	3 292	3 309
Bolivia	0	3	3	27	27	27	27	27	128	131
Brazil	2 202	4 888	7 633	10 129	12 304	14 843	15 438	17 198	21 161	24 163
Chile	301	736	910	1 039	1 305	1 524	1 620	2 149	3 137	3 830
Colombia	18	18	18	18	18	18	18	18	18	18
Ecuador	19	21	21	21	21	21	21	21	21	21
Falklands Malv	1	1	1	1	1	1	3	3	3	3
Guyana	0	0	0	0	0	0	0	0	0	0
Peru	1	143	240	240	240	372	372	409	409	409
South Georgia	0	0	0	0	0	0	0	0	0	0
Uruguay	59	481	857	1 211	1 511	1 511	1 514	1 514	1 514	1 514
Venezuela	71	71	71	71	71	71	71	71	71	71

Onshore wind energy

Énergie éolienne terrestre

Energía eólica terrestre

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	292 856	340 974	404 630	452 686	495 586	540 923	592 539	697 285	769 912	835 624
Africa	1 742	2 399	3 320	3 831	4 578	5 472	5 529	6 515	7 370	7 685
Algeria		10	10	10	10 e	10 e	10 e	10 e	10 e	10 e
Cabo Verde	27	27	27	27	27	28 e	28 e	28 e	28 e	28 e
Chad				1 u	1 e	1 e	1 e	1 o	1 e	1 e
Djibouti									20 u	20 e
Egypt	555 o	555 o	755 o	755 o	755 o	1130 o	1132 e	1380 e	1640 e	1643 e
Eritrea	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Ethiopia	171	171	324	324 u	324 e	324 e	324 e	324	324	404 e
Gambia	1 o	1 o	1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e
Ghana			0 o	0 e	0 e	0 e	0 e	0 e	0 e	0 o
Kenya	6 o	6 o	26 e	26 e	26 e	336 e	336 e	336 e	436 e	436 e
Madagascar	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e	0 e
Mauritania	4 o	4 o	34 o	34 o	34 o	34 e	34 e	34 e	34 e	34 e
Mauritius	1	1	1	11 o	11 e	11 e	11 e	11 e	11 e	11 e
Morocco	495	797	797	902 o	1 022 o	1 225 o	1 225 e	1 435 e	1 471 e	1 556 e
Namibia	0 e	0 e	0 e	0 e	5 u	5 e	5	5 e	5 e	5 e
Reunion	15 o	15 o	15 o	17 o	17 e	17 o	17 e	17 e	17 e	17 e
Senegal							55 o	159 o	159 e	159 e
Seychelles	6 o	6 o	6 o	6 o	6 o	6 e	6 e	6 e	6 o	6 e
Somalia	2 u	2 u	3 u	3 u	4 u	4 e	4 e	4	4 e	4 e
South Africa	257 o	569 o	1 079 o	1 473 o	2 094 o	2 094 o	2 094 e	2 516 u	2 956 e	3 103 u
Tanzania								2 u	2 e	2 e
Tunisia	200 o	233 o	240 o	240 o	240 o	245 o	245 o	245 o	245 e	245 e
Asia	99 055	123 820	161 082	182 506	202 010	224 261	251 373	322 884	357 127	393 178
Afghanistan	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Bangladesh	2 o	2 o	3 o	3 o	3 o	3 e	3 o	3 o	3 o	3 o
Bhutan			1 u	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Cambodia	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
China	76 314	96 379	130 489	147 037	161 586	180 077	203 652 e	273 123 o	302 583 e	335 504 e
China HK SAR					1	1	1	1	1	1 e
Chinese Taipei	614 o	637 o	647 o	682 o	684 o	705 o	717 o	809 o	796 o	836 o
India	18 420 o	22 465 o	25 088 o	28 700 o	32 848 o	35 288 o	37 505 o	38 559 o	40 067 o	41 930 o
Indonesia	1 o	1 o	1 o	1 o	1 o	144 o	154 o	154 e	154 o	154 o
Japan	2 596	2 703	2 755	3 187	3 418	3 433	3 886	4 306 o	4 406 o	4 516 o
Kazakhstan	4	53	72	98	112	121 o	284 e	486	684	1108
Korea DPR	0 u	0 u	0 u	0 u	1 o	1 e	1 e	1 e	1 e	1 e
Korea Rep	571	602	837	1 027	1 170	1 347	1 421	1 500 o	1 572 o	1 757 e
Maldives	1 u	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Mongolia	51 e	51 e	51 e	51 e	101 e	156 o	156 e	156	156	156
Myanmar			0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Nepal	0 u	0 u	0 u	0 u	0 e	0 o	0 o	0 e	0 e	0 e
Pakistan	106 e	206 e	308 e	591 e	789 e	1 186 e	1 236 e	1 236 e	1 335 e	1 435 e
Philippines	33 o	337 o	427 o	427 o	427 o	427 o	443 o	443 o	443 e	443 o
Singapore					0 u	0 e	0 e	0 e	0 e	0 e
Sri Lanka	81 o	121 o	131 o	131 o	131 o	128 o	128 e	179 o	252 o	252 e
Thailand	223	225	234	507	628 o	1 103 o	1 507 o	1 507 o	1 545 o	1 545 e
Uzbekistan					1 o	1 o	1 e	1	1 e	1
Viet Nam	37	37 u	37 u	61 e	106 e	138 u	275 e	419 e	3 124 e	3 534 e
C America + Carib	797	920	1 282	1 523	1 603	1 712	1 940	1 965	1 992	2 036
Antigua Barb								4 u	4 e	4 e
Aruba	30	30	30	30	30	30 e	30 o	30 e	30 e	30 e
Barbados	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 u	1 u
Belize	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 e	0 u
BES Islands	11 o	11 o	11 o	11 o	11 o	11 o	11 o	11 o	11 o	11 o
Br Virgin Is	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o
Costa Rica	144	193	272	365	378	408 o	411 o	394 o	394 o	390 o
Cuba	12	12	12	12	12	12 e	12	12	12	12 e
Curacao	30	30	30	30	47 o	47 o	47 o	47 o	47 o	47 o
Dominica	0 o	0 o	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e
Dominican Rep	85	85	85	135 o	135 o	183 o	370 o	370 o	370	417 o
El Salvador								36 o	54 o	54 e
Grenada	0 u	0 u	0 u	0 u	0 u	0 u	0 e	0 e	0 e	0 e
Guadeloupe	23	23	27	26	26	26	42	42	52	52
Guatemala			76	76	76	107 o	107 o	107 o	107 o	107 o
Haiti						0 u	0 e	0 e	0 e	0 e
Honduras	152 o	152	156 e	179 e	229 e	229 e	239 e	239 e	239 e	239 e
Jamaica	39	39	39	99	99	99 e	99 e	99 o	99 e	99 e
Martinique	1 o	1 o	1 o	1 o	1 e	1 o	13	15	14	14 e
Nicaragua	147	186	186	186	186	186 o	186 o	186 o	186 e	186 e
Panama	20	55	253	270	270	270 o	270	270 e	270 o	270
Puerto Rico	100 o	99 o	100 o	99 o	99 o	99 o	99 o	99 o	99 o	99 o
St Kitts Nevis	2	2	2	2	2 u	2 e	2 e	2 e	2 e	2 e
Trinidad Tobago			0	0	0	0 e	0 e	0 e	0 e	0 e
US Virgin Is	0 o	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e

Onshore wind energy

Énergie éolienne terrestre

Energía eólica terrestre

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Eurasia	2 775	3 645	4 525	5 801	6 566	7 146	7 783	9 868	12 652	13 712
Armenia	3	3	3	3 o	3 e	3 o	3 e	3 e	3 e	3
Azerbaijan	3	3	8	16 u	16 u	66 o	66 e	66	66	66
Georgia				20	20	20	21	21 o	21 o	29
Russian Fed	10	10 e	11 e	11 e	11 e	52 e	102 e	945	1 955 o	2 218
Türkiye	2 760	3 630	4 503	5 751	6 516	7 005	7 591	8 832	10 607	11 396
Europe	111 486	122 223	132 019	143 094	154 814	163 060	174 129	182 983	195 635	209 961
Austria	1 675	2 110	2 489	2 730	2 887	3 133	3 224	3 226	3 408	3 736
Belarus	7	9	22	62	84	92	112	112	112	112
Belgium	1 061	1 225	1 469	1 622	1 902	2 119	2 308	2 411	2 687	2 990
Bosnia Herzg	0 o	0 o	0 o	0 o	0 o	51	87	87	135 u	135
Bulgaria	683	699	699	699	698	699	703	703	704	704
Croatia	254	339	418	483	576	586	646	801	987	1 043
Cyprus	147	147	158	158	158	158	158 o	158 o	158	158
Czechia	262	278	281	282	308	316	339	339	339	339
Denmark	3 548	3 615	3 806	3 974	4 225	4 422	4 410	4 566	4 715	4 782
Estonia	248	275	300	310	312	310	316	317	315	315
Faroe Islands	9 o	20 o	20 o	20 o	20 e	16 o	13 o	19 o	23	23
Finland	421 e	601 e	973 e	1 533 e	1 971	1 968 o	2 211	2 513	3 184 u	5 541
France	8 156	9 201	10 298	11 567	13 497	14 898	16 425	17 512	18 738	20 638
Germany	32 969 o	37 620 o	41 297 o	45 303	50 174	52 328	53 187	54 414	56 046	58 186
Greece	1 809	1 978	2 091	2 370	2 624	2 877	3 589	4 119	4 649	4 879
Hungary	329	329	329	329	329 u	329 o	323	323	324	324
Iceland	2	3	3	3	2	2	2	2	2 e	2
Ireland	1 898	2 258	2 426	2 776	3 294	3 649	4 101	4 282	4 314	4 594
Italy	8 542	8 683	9 137	9 384	9 737	10 230	10 679	10 871	11 254	11 750
Kosovo*	1	1	1	1	34	34	34	34	139	139
Latvia	66	69	68	70	77	78	78	78	77	136
Lithuania	279	288	436	509	518	533	534	540	671 o	814
Luxembourg	58	58	64	120	120	123	136	153	136	165
Malta	0	0	0 o	0	0	0 e	0 e	0 e	0 e	0
Moldova Rep	1	1	1	2 o	9 o	33	35	41	73	102
Montenegro					72 u	72	118 u	118 e	118 u	118
Netherlands	2 485 o	2 637 o	3 034	3 300	3 245	3 436	3 527	4 188	5 310	6 090
North Macedonia		37	37	37	37 u	37 u	37 o	37 o	37 u	37
Norway	816 e	857	865 e	881 e	1 205 o	1 708	2 912	4 028	5 043	5 068
Poland	3 429	3 836	4 886	5 747	5 759	5 766	5 837	6 298	6 967	7 987
Portugal	4 608	4 855	4 935	5 124	5 124	5 172	5 215	5 097	5 402	5 430
Romania	2 773	3 244	3 130	3 025	3 030	3 032	3 038	3 013	3 015	3 015
Serbia	1	1	10 e	17	25 u	227	398	398	398 o	398
Slovakia	5	3	3	3	4 u	3	4	4	4	4
Slovenia	2	3	3	3	3	3	3	3	3	3
Spain	22 953 e	22 920	22 938 e	22 985	23 119	23 400	25 585	26 814	27 903	29 303
Sweden	3 982	4 875	5 606	6 232	6 408	7 097	8 478	9 773	11 923	14 364
Switzerland	60	60	60	75	75 u	75 o	75 e	87 o	87 u	87
UK	7 586	8 573	9 212	10 833	12 597	13 425	13 994	14 102 o	14 474	14 690
Ukraine	362	514	514	526	553	621 o	1 258 o	1 402	1 761 u	1 761 e
European Union (27)	102 681	112 186	121 316	130 681	140 144	146 711	155 126	162 590	173 316	187 373
Middle East	122	165	286	423	504	609	775	923	1 029	1 053
Bahrain	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 u
Iran IR	108	149	153	191	259 o	282 o	305	308	310	342 u
Israel	6 e	6 o	6 e	27 e	27 o	27 e	27 e	27 e	27 e	27 e
Jordan	1 o	1 o	118 o	198 o	198 o	280 o	373 u	518 o	622 u	614 e
Kuwait	2 u	2 e	2 e	2 e	12 e	12 e	12 e	12 e	12 e	12 e
Lebanon	2 u	3 u	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e
Oman							50	50 e	50 e	50 e
Saudi Arabia					3 u	3 e	3 o	3 e	3 e	3 e
Syrian AR	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
United Arab Em	1 e	2 e	2 e	u	u	u	u	u	u	u
N America	70 122	76 693	87 252	97 497	104 231	113 340	123 292	138 765	154 436	163 428
Canada	7 801	9 694	11 214	11 973	12 250	12 816 u	13 413 u	13 627	14 304	15 295
Greenland						0 o	0 o	0 e	0 e	0 e
Mexico	2 122	2 569	3 271	4 051	4 180	5 887	6 073	6 504	7 154	7 312
St Pierre Mq	1 u									
USA	60 198 o	64 430 o	72 767 o	81 473 o	87 801 o	94 637 o	103 806 o	118 634 o	132 978 o	140 820 o
Oceania	3 894	4 530	4 921	5 065	5 553	6 184	7 022	9 346	9 917	11 100
Australia	3 221	3 797	4 181	4 324	4 812	5 442	6 279	8 603 o	8 951 o	10 134 o
Cook Is	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Fiji	10 u	10 u	10 u	10 u	10 u	10 o	10 o	10 o	10 o	10 e
Fr Polynesia	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Guam				0 o	0 o	0 e	0 e	0 e	0 e	0 e
Marshall Is						0 u	0 e	0 e	0 e	0 e

Onshore wind energy

Énergie éolienne terrestre

Energía eólica terrestre

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Micronesia						1 u	1 e	1 e	1 e	1 e
New Caledon	38 o	38 o	38 o	38 o	38 o	38 o	38 e	38 e	38 e	38 e
New Zealand	622	681	688	689	689	689 o	689 o	689	912 o	912 e
Samoa		1 o	1 o	1 o	1 o	1 o	1 e	1 e	1 e	1 e
Tokelau							0 o	0 e	0 e	0 e
Tonga	0 e	0 e	0 u	0 u	0 u	0 u	1 u	1 e	1 e	1 e
Vanuatu	3 o	4 o	4 o	4 o	3 o	3 o	3 o	3 e	3 e	3 e
S America	2 863	6 579	9 942	12 946	15 726	19 140	20 695	24 035	29 755	33 471
Argentina	190 o	215 o	187 o	187 o	227 e	750 e	1 609 o	2 624 e	3 292 e	3 309
Bolivia	0	3 o	3 o	27 o	27 o	27 o	27 o	27 o	128 o	131 o
Brazil	2 202 o	4 888 o	7 633 o	10 129 o	12 304 o	14 843 o	15 438 o	17 198 o	21 161 o	24 163 o
Chile	301	736	910	1 039	1 305 o	1 524 o	1 620 o	2 149 o	3 137 o	3 830 o
Colombia	18 o	18 o	18 o	18 o	18 o	18 o	18 o	18	18	18
Ecuador	19	21 o	21 o	21 o	21 o	21 e	21 o	21 o	21 o	21
Falklands Malv	1 e	1 e	1 o	1 o	1 o	1 o	3 e	3 e	3 e	3 e
Guyana	0	0	0	0	0	0 e	0 e	0 e	0 e	0 e
Peru	1	143	240 o	240 o	240 o	372 e	372 e	409 e	409 o	409 e
South Georgia	0	0	0	0	0	0	0	0 e	0 e	0 e
Uruguay	59 o	481	857	1 211	1 511 o	1 511 o	1 514 o	1 514 o	1 514 e	1 514 o
Venezuela	71 u	71 u	71 u	71 u	71 u	71 u	71 u	71 e	71 e	71 e

Offshore wind energy

Énergie éolienne maritime

Energía eólica marina

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	7 171	8 492	11 718	14 342	18 837	23 590	28 303	34 371	54 259	63 200
Asia	488	516	722	1 680	3 006	4 833	6 298	9 414	27 818	32 496
China	417	440	559	1 480	2 788 u	4 588 u	5 930	8 990 o	26 390 o	30 460 o
Chinese Taipei					8 u	8 u	128 o	128 o	237 o	745 o
Japan	50	50	53	60	65 u	65 u	68	61	61 e	61 o
Korea Rep	5	11	11	41	46 e	73 u	73 u	136 u	136 e	136 e
Viet Nam	16 e	16 u	99 u	99 o	99 o	99 e	99 u	99 e	994 e	1 094 e
Europe	6 684	7 976	10 996	12 633	15 802	18 727	21 975	24 927	26 399	30 663
Belgium	708	708	712	712	877	1 186	1 556	2 262	2 262 o	2 262
Denmark	1 271	1 271	1 271	1 271	1 264	1 701	1 701	1 701 o	2 306	2 306
Finland	26 u	26 u	32 u	32 u	73	73 o	73	73 u	73 u	73
France					2 u	2 o	2 u	2 u	2 u	482
Germany	508 o	994 o	3 283 o	4 132 o	5 406	6 393	7 555	7 787	7 787	8 129
Ireland	25	25	25	25	25 u	25 o	25	25 o	25 e	25
Italy										30
Netherlands	228 o	228 o	357 o	957 o	957 u	957 u	957 u	2 460	2 460	3 220
Norway	2 u	2 u	2 u	2 u	2 o	2 u	2 u	2 e	6 u	66
Portugal	2	2	2			8	25	25 u	25 u	25
Spain	5 u	5 u	5 u	5 u	5 u	5	5 o	5 e	5 o	5
Sweden	212	213	213	203	203 e	203	203 u	203 u	193	193
UK	3 696	4 501	5 094	5 293 o	6 988	8 181	9 888	10 383	11 256	13 848
European Union (27)	2 985	3 472	5 900	7 337	8 812	10 545	12 085	14 542	15 137	16 749
N America		0	0	29	29	29	29	29	41	41
USA		0 u	0 u	29 o	29 o	29 o	29 o	29 o	41 o	41 o

Solar energy

Énergie solaire

Energía solar

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	140 514	180 712	228 920	301 082	395 947	489 306	592 245	720 429	861 537	1 053 115
Africa	716	1 709	2 242	3 455	5 200	8 150	9 493	10 819	11 628	12 641
Algeria	25	28	91	330	423	448	448	448	448	460
Angola	11	12	13	13	13	13	13	13	13	297
Benin		0	1	3	3	3	3	3	3	28
Botswana	2	2	2	3	3	4	6	6	6	6
Burkina Faso	6	7	8	10	47	62	62	62	62	92
Burundi	3	3	3	4	5	5	5	5	13	13
Cabo Verde	6	6	6	6	6	8	8	8	8	8
Cameroon	4	6	7	9	12	14	14	14	14	14
Cent Afr Rep	0	0	0	0	0	0	0	0	0	0
Chad	0	0	0	0	0	0	0	1	1	1
Comoros										4
Congo DR	0	1	1	3	5	20	20	20	20	20
Congo Rep	0	0	0	0	1	1	1	1	1	1
Cote d'Ivoire	3	4	5	5	8	13	13	13	13	13
Djibouti	0	0	0	0	0	0	0	0	0	0
Egypt	35	35	36	59	180	764	1 647	1 643	1 663	1 724
Eq Guinea				0	0	0	0	0	0	0
Eritrea	0	8	8	9	11	12	12	12	11	11
Eswatini	1	1	1	1	1	1	1	1	11	11
Ethiopia	3	9	10	14	12	12	12	20	21	21
Gabon	1	1	1	1	1	1	1	1	1	1
Gambia	2	2	2	2	2	2	3	3	3	3
Ghana	3	5	30	34	39	66	72	95	98	98
Guinea	0	0	0	0	0	1	1	2	2	2
Guinea Bissau			0	0	0	1	1	1	1	1
Kenya	7	17	31	36	46	107	127	147	218	307
Lesotho	0	0	0	0	0	0	0	0	0	0
Liberia	0	0	0	0	2	3	3	3	3	3
Libya	5	5	5	5	5	5	5	5	6	6
Madagascar	5	7	9	11	13	33	33	33	33	33
Malawi	5	8	12	12	19	26	80	82	141	143
Mali	3	4	5	5	7	7	8	59	89	229
Mauritania	18	18	18	35	35	87	88	88	88	89
Mauritius	3	3	19	26	33	75	99	108	110	110
Mayotte	13	13	13	13	15	16	17	19	30	30
Morocco	35	40	200	202	204	734	734	774	854	858
Mozambique	5	7	10	13	15	56	56	61	64	108
Namibia	15	16	21	36	75	99	151	151	151	176
Niger	5	6	7	8	9	27	27	27	27	62
Nigeria	15	16	17	18	19	19	28	28	33	37
Reunion	156	167	187	186	188	190	199	207	224	224
Rwanda	1	10	11	12	17	22	25	25	25	25
Sao Tome Prn	0	0	0	0	0	0	0	0	0	0
Senegal	7	9	9	38	109	150	173	173	240	263
Seychelles	0	1	1	2	3	4	5	7	13	18
Sierra Leone	0	0	0	0	4	4	4	4	4	9
Somalia		0	0	5	7	7	7	16	24	47
South Africa	262	1 164	1 353	2 176	3 451	4 805	4 908	5 994	6 316	6 326
South Sudan	0	0	0	0	0	1	1	1	1	14
Sudan	15	17	20	26	36	59	80	117	136	190
Tanzania	4	11	13	12	13	17	15	15	15	15
Togo	0	0	0	0	1	4	5	7	57	57
Tunisia	10	17	28	38	47	64	80	95	95	197
Uganda	19	20	22	24	44	67	78	88	90	94
Zambia	0	0	0	0	0	1	96	96	96	96
Zimbabwe	2	3	3	3	5	9	12	14	28	41
Asia	36 225	60 691	90 581	140 489	211 853	276 406	332 854	410 326	485 413	597 573
Afghanistan	17	18	19	20	22	22	31	31	31	33
Bangladesh	94	120	147	164	196	218	269	317	480	537
Bhutan	0	0	0	0	0	0	0	0	0	0
Brunei Darism	1	1	1	1	1	1	1	1	5	5
Cambodia	6	9	12	18	29	29	124	315	376	456
China	17 759	28 399	43 549	77 819	130 832	175 262	204 971	253 964	306 973	393 032
China HK SAR					1	1	89	91	95	95
Chinese Taipei	410	636	884	1 245	1 768	2 738	4 150	5 817	7 700	9 724
India	1 599	3 773	5 693	9 979	18 252	27 453	35 203	39 385	49 684	63 146
Indonesia	38	42	79	88	98	65	155	185	225	291
Japan	13 599	23 339	34 150	42 040	49 500	56 162	63 192	69 764	74 191	78 833
Kazakhstan	16	76	144	157	175	490	1 150	1 719	1 923	2 031
Korea DPR	6	11	23	32	35	38	42	42	52	52
Korea Rep	1 555	2 481	3 615	4 502	5 835	8 099	11 952	14 575	18 161	20 975
Lao PDR	0	2	2	2	8	34	34	34	34	34
Malaysia	139	205	266	344	394	545	894	1 483	1 787	1 933
Maldives	2	4	5	7	11	16	21	27	31	36
Mongolia	5	5	5	15	48	64	89	95	95	195
Myanmar	4	6	21	32	44	48	88	84	80	103
Nepal	11	12	13	14	55	55	54	70	97	117

Solar energy

Énergie solaire

Energía solar

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Pakistan	101	165	266	590	655	680	755	854	1 077	1 243
Philippines	3	28	173	784	908	917	982	1 058	1 377	1 625
Singapore	12	25	46	97	116	161	272	333	487	572
Sri Lanka	13	22	37	80	156	231	351	431	624	714
Tajikistan								0	0	0
Thailand	829	1 304	1 425	2 451	2 702	2 967	2 988	2 988	3 065	3 065
Timor Leste	1	1	1	1	0	0	0	0	0	0
Uzbekistan	1	1	1	2	3	4	4	4	104	253
Viet Nam	5	5	5	5	8	105	4 993	16 660	16 660	18 474
C America + Carib	277	333	1 031	1 238	1 605	1 976	2 495	2 799	3 581	3 987
Anguilla	0	1	1	2	2	1	2	2	2	2
Antigua Barb	0	0	3	4	4	9	9	13	13	13
Aruba	2	5	6	6	6	14	14	14	14	14
Bahamas	1	1	1	1	1	1	2	2	2	3
Barbados	0	1	3	15	16	17	33	49	64	69
Belize	0	0	0	0	1	1	7	7	7	7
BES Islands			0	2	5	6	7	7	7	7
Br Virgin Is	0	0	1	1	1	1	1	1	1	1
Cayman Is				3	9	10	11	13	14	14
Costa Rica	13	17	22	24	28	28	48	57	74	74
Cuba	11	22	24	37	65	128	159	217	246	258
Curacao	3	8	10	11	11	12	15	16	16	16
Dominica	0	0	0	1	1	0	0	0	0	0
Dominican Rep	8	15	25	73	106	205	315	386	594	742
El Salvador	13	13	24	25	121	198	403	478	643	664
Grenada	1	1	1	2	2	3	3	4	4	4
Guadeloupe	67	67	67	68	70	70	81	85	86	90
Guatemala	3	10	93	93	99	101	101	101	101	105
Haiti	1	2	2	2	3	3	3	3	3	3
Honduras	5	5	396	417	454	514	518	525	529	529
Jamaica	2	4	7	28	56	56	93	93	93	93
Martinique	62	63	65	67	68	71	76	76	78	78
Montserrat							0	0	1	1
Nicaragua	1	1	1	1	14	14	16	16	16	16
Panama	4	6	49	93	147	188	219	229	462	522
Puerto Rico	74	79	209	244	302	305	337	381	488	639
St Barth				0	0	0	0	0	0	0
St Kitts Nevis	1	1	1	1	1	1	1	2	2	2
St Lucia	0	0	1	1	1	4	4	4	4	4
St Martin	1	2	3	2	0	0	1	1	1	1
St Vincent Gren	0	0	1	1	1	1	2	3	4	4
Trinidad Tobago	4	4	4	4	4	4	4	4	4	4
Turks Caicos			0	0	0	0	1	1	1	1
US Virgin Is	1	5	9	9	5	10	10	10	10	10
Eurasia	21	48	316	937	3 678	5 652	7 358	8 243	9 761	11 618
Armenia				1	2	17	50	106	217	306
Azerbaijan	1	2	5	25	28	35	33	35	48	51
Georgia				0	1	1	3	5	18	18
Russian Fed	1	5	61	76	225	535	1 276	1 428	1 661	1 816
Türkiye	19	41	250	834	3 422	5 064	5 996	6 668	7 817	9 426
Europe	84 189	91 095	99 604	106 173	112 299	121 603	142 272	162 795	190 143	227 799
Albania	1	1	1	1	1	1	14	21	23	29
Andorra		0	0	0	0	1	2	3	4	4
Austria	626	785	937	1 096	1 269	1 455	1 702	2 043	2 783	3 548
Belarus		4	6	47	80	154	154	160	160	269
Belgium	2 902	3 015	3 132	3 329	3 621	4 000	4 637	5 573	6 012	6 898
Bosnia Herzg	1	7	8	14	16	18	22	35	57	107
Bulgaria	1 039	1 029	1 028	1 030	1 031	1 033	1 044	1 100	1 275	1 948
Croatia	19	33	48	56	60	68	85	109	138	182
Cyprus	35	64	76	84	110	118	151	229	315	464
Czechia	2 064	2 067	2 075	2 068	2 075	2 081	2 111	2 172	2 246	2 627
Denmark	571	607	782	851	906	998	1 080	1 304	1 704	2 490
Estonia	2	3	7	10	15	32	121	208	395	535
Faroe Islands							0	0	0	0
Finland	9	11	17	39	82	140	222	318	425	591
France	5 277	6 034	7 138	7 702	8 610	9 672	10 817	12 065	14 819	17 419
Germany	36 710	37 900	39 224	40 679	42 293	45 158	48 914	53 671	59 373	66 554
Greece	2 579	2 596	2 604	2 604	2 606	2 652	2 834	3 288	4 277	5 557
Hungary	35	89	172	235	344	728	1 400	2 131	2 968	2 988
Iceland	1	1	3	4	4	5	7	7	7	7
Ireland	1	2	2	6	17	32	58	90	135	135
Italy	18 190	18 600	18 907	19 289	19 688	20 114	20 871	21 656	22 600	25 083

Solar energy

Énergie solaire

Energía solar

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kosovo*			0	2	7	7	10	10	10	10
Latvia				1	1	2	3	5	7	56
Lithuania	68	69	69	70	74	82	103	164	255	568
Luxembourg	95	110	116	122	128	131	160	187	277	319
Malta	29	55	75	94	112	132	155	188	206	206
Moldova Rep		1	1	2	2	3	5	4	14	19
Montenegro	1	2	3	3	3	4	5	6	7	26
Netherlands	650	1 007	1 526	2 135	2 911	4 608	7 226	11 108	14 911	22 590
North Macedonia	7	15	17	17	17	21	26	94	94	94
Norway	11	13	15	27	45	68	120	160	205	321
Poland	2	27	108	187	287	562	1 539	3 955	7 416	11 167
Portugal	296	415	447	513	579	667	901	1 100	1 646	2 536
Romania	761	1 293	1 326	1 372	1 374	1 386	1 398	1 383	1 394	1 414
Serbia	10	13	16	17	18	21	23	31	52	137
Slovakia	533	533	533	533	528	472	590	535	537	537
Slovenia	187	223	238	233	247	247	278	370	461	632
Spain	6 994	7 001	7 008	7 017	7 027	7 068	11 111	12 440	16 019	20 518
Sweden	43	60	104	153	244	428	714	1 107	1 606	2 606
Switzerland	756	1 061	1 394	1 664	1 906	2 173	2 498	2 973	3 449	4 134
UK	2 937	5 528	9 601	11 914	12 760	13 059	13 224	13 462	13 799	14 412
Ukraine	748	819	841	955	1 200	2 003	5 936	7 331	8 062	8 062
European Union (27)	80 051	83 976	88 080	91 890	96 627	104 459	120 645	138 941	164 675	200 647
Middle East	633	884	1 103	1 610	2 236	3 461	6 261	7 433	9 681	12 882
Bahrain	1	5	5	6	6	6	9	10	11	12
Iran IR	1	9	9	43	184	286	346	430	456	539
Iraq	30	37	37	37	37	37	37	37	37	42
Israel	446	656	796	906	1 006	1 346	2 138	2 652	3 591	4 411
Jordan	0	0	6	287	397	700	1 186	1 448	1 521	1 914
Kuwait	0	2	3	31	32	43	93	93	93	93
Lebanon	2	5	11	24	37	55	76	90	190	440
Oman	1	1	2	2	8	8	9	112	138	638
Palestine	1	3	12	25	35	40	82	117	178	192
Qatar	2	4	4	5	5	5	5	5	5	805
Saudi Arabia	22	24	24	24	34	84	109	109	439	440
Syrian AR					0	1	2	12	33	60
United Arab Em	126	133	134	141	355	598	1 918	2 061	2 733	3 040
Yemen	2	5	60	80	100	250	250	257	257	257
N America	13 645	20 129	27 043	38 731	47 828	57 664	69 656	86 493	107 192	126 443
Canada	1 210	1 843	2 519	2 665	2 932	3 095	3 327	3 342	3 630	4 401
Greenland						0	0	0	1	1
Mexico	109	174	287	633	1 126	2 582	4 742	6 709	8 171	9 026
USA	12 326	18 112	24 237	35 434	43 770	51 987	61 587	76 441	95 391	113 015
Oceania	4 610	5 358	6 079	6 860	7 576	8 881	13 293	18 357	23 342	27 400
Amer Samoa	2	2	2	4	4	5	5	5	5	5
Australia	4 568	5 287	5 946	6 689	7 354	8 626	12 970	17 986	22 870	26 792
Cook Is	1	2	3	3	3	5	6	6	6	6
Fiji	1	2	4	6	8	8	8	9	9	9
Fr Polynesia	17	25	28	32	35	37	41	45	46	46
Guam	1	1	32	35	36	38	40	41	43	105
Kiribati	1	1	2	3	3	3	3	3	3	3
Marshall Is	1	1	1	2	2	2	2	2	2	2
Micronesia	1	1	1	2	2	2	3	3	3	3
Nauru	0	0	0	1	1	1	2	2	3	3
New Caledon	3	3	7	9	26	28	59	74	77	75
New Zealand	9	22	37	53	70	91	117	144	237	303
Niue	0	0	0	0	0	0	1	1	1	1
Palau	1	1	1	2	2	3	3	3	4	4
Papua N Guin	0	0	1	1	1	1	3	3	4	4
Samoa	0	3	5	7	14	14	14	14	14	14
Solomon Is	1	1	1	2	3	3	2	2	2	4
Tokelau	1	1	1	1	1	1	1	1	1	1
Tonga	3	3	4	4	7	7	7	7	7	14
Tuvalu	0	0	2	2	2	2	2	2	2	2
Vanuatu	0	0	0	2	3	4	5	5	5	5
S America	198	465	921	1 589	3 672	5 512	8 562	13 164	20 795	32 773
Argentina	8	8	9	9	9	191	442	764	1 071	1 104
Bolivia	6	6	6	6	8	70	120	120	170	170
Brazil	13	21	46	128	1 207	2 435	4 635	8 291	14 197	24 079
Chile	15	221	576	1 125	1 809	2 137	2 654	3 205	4 468	6 250
Colombia	1	1	1	2	11	13	26	86	184	457
Ecuador	4	26	26	26	26	27	28	28	28	29
Falklands Malv			0	0	0	0	0	0	0	0
Fr Guiana	37	37	47	47	47	47	47	55	55	55

Solar energy Énergie solaire Energía solar

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Guyana	1	1	2	2	3	6	8	8	8	8
Paraguay	0	0	0	0	0	0	0	0	0	0
Peru	109	130	135	146	298	324	335	335	332	332
Suriname	1	6	6	7	8	9	9	9	9	12
Uruguay	2	4	64	89	243	248	253	258	266	270
Venezuela	2	3	5	5	5	4	5	5	5	5

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	136 572	176 113	224 070	296 112	390 878	483 495	585 868	713 918	855 162	1 046 614
Africa	651	1 544	1 917	3 030	4 675	7 165	8 408	9 734	10 543	11 556
Algeria		3	66 e	305 e	398 e	423 e	423 e	423 e	423 e	435 u
Angola	11 e	12 e	13 e	13 e	13 e	13 e	13 e	13 e	13 e	297 e
Benin		0	1	3	3	3	3 e	3 e	3 e	28 e
Botswana	2 e	2 e	2 e	3 e	3 e	4 e	6 e	6 e	6 e	6 e
Burkina Faso	6 e	7 e	8 e	10 e	47 e	62 e	62 e	62 e	62 e	92 e
Burundi	3 e	3 e	3 e	4 e	5 e	5 e	5 e	5 e	13 e	13 e
Cabo Verde	6	6	6	6	6	8 e	8 e	8 e	8 e	8 e
Cameroon	4 e	6 e	7 e	9 e	12 e	14 e	14 e	14 e	14 e	14 e
Cent Afr Rep	0 e	0 e	0 e	0 e	0 e	0 e	0	0 e	0 e	0 e
Chad	0 e	0 e	0 e	0 e	0 e	0 e	0 e	1 u	1 e	1 e
Comoros										4
Congo DR	0 e	1 e	1 e	3 u	5 u	20 e	20 e	20 e	20 e	20 e
Congo Rep	0 e	0 e	0 e	0 e	1 e	1 e	1 e	1 e	1 e	1 e
Cote d Ivoire	3 e	4 e	5 e	5 e	8 e	13 e	13 e	13 e	13 e	13 e
Djibouti	0 e	0 e	0 e	0 u	0 u	0 u	0 u	0 e	0 e	0 e
Eq Guinea				0 e	0 e	0 e	0 e	0 e	0 e	0 e
Eritrea	0 e	8 e	8 e	9 e	11 e	12 e	12 e	12 e	11 e	11 e
Eswatini	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	11 e	11 e
Ethiopia	3	9	10	14	12	12	12	20	21	21 e
Gabon	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Gambia	2 e	2 e	2 e	2 e	2 e	2 e	3 e	3 e	3 e	3 e
Ghana	3 o	5 o	30 o	34 o	39 o	66 o	72 o	95 o	98 o	98 o
Guinea	0 e	0 e	0 e	0 e	0 e	1 e	1 e	2 e	2 e	2 e
Guinea Bissau			0 e	0 e	0 e	1 o	1 e	1 e	1 e	1 e
Kenya	7 e	17 e	31 e	36 e	46 e	107 e	127 e	147 e	218 e	307 e
Lesotho	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 u	0 e
Liberia	0 u	0 u	0 u	0 u	2 u	3 u	3 e	3 e	3 e	3 e
Libya	5 u	5 u	5 u	5 u	5 u	5 e	5 e	5 e	6 u	6 e
Madagascar	5 e	7 e	9 e	11 e	13 e	33	33 e	33 e	33 e	33 e
Malawi	5 e	8 e	12 e	12 e	19 e	26 e	80 e	82 e	141 e	143 e
Mali	3 e	4 e	5 e	5 e	7 e	7 e	8 e	59 e	89 e	229 e
Mauritania	18 o	18 o	18 o	35 o	35 o	87 u	88 u	88 e	88 e	89 e
Mauritius	3 e	3 e	19 e	26 e	33 e	75 e	99 e	108 e	110 e	110 e
Mayotte	13	13	13	13 o	15 o	16	17	19	30	30
Morocco	15	20	20	22	24 o	194 o	194 o	234	314 e	318 e
Mozambique	5 e	7 e	10 e	13 e	15 e	56 e	56 e	61 o	64 o	108 o
Namibia	15 e	16 e	21 e	36 e	75 e	99 u	151 u	151 e	151 e	176 e
Niger	5 e	6 e	7 e	8 e	9 u	27 u	27 u	27 e	27 e	62 e
Nigeria	15 e	16 e	17 e	18 e	19 e	19 u	28 e	28 e	33 e	37 e
Reunion	156 o	167 o	187 o	186 o	188 o	190 o	199 u	207 e	224 e	224 e
Rwanda	1 e	10 e	11 e	12 e	17 e	22 e	25 e	25 e	25 e	25 e
Sao Tome Prn	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Senegal	7 e	9 e	9 e	38 e	109 e	150 e	173 e	173 e	240 e	263 e
Seychelles	0 o	1 o	1 o	2 o	3 e	4 e	5 e	7 e	13 e	18 e
Sierra Leone	0 u	0 u	0 u	0 u	4 u	4 u	4 e	4 e	4 u	9 e
Somalia		0 e	0 e	5 e	7 e	7 e	7 e	16 u	24 u	47 u
South Africa	262 e	1 064 e	1 253 e	1 976 e	3 151 e	4 405 e	4 408 e	5 494 e	5 816 e	5 826 e
South Sudan	0 e	0 e	0 e	0 u	0 u	1 e	1 u	1 e	1 u	14 u
Sudan	15 u	17 u	20 u	26 u	36 u	59 u	80 u	117 u	136 u	190 e
Tanzania	4 e	11 e	13 e	12 e	13 e	17 e	15 e	15 e	15 e	15 e
Togo	0 e	0 e	0 e	0 e	1 e	4 e	5 e	7 o	57 u	57 e
Tunisia	10 e	17 e	28 e	38 e	47 e	64 e	80 u	95 e	95 e	197 e
Uganda	19 e	20 e	22 e	24 e	44 e	67 e	78 e	88 e	90 e	94 e
Zambia	0 e	0 e	0 e	0 e	0 e	1 e	96 e	96 e	96 o	96 u
Zimbabwe	2 e	3 e	3 e	3 e	5 e	9 e	12 e	14 e	28 e	41 e
Asia	36 055	60 346	90 236	140 125	211 488	275 827	332 111	409 433	484 496	596 530
Afghanistan	17 e	18 e	19 e	20 e	22 e	22 e	31 e	31 e	31 e	33 e
Bangladesh	94 e	120 e	147 e	164 e	196 e	218 e	269 e	317 e	480 e	537 e
Bhutan	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Brunei Darism	1	1 u	1 u	1 u	1 u	1 u	1 u	1 u	5 u	5 u
Cambodia	6 e	9 e	12 e	18 e	29 e	29 e	124 e	315 e	376 e	456 e
China	17 748	28 388	43 538	77 788	130 801	175 016	204 575 e	253 418 o	306 403 e	392 436 e
China HK SAR					1	1	89	91	95	95
Chinese Taipei	410 o	636 o	884 o	1 245 o	1 768 o	2 738 o	4 150 o	5 817 o	7 700 o	9 724 o
India	1 446 e	3 444 e	5 365 e	9 651 e	17 923 e	27 125 e	34 861 e	39 043 e	49 342 e	62 804 e
Indonesia	38 e	42 e	79 e	88 e	98 e	65 o	155 o	185 o	225 o	291 o
Japan	13 599	23 339	34 150	42 040	49 500	56 162	63 192	69 764 o	74 191 o	78 833 o
Kazakhstan	16	76	144	157	175	490 o	1 150 e	1 719	1 923 e	2 031
Korea DPR	6 u	11 u	23 u	32 u	35 u	38 u	42 u	42 e	52 e	52 e
Korea Rep	1 555	2 481	3 615	4 502 o	5 835	8 099	11 952	14 575 o	18 161 o	20 975 o
Lao PDR	0 e	2 e	2 e	2 e	8 e	34 e	34 e	34 e	34 e	34 e
Malaysia	139 o	205 e	266 e	344 e	394 e	545 e	894 e	1 483 e	1 787 e	1 933 e
Maldives	2 o	4 o	5 o	7 o	11 o	16 o	21 u	27 u	31 u	36 o
Mongolia	5 e	5 e	5 e	15 e	48 e	64 e	89 e	95	95	95
Myanmar	4 o	6 o	21 o	32 o	44 o	48 o	88 u	84 e	80 e	103 e
Nepal	11 o	12 o	13 o	14 e	55 e	55 e	54 e	70 e	97 e	117 e
Pakistan	101 e	165 e	266 e	590 e	655 e	680 e	755 e	854 e	1 077 e	1 243 e

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Philippines	3 o	28 o	173 o	784 o	908 o	917 o	982 o	1 058 o	1 377 e	1 625 o
Singapore	12 o	25 o	46 o	97 o	116 o	161 o	272 o	333 o	487 o	572 o
Sri Lanka	13 e	22 e	37 e	80 e	156 e	231 e	351 e	431 e	624 e	714 e
Tajikistan								0	0	0
Thailand	824	1 299	1 420	2 446	2 697	2 962 o	2 983 o	2 983 o	3 060 o	3 060 e
Timor Leste	1 u	1 u	1 u	1 u	0 u	0 u	0 u	0 u	0 u	0 u
Uzbekistan	1	1	1	2	3	4	4 e	4 e	104 e	253
Viet Nam	5 e	5 e	5 e	5 e	8 e	105 e	4 993 e	16 660 e	16 660 e	18 474 e
C America + Carib	277	333	1 031	1 238	1 605	1 976	2 495	2 799	3 581	3 987
Anguilla	0 e	1 e	1 e	2 e	2 e	1 e	2 e	2 e	2 e	2 e
Antigua Barb	0	0	3	4 e	4 e	9 e	9 e	13 e	13 e	13 e
Aruba	2 e	5 e	6	6	6	14 e	14 e	14 e	14 e	14 e
Bahamas	1 e	1 e	1 e	1 e	1 e	1 e	2 e	2 e	2 e	3 u
Barbados	0 u	1 u	3 u	15 u	16 u	17 u	33 u	49 u	64 u	69 u
Belize	0 u	0 u	0 u	0 u	1 u	1 u	7 u	7 e	7 e	7 u
BES Islands			0	2 o	5 o	6 o	7 o	7 o	7 o	7 o
Br Virgin Is	0 o	0 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o
Cayman Is				3 u	9 u	10 u	11 u	13 o	14	14
Costa Rica	13 o	17 o	22 o	24 o	28 o	28 o	48 e	57 e	74 e	74 e
Cuba	11	22	24	37	65 u	128 u	159 u	217 u	246	258 e
Curacao	3 o	8 o	10 o	11 o	11 o	12 o	15 o	16 o	16 o	16 o
Dominica	0	0	0	1	1	0 e	0 e	0 e	0 e	0 e
Dominican Rep	8	15	25	73	106	205	315 o	386 o	594 e	742 e
El Salvador	13 e	13 e	24 e	25 e	121	198	403 o	478 e	643 e	664 e
Grenada	1 o	1 o	1 o	2	2	3 o	3 o	4	4 e	4 e
Guadeloupe	67	67	67	68	70	70 o	81 o	85 o	86	90
Guatemala	3 e	10 e	93 e	93 e	99 e	101 e	101 e	101 e	101 e	105 e
Haiti	1 e	2 e	2 e	2 e	3 e	3 e	3 e	3 e	3 e	3 e
Honduras	5 e	5 e	396 e	417 e	454 e	514 e	518 e	525 e	529 e	529 e
Jamaica	2 e	4 e	7 e	28 e	56 e	56 e	93 e	93 e	93 e	93 e
Martinique	62	63 o	65	67	68	71	76	76	78	78
Montserrat							0 u	0 e	1	1 e
Nicaragua	1 o	1	1	1	14 o	14 o	16 o	16 o	16 e	16 e
Panama	4	6	49	93	147 o	188 e	219 u	229 e	462 o	522 e
Puerto Rico	74 o	79 o	209 o	244 o	302 e	305 o	337 o	381 e	488 e	639 e
St Barth				0 o	0 o	0 o	0 e	0	0 e	0 e
St Kitts Nevis	1 o	1 e	1 e	1 e	1 e	1 e	1 e	2 e	2 e	2 e
St Lucia	0	0	1	1	1	4 u	4 e	4 o	4 e	4
St Martin	1	2	3	2 o	0 o	0 e	1 o	1	1	1
St Vincent Gren	0	0	1	1	1	1 e	2	3	4	4
Trinidad Tobago	4	4	4 o	4	4	4	4	4	4	4
Turks Caicos			0 o	0 e	0 u	0 u	1 u	1 e	1 e	1 e
US Virgin Is	1 e	5 e	9 e	9 e	5 e	10	10	10	10	10 e
Eurasia	20	47	315	936	3 677	5 651	7 357	8 242	9 760	11 617
Armenia				1	2	17 o	50 o	106	217	306
Azerbaijan	1	2 u	5	25	28 u	35 o	33	35	48	51
Georgia				0 u	1 u	1 u	3 u	5 e	18 e	18
Russian Fed	1	5 e	61 e	76 e	225 e	535 e	1 276 e	1 428	1 661 e	1 816
Türkiye	18 u	40	249	833	3 421 o	5 063	5 995	6 667	7 816	9 425
Europe	81 878	88 783	97 292	103 861	109 987	119 291	139 951	160 474	187 822	225 478
Albania	1 e	1 e	1 e	1	1	1 e	14	21	23	29
Andorra		0 o	0 o	0 o	0 o	1 o	2 o	3 o	4 e	4
Austria	626	785	937	1 096	1 269	1 455	1 702	2 043	2 783	3 548
Belarus		4	6	47	80	154	154	160	160	269
Belgium	2 902	3 015	3 132	3 329	3 621	4 000	4 637	5 573	6 012	6 898
Bosnia Herzg	1 o	7 o	8 o	14 o	16	18 o	22	35 o	57	107
Bulgaria	1 039	1 029	1 028	1 030	1 031	1 033	1 044	1 100	1 275	1 948
Croatia	19	33	48	56	60	68	85	109	138	182
Cyprus	35	64	76	84	110	118	151	229	315	464
Czechia	2 064	2 067	2 075	2 068	2 075	2 081	2 111	2 172	2 246	2 627
Denmark	571	607	782	851	906	998 o	1 080	1 304	1 704	2 490
Estonia	2 u	3 u	7 u	10	15	32	121	208	395	535
Faroe Islands							0	0 o	0 e	0
Finland	9	11	17	39	82	140	222	318	425	591
France	5 277	6 034	7 138	7 702	8 610	9 672	10 808	12 056	14 810	17 410
Germany	36 708	37 898	39 222	40 677	42 291	45 156	48 912	53 669	59 371	66 552
Greece	2 579	2 596	2 604	2 604	2 606	2 652	2 834	3 288	4 277	5 557
Hungary	35	89	172	235	344	728	1 400	2 131	2 968	2 988
Iceland	1 e	1 e	3 e	4 e	4 e	5 e	7 e	7 e	7 e	7
Ireland	1	2	2	6	17	32	58 o	90 e	135 e	135
Italy	18 185	18 594	18 901	19 283	19 682	20 108	20 865	21 650	22 594	25 077

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kosovo*			0 o	2	7	7 o	10	10 e	10 e	10
Latvia				1	1	2	3	5	7	56
Lithuania	68	69	69	70	74	82	103	164	255	568
Luxembourg	95	110	116	122	128	131	160	187	277	319
Malta	29	55	75	94	112	132	155	188	206	206
Moldova Rep		1	1	2 o	2 o	3	5	4	14	19
Montenegro	1 e	2 e	3	3 e	3 e	4	5	6	7 e	26
Netherlands	650	1 007	1 526	2 135	2 911	4 608	7 226	11 108	14 911	22 590
North Macedonia	7	15	17	17	17	21	26 o	94	94 e	94
Norway	11 u	13 u	15 u	27 u	45 u	68	120	160	205	321
Poland	2	27	108	187	287	562	1 539	3 955	7 416	11 167
Portugal	296	415	447	513	579	667	901	1 100	1 646	2 536
Romania	761	1 293	1 326	1 372	1 374	1 386	1 398	1 383	1 394	1 414
Serbia	10 e	13 e	16 e	17 e	18 e	21 e	23 e	31	52	137
Slovakia	533	533	533	533	528	472	590	535	537	537
Slovenia	187	223	238	233	247	247	278	370	461	632
Spain	4 690	4 697	4 704	4 713	4 723	4 764	8 807	10 136	13 715	18 214
Sweden	43	60	104	153	244	428	714	1 107	1 606	2 606
Switzerland	756	1 061	1 394	1 664	1 906 o	2 173	2 498	2 973 o	3 449 e	4 134
UK	2 937	5 528	9 601	11 914	12 760	13 059	13 224	13 462 o	13 799	14 412
Ukraine	748	819 o	841 o	955 o	1 200 o	2 003 o	5 936 o	7 331	8 062 u	8 062 e
European Union (27)	77 740	81 664	85 767	89 578	94 315	102 147	118 323	136 620	162 354	198 326
Middle East	527	778	996	1 504	2 130	3 305	5 813	6 990	9 239	12 440
Bahrain	1 e	5 u	5 e	6 u	6 e	6 u	9 o	10 o	11 u	12
Iran IR	1	9	9	43	184 o	286 e	346 e	430 e	456 e	539 e
Iraq	30 o	37 o	37 e	37 e	37 e	37 e	37 e	37 e	37 e	42 e
Israel	440	650	790	900	1 000	1 340	1 890	2 410	3 349	4 169
Jordan	0 o	0 o	6 o	287 u	397 u	700 u	1 186 u	1 448 u	1 521 e	1 914 e
Kuwait	0 o	2 o	3 o	31 o	32 o	43	43 o	43 e	43 e	43 e
Lebanon	2 e	5 e	11 e	24 e	37 e	55 o	76 o	90 e	190 o	440 e
Oman	1 u	1 e	2 e	2 e	8 e	8 e	9 e	112 e	138 e	638 e
Palestine	1	3	12	25	35	40	82 o	117 e	178 e	192 e
Qatar	2 u	4 u	4 e	5 u	5 e	5 e	5 e	5 e	5 e	805 u
Saudi Arabia	22 u	24 e	24 e	24 e	34 e	34 e	59 e	59 e	389 e	390 e
Syrian AR					0 u	1 u	2 u	12	33	60
United Arab Em	26 e	33 e	33 e	40 e	255 u	498 o	1 818 o	1 961 u	2 632 e	2 940 u
Yemen	2 o	5 o	60 o	80 o	100 e	250 u	250 e	257 e	257 e	257 e
N America	12 358	18 463	25 285	36 973	46 070	55 890	67 881	84 728	105 695	124 946
Canada	1 210	1 843	2 519	2 665	2 932	3 095	3 327	3 342 u	3 630	4 401
Greenland						0 o	0 o	0	1	1 e
Mexico	109 o	174 o	287 o	633 o	1 126 o	2 566 o	4 725 o	6 692 o	8 154 o	9 009 o
USA	11 039 o	16 445 o	22 479 o	33 676 o	42 012 o	50 229 o	59 829 o	74 693 o	93 911 o	111 535 o
Oceania	4 607	5 355	6 076	6 857	7 574	8 878	13 290	18 354	23 339	27 397
Amer Samoa	2 o	2 o	2 o	4 e	4 e	5 e	5 e	5 e	5 e	5 e
Australia	4 565	5 284	5 943	6 686	7 352	8 623	12 967	17 983	22 867	26 789 u
Cook Is	1 e	2 e	3 e	3 e	3 e	5 u	6 u	6 e	6 e	6 e
Fiji	1 u	2 u	4 u	6 u	8 u	8 u	8 u	9 u	9 u	9 u
Fr Polynesia	17 o	25 o	28 o	32 o	35 o	37 o	41 o	45 o	46 e	46 e
Guam	1 o	1 o	32 o	35 o	36 e	38 e	40 e	41 e	43 e	105 e
Kiribati	1 o	1 u	2 u	3 u	3 u	3 e	3 e	3 e	3 e	3 e
Marshall Is	1 e	1 e	1 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Micronesia	1 e	1 e	1 e	2 e	2 e	2 u	3 e	3 e	3 e	3 e
Nauru	0 e	0 e	0 e	1 e	1 e	1 e	2 e	2 e	3 e	3 e
New Caledon	3 o	3 o	7 o	9 o	26 o	28 o	59 o	74 o	77 o	75 o
New Zealand	9	22	37	53	70	91	117	144	237 o	303 o
Niue	0 e	0 e	0 e	0 e	0 e	0 e	1 u	1 e	1 e	1 e
Palau	1 o	1 u	1 u	2 u	2 u	3 e	3 u	3 e	4 e	4 e
Papua N Guin	0 e	0 e	1 u	1 u	1 u	1 u	3 e	3 e	4 e	4 e
Samoa	0 e	3 e	5 e	7 e	14 e	14 e	14 e	14 e	14 e	14 e
Solomon Is	1 e	1 e	1 e	2 e	3 e	3 e	2 e	2 e	2 e	4 e
Tokelau	1 u	1 u	1 u	1 u	1 e	1 e	1 e	1 e	1 e	1 e
Tonga	3 o	3 o	4 o	4 o	7 o	7 u	7 e	7 e	7 e	14 e
Tuvalu	0 o	0 o	2 o	2 o	2 o	2 e	2 e	2 e	2 e	2 e
Vanuatu	0 e	0 e	0 e	2 e	3 e	4 u	5 u	5 u	5 u	5 e
S America	198	465	921	1 589	3 672	5 512	8 562	13 164	20 687	32 665
Argentina	8 o	8 o	9 o	9 o	9 e	191 e	442 o	764 e	1 071 e	1 104
Bolivia	6 e	6 e	6 e	6 e	8 e	70 o	120 o	120 e	170 e	170 e
Brazil	13 e	21 e	46 e	128 e	1 207 e	2 435 e	4 635 o	8 291 o	14 197 o	24 079 e
Chile	15	221	576	1 125	1 809 o	2 137 o	2 654 o	3 205 o	4 360 o	6 142 o
Colombia	1	1	1	2	11	13	26	86	184 e	457 o
Ecuador	4 o	26 o	26 o	26 o	26 o	27 e	28 o	28 o	28 o	29
Falklands Malv			0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e
Fr Guiana	37 o	37 o	47 o	47 o	47 o	47 o	47 o	55 e	55	55

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Guyana	1	1	2	2	3	6 e	8 e	8 e	8 e	8 e
Paraguay	0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 e	0 e	0 e
Peru	109 e	130 e	135 e	146 e	298 e	324 o	335 o	335 e	332 o	332 e
Suriname	1 e	6 e	6 e	7 e	8 e	9 o	9 e	9 e	9 e	12 e
Uruguay	2 o	4 o	64 o	89 o	243 o	248 o	253 o	258 o	266 o	270 o
Venezuela	2	3	5	5	5	4 e	5 o	5 e	5 e	5 e

Concentrated solar power Solaire thermique à concentration Energía solar termoeléctrica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	3 942	4 599	4 850	4 970	5 069	5 811	6 377	6 511	6 375	6 501
Africa	65	165	325	425	525	985	1 085	1 085	1 085	1 085
Algeria	25 o	25 o	25 o	25 o	25 e	25 e	25 e	25 e	25 e	25 e
Egypt	20	20	20	20	20 o	20 e	20 e	20 e	20 e	20 e
Morocco	20	20	180	180	180 o	540	540	540	540 e	540 e
South Africa		100 o	100 o	200 o	300 o	400 o	500 u	500 o	500 e	500 e
Asia	170	345	345	365	365	580	744	894	918	1 044
China	11	11	11	31 u	31 u	246 u	396 u	546 u	570 u	596 u
India	154 u	329 u	329 u	329 u	329 u	329 u	343 u	343 u	343 u	343 e
Korea Rep	0 e	0 e	0 e	0 e	0 e					
Mongolia										100
Thailand	5	5	5	5	5	5 e	5 e	5 e	5 e	5 e
Eurasia	1	1	1	1	1	1	1	1	1	1
Türkiye	1 o	1 o	1 o	1 o	1 o	1 o	1 e	1 e	1 e	1
Europe	2 311	2 312	2 312	2 312	2 312	2 312	2 321	2 321	2 321	2 321
France							9 o	9 e	9 e	9
Germany	2	2	2	2	2 e	2	2	2 e	2 e	2
Italy	5 o	6 o	6 o	6 o	6 o	6 e	6 e	6 e	6 e	6
Romania					0	0	0 e	0 e		
Spain	2 304	2 304	2 304	2 304	2 304	2 304	2 304	2 304 o	2 304 o	2 304
European Union (27)	2 311	2 312	2 312	2 312	2 312	2 312	2 321	2 321	2 321	2 321
Middle East	106	106	106	106	106	156	448	442	442	442
Israel	6 e	6 e	6 e	6 e	6 e	6 e	248 u	242 o	242 e	242 e
Kuwait							50 e	50 e	50 e	50 e
Saudi Arabia						50 u	50 e	50 e	50 e	50 e
United Arab Em	100 o	100 o	100 u	100 u	100 u	100 e	100 e	100 e	100 e	100 e
N America	1 286	1 667	1 758	1 758	1 758	1 774	1 775	1 765	1 497	1 497
Mexico						16	17	17	17	17 e
USA	1 286 o	1 667 o	1 758 o	1 758 o	1 758 o	1 758 o	1 758 o	1 748 o	1 480 o	1 480 o
Oceania	3	3	3	3	2	3	3	3	3	3
Australia	3	3	3	3	2	3	3	3	3 e	3 e
S America									108	108
Chile									108	108 o

Bioenergy Bioénergíe Bioenergía

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	84 879	90 745	96 484	105 424	111 006	118 194	124 199	133 236	141 302	148 912
Africa	1 256	1 356	1 440	1 502	1 581	1 735	1 746	1 757	1 847	1 847
Angola		51	51	51	51	51	51	51	51	51
Burkina Faso	0	0	1	1	1	1	1	1	1	1
Burundi	4	4	4	4	4	4	4	4	4	4
Chad	2	2	2	2	2	2	2	2	2	2
Congo DR	0	0	0	0	2	3	3	3	3	3
Congo Rep	12	12	12	12	12	12	12	12	12	12
Egypt	67	67	67	67	67	67	79	79	123	123
Eswatini	123	106	106	106	106	106	106	106	106	106
Ethiopia	71	71	119	145	205	290	290	290	335	335
Gabon			1	1	1	1	1	1	1	1
Ghana	7	8	8	8	8	8	8	8	8	8
Kenya	56	56	58	84	85	88	88	99	99	99
Liberia	0	0	0	0	0	0	0	0	0	0
Madagascar	0	0	0	0	0	0	0	0	0	0
Malawi	19	19	19	19	19	19	19	19	19	19
Mali	32	40	40	40	40	40	40	40	40	40
Mauritius	80	80	91	91	91	91	91	91	91	91
Morocco	1	1	5	7	7	7	7	7	7	7
Mozambique	14	14	14	14	14	14	14	14	14	14
Namibia	0	0	0	0	0	0	0	0	0	0
Nigeria	8	9	9	10	10	10	10	10	10	10
Reunion	44	44	45	46	46	87	87	87	87	87
Rwanda	1	1	1	1	1	1	1	1	1	1
Senegal	25	25	25	25	25	25	25	25	25	25
Sierra Leone		34	34	34	34	34	34	34	34	34
South Africa	246	246	251	256	260	265	265	265	265	265
Sudan	199	199	199	199	199	199	199	199	199	199
Tanzania	66	70	70	70	70	70	70	70	70	70
Uganda	36	54	65	65	76	96	96	96	96	96
Zambia	43	43	43	43	43	43	43	43	43	43
Zimbabwe	100	100	100	100	100	100	100	100	100	100
Asia	18 550	21 210	24 018	30 345	33 663	37 596	41 806	49 636	57 240	63 370
Bangladesh	3	4	5	5	5	5	5	5	5	5
Cambodia	28	36	34	32	52	53	53	45	43	52
China	6 089	6 653	7 977	9 269	11 234	13 235	16 537	23 583	29 753	34 088
China HK SAR			17	45	45	45	52	52	52	52
Chinese Taipei	396	396	395	395	395	397	393	400	408	408
India	4 180	5 030	5 478	8 895	9 417	10 137	10 226	10 532	10 592	10 670
Indonesia	1 701	1 729	1 734	1 775	1 849	1 875	1 884	1 896	2 270	3 005
Japan	1 514	1 630	1 901	2 213	2 608	3 033	3 506	4 099	4 592	5 476
Kazakhstan	0	0	0	0	1	1	2	8	8	8
Lao PDR	40	40	40	40	40	105	105	105	105	105
Malaysia	1 045	1 431	1 555	1 526	800	810	883	891	900	900
Maldives							0	0	0	0
Myanmar	49	52	48	49	52	57	59	59	59	59
Nepal	7	7	7	7	7	7	7	6	6	6
Pakistan	269	325	333	375	375	433	433	433	433	433
Philippines	131	143	233	259	276	341	393	513	519	633
Singapore	160	183	205	210	211	219	206	198	206	275
Sri Lanka	13	20	20	24	26	37	40	45	45	45
Thailand	2 610	2 796	3 165	3 322	3 728	4 037	4 097	4 241	4 476	4 476
Viet Nam	125	136	161	188	195	384	383	384	367	367
C America + Carib	1 772	1 954	2 076	2 417	2 513	2 638	2 931	3 039	3 040	3 040
Aruba		2	2	2	2	2	2	2	2	2
Belize	28	28	28	28	36	36	36	36	36	36
Costa Rica	38	36	37	43	47	60	79	80	80	80
Cuba	470	499	530	495	532	554	842	951	951	951
Dominican Rep	16	16	17	47	47	47	47	47	47	47
El Salvador	270	305	202	259	270	305	305	300	301	301
Guadeloupe	31	31	31	31	31	35	35	35	35	35
Guatemala	598	714	873	1 056	1 091	1 103	1 036	1 036	1 036	1 036
Honduras	124	124	161	210	210	210	221	221	221	221
Jamaica	32	32	32	32	32	32	32	32	32	32
Martinique	2	2	3	3	3	40	40	40	40	40
Nicaragua	134	134	134	177	177	179	220	220	220	220
Panama	30	30	27	32	33	33	33	33	33	33
Puerto Rico				2	2	2	2	5	5	5
St Lucia				0	0	0	0	0	0	0

Bioenergy Bioénergíe Bioenergía

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Eurasia	1 406	1 628	1 679	1 767	1 887	2 005	2 201	2 515	3 054	3 330
Azerbaijan	37	37	38	38	43	45	45	45	45	45
Russian Fed	1 197	1 370	1 370	1 370	1 373	1 373	1 373	1 373	1 373	1 373
Türkiye	172	221	271	359	472	587	784	1 097	1 637	1 912
Europe	31 473	33 187	34 617	35 600	37 039	39 850	41 155	41 774	41 431	41 694
Albania					1	1	1	1	1	1
Andorra	5	5	5	5	5	5	5	5	5	5
Austria	1 507	1 411	1 396	1 393	1 290	1 271	1 249	1 251	1 171	1 171
Belarus	35	35	35	40	41	48	53	123	120	120
Belgium	965	913	943	923	912	887	906	922	817	828
Bosnia Herzg				1	1	1	2	2	2	2
Bulgaria	34	40	54	57	52	69	57	48	47	47
Croatia	24	25	53	63	87	115	127	135	154	157
Cyprus	10	10	10	10	10	13	13	13	13	13
Czechia	690	745	771	773	802	782	830	846	854	854
Denmark	1 185	1 248	1 243	1 305	1 791	1 774	1 982	2 086	2 150	2 151
Estonia	261	278	281	281	281	259	273	296	296	318
Faroe Islands								0	0	0
Finland	1 952	1 977	1 987	2 009	2 230	2 230	2 227	2 706	2 711	2 719
France	1 409	1 465	1 534	1 660	1 712	1 937	2 011	1 931	2 044	2 051
Germany	7 964	8 202	8 429	8 660	8 982	9 662	9 994	10 320	9 825	9 880
Greece	46	47	51	58	64	82	88	97	109	109
Hungary	328	549	519	427	491	513	504	509	551	551
Ireland	66	70	70	72	103	103	107	107	108	108
Italy	3 344	3 359	3 367	3 439	3 450	3 491	3 454	3 439	3 420	3 416
Latvia	108	121	126	143	154	134	158	156	152	165
Lithuania	64	71	71	72	79	104	105	116	116	118
Luxembourg	23	23	24	25	36	36	56	56	56	56
Malta	3	3	3	5	5	5	5	5	5	5
Moldova Rep	2	3	3	3	6	6	6	7	6	12
Netherlands	769	752	792	772	785	827	818	866	879	902
North Macedonia			4	5	7	8	10	10	10	10
Norway	140	140	140	87	87	87	81	77	77	77
Poland	735	816	961	974	968	1 004	1 010	1 045	1 100	1 111
Portugal	551	561	577	587	582	648	702	715	717	717
Romania	46	94	118	123	140	141	139	165	140	142
Serbia	4	5	5	10	13	17	28	31	36	36
Slovakia	214	237	242	253	246	243	226	225	250	250
Slovenia	59	62	63	60	62	60	60	67	67	68
Spain	1 013	1 032	1 035	1 037	1 045	1 057	1 112	1 264	1 278	1 278
Sweden	4 013	4 483	4 716	4 850	4 822	5 021	5 299	4 560	4 474	4 474
Switzerland	232	229	240	241	242	242	241	245	245	245
UK	3 642	4 129	4 697	5 121	5 385	6 869	7 036	7 115	7 150	7 251
Ukraine	31	50	53	60	73	98	180	212	275	275
European Union (27)	27 458	28 663	29 513	30 107	31 258	32 630	33 678	34 111	33 667	33 823
Middle East	53	60	81	88	88	86	86	84	84	101
Iran IR	7	11	11	11	11	11	11	11	11	11
Israel	14	17	28	28	28	28	28	26	26	26
Jordan	4	4	13	13	13	13	13	13	13	13
Lebanon	2	2	2	9	9	7	7	7	7	7
Palestine				0	0	0	0	0	0	0
Qatar	19	19	19	19	19	19	19	19	19	19
Syrian AR	7	7	7	7	7	7	7	7	7	7
United Arab Em	1	1	1	1	1	1	1	1	1	18
Yemen									0	0
N America	15 217	15 692	16 334	16 521	16 590	16 379	15 692	15 537	14 990	14 960
Canada	2 398	2 651	2 628	2 696	2 779	2 792	2 668	2 674	2 674	2 682
Mexico	542	627	736	925	973	971	971	974	982	982
USA	12 277	12 414	12 969	12 901	12 838	12 616	12 053	11 889	11 334	11 296
Oceania	1 025	1 036	1 039	1 074	1 090	1 090	1 090	1 096	1 104	1 105
Australia	817	824	826	864	864	864	864	875	876	877
Fiji	42	42	42	42	54	54	54	54	61	61
New Caledon	0	0	0	0	0	0	0	0	0	0
New Zealand	144	148	149	146	150	150	150	144	144	144
Papua N Guin	18	18	18	18	18	18	18	18	18	18
Samoa								1	1	1
Solomon Is	1	1	1	1	1	1	1	1	1	1
Vanuatu	3	3	3	3	3	3	3	3	3	3

Bioenergy Bioénergie Bioenergía

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
S America	14 128	14 623	15 202	16 111	16 555	16 816	17 492	17 799	18 511	19 465
Argentina	246	228	254	243	241	217	298	307	281	278
Bolivia	85	126	134	142	142	160	174	185	211	261
Brazil	11 601	12 343	13 311	14 187	14 574	14 819	15 358	15 686	16 351	17 206
Chile	1 267	926	466	463	466	467	502	452	438	490
Colombia	187	215	237	257	310	320	320	329	397	397
Ecuador	101	144	144	146	152	152	152	152	153	153
Fr Guiana	2	2	2	2	2	2	5	5	5	5
Guyana	51	51	51	42	42	42	42	42	42	42
Paraguay	39	39	39	39	39	39	22	22	22	22
Peru	131	131	133	160	170	174	195	195	187	187
Suriname			2	2	2	2	2	2	2	2
Uruguay	417	419	429	429	417	422	422	422	422	422

Solid biofuels and renewable waste

Biocombustibles solides et déchets renouvelables

Biocombustibles sólidos y residuos renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	68 727	73 259	78 242	86 295	91 243	97 317	102 293	110 052	117 852	124 979
Africa	1 244	1 345	1 414	1 467	1 542	1 651	1 651	1 662	1 707	1 707
Angola		51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e
Burundi	4 o	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Chad	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 e	2 e
Congo DR	0 e	0 e	0 e	0 e	0 e	3 e	3 e	3 e	3 e	3 e
Congo Rep	12 e	12 e	12 e	12 e	12 e	12 e	12 e	12 e	12 e	12 e
Egypt	67	67	67	67	67	67	67	67 e	67 e	67 e
Eswatini	123	106	106	106 e	106 e	106 e	106 e	106 e	106 e	106 e
Ethiopia	71	71	119	145	205	290	290 e	290	335	335 e
Ghana	7 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e
Kenya	56 u	56 u	56 u	82 u	83 u	86 u	86 u	97 u	97 u	97 u
Liberia	0 u	0 u	0 e	0 u	0 e	0 e	0 e	0 e	0 e	0 e
Madagascar	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e	0 e
Malawi	19 u	19 u	19 u	19 u	19 u	19 u	19 u	19 u	19 u	19 u
Mali	32 o	40 e	40 e	40 e	40 u	40 e	40 e	40 e	40 e	40 e
Mauritius	77 o	77 o	87 o	87 o	87 o	87 o	87 e	87 e	87 e	87 e
Mozambique	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e
Namibia	0	0	0	0 e	0 e	0 e	0	0 e	0 e	0 e
Nigeria	8 u	9 u	9 u	10 u	10 u	10 u	10 e	10 e	10 e	10 e
Reunion	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e
Rwanda	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Senegal	25 e	25 e	25 e	25 e	25 e	25 e	25 e	25 e	25 e	25 e
Sierra Leone		34 e	34 e	34 e	34 e	34 e	34 e	34 e	34 e	34 e
South Africa	242 e	242 e	242 e	242 e	242 e	242 e	242 e	242 e	242 e	242 e
Sudan	199 e	199 e	199 e	199 e	199 e	199 e	199 e	199 e	199 u	199 e
Tanzania	66 o	70 o	70 o	70 o	70 e	70 e	70 e	70 e	70 e	70 e
Uganda	36 e	54 e	65 e	65 e	76 e	96 e	96 e	96 e	96 o	96 e
Zambia	43 e	43 e	43 e	43 e	43 e	43 e	43 e	43 e	43 o	43 e
Zimbabwe	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e
Asia	17 900	20 008	22 685	28 829	31 930	35 622	39 582	46 945	53 963	59 869
Bangladesh			0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 o
Cambodia	28 o	36 o	33 o	31 o	51 o	51 o	51 e	44 e	42 e	51 u
China	5 896	6 343	7 646	8 920	10 780	12 605	15 738	22 298 o	28 042 o	32 161 e
China HK SAR					28	28	28	28	28	28 e
Chinese Taipei	396 o	396 o	393 o	393 o	393 o	395 o	391 o	399 o	407 o	407 o
India	4 175 o	5 023 o	5 469 o	8 885 o	9 405 o	10 124 o	10 212 o	10 518 o	10 578 o	10 656 o
Indonesia	1 683 o	1 709 o	1 679 o	1 711 o	1 748 o	1 766 e	1 771 e	1 775 e	2 135 e	2 870 e
Japan	1 504	1 615	1 878	2 179	2 561	2 974	3 436	4 022 o	4 507 o	5 382 o
Korea Rep	93	124	255	1 256	1 853	1 899	2 056	1 730 e	1 940 e	1 846 e
Lao PDR	40 o	40 o	40 o	40 o	40 e	105 o	105 e	105 e	105 e	105 e
Malaysia	1 030 o	1 413 o	1 535 o	1 468 o	738 o	740 e	780 e	780 e	780 e	780 e
Maldives							0 o	0 e	0 e	0 e
Myanmar	47 e	51 e	46 e	48 e	51 e	55 e	57 e	57 e	57 e	57 e
Nepal	7 e	7 e	7 e	7 e	7 e	7 e	7 e	6 e	6 e	6 e
Pakistan	260 e	316 e	324 e	365 e	365 e	423 e	423 e	423 o	423 e	423 e
Philippines	100 o	112 o	202 o	219 o	235 o	287 o	339 o	457 o	463 o	578 o
Singapore	160 e	183 e	205 e	210 e	211 e	219 e	206 e	198 e	206 e	275 e
Sri Lanka	13 o	20 o	20 o	24 o	26 o	37 o	40 o	45 o	45 u	45 e
Thailand	2 345 o	2 485 o	2 793 o	2 887 o	3 253 o	3 532 o	3 567 o	3 684 o	3 841 o	3 841 e
Viet Nam	125 e	136 e	161 e	186 e	186 e	375 e	374 e	375 e	358 e	358 e
C America + Carib	1 759	1 941	2 059	2 386	2 478	2 597	2 889	2 993	2 995	2 995
Aruba		2	2	2	2	2	2	2 e	2 e	2 e
Belize	28	28	28	28 u	36 u	36 u	36 u	36 u	36 u	36 u
Costa Rica	34	34	34	40	45	57 o	76 o	76 e	76 e	76 e
Cuba	470	498	530 o	495 o	532 e	554 e	841 e	951 e	951 e	951 e
Dominican Rep	15 e	15 e	15 e	45 e	45 e	45 e	45 e	45 e	45 e	45 e
El Salvador	263	298	195	252	263	298	298	294 o	295 o	295 e
Guadeloupe	31	31	31	31	31 u	31 e	31 e	31 e	31 e	31 e
Guatemala	597	713	869	1 053 o	1 084 o	1 096 o	1 029 o	1 029 o	1 030 o	1 030 o
Honduras	123 o	123 o	161 o	206 o	206 o	206 o	218 o	218 o	218 o	218 o
Jamaica	32	32	32	32	32	32 e	32 e	32 e	32 e	32 e
Martinique	2 o	2 o	2 o	2 o	2 o	39 o	39 o	39 o	39 o	39 o
Nicaragua	134 o	134 o	134 o	177	177	177 o	218 o	218 o	218 e	218 e
Panama	30	30	27	24	25 o	25 e	25 e	25 e	25 o	25 e
St Lucia				0 e	0 e	0 e	0 e	0 e	0 e	0 e
Eurasia	1 244	1 417	1 419	1 462	1 498	1 547	1 633	1 750	2 052	2 203
Azerbaijan	37	37	37	37 e	42	44 o	44 e	44	44 e	44
Russian Fed	1 197 e	1 370 e	1 370 e	1 370 e	1 373 e	1 373 e	1 373 e	1 373 e	1 373 e	1 373
Türkiye	10	10	12	55	83	130	216	334	636	786

Solid biofuels and renewable waste

Biocombustibles solides et déchets renouvelables

Biocombustibles sólidos y residuos renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Europe	19 384	20 545	21 453	22 031	23 027	25 141	25 703	25 703	25 851	26 020
Albania					1 u	1 u	1 u	1 e	1 e	1
Andorra	5 o	5 o	5 o	5 o	5 o	5 o	5 o	5 e	5 e	5
Austria	1 307 e	1 221 e	1 202 e	1 188 e	1 108 e	1 094 o	1 085 e	1 086 e	1 005 e	1 005
Belarus	13	13	13	13	13	16	16	86	83	83
Belgium	764	681	716	691 e	685	652	665 o	700	594	605
Bosnia Herzg						0	1	1	1	1
Bulgaria	30	30	34	19	23	33 e	24 e	15	14	14
Croatia	7	8	25	26	42	65	76	80	95	98
Czechia	329 e	378 e	403 e	404 e	430 e	413 e	462 e	480 e	484 e	484
Denmark	1 085 e	1 152 e	1 139 e	1 198 e	1 683 e	1 666 e	1 862 e	1 954 e	2 022 e	2 023
Estonia	255	270	270	270	270 e	250	265	285 o	285	307
Finland	1 864 e	1 877 e	1 885 e	1 895 e	2 114 e	2 114 o	2 111	2 590	2 595 o	2 603
France	1 098	1 109	1 131	1 232	1 249	1 450	1 488	1 370 e	1 470 e	1 470
Germany	2 553 o	2 533 o	2 554 e	2 579 o	2 605 e	2 648 e	2 682 e	2 595 e	2 634 e	2 689
Greece			2 e	2 e	3 e	12	13	14	16	16
Hungary	265	486	447	351	409	437	425	424	466	466
Ireland	13 e	16 e	16 e	16 e	47 e	47 e	48	48 o	48 e	48
Italy	1 024	1 033	1 031	1 094	1 092	1 145	1 124	1 128	1 120	1 116
Latvia	55	63	66	81	94	73	97 e	96 e	95 o	108
Lithuania	48	51	50	47	54	69	70	80	79 o	81
Luxembourg	13	12	13	13	23	24 e	44 e	44 o	44 o	44
Netherlands	539	515	549	548	561	620	617	661	675	698
North Macedonia						1 o	2 o	2 e	2 e	2
Norway	123	123	123	77	77 e	77 e	74 u	66	70	70
Poland	582	629	745	749	738	778	777	784	848	848
Portugal	496	495	511	519	512	577	630	644	644 e	644
Romania	35	79	104	107	119	119	119	136	109	111
Serbia							2	2 e	2 e	2
Slovakia	179	159	151	160	155	154	144 e	143 e	169 e	169
Slovenia	30	30	30	30	33	32	34	35	36	37
Spain	770	790	789	789	793	793	839 o	989	1 001	1 001
Sweden	3 460 e	3 959 e	4 138 e	4 333 e	4 273 e	4 484 e	4 402 e	3 565 e	3 479 e	3 479
Switzerland	199	197	211	212	212 e	212 o	211 o	211 o	211 e	211
UK	2 228	2 598	3 069	3 348	3 566	5 032	5 204	5 276	5 297	5 328
Ukraine	17	35	35	39	39 o	52 o	87	109	152 u	152 e
European Union (27)	16 874	17 644	18 071	18 412	19 188	19 857	20 214	20 057	20 139	20 277
Middle East	18	18	18	18	18	18	18	15	15	30
Israel	3	3 e	3 e	3 e	3 e	3 e	3 e	o		
Qatar	15 e	15 e	15 e	15 e	15 e	15 e	15 e	15 e	15 e	15 e
United Arab Em										15 o
Yemen									0 o	0 e
N America	12 523	12 873	13 538	13 712	13 713	13 495	12 997	12 950	12 536	12 521
Canada	2 129 e	2 381 e	2 357 e	2 424 e	2 503 e	2 515 e	2 391 e	2 391 e	2 391 e	2 399 e
Mexico	505 o	591 o	700 o	878 o	917 o	916 o	916 o	917 o	917 o	917 e
USA	9 889 o	9 902 o	10 482 o	10 411 o	10 294 o	10 065 o	9 690 o	9 642 o	9 229 o	9 205 o
Oceania	753	754	754	830	847	847	847	845	853	853
Australia	597	598	598	674 o	674 e	674 e	674 e	678 e	678 e	678 e
Fiji	42 u	42 u	42 u	42 u	54 u	54 u	54 e	54 e	61 e	61 e
New Zealand	99	99	99	99	104	104	104	98	98 o	98 e
Papua N Guin	15 u	15 u	15 u	15 u	15 u	15 u	15 e	15 e	15 e	15 e
Samoa								1 e	1 e	1 e
Solomon Is	1 e	1 e	1 u	1 u	1 u	1 u	1 e	1 e	1 e	1 e
S America	13 901	14 359	14 903	15 561	16 190	16 400	16 974	17 189	17 878	18 781
Argentina	229 e	211 e	237 e	226 e	220 e	194 e	254 e	252 e	212 e	206 e
Bolivia	85 o	126 o	134 o	142 o	142 o	160 o	169 o	180 o	206 e	256 e
Brazil	11 424	12 145	13 088 o	13 722 e	14 307 o	14 512 o	14 981 o	15 229 o	15 894 o	16 702 o
Chile	1 240 e	884 e	417 e	410 e	410 e	410 e	442 o	396 o	375 o	426 o
Colombia	187 u	215 u	237 u	253 u	306 u	316 u	316 e	319 e	387 e	387 e
Ecuador	101 o	144 o	144 o	144 o	144 e	144 e	144 o	144 o	144 o	144
Fr Guiana	2 o	2 o	2 o	2 o	2 o	2 o	5 o	5 e	5 o	5
Guyana	51	51	51	42	42	42	42	42 e	42 e	42 e
Paraguay	39	39	39	39	39	39 e	20 e	20 e	20 e	20 e
Peru	126 o	126 o	126 o	153 o	163 o	163 o	185 o	185 e	177 o	177 o
Suriname			2	2	2	2 e	2 e	2 e	2 e	2 e
Uruguay	416 o	416 o	426 o	426 o	415 o	415 o	415 e	415 o	415 e	415 o

Bagasse Bagasse Bagazo

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	14 980	15 966	17 040	17 899	18 450	19 213	19 913	20 327	20 590	21 028
Africa	1 190	1 299	1 367	1 419	1 493	1 575	1 575	1 586	1 631	1 631
Angola		51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e
Burundi	4 o	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Chad	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 e	2 e
Congo Rep	5 e	5 e	5 e	5 e	5 e	5 e	5 e	5 e	5 e	5 e
Egypt	67	67	67	67	67	67	67	67 e	67 e	67 e
Eswatini	106	106	106	106 e	106 e	106 e	106 e	106 e	106 e	106 e
Ethiopia	71	71	119	145	205	265	265	265	310	310 e
Kenya	56 u	56 u	56 u	82 u	83 u	86 u	86 u	97 u	97 u	97 u
Malawi	19 u	19 u	19 u	19 u	19 u	19 u	19 u	19 u	19 u	19 u
Mali	32 o	40 e	40 e	40 e	40 u	40 e	40 e	40 e	40 e	40 e
Mauritius	77 o	77 o	87 o	87 o	87 o	87 o	87 e	87 e	87 e	87 e
Mozambique	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e
Nigeria	5 u	5 u	5 u	5 u	5 u	5 u	5 e	5 e	5 e	5 e
Reunion	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e
Rwanda	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Senegal	25 e	25 e	25 e	25 e	25 e	25 e	25 e	25 e	25 e	25 e
Sierra Leone		32 u	32 e	32 e	32 e	32 e	32 e	32 e	32 e	32 e
South Africa	242 e	242 e	242 e	242 e	242 e	242 e	242 e	242 e	242 e	242 e
Sudan	199 e	199 e	199 e	199 e	199 e	199 e	199 e	199 e	199 u	199 e
Tanzania	46 o	46 o	46 o	46 o	46 e	46 e	46 e	46 e	46 e	46 e
Uganda	36 e	54 e	65 e	65 e	76 e	96 e	96 e	96 e	96 o	96 e
Zambia	43 e	43 e	43 e	43 e	43 e	43 e	43 e	43 e	43 o	43 e
Zimbabwe	100	100	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e
Asia	787	854	940	977	997	1 350	1 377	1 457	1 440	1 606
Cambodia	16 o	16 o	16 o	16 o	36 o	36 o	36 e	27 e	27 e	27 o
Indonesia	208 o	219 o	219 o	219 o	219 o	219 o	219 e	219 e	219 e	352 e
Lao PDR	40 o	40 o	40 o	40 o	40 e	105 o	105 e	105 e	105 e	105 e
Myanmar	47 e	51 e	46 e	48 e	47 e	52 e	54 e	54 e	54 e	54 e
Nepal	6 e	6 e	6 e	6 e	6 e	6 e	6 e	6 e	6 e	6 e
Pakistan	254 e	306 e	314 e	314 e	314 e	372 o	372 o	372 o	372 e	372 e
Philippines	92 o	92 o	149 o	161 o	161 o	208 o	233 o	321 o	321 o	355 o
Viet Nam	125 e	125 e	150 e	174 e	174 e	353 u	352 e	353 e	336 e	336 e
C America + Carib	1 746	1 925	2 010	2 292	2 379	2 498	2 788	2 892	2 895	2 895
Belize	28	28	28	28 u	36 u	36 u	36 u	36 u	36 u	36 u
Costa Rica	34	34	34	40	40	53 o	71 o	71 o	71 o	71 o
Cuba	470	498	529	494	531 e	553 e	841	950	950 o	950 e
Dominican Rep	14 o	14 o	14 o	44 o	44 o	44 e	44 e	44 e	44 e	44 e
El Salvador	263	298	195	252	263	298	298	294 o	295 o	295 e
Guadeloupe	30	30	30	30	30	30 e	30 e	30 e	30 e	30 e
Guatemala	594	711	867	1 050 o	1 081 o	1 094 o	1 026 o	1 026 o	1 027 o	1 027 o
Honduras	118 o	118 o	122 o	122 o	122 o	122 o	132 o	132 o	132 o	132 o
Jamaica	32	32	32	32	32	32 e	32 e	32 e	32 e	32 e
Martinique						37 o	37 o	37 o	37 o	37 o
Nicaragua	134 o	134 o	134 o	177	177	177 o	218 o	218 o	218 e	218 e
Panama	30	30	27	24	25 o	25 e	25 e	25 e	25 o	25 e
Europe			2	2	2	2	2	2	2	2
Portugal			2	2	2	2	2	2	2 e	2
European Union (27)	72	72	74	74	74	111	111	111	111	111
N America	705	796	912	977	986	986	986	986	986	986
Mexico	478 o	569 o	685 o	796 o	816 o	816 o	816 o	816 o	816 o	816 o
USA	227 o	227 o	227 o	181 o	170 o	170 o	170 o	170 o	170 o	170 o
Oceania	453	453	453	529	529	529	529	533	541	541
Australia	424	424	424	500 o	500 o	500 o	500 e	504 o	504 o	504 e
Fiji	29 u	29 u	29 u	29 u	29 u	29 u	29 e	29 e	37 e	37 e
S America	10 099	10 638	11 355	11 702	12 064	12 272	12 656	12 870	13 095	13 367
Argentina	64 e	47 e	64 e	45 e	50 e	50 e	56 o	57 e	57 e	54
Bolivia	85 o	126 o	134 o	142 o	142 o	160 o	169 o	180 o	195 e	256 e
Brazil	9 435	9 881	10 549	10 874	11 168	11 348 o	11 714 o	11 913 o	12 064 o	12 277 o
Colombia	187 u	215 u	237 u	253 u	306 u	316 u	316 e	319 e	387 e	387 e
Ecuador	101 o	144 o	144 o	144 o	144 e	144 e	144 o	144 o	144 o	144
Guyana	51	51	51	42	42	42	42	42 e	42 e	42 e
Paraguay	39	39	39	39	39	39 e	20 e	20 e	20 e	20 e
Peru	126 o	126 o	126 o	153 o	163 o	163 o	185 o	185 e	177 o	177 o
Uruguay	10	10	10	10	10	10	10 e	10 o	10 e	10 o

Renewable municipal waste

Déchets municipaux renouvelables

Residuos municipales renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	8 617	8 827	9 746	10 620	11 545	12 750	14 248	16 971	19 349	21 929
Africa						25	25	25	25	25
Ethiopia						25	25 e	25	25	25 o
Asia	3 183	3 446	3 995	4 535	5 329	6 383	7 840	10 528	13 007	15 483
China	1 700	1 893	2 342	2 870	3 640	4 575	6 009	8 682 o	11 022 o	13 406 e
Chinese Taipei	315 o	315 o	315 o	315 o	315 o	316 o	316 o	316 o	316 o	316 o
India	105 o	124 o	137 o	139 o	146 o	159 o	165 o	188 o	217 o	261 o
Indonesia	13 o	18 o	8 o	8 o	8 o	8 o	8 o	8 e	14 o	14 o
Japan	852	876	900	919	935	958	975	963 o	1 033 o	1 026 o
Korea Rep	38	50	95	77	54	64	64	54 e	60 e	45 e
Malaysia	9	9	7 o	7 o	7 o	7 o	7 o	7 o	7 o	7 e
Maldives							0 o	0 e	0 e	0 e
Myanmar					0 u	0 e	0 e	0 e	0 e	0 e
Singapore	128 o	128 o	128 o	128 o	128 o	128 o	128 o	128 o	128 o	197 o
Sri Lanka								5 o	5 u	5 e
Thailand	24 o	33 o	66 o	73 o	96 o	159 o	157 o	167 o	194 o	194 e
Viet Nam				1 u	1 e	11 e	11 e	11 e	11 e	11 e
C America + Carib	2	4	4	4	4	4	4	4	4	4
Aruba		2	2	2	2	2	2	2 e	2 e	2 e
Martinique	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o
Eurasia	37	37	37	37	42	45	46	46	57	56
Azerbaijan	37	37	37	37 e	42	44 o	44 e	44	44 e	44
Türkiye						1	2	2	13	12
Europe	4 197	4 147	4 514	4 779	4 889	5 014	5 105	5 140	5 015	5 134
Albania					1 u	1 u	1 u	1 e	1 e	1
Andorra	5 o	5 o	5 o	5 o	5 o	5 o	5 o	5 e	5 e	5
Austria	290	262	263	271	271	270	272	270	240	240
Belgium	124	124	124	125	125	125	126	136	146	145
Czechia	23	23	23	28	28 e	28 o	28	28 e	28 e	28
Denmark	166	163	166	166	182	181	181	177	175	176
Estonia	105	105	105	105	105 e	85	85	85 o	85	85
Finland	113 e	126 e	134 e	148 e	148 e	148 o	148	148	197 o	267
France	647	645	603	621	625	622	613	560	572	572
Germany	930	944	962	979	1 004	1 063	1 084	1 024	1 068	1 068
Hungary	18	19	25	29	23	23	23	27	28	28
Ireland	8	11	11	11	41	41	41	41 o	41 o	41
Italy	418	413	415	409	408	412	396	402	418	418
Lithuania	5	5	5	8	9	7	7	17	21	19
Luxembourg	10	9	9	9	9	9 e	9 e	9 o	9 o	9
Netherlands	325	325	338	338	334	389	389	390	390	413
Norway	44	44	44	50	50 e	50 e	47	46	43	43
Poland			8	22	30	43	45	50	45	45
Portugal	38	39	40	42	41	41	41	41	41 o	41
Slovakia	3	6	6	10	6	6	6 e	6 e	6 e	6
Spain	117	117	117	117	121	121	121 o	121	133	133
Sweden	340	230	438	564	567	566	568	623	386	386
Switzerland	199	197	211	212	212 e	212 o	211 o	211 o	211 e	211
UK	273	340	465	514	545	568	661	723	727	755
European Union (27)	3 680	3 564	3 792	4 000	4 078	4 180	4 182	4 156	4 029	4 121
Middle East	18	18	18	18	18	18	18	15	15	30
Israel	3	3 e	3 e	3 e	3 e	3 e	3 e			
Qatar	15 e	15 e	15 e	15 e	15 e	15 e	15 e	15 e	15 e	15 e
United Arab Em										15 o
N America	1 179	1 175	1 177	1 244	1 260	1 254	1 197	1 198	1 195	1 162
Canada	39	39	39	39	38	38 e	38 e	38 e	38 e	38 e
Mexico	27	21	15	81	100	100	100	100	100	100 e
USA	1 114 o	1 115 o	1 124 o	1 124 o	1 123 o	1 117 o	1 060 o	1 061 o	1 058 o	1 025 o
Oceania									0	0
Australia									0 o	0 e
S America				3	3	5	13	14	30	35
Brazil				3 o	3 o	5 o	13 o	14 o	30 o	35 o

Other solid biofuels

Autres biocarburants solides

Otros biocombustibles sólidos

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	45 130	48 466	51 457	57 777	61 248	65 354	68 131	72 754	77 912	82 022
Africa	55	46	46	48	50	50	51	51	51	51
Congo DR	0 e	0 e	0 e	0 e	2 e	3 e	3 e	3 e	3 e	3 e
Congo Rep	7 e	7 e	7 e	7 e	7 e	7 e	7 e	7 e	7 e	7 e
Eswatini	17									
Ghana	7 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e
Liberia	0 u	0 u	0 e	0 u	0 e	0 e	0 e	0 e	0 e	0 e
Madagascar	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e	0 e
Namibia	0	0	0	0 e	0 e	0 e	0	0 e	0 e	0 e
Nigeria	3 u	4 u	4 u	5 u	5 u	5 u	6 e	6 e	6 e	6 e
Sierra Leone		2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Tanzania	20 o	24 o	24 o	24 o	24 e	24 e	24 e	24 e	24 e	24 e
Zimbabwe	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Asia	13 931	15 708	17 750	23 317	25 604	27 888	30 366	34 960	39 516	42 780
Bangladesh			0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 o
Cambodia	12 o	20 o	17 o	15 o	15 o	15 o	15 o	17 o	15 o	24 u
China	4 196	4 450	5 304	6 050	7 140	8 030	9 729	13 617 o	17 021 o	18 755 e
China HK SAR					28	28	28	28	28	28 e
Chinese Taipei	81 o	81 o	79 o	79 o	79 o	79 o	75 o	83 o	91 o	91 o
India	4 070 o	4 899 o	5 332 o	8 746 o	9 258 o	9 965 o	10 046 o	10 331 o	10 361 o	10 395 o
Indonesia	1 462 o	1 472 o	1 452 o	1 484 o	1 522 o	1 540 e	1 545 e	1 548 e	1 902 e	2 504 e
Japan	652	739	978	1 260	1 626	2 016	2 461	3 059 o	3 474 o	4 356 o
Korea Rep	55	74	160	1 179	1 799	1 835	1 992	1 676 e	1 880 e	1 801 o
Malaysia	1 022 o	1 404 o	1 528 o	1 462 o	732 o	734 e	774 e	774 e	774 e	774 e
Myanmar	0 e	0 e	0 e	0 e	3 e	3 e	3 e	3 e	3 e	3 e
Nepal	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Pakistan	6 e	10 e	10 e	51 e	51 e	51 e	51 e	51 o	51 e	51 e
Philippines	8 o	20 o	53 o	58 o	74 o	80 o	107 o	136 o	142 o	223 o
Singapore	32 e	55 e	77 e	82 e	83 e	91 e	78 e	70 e	78 e	78 e
Sri Lanka	13 o	20 o	20 o	24 o	26 o	37 o	40 o	40 o	40 o	40 e
Thailand	2 321	2 452	2 727	2 815	3 157 o	3 373 o	3 410 o	3 517 o	3 647 o	3 647 e
Viet Nam		11 u	11 u	11 u	11 u	11 u	11 e	11 e	11 e	11 e
C America + Carib	10	11	45	90	95	95	96	96	96	96
Costa Rica					5	5	5	5 e	5 e	5 e
Cuba		1	1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e
Dominican Rep	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Guadeloupe	1	1	1	1	1 u	1 e	1 e	1 e	1 e	1 e
Guatemala	3	3	3	3	3	3 o	3 o	3 o	3 o	3 o
Honduras	6 o	6 o	39 o	84 o	84 o	84 o	86 o	86 o	86 o	86 o
St Lucia				0 e	0 e	0 e	0 e	0 e	0 e	0 e
Eurasia	1 207	1 380	1 382	1 425	1 456	1 501	1 587	1 704	1 995	2 147
Russian Fed	1 197 e	1 370 e	1 370 e	1 370 e	1 373 e	1 373 e	1 373 e	1 373 e	1 373 e	1 373
Türkiye	10	10	12	55	83	129	214	332	623	775
Europe	15 187	16 398	16 937	17 250	18 135	20 125	20 596	20 561	20 834	20 884
Austria	1 017 e	959 e	939 e	917 e	838 e	824 o	813 e	816 e	765 e	765
Belarus	13	13	13	13	13	16	16	86	83	83
Belgium	640	558	591	566 e	559	526	539 o	564	448	460
Bosnia Herzg						0	1	1	1	1
Bulgaria	30	30	34	19	23	33 e	24 e	15	14	14
Croatia	7	8	25	26	42	65	76	80	95	98
Czechia	306 e	355 e	380 e	376 e	402 e	385 e	434 e	452 e	456 e	456
Denmark	919 e	989 e	973 e	1 032 e	1 501 e	1 485 e	1 681 e	1 777 e	1 848 e	1 848
Estonia	150	165	165	165	165	165	180	200	200	222
Finland	1 751	1 751	1 751	1 747	1 966	1 966	1 963	2 442	2 398	2 336
France	451	465	528	612	624	828	875	810 e	899 e	899
Germany	1 623 o	1 589 o	1 592 e	1 600 o	1 601 e	1 585 e	1 598 e	1 571 e	1 566 e	1 621
Greece			2 e	2 e	3 e	12	13	14	16	16
Hungary	247	467	422	322	386	414	402	397	438	438
Ireland	5 e	5 e	5 e	5 e	5 e	5 e	7	7	7 e	7
Italy	606	620	616	685	684	733	728	726	702	698
Latvia	55	63	66	81	94	73	97 e	96 e	95 o	108
Lithuania	43	46	45	39	45	62	63	63	58 o	62
Luxembourg	4	4	4	4	15	15	35	35 o	35 o	35
Netherlands	215	190	210	210	226	231	228	271	285	285
North Macedonia						1 o	2 o	2 e	2 e	2
Norway	79	79	79	27	27 e	27 e	27 u	20	27	27
Poland	582	629	737	727	709	735	732	734	803	803
Portugal	458	456	469	475	469	534	587	601	601 e	601
Romania	35	79	104	107	119	119	119	136	109	111
Serbia							2	2 e	2 e	2
Slovakia	176	153	145	150	149	148	138	137	163	163
Slovenia	30	30	30	30	33	32	34	35	36	37
Spain	653	673	672	672	672	672	718	868	867	867

Other solid biofuels Autres biocarburants solides Otros biocombustibles sólidos

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sweden	3 120 e	3 729 e	3 700 e	3 769 e	3 706 e	3 918 e	3 834 e	2 942 e	3 093 e	3 093
UK	1 955	2 258	2 604	2 834	3 020	4 463	4 543	4 553	4 569	4 573
Ukraine	17	35	35	39	39 o	52 o	87	109	152 u	152 e
European Union (27)	13 122	14 008	14 205	14 337	15 036	15 565	15 921	15 791	15 999	16 045
Middle East									0	0
Yemen									0 o	0 e
N America	10 639	10 902	11 449	11 492	11 468	11 255	10 813	10 766	10 355	10 373
Canada	2 090 e	2 342 e	2 318 e	2 385 e	2 465 e	2 477 e	2 353 e	2 353 e	2 353 e	2 361 e
Mexico	0 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	2 o	2 o
USA	8 548 o	8 560 o	9 130 o	9 106 o	9 002 o	8 778 o	8 459 o	8 411 o	8 000 o	8 009 o
Oceania	299	300	300	300	317	317	317	312	312	312
Australia	173	174	174	174	174 e	174 e	174 o	174 e	174 e	174 e
Fiji	12 u	12 u	12 u	12 u	24 u	24 u	24 e	24 e	24 e	24 e
New Zealand	99	99	99	99	104	104	104	98	98 o	98 e
Papua N Guin	15 u	15 u	15 u	15 u	15 u	15 u	15 e	15 e	15 e	15 e
Samoa								1 e	1 e	1 e
Solomon Is	1 e	1 e	1 u	1 u	1 u	1 u	1 e	1 e	1 e	1 e
S America	3 802	3 721	3 548	3 856	4 124	4 122	4 306	4 305	4 753	5 380
Argentina	165 e	164 e	173 e	181 e	170 e	144 e	197 e	195 e	155 e	152 e
Bolivia									11 e	
Brazil	1 989	2 264	2 539 o	2 846 e	3 136 o	3 159 o	3 255 o	3 301 o	3 801 o	4 390 o
Chile	1 240 e	884 e	417 e	410 e	410 e	410 e	442 o	396 o	375 o	426 o
Colombia					0 o	0 o				
Fr Guiana	2 o	2 o	2 o	2 o	2 o	2 o	5 o	5 e	5 o	5
Guyana			0	0	0	1	1	1 e	1 e	1 e
Suriname			2	2	2	2 e	2 e	2 e	2 e	2 e
Uruguay	406 o	406 o	416 o	416 o	405 o	405 o	405 e	405 o	405 e	405 o

Liquid biofuels

Biocarburants liquides

Biocarburantes líquidos

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	2 001	2 298	2 378	2 282	2 317	2 382	2 607	2 532	2 544	2 557
Africa	0	0	0	0	0	41	41	41	41	41
Burkina Faso	0 u	0 u	0 u	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Reunion						41 o	41 o	41 o	41 o	41 e
Tanzania		0 u	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Asia		356	361	360	359	348	348	293	329	329
Korea Rep		356	361	360	359	348	348	293 e	329 e	329 e
Eurasia		7	7	7	12	19	19	23	23	23
Türkiye		7	7	7	12	19	19	23	23	23
Europe	1 879	1 797	1 865	1 792	1 813	1 791	2 128	2 104	2 081	2 081
Austria	6	1	3	3	1	1	1	0	0	0
Belgium	50	51	49	45	45	45	45 e	23	19	19
Denmark	7		1	0	1	1				
France			3	4	0	0	0	15	10	10
Germany	263	232	232	231	230	230	231	231 e	230	230
Italy	1 003	990	1 000	993 e	987	971	948	932	919 e	919
Poland	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0
Slovenia	1	1	1	1	1	1	1 o	1	1 e	1
Spain						6	6 e	6 e	6 e	6
Sweden	548	522	576	515	547	535	895	895 e	895 e	895
European Union (27)	1 879	1 797	1 865	1 792	1 813	1 832	2 169	2 145	2 122	2 122
N America	115	115	115	115	125	175	62	62	62	62
USA	115 o	115 o	115 o	115 o	125 o	175 o	62 o	62 o	62 o	62 o
Oceania	3	3	3	3	3	3	3	3	3	3
Fiji	0 u	0 u	0 u	0 u	0 u	0 u	0 e	0 e	0 e	0 e
New Caledon	0 o	0 o	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e
Solomon Is		0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Vanuatu	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e
S America	4	19	27	4	5	5	5	5	5	18
Brazil	4	19	27	4 o	5 o	5 o	5 o	5 o	5 o	18 o

Biogas Biogaz Biogás

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	14 151	15 188	15 863	16 847	17 446	18 495	19 300	20 652	20 906	21 376
Africa	11	11	26	35	38	43	54	54	99	99
Burkina Faso			1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e
Egypt							12 o	12 e	56 e	56 e
Gabon			1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Ghana			0 o	0 o	0 e	0 o	0 e	0 o	0 e	0 o
Kenya	0 e	0 e	3 e	3 e	2 e	2 e	2 e	2 e	2 e	2 e
Mauritius	3	3	3	3 o	3 e	3 e	3 e	3 e	3 e	3 e
Morocco	1 o	1 o	5 o	7	7	7	7	7	7 e	7 e
Nigeria				0 u	0 u	0 u	0 e	0 e	0 e	0 e
Reunion	2 o	2 o	3 o	4 o	4 e	4 o	4 e	4 e	4 e	4 e
South Africa	4 e	4 e	9 e	14 e	18 e	23 u	23 e	23 e	23 e	23 e
Tanzania	1 o	1 o	1 o	1 u	1 e	1 e	1 e	1 e	1 e	1 e
Asia	650	846	972	1 157	1 374	1 626	1 876	2 398	2 948	3 173
Bangladesh	3 o	4 o	4 o	5 o	5 o	5 o	5 o	5 o	5 e	5 e
Cambodia			2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
China	193	310	331	350	454	630	799	1 285 o	1 711 o	1 928 e
China HK SAR				17	17	17	24	24	24	24 e
Chinese Taipei			1 o	1 o	1 o	1 e	1 o	1 o	1 e	1 e
India	6 o	7 o	10 o	10 o	13 e	14 e	14 e	14 e	14 e	14 e
Indonesia	18 o	19 o	55 o	64 e	101 e	109 e	112 o	120 e	135 e	135 e
Japan	10	15	23	34	47	59	70	77 o	85 o	94 o
Kazakhstan	0	0	0	0	1 o	1 o	2 e	8	8 e	8
Korea Rep	99	121	113	129	136 o	140	139	117 e	131 e	131 e
Lao PDR						0 o	0 o	0 o	0 o	0 e
Malaysia	14 o	18 o	20 o	58 o	62 o	70 o	103 e	111 e	120 e	120 e
Myanmar	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Pakistan	9 e	9 e	9 e	10 e	10 e	10 e	10 e	10 e	10 e	10 e
Philippines	31 e	31 e	31 e	40 e	42 e	54 e	54 o	56 e	56 e	56 o
Sri Lanka			0 o	0 o	0 o	0 o	0 e	0 e	0 u	0 e
Thailand	266	312	373	435	475	505 o	530 o	557 o	635 o	635 e
Viet Nam				2 e	9 e	9 e	9 e	9 e	9 e	9 e
C America + Carib	14	13	16	31	35	42	43	46	45	45
Costa Rica	4	2	3	3	3	3 o	4	5	5 o	5 o
Cuba		1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Dominican Rep	1 o	1 o	2 o	2 o	2 o	2 e	2 e	2 e	2 e	2 e
El Salvador	6	6	7	7	7	7	7	7 o	7 e	7 e
Guadeloupe	0	0	0	0	0	5 o	5 o	5 o	5 e	5 e
Guatemala	1	1	4	4	7	7 o	7 o	7 o	6 o	6 o
Honduras	1 o	1 e	0 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Martinique			1	1 o	1 o	1	1	1	1 e	1 e
Nicaragua				0 e	0 e	2 e	2 e	2 e	2 e	2 e
Panama				8	8 o	8 e	8 o	8 e	8 o	8
Puerto Rico			o	2 o	2 o	2 o	2 o	5 e	5 o	5 o
Eurasia	162	204	253	298	378	440	549	742	979	1 104
Azerbaijan			1	1	1	1 o	1 e	1	1	1
Türkiye	162	204	252	297	377	438	548	741	979	1 103
Europe	10 210	10 845	11 299	11 777	12 200	12 917	13 324	13 966	13 499	13 593
Austria	194 e	189 e	191 e	202 e	180 e	175 o	164 e	165 e	166 e	166
Belarus	22	22	22	27	28	33 o	38 e	37	37 e	37
Belgium	151	181	179	188	183	190	197	199	204	204
Bosnia Herzg				1 u	1 e	1	1	1	1	1
Bulgaria	4	10	20	38	29	36 e	33 e	33 e	33 o	33
Croatia	17	17	28	37 o	45 o	51 o	52 e	55 o	59 o	59
Cyprus	10	10	10	10	10 e	13 o	13 o	13 o	13 e	13
Czechia	361 o	367 o	368 o	369 o	372 o	369 o	368 e	366 e	370 e	370
Denmark	93 e	96 e	104 e	107 e	108 e	108 e	121 e	132 e	128 e	128
Estonia	6 e	8 e	11 e	11 e	11 e	9 e	8 e	11 e	11 o	11
Faroe Islands								0 o	0 e	0
Finland	88 e	100 e	102 e	114	116	116	116	116 o	116 e	116
France	311	356	400	424	463	487	523	546	564	571
Germany	5 148 o	5 437 o	5 643 o	5 850 o	6 147 o	6 784 o	7 081 o	7 494 e	6 961 e	6 961
Greece	46 u	47 u	49 u	56 u	62 u	70 u	75 o	83 e	92 e	92
Hungary	63	63	72	76	82	76	79	85	85	85
Ireland	52 o	53 o	53 o	56 o	56 o	57	59 e	59 o	60 e	60
Italy	1 317	1 336	1 336	1 352	1 372	1 375	1 382	1 379	1 382	1 382
Latvia	53 e	58 e	60 e	62 e	60	61	61 e	60 e	57 o	57
Lithuania	16	20	21	25 e	25 e	35 o	35 o	36 e	37 e	37
Luxembourg	10	10	12	12	12 e	12 e	12 e	12 o	12 o	12
Malta	3	3	3	5	5	5 e	5 e	5 e	5 e	5
Moldova Rep	2	3	3	3	6	6	6	7	6	12
Netherlands	230 e	237 e	244 e	224 e	224 e	207 u	201 e	205 e	204 e	204
North Macedonia			4	5	7	7 o	8	8 o	8 e	8
Norway	17	17	17	10	10 e	10 e	7	11	7	7

Biogas Biogaz Biogás

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Poland	153 o	187 o	216 o	225 o	229 e	225 e	233 e	261 e	251 e	262
Portugal	55	66	66	68	70	71	72	71	73 e	73
Romania	11	15	14	16	22	22	20	30	32	32
Serbia	4	5	5	10	13	17	26	29	34	34
Slovakia	35	78	91	93	91	89	82	82 e	81	81
Slovenia	28	31	32	29	27	27	25	30	30	30
Spain	243	243	245	248	251	258	267	269	271	271
Sweden	5 e	2 e	2 e	2 e	2 e	2 o	2 e	100 e	100 e	100
Switzerland	33	32	29	29 o	30	30	30	34 o	34 e	34
UK	1 414	1 531	1 628	1 774	1 819 o	1 837	1 832	1 839	1 853	1 923
Ukraine	14 o	15 o	18 o	21 o	34 o	46 o	93	103	123 e	123 e
European Union (27)	8 706	9 221	9 576	9 903	10 257	10 941	11 295	11 908	11 406	11 424
Middle East	35	42	62	69	70	68	68	69	69	71
Iran IR	7	11	11 e	11 e	11 e	11 e	11 e	11 e	11 o	11 e
Israel	11 e	14 e	25 e	25 e	25 e	25 e	25 e	26 e	26 e	26 e
Jordan	4 o	4 o	13 u	13 u	13 e	13 e	13 e	13 e	13 e	13 e
Lebanon	2 u	2 u	2 u	9 e	9 e	7 e	7 e	7 e	7 e	7 e
Palestine				0	0	0 e	0 e	0 e	0 e	0 e
Qatar	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Syrian AR	7 e	7 e	7 e	7 e	7 e	7 e	7 e	7 e	7 e	7 e
United Arab Em	1 o	1 o	1 o	1 o	1 o	1 e	1 u	1 u	1 e	3 e
N America	2 579	2 704	2 681	2 694	2 752	2 708	2 633	2 525	2 391	2 377
Canada	269 e	271 e	272 e	272 e	277 e	277 e	277 e	283 e	283 e	283 e
Mexico	36	36	36	47 o	57 o	55 o	55 o	57 o	64 o	65 e
USA	2 273 o	2 397 o	2 373 o	2 375 o	2 419 o	2 376 o	2 301 o	2 184 o	2 043 o	2 029 o
Oceania	269	279	282	241	240	240	240	247	248	249
Australia	220	226	228	190 o	190 o	190 o	190	197 o	198 o	199 e
New Zealand	45	49	50	47	46 o	46 o	46 o	46 e	46 e	46 e
Papua N Guin	4 u	4 u	4 u	4 u	4 u	4 u	4 e	4 e	4 e	4 e
S America	223	245	272	546	360	411	513	605	628	666
Argentina	17 o	17 o	17 o	17 o	21 o	23 o	44 o	55 e	69 e	73
Bolivia							5 o	5 o	5 o	5 o
Brazil	173	178 o	196 o	461 o	262 o	302 o	372 o	452 o	452 o	486 o
Chile	27	42	49	53	56 o	57 o	60 o	55 o	64 o	64 o
Colombia				4	4	4 o	4 o	9 o	9	9
Ecuador				2 o	7 o	7 o	7 o	7 o	8 o	8
Paraguay	0 e	0 e	0 e	0 e	0 e	0 e	2 o	2 e	2 e	2 e
Peru	5	5 o	7 o	7 o	7 o	10 o	10	10 o	10 o	10 o
Uruguay	1	2 e	2 e	2 e	2 e	8 e	8 e	8 e	8 e	8 o

Geothermal energy Énergie géothermique Energía geotérmica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	10 983	11 424	12 085	12 405	13 025	13 471	14 089	14 417	14 696	14 877
Africa	213	373	626	660	680	691	691	870	870	956
Ethiopia	7	7	7	7	7	7 e	7 o	7	7	7 o
Kenya	206 o	366 o	619 o	653 o	673 o	684 o	684 o	863 o	863 o	949 o
Asia	3 728	3 854	3 896	4 001	4 226	4 375	4 540	4 540	4 700	4 711
China	26	26	26	26	26	26	26	26	26	26
Chinese Taipei						0 o	0 o	0 o	5 o	5 o
Indonesia	1 344 o	1 404 o	1 438 o	1 533 o	1 808 o	1 948 o	2 131 o	2 131 o	2 286 o	2 343 o
Japan	512	508	516	526	476	473	481	481 o	481 o	431 o
Philippines	1 847 o	1 916 o	1 916 o	1 916 o	1 916 o	1 928 o	1 928 o	1 928 o	1 928 o	1 932 o
Thailand	0	0	0	0	0	0 e	0 o	0 o	0 e	0 e
C America + Carib	641	637	640	629	665	665	722	723	723	724
Costa Rica	218	218	217	207	207	207 o	262 o	262 o	262 o	263 o
El Salvador	204	204	204	204	204	204 o	204 o	204 o	204 e	204 e
Guadeloupe	15	12	15	15	15 u	15 e	15 o	15 e	15 e	15 e
Guatemala	49	49	49	49	49	49 o	52 o	49 o	49 o	49 o
Honduras					35 o	35 o	35 o	39 o	39 o	39 o
Nicaragua	155	155	155	155	155	155 o	153 o	153 o	153 e	153 e
Eurasia	390	483	702	899	1 138	1 357	1 596	1 687	1 750	1 765
Russian Fed	79	78	78	78	74	74	81	74	74	74
Türkiye	311	405	624	821	1 064 o	1 283	1 515	1 613 o	1 676 o	1 691
Europe	1 461	1 503	1 503	1 507	1 558	1 617	1 622	1 627	1 634	1 634
Austria	1	1	1	1	1	1	1 e	1 o	1 e	1
Croatia						10	10 o	10 o	10 o	10
France	15	15	15	16	16	16	16	16	16 e	16
Germany	26	29	29	33	32	35	40	40 e	46	46
Hungary					3 u	3 e	3	3 o	3 e	3
Iceland	665	665	665	665	710	756	756	756	757	757
Italy	729	768	768	767	767	767 e	767	772	772	772
Portugal	25	25	25	25	29	29	29	29	29 o	29
Romania		0 o	0 o	0 o	0 o	0	0 u	0 o	0 e	0
European Union (27)	811	849	852	857	863	876	881	886	892	892
N America	3 430	3 327	3 448	3 443	3 468	3 429	3 589	3 606	3 656	3 712
Mexico	823	813	906	926	985	985	1 034	1 034	1 059 o	1 059 e
USA	2 607	2 514 o	2 542 o	2 517 o	2 483 o	2 444 o	2 555 o	2 572 o	2 597 o	2 653 o
Oceania	1 120	1 246	1 270	1 265	1 265	1 289	1 289	1 323	1 323	1 323
Australia	0	0	0	0	0 e		0 u	0 e	0 e	0 e
New Zealand	1 070	1 196	1 220	1 215	1 215	1 239	1 239	1 273	1 273 o	1 273 e
Papua N Guin	50 e	50 e	50 e	50 e	50 e	50 e	50 e	50 e	50 e	50 e
S America					24	48	40	40	40	51
Chile					24 o	48	40 o	40 o	40 o	51 o

Off-grid capacity

Capacité hors réseau

Capacidad aislada

Total renewable energy

Total énergies renouvelables

Total energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	5 532.411	6 523.984	7 214.308	7 750.937	7 617.277	9 496.025	9 916.695	10 436.724	11 199.017	12 435.683
Africa	445.584	529.948	650.581	770.207	873.564	1 023.496	1 144.181	1 238.443	1 144.181	1 422.508
Algeria		11.300	59.296	98.396	98.396	111.196	111.196	111.196	111.196	123.196
Angola	32.458	34.821	35.726	36.236	48.656	48.656	48.656	48.656	48.656	48.656
Benin				1.500	1.500	1.500	1.500	1.540	1.500	1.540
Botswana	0.415	0.560	0.853	1.926	2.061	2.366	2.366	2.365	2.366	2.365
Burkina Faso	6.450	7.150	8.150	10.150	12.150	27.150	29.650	29.650	29.650	29.650
Burundi	7.803	8.003	8.303	9.303	10.303	10.303	10.303	10.303	10.303	10.303
Cabo Verde	0.151	0.305	0.618	0.674	0.735	0.801	0.846	0.846	0.846	0.846
Cameroon	3.900	5.900	7.700	9.300	11.896	14.492	14.492	14.617	14.492	14.617
Cent Afr Rep	0.500	0.500	0.500	0.500	0.500	0.500	0.516	0.516	0.516	0.516
Chad	0.050	0.050	0.172	1.273	1.273	1.290	1.290	1.327	1.290	1.327
Congo DR	98.349	98.568	111.732	114.297	129.095	154.587	164.487	164.487	164.487	164.487
Congo Rep	0.230	0.460	0.460	0.460	0.570	0.720	0.720	0.720	0.720	0.720
Cote d'Ivoire	2.908	3.834	5.059	5.059	8.278	13.144	13.144	13.144	13.144	13.144
Djibouti	0.300	0.300	0.300	0.362	0.362	0.362	0.362	0.362	0.362	20.362
Egypt	20.000	20.000	21.000	35.000	35.000	49.200	35.200	37.000	35.200	71.000
Eq Guinea				0.154	0.348	0.348	0.330	0.319	0.330	0.183
Eritrea	0.860	8.684	8.684	9.839	12.179	12.429	12.427	12.414	12.427	11.632
Eswatini	2.478	2.504	2.504	2.504	2.504	2.504	2.504	2.504	2.504	2.504
Ethiopia	4.623	10.410	11.169	15.325	13.779	13.631	13.631	21.469	13.631	22.469
Gabon	1.600	1.600	2.800	2.887	2.887	2.887	2.887	2.887	2.887	2.887
Gambia	1.995	2.000	2.000	2.000	2.002	2.002	2.002	2.002	2.002	2.122
Ghana	6.774	9.624	13.903	15.141	15.877	15.881	15.881	15.881	15.881	16.028
Guinea	2.291	2.291	2.293	2.453	2.652	2.915	3.606	4.222	3.606	4.333
Guinea Bissau			0.312	0.312	0.312	1.169	1.169	1.169	1.169	1.169
Kenya	12.368	20.901	35.044	40.483	52.714	60.782	76.257	106.771	76.257	131.772
Lesotho	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.393
Liberia	4.050	4.090	4.107	4.169	6.591	6.768	6.768	6.768	6.768	6.768
Libya	4.900	4.900	4.900	4.900	5.110	5.110	5.110	5.110	5.110	6.333
Madagascar	8.985	11.630	14.660	16.660	18.760	18.760	18.760	18.760	18.760	18.760
Malawi	5.965	8.234	12.657	12.957	20.037	27.244	81.323	82.635	81.323	83.923
Mali	35.346	43.755	44.783	45.314	47.154	47.398	48.233	48.370	48.233	79.011
Mauritania	7.400	7.551	7.566	24.166	24.166	25.466	25.609	25.609	25.609	25.609
Mauritius	0.126	0.107	0.134	0.915	3.287	3.440	4.815	4.148	4.815	3.380
Morocco	20.000	23.800	23.800	25.870	27.895	27.895	27.903	28.000	27.903	28.000
Mozambique	5.175	7.900	11.060	14.060	16.060	16.060	16.060	21.501	16.060	30.708
Namibia	13.402	14.180	14.180	14.180	14.198	21.951	23.891	23.891	23.891	23.891
Niger	5.000	6.000	7.000	8.000	9.041	20.041	20.041	20.041	20.041	20.041
Nigeria	22.900	24.600	26.400	27.830	28.030	28.195	37.174	37.643	37.174	37.643
Reunion							1.340	1.340	1.340	1.340
Rwanda	2.532	3.075	3.655	4.865	6.731	11.665	15.106	15.272	15.106	15.272
Sao Tome Prn	0.063	0.098	0.119	0.157	0.316	0.334	0.334	0.334	0.334	0.334
Senegal	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000
Seychelles	0.068	0.068	0.068	0.068	1.022	1.022	1.022	1.022	1.022	1.022
Sierra Leone	0.634	0.645	0.670	0.734	8.720	9.136	9.136	9.136	9.136	9.176
Somalia	2.200	2.300	2.970	7.470	10.444	10.618	10.618	19.088	10.618	50.588
South Africa	7.948	9.391	9.866	10.142	12.924	12.785	13.213	12.978	13.213	12.875
South Sudan	0.160	0.160	0.160	0.428	0.449	0.737	0.835	0.835	0.835	2.061
Sudan	14.666	16.584	19.911	26.219	35.800	59.478	80.199	116.840	80.199	135.570
Tanzania	34.974	46.248	53.675	53.161	54.838	58.764	56.846	56.846	56.846	56.846
Togo	0.007	0.022	0.062	0.082	0.972	3.490	5.460	6.460	5.460	6.493
Tunisia	1.555	1.563	1.710	2.060	2.076	2.076	7.076	7.076	7.076	7.076
Uganda	27.500	29.000	34.500	36.500	39.400	39.240	39.360	39.520	39.360	39.839
Zambia	2.667	2.667	1.917	1.951	1.951	2.081	9.921	9.921	9.921	9.949
Zimbabwe	3.515	4.272	4.130	4.472	5.174	5.584	5.263	5.588	5.263	4.779
Asia	4 413.627	5 259.184	5 738.516	6 108.761	5 831.090	7 378.304	7 644.120	8 032.762	7 644.120	9 830.846
Afghanistan	41.140	46.109	50.127	54.814	58.416	57.948	57.482	56.914	57.482	59.076
Bangladesh	98.494	124.615	148.983	156.444	180.794	175.078	197.143	187.425	197.143	188.128
Bhutan	8.353	8.353	8.353	8.353	8.353	8.590	8.590	8.590	8.590	8.610
Brunei Darism		0.014	0.014	0.014	0.015	0.015	0.016	0.027	0.016	0.047
Cambodia	2.798	2.992	4.995	5.673	5.777	5.220	4.995	4.468	4.995	5.032
China	508.330	586.930	655.530	710.490	747.190	786.950	826.710	866.470	826.710	945.990
India	935.774	1 201.010	1 355.564	1 566.152	1 805.507	2 079.650	2 081.682	2 238.922	2 081.682	2 774.857
Indonesia	1 655.872	1 671.392	1 682.078	1 689.607	1 726.910	2 671.190	2 682.150	2 744.610	2 682.150	3 851.580
Kazakhstan	15.262	71.255	86.517	99.689	116.656	281.060	608.000	807.000	608.000	885.256
Korea DPR	6.339	11.158	22.994	31.734	35.380	38.380	41.380	41.380	41.380	41.380
Lao PDR	2.475	2.907	3.259	3.414	3.414	3.704	3.704	3.704	3.704	3.709
Malaysia	732.706	1 102.060	1 240.795	1 246.117	534.907	539.957	539.987	540.171	539.987	540.202
Maldives	3.160	5.289	6.206	8.895	12.198	17.885	22.012	28.112	22.012	37.212
Mongolia	8.583	8.583	8.583	8.583	8.583	8.583	8.583	8.577	8.583	8.571
Myanmar	55.809	61.811	75.584	88.119	102.289	110.740	113.730	109.744	113.730	105.695
Nepal	52.380	56.387	61.872	63.973	105.248	106.174	106.101	113.371	106.101	119.418
Pakistan	17.753	18.353	18.520	21.653	33.362	34.428	35.514	38.825	35.514	38.863
Philippines	31.567	32.007	35.370	44.320	44.601	53.806	89.426	89.329	89.426	87.387
Sri Lanka	13.041	13.218	13.464	13.815	14.078	14.274	14.243	13.963	14.243	13.963

Total renewable energy

Total énergies renouvelables

Total energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tajikistan	43.200	43.200	43.200	43.200	43.200	44.160	44.160	44.160	44.160	45.260
Timor Leste	1.073	1.051	1.018	1.012	0.697	0.697	0.697	0.685	0.697	0.795
Uzbekistan	1.000	1.000	1.000	2.200	3.025	3.325	3.325	3.325	3.325	3.325
Viet Nam	178.518	189.490	214.490	240.490	240.490	336.490	154.490	82.990	154.490	66.490
C America + Carib	74.600	79.750	86.029	85.760	96.232	106.982	107.009	114.522	107.009	138.198
Antigua Barb				0.010	0.414	0.414	0.414	0.414	0.414	0.414
Bahamas	0.025	0.126	0.147	0.200	0.146	0.115	0.058	0.058	0.058	0.058
Belize	0.179	0.185	0.189	0.189	0.196	0.196	0.790	0.790	0.790	0.790
Br Virgin Is	0.519	0.519	1.286	1.447	1.447	1.455	1.775	1.975	1.775	1.975
Costa Rica					4.500	4.500	6.081	6.140	6.081	6.140
Cuba					0.467	0.835	8.900	9.124	8.900	9.847
Curacao	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Dominica	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Dominican Rep	18.254	20.310	22.591	24.701	33.949	39.951	40.143	40.178	40.143	63.105
El Salvador	12.545	12.545	12.545	12.545	12.418	14.856	4.016	4.016	4.016	4.016
Guatemala	2.560	5.434	8.308	8.308	8.308	8.308	8.308	8.308	8.308	8.308
Haiti	0.831	0.927	1.154	1.195	1.275	1.318	1.371	1.371	1.371	1.371
Honduras	5.156	5.170	9.070	9.140	4.525	4.537	5.947	12.970	5.947	12.996
Jamaica	0.006	0.008	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Nicaragua	0.400	0.400	0.400	0.010	0.010	1.912	4.312	4.312	4.312	4.312
Panama	34.011	34.011	30.211	27.711	28.211	28.211	24.520	24.520	24.520	24.520
Puerto Rico					0.062	0.070	0.070	0.042	0.070	0.042
St Kitts Nevis		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
St Lucia					0.176	0.176	0.176	0.176	0.176	0.176
US Virgin Is	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Middle East	38.981	53.050	108.394	128.551	148.596	303.153	306.298	315.685	306.298	320.540
Iran IR	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378
Iraq	30.840	37.840	37.840	37.840	37.840	37.840	37.840	37.840	37.840	40.340
Jordan	0.141	0.236	0.557	0.593	0.588	0.623	0.670	2.385	0.670	2.385
Kuwait	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400
Lebanon	2.061	3.390	3.397	3.507	3.527	7.880	7.880	7.880	7.880	7.890
Oman				0.011	0.011	0.011	0.011	0.011	0.011	0.011
Palestine							1.833	1.833	1.833	1.833
Saudi Arabia		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Syrian AR	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	2.600
United Arab Em	0.192	3.192	3.208	3.208	3.238	3.407	4.672	5.597	4.672	5.897
Yemen	2.369	5.000	60.000	80.000	100.000	250.000	250.000	256.747	250.000	256.792
Oceania	152.033	154.429	158.297	162.702	164.827	167.283	170.782	171.170	170.782	174.269
Amer Samoa				1.504	1.854	1.854	1.854	1.854	1.854	1.854
Cook Is	0.047	0.047	0.047	0.047	0.047	1.869	2.606	2.606	2.606	2.606
Fiji	1.168	1.402	2.648	4.651	4.718	5.131	5.222	5.324	5.222	5.904
Fr Polynesia	1.848	2.948	3.148	3.248	3.548	3.448	3.548	3.548	3.548	3.548
Kiribati	0.502	0.743	1.389	1.397	1.397	1.397	1.397	1.397	1.397	1.397
Marshall Is	0.480	0.650	0.650	0.650	0.710	0.727	0.727	0.727	0.727	0.727
Micronesia	0.388	0.388	0.388	0.388	0.388	0.395	0.395	0.395	0.395	0.395
Nauru	0.008	0.008	0.008	0.008	0.009	0.009	0.167	0.158	0.167	0.158
New Caledon	0.500	0.500	0.500	0.500	0.575	0.607	0.656	0.711	0.656	0.869
Palau				0.170	0.170	0.170	0.235	0.235	0.235	0.235
Papua N Guin	145.046	145.296	145.835	146.186	146.152	145.915	147.653	147.767	147.653	148.394
Samoa	0.014	0.014	0.014	0.014	0.039	0.039	0.197	0.262	0.197	0.262
Solomon Is	1.489	1.765	1.765	1.946	2.321	2.321	2.208	2.208	2.208	3.918
Tokelau	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
Tonga	0.234	0.234	0.240	0.277	0.277	0.437	0.437	0.437	0.437	0.437
Tuvalu	0.192	0.192	1.308	1.316	1.321	1.332	1.332	1.332	1.332	1.332
Vanuatu	0.096	0.221	0.336	0.379	1.280	1.611	2.127	2.188	2.127	2.212
S America	407.586	447.623	472.491	494.956	502.968	516.807	544.305	564.142	544.305	549.322
Argentina	3.695	6.237	4.748	4.753	4.753	4.753	13.509	13.509	13.509	
Bolivia	73.705	96.035	105.735	105.735	105.735	123.160	128.550	139.550	128.550	139.550
Brazil	0.721	0.721	3.930	4.091	7.212	7.227	7.241	7.241	7.241	7.241
Chile	0.765	0.765	0.765	0.765	0.765	0.765	1.445	1.445	0.765	2.225
Colombia	1.442	1.477	1.840	1.897	6.937	8.994	16.937	24.085	16.937	28.182
Ecuador	7.200	10.250	12.250	12.320	12.320	13.879	13.879	13.879	13.879	14.902
Falklands Malv	0.340	0.340	0.410	0.410	0.410	0.410	0.410	0.410	0.410	0.410
Fr Guiana	1.211	1.211	1.211	1.211	1.211	1.211	4.311	4.311	4.311	4.311
Guyana	46.496	46.706	47.151	37.787	37.800	38.419	38.563	38.563	38.563	38.563
Paraguay	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057
Peru	195.845	205.543	214.442	244.947	238.135	224.136	222.219	222.219	222.219	213.819
South Georgia	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256
Suriname	0.943	1.195	2.845	3.310	4.312	4.906	4.906	5.562	4.906	5.562
Uruguay	0.520	1.340	1.361	1.927	7.575	13.554	17.212	17.565	17.212	18.754
Venezuela	74.390	75.490	75.490	75.490	75.490	75.080	75.490	75.490	75.490	75.490

Hydropower Hydroélectricité Hidroeléctrica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	695.634	707.822	752.178	763.570	785.066	1 736.421	1 758.905	1 793.867	1 806.081	1 802.194
Africa	172.775	176.206	199.651	203.558	239.174	249.664	262.314	274.280	280.046	279.826
Angola	21.659 u	22.859 u	22.859 u	22.859 u	35.279 u	35.279 e	35.279 e	35.279 e	35.279 e	35.279 e
Burkina Faso							2.500 u	2.500 e	2.500 e	2.500 e
Burundi	1.603 o	1.603 o	1.603 o	1.603 o	1.603 e	1.603 e	1.603 e	1.603 e	1.603 e	1.603 e
Cameroon	0.300 o	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e
Cent Afr Rep	0.200 e	0.200 e	0.200 e	0.200 e	0.200 e	0.200 e	0.200 e	0.200 e	0.200 e	0.200 e
Congo DR	97.800 e	97.800 e	110.900 e	110.900 e	121.700 e	131.700 u	141.600 u	141.600 e	141.600 e	141.600 e
Eswatini	1.700	1.700	1.700	1.700 e	1.700 e	1.700 e	1.700 e	1.700 e	1.700 e	1.700 e
Ethiopia	1.279 e	1.279 e	1.279 e	1.279	1.279	1.279 e	1.279 e	1.279	1.279	1.279 e
Gabon	0.200 e	0.200 e	0.200 e	0.287 e	0.287 e	0.287 e	0.287 e	0.287 e	0.287 e	0.287 e
Guinea	2.220 o	2.220 o	2.220 o	2.220 o	2.220 e	2.220 e	2.220 e	2.220 e	2.220 e	2.000 e
Kenya	5.139 e	5.779 e	5.779 e	9.299 e	15.419 e	15.419 e	15.419 e	27.219 e	29.219 e	29.219 e
Lesotho	0.180	0.180	0.180 e	0.180 e	0.180 e	0.180 e	0.180 e	0.180 e	0.180 e	0.180 e
Liberia	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e
Madagascar	3.574 o	4.219 o	5.249 o	5.249 o	5.349 e	5.349 e	5.349 e	5.349 e	5.349 e	5.349 e
Malawi	1.400 e	1.400 e	1.400 e	1.700 e	1.700 e	2.350 e	2.000 e	2.000 e	2.000 e	2.000 e
Mozambique	0.275 e	0.900 e	1.060 e	1.060 e	1.060 e	1.060 e	1.060 e	1.060 e	4.826 o	4.826 o
Nigeria			0.400 o	0.400 o	0.400 o	0.400 o	0.400 e	0.400 e	0.400 e	0.400 e
Rwanda	1.840 o	1.840 o	1.840 o	1.840 o	2.276 o	2.276 e	2.276 e	2.442 u	2.442 e	2.442 e
Sierra Leone	0.250 e	0.250 e	0.250 e	0.250 e	4.890 e	4.890 e	4.890 e	4.890 e	4.890 e	4.890 e
South Africa	7.204 e	7.500 e	7.650 e	7.650 e	7.650 e	7.650 e	7.650 e	7.650 e	7.650 e	7.650 e
Tanzania	8.800 e	8.800 e	14.620 e	14.620 e	15.420 e	15.420 e	15.420 e	15.420 e	15.420 e	15.420 e
Uganda	9.000 e	9.000 e	12.500 e	12.500 e	12.800 e	12.640 e	12.600 e	12.600 e	12.600 o	12.600 e
Zambia	2.607 o	2.607 o	1.857 o	1.857 o	1.857 o	1.857 o	2.497 u	2.497 e	2.497 e	2.497 e
Zimbabwe	1.545	1.570	1.605 e	1.605 e	1.605 e	1.605 e	1.605 e	1.605 e	1.605 e	1.605 e
Asia	294.512	304.967	321.475	330.715	335.478	1 274.668	1 286.046	1 308.342	1 310.693	1 310.301
Afghanistan	24.197 e	27.646 e	31.095 e	34.544 e	37.993 e	37.993 e	37.993 e	37.993 e	38.108 u	38.138 u
Bhutan	8.078 o	8.078 o	8.078 o	8.078 o	8.078 o	8.315 o	8.315 o	8.315 o	8.335 o	8.335 e
India	82.169 e	83.377 e	84.079 e	84.675 e	84.675 e	84.675 e	84.675 o	84.675 e	84.675 e	84.675 e
Indonesia	11.515 e	12.764 e	14.457 e	14.887 e	14.887 e	944.880 o	944.880 o	964.300 o	964.300 o	964.300 o
Lao PDR	2.005 u	2.005 u	2.005 u	2.005 u	2.005 u	2.005 u	2.005 e	2.005 e	2.005 e	2.005 e
Malaysia	0.172 e	0.532 e	0.580 e	0.655 e	0.688 e	0.688 e	0.737 e	0.737 e	0.737 e	0.737 e
Mongolia	2.992 e	2.992 e	2.992 e	2.992 e	2.992 e	2.992 e	2.992 e	2.992	2.992	2.992
Myanmar	2.974 e	3.165 e	6.890 e	6.890 e	6.890 e	6.890 e	6.890 e	6.890 e	6.890 e	6.890 e
Nepal	42.168 o	45.456 o	49.102 o	51.012 o	52.257 o	52.257 e	53.506 e	54.376 e	55.492 e	57.240 e
Pakistan	16.874 e	17.339 e	17.339 e	19.789 e	19.825 e	19.825 e	19.905 e	21.911 e	21.911 e	21.911 e
Philippines	9.595 o	9.595 o	12.595 o	12.595 o	12.595 o	20.595 o	30.595 o	30.595 o	30.595 e	28.425 o
Sri Lanka	5.248 e	5.493 e	5.738 e	6.068 e	6.068 e	6.068 e	6.068 e	6.068 e	6.068 e	6.068 e
Tajikistan	43.200	43.200	43.200	43.200	43.200	44.160 e	44.160 e	44.160	45.260 u	45.260
Timor Leste	0.325 o	0.325 e	0.325 e	0.325 e	0.325 e	0.325 e	0.325 e	0.325 e	0.325 e	0.325 e
Viet Nam	43.000 e	43.000 e	43.000 e	43.000 e	43.000 e	43.000 e	43.000 e	43.000 e	43.000 e	43.000 e
C America + Carib	1.323	1.610	1.886	1.677	1.808	1.888	3.815	3.835	3.835	3.835
Belize	0.150 u	0.150 u	0.150 u	0.150 u	0.150 u	0.150 u	0.150 u	0.150 u	0.150 u	0.150 u
Cuba							1.900 o	1.900 u	1.900	1.900 e
Dominican Rep	0.633 o	0.920 o	1.196 o	1.317 o	1.448 o	1.528	1.665 o	1.685 o	1.685 e	1.685 e
El Salvador	0.140 e	0.140 e	0.140 e	0.140 e	0.140 e	0.140 e	0.030 o	0.030 e	0.030 e	0.030 e
Honduras				0.070 e	0.070 e	0.070 e	0.070 e	0.070 e	0.070 e	0.070 e
Nicaragua	0.400	0.400	0.400							
Middle East	1.340	1.340	1.340	1.340	1.340	1.340	1.340	1.340	1.340	1.340
Iraq	1.340 e	1.340 e	1.340 e	1.340 e	1.340 e	1.340 e	1.340 e	1.340 e	1.340 e	1.340 e
Oceania	76.714	77.039	77.039	77.192	77.192	77.192	77.192	77.192	77.192	77.192
Fiji	0.130 u	0.130 u	0.130 u	0.130 u	0.130 u	0.130 u	0.130 e	0.130 e	0.130 e	0.130 e
Papua N Guin	76.395 u	76.645 e	76.645 e	76.645 e	76.645 e	76.645 e	76.645 e	76.645 e	76.645 e	76.645 e
Solomon Is	0.189 o	0.189 o	0.189 o	0.339 o	0.339 o	0.339 o	0.339 e	0.339 e	0.339 e	0.339 e
Vanuatu		0.075 e	0.075 e	0.078 e	0.078 e	0.078 e	0.078 e	0.078 e	0.078 e	0.078 e
S America	148.970	146.660	150.787	149.088	130.074	131.669	128.198	128.878	132.975	129.700
Argentina	3.600 o	6.136 o	4.026 o	4.055 o	4.055 e	4.055 e	4.055 e	4.055 e	4.055 e	
Bolivia	8.000	1.200	1.200	1.200	1.200	0.800 e	0.800 e	0.800 e	0.800 e	0.800 e
Chile	0.765 o	0.765 o	0.765 o	0.765 o	0.765 o	0.765 o	0.765 o	1.445 o	1.445 o	2.225 o
Colombia			0.318 e	0.318 e	5.318 o	5.318 o	9.405 e	9.405 e	13.502 o	13.502 e
Ecuador	4.400 o	3.660 o	5.660 o	5.660 o	5.660 e	6.060 o	6.060 o	6.060 o	6.060 o	6.060
Fr Guiana	1.050 o	1.050 o	1.050 o	1.050 o	1.050 o	1.050 o	1.050 o	1.050 o	1.050 o	1.050
Guyana	2.175 e	2.330 e	2.330 o	2.330 e	2.330 e	2.330 e	2.350 o	2.350 e	2.350 e	2.350 e
Peru	127.920 o	131.659 o	134.228 o	132.500 o	108.456 o	110.061 o	102.073 o	102.073 o	102.073 o	102.073 o
South Georgia	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250 e	0.250 e	0.250 e
Suriname			0.150	0.150	0.180 e	0.180 e	0.180 e	0.180 e	0.180 e	0.180 e
Venezuela	0.810 o	0.810 u	0.810 u	0.810 e	0.810 e	0.800 e	1.210 o	1.210 e	1.210 e	1.210 e

**Solar photovoltaic
Solaire photovoltaïque
Solar fotovoltaica**

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	1 054.435	1 389.343	1 761.905	2 118.541	2 578.736	3 286.489	3 827.555	4 213.258	4 573.488	5 051.785
Africa	181.323	237.256	332.574	445.872	510.669	649.621	757.551	839.847	922.017	998.366
Algeria		1.100	49.096 e	88.196 e	88.196 e	101.196 e	101.196 e	101.196 e	101.196 e	113.196 u
Angola	10.799 e	11.962 e	12.867 e	13.377 e	13.377 e	13.377 e	13.377 e	13.377 e	13.377 e	13.377 e
Benin			1.500	1.500	1.500	1.500	1.500 e	1.540 o	1.540 e	1.540 e
Botswana	0.415 e	0.560 e	0.853 e	1.926 e	2.061 e	2.366 e	2.366 e	2.365 e	2.365 e	2.365 e
Burkina Faso	6.300 e	7.000 e	8.000 e	10.000 e	12.000 e	27.000 o	27.000 e	27.000 e	27.000 e	27.000 e
Burundi	2.200 e	2.400 e	2.700 e	3.700 e	4.700 e	4.700 e	4.700 e	4.700 e	4.700 e	4.700 e
Cabo Verde	0.151	0.305	0.618	0.674	0.735	0.801 e	0.846 u	0.846 e	0.846 e	0.846 e
Cameroon	3.600 e	5.600 e	7.400 e	9.000 e	11.596 e	14.192 e	14.192 e	14.317 e	14.317 e	14.317 e
Cent Afr Rep	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e	0.300 e	0.316	0.316 e	0.316 e	0.316 e
Chad	0.050 e	0.050 e	0.172 e	0.173 e	0.173 e	0.190 e	0.190 e	0.227	0.227 e	0.227 e
Congo DR	0.389 e	0.608 e	0.672 e	3.237 u	5.235 u	19.927 e	19.927 e	19.927 e	19.927 e	19.927 e
Congo Rep	0.230 e	0.460 e	0.460 e	0.460 e	0.570 e	0.720 e	0.720 e	0.720 e	0.720 e	0.720 e
Cote d'Ivoire	2.908 e	3.834 e	5.059 e	5.059 e	8.278 e	13.144 e	13.144 e	13.144 e	13.144 e	13.144 e
Djibouti	0.300 e	0.300 e	0.300 e	0.362 u	0.362 u	0.362 u	0.362 u	0.362 e	0.362 e	0.362 e
Egypt	15.000	15.000	16.000 o	30.000 o	30.000 o	44.200 o	30.200 o	32.000 o	30.500 o	66.000 u
Eq Guinea			0.154 e	0.348 e	0.348 e	0.348 e	0.330 e	0.319 e	0.183 e	0.183 e
Eritrea	0.035 e	7.859 e	7.859 e	9.014 e	11.354 e	11.604 e	11.602 e	11.589 e	10.807 e	10.807 e
Eswatini	0.778 e	0.804 e	0.804 e	0.804 e	0.804 e	0.804 e	0.804 e	0.804 e	0.804 e	0.804 e
Ethiopia	3.344	9.131	9.890	14.040	12.494	12.346	12.346	20.184	21.184	21.184 e
Gabon	1.400 e	1.400 e	1.400 e	1.400 e	1.400 e	1.400 e	1.400 e	1.400 e	1.400 e	1.400 e
Gambia	1.995 e	2.000 e	2.000 e	2.000 e	2.002 e	2.002 e	2.002 e	2.002 e	2.002 e	2.122 e
Ghana		1.350 o	5.609 o	6.847 o	7.583 o	7.587 o	7.587 o	7.587 o	7.734 o	7.734 o
Guinea	0.071 e	0.071 e	0.073 e	0.233 e	0.432 e	0.695 e	1.386 e	2.002 e	2.333 e	2.333 e
Guinea Bissau			0.312 e	0.312 e	0.312 e	1.169 o	1.169 e	1.169 e	1.169 e	1.169 e
Kenya	6.675 e	14.568 e	28.661 e	30.580 e	36.581 e	44.759 e	60.234 e	78.948 e	101.949 e	101.949 e
Lesotho	0.163 e	0.163 e	0.163 e	0.163 e	0.163 e	0.163 e	0.163 e	0.163 e	0.213 u	0.213 e
Liberia	0.040 u	0.040 u	0.057 u	0.059 u	2.406 u	2.583 u	2.583 e	2.583 e	2.583 e	2.583 e
Libya	4.900 u	4.900 u	4.900 u	4.900 u	5.110 u	5.110 e	5.110 e	5.111 e	6.333 u	6.333 e
Madagascar	5.000 e	7.000 e	9.000 e	11.000 e	13.000 e	13.000	13.000	13.000 e	13.000 e	13.000 e
Malawi	4.565 e	6.834 e	11.257 e	11.257 e	18.337 e	24.894 e	79.323 e	80.635 u	80.623 e	81.923 e
Mali	3.346 e	3.755 e	4.783 e	5.314 e	7.154 e	7.398 e	8.233 e	8.370 e	39.011 e	39.011 e
Mauritania	3.000 o	3.151 o	3.166 o	19.766 o	19.766 o	21.066 u	21.209 u	21.209 e	21.209 e	21.209 e
Mauritius	0.126 e	0.107 e	0.134 e	0.915 e	3.287 e	3.440 e	4.815 e	4.148 e	3.380 e	3.380 e
Morocco	15.000	18.800	18.800	20.870	22.895 o	22.895 o	22.903 o	23.000	23.000 e	23.000 e
Mozambique	4.900 e	7.000 e	10.000 e	13.000 e	15.000 e	15.000 e	20.441 o	20.441 o	22.924 o	25.882 o
Namibia	13.400 e	14.178 u	14.178 e	14.178 e	14.187 u	21.940 u	23.880 u	23.880 e	23.880 e	23.880 e
Niger	5.000 e	6.000 e	7.000 e	8.000 e	9.041 u	20.041 u	20.041 u	20.041 e	20.041 e	20.041 e
Nigeria	15.400 e	15.600 e	17.000 e	17.200 e	17.400 e	17.565 u	26.439 u	26.908 u	26.908 e	26.908 e
Reunion							1.340 u	1.340 e	1.340 e	1.340 e
Rwanda	0.692 e	1.235 e	1.815 e	3.025 e	4.455 e	9.389 e	12.830 e	12.830 e	12.830 e	12.830 e
Sao Tome Prn	0.063 e	0.098 e	0.119 e	0.157 e	0.316 e	0.334 e	0.334 e	0.334 e	0.334 e	0.334 e
Senegal	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e
Seychelles	0.068 o	0.068 o	0.068 o	0.068 o	0.068 e	1.022 e	1.022 e	1.022 e	1.022 e	1.022 e
Sierra Leone	0.384 u	0.395 u	0.420 u	0.484 u	3.830 u	4.246 u	4.246 e	4.286 e	4.286 e	4.286 e
Somalia		0.100 e	0.170 e	4.670 e	6.894 e	7.068 e	7.068 e	15.538 u	23.538 u	47.038 u
South Africa	0.744 e	1.891 e	2.216 e	2.492 e	5.274 e	5.135 e	5.563 e	5.328 e	5.225 e	5.225 e
South Sudan	0.160 e	0.160 e	0.160 e	0.428 u	0.449 u	0.737 e	0.835 u	0.835 e	1.278 u	2.061 u
Sudan	14.666 u	16.584 u	19.911 u	26.219 u	35.800 u	59.478 u	80.199 u	116.840 u	135.570 u	135.570 e
Tanzania	3.674 e	11.188 e	12.795 e	12.256 e	13.133 e	17.059 e	15.141 e	15.141 e	15.141 e	15.141 e
Togo	0.007 e	0.022 e	0.062 e	0.082 e	0.972 e	3.490 o	5.460 o	6.493 o	6.493 o	6.493 o
Tunisia	1.555 e	1.563 e	1.710 e	2.060 e	2.076 e	2.076 e	7.076 u	7.076 e	7.076 e	7.076 e
Uganda	18.500 e	20.000 e	22.000 e	24.000 e	26.600 e	26.600 e	26.760 e	26.920 e	27.079 e	27.239 e
Zambia	0.060 e	0.060 e	0.060 e	0.094 e	0.094 e	0.224 e	7.424 e	7.424 e	7.424 o	7.452 u
Zimbabwe	1.970 e	2.702 e	2.525 e	2.867 e	3.569 e	3.979 e	3.658 e	3.983 e	3.174 e	3.174 e
Asia	766.463	1 016.769	1 220.579	1 428.854	1 784.953	2 198.476	2 613.792	2 891.784	3 162.769	3 539.985
Afghanistan	16.843 e	18.363 e	18.932 e	20.170 e	20.323 e	19.855 e	19.389 e	18.821 u	18.821 u	20.838 u
Bangladesh	94.074 e	119.495 e	142.333 e	149.394 e	173.744 e	168.028 e	190.093 e	180.075 e	176.901 e	180.778 e
Bhutan	0.275 e	0.275 e	0.275 e	0.275 e	0.275 e	0.275 e	0.275 e	0.275 e	0.275 e	0.275 e
Brunei Darism		0.014 u	0.014 u	0.014 u	0.014 u	0.015 u	0.016 u	0.027 u	0.047 u	0.047 u
Cambodia	0.548 e	0.742 e	1.245 e	1.923 e	2.027 e	1.470 e	1.245 e	0.718 e	1.364 e	1.282 e
China	297.800	337.800	357.800	367.800	376.800	385.800	394.800 e	403.800 o	412.800 e	421.800 e
India	269.577 e	381.328 e	486.114 e	637.861 e	870.886 e	1 098.628 e	1 130.378 e	1 190.378 e	1 367.173 e	1 722.113 e
Indonesia	29.357 e	32.628 e	41.621 e	41.720 e	43.023 e	41.050 o	50.010 o	61.490 o	69.750 o	69.750 o
Kazakhstan	15.262	71.255	86.517	99.689	116.656	281.060	608.000	807.000	885.256 e	885.256 e
Korea DPR	6.139 u	10.958 u	22.794 u	31.534 u	34.780 u	37.780 u	40.780 u	40.780 e	40.780 e	40.780 e
Lao PDR	0.470 e	0.902 e	1.254 e	1.409 e	1.409 e	1.409 e	1.409 e	1.409 e	1.414 u	1.414 e
Malaysia	0.004 o	1.528 e	2.415 e	2.462 e	2.579 e	7.629 e	7.610 e	7.794 e	7.825 e	7.825 e
Maldives	1.753 o	3.882 o	4.799 o	7.488 o	10.791 o	16.478 o	20.605 u	26.705 u	30.805 u	35.805 o
Mongolia	4.585 e	4.585 e	4.585 e	4.585 e	4.585 e	4.585 o	4.585 e	4.585	4.585	4.585
Myanmar	4.209 o	6.271 o	20.819 o	32.008 o	43.781 o	47.542 o	48.482 o	44.496 o	40.447 e	40.447 e
Nepal	10.143 o	10.862 o	12.701 o	12.892 e	52.922 e	53.748 e	52.396 e	58.796 e	59.844 e	61.979 e
Pakistan	0.318 e	0.453 e	0.602 e	0.611 e	12.284 e	13.350 e	14.356 e	15.661 e	15.699 e	15.699 e
Philippines	1.047 o	1.487 o	1.850 o	1.895 o	2.176 o	3.381 o	13.001 o	12.904 o	12.904 o	13.132 o
Sri Lanka	7.793 e	7.725 e	7.726 e	7.747 e	8.010 e	8.206 e	8.175 e	7.895 e	7.895 e	7.895 e
Timor Leste	0.748 u	0.726 u	0.693 u	0.687 u	0.372 u	0.372 u	0.372 u	0.360 u	0.369 u	0.470 u
Uzbekistan	1.000	1.000	1.000	2.200	3.025	3.325	3.325	3.325	3.325	3.325
Viet Nam	4.518 e	4.490 e	4.490 e	4.490 e	4.490 e	4.490 e	4.490 e	4.490 e	4.490 e	4.490 e

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
C America + Carib	26.226	30.806	36.204	38.142	43.385	52.007	49.806	57.299	62.250	80.975
Antigua Barb				0.010 e	0.414 e	0.414 e	0.414 e	0.414 e	0.414 e	0.414 e
Bahamas	0.025 e	0.126 e	0.147 e	0.200 e	0.146 e	0.115 e	0.058 e	0.058 e	0.058 e	0.058 e
Belize	0.009 u	0.015 u	0.019 u	0.019 u	0.026 u	0.026 u	0.620 u	0.620 e	0.620 e	0.620 u
Br Virgin Is	0.019 o	0.019 o	0.786 o	0.947 o	0.947 o	0.955 o	0.974 o	1.174 o	1.174 o	1.174 o
Costa Rica							1.581 e	1.640 e	1.640 e	1.640 e
Cuba					0.467 u	0.835 u	7.000 u	7.224 u	7.947	7.947 e
Curacao	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o
Dominican Rep	1.500	3.000	4.500	6.173	15.192	20.992	21.047 o	21.062 o	25.290 e	43.989 e
El Salvador	12.405 e	12.405 e	12.405 e	12.405 e	12.278	14.716	3.986 o	3.986 e	3.986 e	3.986 e
Guatemala	2.560 e	5.434 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e
Haiti	0.831 e	0.927 e	1.154 e	1.195 e	1.275 e	1.294 e	1.347 e	1.347 e	1.347 e	1.347 e
Honduras	5.156 e	5.156 e	5.156 e	5.156 e	0.541 e	0.553 e	1.963 e	1.963 e	1.963 e	1.963 e
Jamaica	0.006 e	0.008 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e
Nicaragua							2.400 o	2.400 o	2.400 e	2.400 e
Panama	3.711	3.711	3.711	3.711	3.711 o	3.711 e	0.020 u	0.020 e	0.020 o	0.020 e
Puerto Rico					0.062 e	0.070 o	0.070 o	0.042 e	0.042 e	0.042 e
St Kitts Nevis		0.001 e	0.001 e	0.001 e	0.001 e	0.001 e	0.001 e	0.001 e	0.001 e	0.001 e
Middle East	32.641	45.710	101.054	121.211	141.256	295.813	298.958	308.335	308.385	313.185
Iran IR	0.378	0.378	0.378	0.378	0.378	0.378 e	0.378 e	0.378 e	0.378 e	0.378 e
Iraq	29.500 o	36.500 o	36.500 e	36.500 e	36.500 e	36.500 e	36.500 e	36.500 e	36.500 e	39.000 e
Jordan	0.141 o	0.236 o	0.557 o	0.593 o	0.588 o	0.623 o	0.670 o	2.375 o	2.375 e	2.375 e
Lebanon	0.061 e	0.390 e	0.397 e	0.507 e	0.527 e	4.880 o	4.880 o	4.880 e	4.890 o	4.890 e
Oman				0.011 e	0.011 e	0.011 e	0.011 e	0.011 e	0.011 e	0.011 e
Palestine							1.833 o	1.833 e	1.833 e	1.833 e
Saudi Arabia		0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e
Syrian AR										2.000
United Arab Em	0.192 e	3.192 e	3.208 e	3.208 e	3.238 u	3.407 o	4.672 o	5.597 u	5.597 e	5.897 u
Yemen	2.369 o	5.000 o	60.000 o	80.000 o	100.000 e	250.000 u	250.000 e	256.747 e	256.787 e	256.787 e
Oceania	6.195	8.266	12.174	16.426	18.551	21.006	24.505	24.893	25.775	27.992
Amer Samoa				1.504 e	1.854 e	1.854 e	1.854 e	1.854 e	1.854 e	1.854 e
Cook Is	0.047 e	0.047 e	0.047 e	0.047 e	0.047 e	1.869 u	2.606 u	2.606 e	2.606 e	2.606 e
Fiji	1.014 u	1.248 u	2.494 u	4.497 u	4.564 u	4.977 u	5.068 u	5.170 u	5.459 u	5.750 u
Fr Polynesia	1.600 o	2.700 o	2.900 o	3.000 o	3.300 o	3.200 o	3.300 o	3.300 o	3.300 e	3.300 e
Kiribati	0.502 o	0.743 o	1.389 o	1.397 o	1.397 o	1.397 e	1.397 e	1.397 e	1.397 e	1.397 e
Marshall Is	0.480 e	0.650 e	0.650 e	0.650 e	0.710 e	0.726 e	0.726 e	0.726 e	0.726 e	0.726 e
Micronesia	0.388 e	0.388 e	0.388 e	0.388 e	0.388 e	0.395 u	0.395 e	0.395 e	0.395 e	0.395 e
Nauru	0.008 e	0.008 e	0.008 e	0.008 e	0.009 e	0.009 e	0.167 e	0.158 e	0.158 e	0.158 e
New Caledon	0.500 o	0.500 o	0.500 o	0.500 o	0.575 o	0.607 o	0.656 o	0.711 o	0.786 o	0.869 o
Palau				0.170 o	0.170 o	0.170 e	0.235 u	0.235 e	0.235 e	0.235 e
Papua N Guin	0.339 e	0.339 e	0.878 u	1.229 u	1.195 u	0.958 u	2.696 e	2.810 e	3.346 e	3.437 e
Samoa	0.014 e	0.014 e	0.014 e	0.014 e	0.039 e	0.039 e	0.197 e	0.262 u	0.262 e	0.262 e
Solomon Is	0.800 e	1.076 e	1.076 e	1.107 e	1.482 e	1.482 e	1.369 e	1.369 e	1.369 e	3.079 e
Tokelau	0.021 u	0.021 u	0.021 u	0.021 u	0.021 e	0.021 e	0.021 e	0.021 e	0.021 e	0.021 e
Tonga	0.234 o	0.234 o	0.240 o	0.277 o	0.277 o	0.437 u	0.437 e	0.437 e	0.437 e	0.437 e
Tuvalu	0.192 o	0.192 o	1.308 o	1.316 o	1.321 o	1.332 o	1.332 o	1.332 e	1.332 e	1.332 e
Vanuatu	0.056 e	0.106 e	0.261 e	0.301 e	1.202 e	1.533 u	2.049 u	2.110 u	2.092 u	2.134 u
S America	41.587	50.536	59.320	68.036	79.922	69.566	82.943	91.100	92.292	91.282
Argentina	0.026 o	0.024 o	0.618 o	0.606 o	0.606 e	0.606 e	2.030 o	2.030 e	2.030 e	
Bolivia	5.535 e	5.535 e	5.535 e	5.535 e	5.535 e	4.860 o	5.250 o	5.250 e	5.250 e	5.250 e
Brazil	0.721 e	0.721 e	3.930 e	4.091 e	7.212 e	7.227 e	7.241 o	7.241 o	7.241 o	7.241 e
Colombia	1.383	1.418	1.463	1.520	1.520	3.577	7.473	14.621	14.621 e	14.621 o
Ecuador	0.400 o	1.940	1.940	2.010	2.010	3.169 o	3.169 o	3.169 o	3.192 o	4.192
Falklands Malv			0.070 o	0.070 o	0.070 o	0.070 o	0.070 e	0.070 e	0.070 e	0.070 e
Fr Guiana	0.161 o	0.161 o	0.161 o	0.161 o	0.161 o	0.161 o	0.161 o	0.161 e	0.161	0.161
Guyana	1.016	1.061	1.476	1.652	1.665	1.684	1.808	1.808 e	1.808 e	1.808 e
Paraguay	0.057 o	0.057 o	0.057 o	0.057 o	0.057 o	0.057 o	0.057 o	0.057 e	0.057 e	0.057 e
Peru	28.525 e	34.484 e	38.914 e	46.147 e	53.379 e	39.675	45.746	45.746 e	45.746 o	45.746 e
Suriname	0.943 e	1.195 e	1.195 e	1.660	2.632	3.226	3.226	3.882	3.882 e	3.882 e
Uruguay	0.520	0.540	0.561	1.127	1.675	2.254 o	3.712 o	4.065 o	5.234 o	5.234 o
Venezuela	2.300	3.400	3.400	3.400	3.400	3.000 e	3.000 o	3.000 e	3.000 e	3.000 e

Other renewable energy Autres énergies renouvelables Otras energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	3 782.342	4 426.819	4 700.225	4 868.826	4 253.475	4 473.115	4 330.235	4 429.599	4 819.448	5 581.704
Africa	91.486	116.486	118.356	120.777	123.721	124.211	124.316	124.316	144.316	144.316
Algeria		10.200	10.200	10.200	10.200	10.200 e	10.000 e	10.000 e	10.000 e	10.000 e
Burkina Faso	0.150 u	0.150 u	0.150 u	0.150 e	0.150 e	0.150 e	0.150 e	0.150 e	0.150 e	0.150 e
Burundi	e 4.000 o	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e	4.000 e
Chad				1.100 u	1.100 e	1.100 e	1.100 e	1.100 o	1.100 e	1.100 e
Congo DR	e 0.160 e	0.160 e	0.160 e	0.160 e	2.160 e	2.960 e	2.960 e	2.960 e	2.960 e	2.960 e
Djibouti									20.000 u	20.000 e
Egypt	o 5.000 o	5.000 o	5.000 o	5.000 o	5.000 o	5.000 o	5.000 o	5.000 o	5.000 o	5.000 e
Eritrea	e 0.825 e	0.825 e	0.825 e	0.825 e	0.825 e	0.825 e	0.825 e	0.825 e	0.825 e	0.825 e
Ethiopia				0.006 u	0.006 e	0.006 e	0.006 e	0.006 e	0.006 e	0.006 e
Gabon			1.200 e	1.200 e	1.200 e	1.200 e	1.200 e	1.200 e	1.200 e	1.200 e
Ghana	e 6.774 e	8.274 e	8.294 e	8.294 e	8.294 e	8.294 e	8.294 e	8.294 e	8.294 e	8.294 e
Kenya	e 0.554 e	0.554 e	0.604 e	0.604 e	0.714 e	0.604 e	0.604 e	0.604 e	0.604 e	0.604 e
Liberia	o 0.010 u	0.050 u	0.050 e	0.110 u	0.185 e	0.185 e	0.185 e	0.185 e	0.185 e	0.185 e
Madagascar	o 0.411 o	0.411 o	0.411 o	0.411 o	0.411 e	0.411 e	0.411 e	0.411 e	0.411 e	0.411 e
Mali	e 32.000 o	40.000 e	40.000 e	40.000 e	40.000 u	40.000 e	40.000 e	40.000 e	40.000 e	40.000 e
Mauritania	o 4.400 o	4.400 o	4.400 o	4.400 o	4.400 o	4.400 e	4.400 e	4.400 e	4.400 e	4.400 e
Morocco	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000 e	5.000 e	5.000 e
Namibia	u 0.002 u	0.002 u	0.002 u	0.002 u	0.011 u	0.011 e	0.011 e	0.011 e	0.011 e	0.011 e
Nigeria	e 7.500 e	9.000 e	9.000 e	10.230 e	10.230 e	10.230 e	10.335 e	10.335 e	10.335 e	10.335 e
Somalia	u 2.200 u	2.200 u	2.800 u	2.800 u	3.550 u	3.550 e	3.550 e	3.550 e	3.550 e	3.550 e
Tanzania	o 22.500 o	26.260 u	26.260 e	26.285 e	26.285 e	26.285 e	26.285 e	26.285 e	26.285 e	26.285 e
Asia	3 352.652	3 937.448	4 196.462	4 349.192	3 710.659	3 905.160	3 744.282	3 832.636	4 210.880	4 980.560
Afghanistan	u 0.100 e	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e
Bangladesh	o 4.420 o	5.120 o	6.650 o	7.050 o	7.050 o	7.050 e	7.050 o	7.350 o	7.350 e	7.350 e
Cambodia	e 2.250 e	2.250 e	3.750 e	3.750 e	3.750 e	3.750 e	3.750 e	3.750 e	3.750 e	3.750 e
China	210.530	249.130	297.730	342.690	370.390	401.150	431.910 e	462.670 o	493.430 e	524.190 e
India	o 584.028 o	736.305 o	785.371 o	843.616 o	849.946 e	896.347 e	866.629 e	963.869 e	963.869 e	968.069 e
Indonesia	o 1 615.000 o	1 626.000 o	1 626.000 o	1 633.000 e	1 669.000 e	1 685.260 e	1 687.260 e	1 718.820 e	2 082.810 e	2 817.530 e
Korea DPR	u 0.200 u	0.200 u	0.200 u	0.200 u	0.600 o	0.600 e	0.600 e	0.600 e	0.600 e	0.600 e
Lao PDR						0.290 o	0.290 o	0.290 o	0.290 o	0.290 e
Malaysia	o 732.530 o	1 100.000 o	1 237.800 o	1 243.000 o	531.640 o	531.640 e	531.640 e	531.640 e	531.640 e	531.640 e
Maldives	u 1.407 u	1.407 e	1.407 e	1.407 e	1.407 e	1.407 e	1.407 e	1.407 e	1.407 e	1.407 e
Mongolia	e 1.006 e	1.006 e	1.006 e	1.006 e	1.006 e	1.006 e	1.006 e	1.000	0.994	0.994
Myanmar	e 48.626 e	52.375 e	47.875 e	49.221 e	51.618 e	56.308 e	58.358 e	58.358 e	58.358 e	58.358 e
Nepal	o 0.069 u	0.069 u	0.069 u	0.069 u	0.069 e	0.169 o	0.199 o	0.199 e	0.199 e	0.199 e
Pakistan	e 0.561 e	0.561 e	0.579 e	1.253 e	1.253 e	1.253 e	1.253 e	1.253 e	1.253 e	1.253 e
Philippines	u 20.925 e	20.925 e	20.925 e	29.830 e	29.830 e	29.830 e	45.830 o	45.830 e	45.830 e	45.830 o
Viet Nam	e 131.000 e	142.000 e	167.000 e	193.000 e	193.000 e	289.000 e	107.000 e	35.500 e	19.000 e	19.000 e
C America + Carib	47.051	47.334	47.939	45.941	51.039	53.087	53.388	53.388	53.388	53.388
Belize	u 0.020 u	0.020 u	0.020 u	0.020 u	0.020 u	0.020 u	0.020 u	0.020 u	0.020 e	0.020 u
Br Virgin Is	o 0.500 o	0.500 o	0.500 o	0.500 o	0.500 o	0.500 o	0.801 o	0.801 o	0.801 o	0.801 o
Costa Rica					4.500	4.500	4.500	4.500 e	4.500 e	4.500 e
Dominica	o 0.010 o	0.010 o	0.010 o	0.010 o	0.010 o	0.010 o	0.010 e	0.010 e	0.010 e	0.010 e
Dominican Rep	e 16.121 e	16.390 e	16.895 e	17.211 e	17.309 e	17.431 e	17.431 e	17.431 e	17.431 e	17.431 e
Haiti						0.024 u	0.024 e	0.024 e	0.024 e	0.024 e
Honduras		0.014 e	3.914 e	3.914 e	3.914 e	3.914 e	3.914 e	3.914 e	3.914 e	3.914 e
Nicaragua				0.010 e	0.010 e	1.912 e	1.912 e	1.912 e	1.912 e	1.912 e
Panama	30.300	30.300	26.500	24.000	24.500 o	24.500 e	24.500 e	24.500 e	24.500 o	24.500 e
St Lucia				0.176 e	0.176 e	0.176 e	0.176 e	0.176 e	0.176 e	0.176 e
US Virgin Is	o 0.100 o	0.100 o	0.100 o	0.100 o	0.100 o	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e
Middle East	5.000	6.000	6.000	6.000	6.000	6.000	6.000	6.010	6.015	6.015
Jordan								0.010 o	0.010 o	0.010 e
Kuwait	u 2.400 u	2.400 e	2.400 e	2.400 e	2.400 e	2.400 e	2.400 e	2.400 e	2.400 e	2.400 e
Lebanon	u 2.000 u	3.000 u	3.000 e	3.000 e	3.000 e	3.000 e	3.000 e	3.000 e	3.000 e	3.000 e
Syrian AR	e 0.600 e	0.600 e	0.600 e	0.600 e	0.600 e	0.600 e	0.600 e	0.600 e	0.600 e	0.600 e
Yemen									0.005 o	0.005 e
Oceania	69.124	69.124	69.084	69.084	69.084	69.085	69.085	69.085	69.085	69.085
Fiji	u 0.024 u	0.024 u	0.024 u	0.024 u	0.024 u	0.024 u	0.024 e	0.024 e	0.024 e	0.024 e
Fr Polynesia	e 0.248 e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e
Marshall Is						0.001 u	0.001 e	0.001 e	0.001 e	0.001 e
Papua N Guin	e 68.312 e	68.312 e	68.312 e	68.312 e	68.312 e	68.312 e	68.312 e	68.312 e	68.312 e	68.312 e
Solomon Is	e 0.500 e	0.500 e	0.500 u	0.500 u	0.500 u	0.500 u	0.500 e	0.500 e	0.500 e	0.500 e
Vanuatu	e 0.040 e	0.040 e								
S America	217.029	250.427	262.384	277.832	292.972	315.572	333.164	344.164	335.764	328.340
Argentina	o 0.069 o	0.077 o	0.104 o	0.092 o	0.092 e	0.092 e	7.424 o	7.424 e	7.424 e	
Bolivia	60.170	90.500	99.000	99.000	99.000	117.500 o	122.500 o	133.500	133.500 e	133.500 e
Colombia	o 0.059 o	0.059 o	0.059 o	0.059 o	0.099 o	0.099 o	0.059 e	0.059 e	0.059 e	0.059 o
Ecuador	2.400	4.650 o	4.650 o	4.650 o	4.650 o	4.650 o	4.650 o	4.650 o	4.650 o	4.650 o
Falklands Malv	e 0.340 e	0.340 e	0.340 o	0.340 o	0.340 o	0.340 o	0.340 e	0.340 e	0.340 e	0.340 e
Fr Guiana							3.100 o	3.100 e	3.100 o	3.100

Other renewable energy Autres énergies renouvelables Otras energías renovables

CAP (MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Guyana	43.305	43.315	43.345	33.805	33.805	34.405	34.405	34.405 e	34.405 e	34.405 e
Peru	o 39.400	o 39.400	41.300	o 66.300	o 76.300	e 74.400	e 74.400	e 74.400	o 66.000	e 66.000
South Georgia	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006 e	0.006 e	0.006 e
Suriname		1.500	1.500	1.500	1.500	1.500 e	1.500 e	1.500 e	1.500 e	1.500 e
Uruguay		e 0.800	e 0.800	e 0.800	e 5.900	e 11.300	e 13.500	e 13.500	e 13.500	o 13.500
Venezuela	u 71.280	u 71.280	u 71.280	u 71.280	u 71.280	u 71.280	u 71.280	e 71.280	e 71.280	e 71.280

Other indicators

Autres indicateurs

Otros indicadores

Renewable energy share of electricity capacity

La part d'énergie renouvelable dans la puissance installée

Proporción de energía renovable en la capacidad eléctrica

%	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World	27.2	28.2	29.5	30.8	32.1	33.1	34.5	36.6	38.3	40.2
Africa	19.0	19.5	20.0	20.0	21.1	21.6	21.7	22.5	22.9	23.6
Algeria	1.6	1.6	1.8	2.8	3.2	3.1	2.8	2.6	2.3	2.3
Angola	44.5	43.9	42.9	56.0	56.8	59.6	61.8	64.0	64.0	65.6
Benin	0.4	0.7	1.7	1.7	1.7	1.9	1.1	1.1	1.1	8.6
Botswana	0.5	0.2	0.2	0.4	0.4	0.4	0.6	0.6	0.7	0.7
Burkina Faso	15.0	13.3	12.1	12.8	21.6	24.7	22.4	22.4	20.1	24.7
Burundi	73.7	73.7	73.8	74.2	53.2	53.2	53.2	53.2	56.2	61.3
Cabo Verde	23.3	23.3	18.7	18.9	18.9	20.0	20.1	20.1	20.1	20.1
Cameroon	57.7	57.8	55.5	55.6	51.3	51.4	54.0	54.0	53.9	53.9
Cent Afr Rep	50.2	46.5	46.5	46.5	46.5	46.5	46.6	46.6	21.0	21.0
Chad	0.7	0.7	0.8	1.1	1.1	1.2	1.2	1.3	1.3	1.3
Comoros	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	20.1
Congo DR	98.9	98.9	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0
Congo Rep	32.7	32.7	32.7	33.4	34.7	34.7	34.7	27.5	27.5	27.5
Cote d'Ivoire	39.0	36.3	33.5	31.5	40.1	40.2	39.7	39.7	39.0	36.1
Djibouti	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	14.2	14.2
Egypt	10.6	10.6	10.4	9.5	8.4	8.6	9.7	10.0	10.5	10.6
Eq Guinea	36.1	36.1	36.1	33.8	31.8	31.8	31.8	31.8	31.7	31.7
Eritrea	0.6	5.9	5.2	5.8	5.6	5.7	5.7	5.7	5.3	5.3
Eswatini	94.9	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.8	94.8
Ethiopia	92.1	92.1	94.8	96.4	97.8	98.1	97.7	97.8	97.9	98.2
Gabon	54.8	55.3	55.2	53.0	53.5	54.4	54.4	54.4	54.4	54.4
Gambia	3.3	3.5	3.6	3.6	3.6	3.2	3.7	3.7	3.1	3.2
Ghana	56.6	56.7	57.1	46.2	41.2	40.7	32.1	31.5	31.6	31.6
Guinea	38.0	38.0	61.1	62.0	60.3	60.0	61.7	61.1	65.6	65.6
Guinea Bissau			1.1	1.1	1.1	4.0	4.0	4.0	4.0	4.0
Kenya	65.3	65.4	65.3	66.2	67.6	71.9	72.1	75.4	76.7	77.9
Lesotho	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
Liberia	4.2	4.2	4.2	21.1	49.1	49.2	49.2	49.2	49.2	49.2
Libya	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Madagascar	30.6	24.9	25.2	25.4	23.6	24.1	24.1	24.1	24.1	24.1
Malawi	93.5	93.5	93.8	91.8	81.3	77.6	78.1	78.2	80.7	80.7
Mali	51.3	50.5	50.2	46.2	44.1	44.1	44.2	47.4	49.2	56.0
Mauritania	9.1	8.8	11.3	14.3	14.3	21.2	20.8	20.8	19.5	19.7
Mauritius	18.7	18.9	21.6	22.6	21.5	27.0	29.0	29.6	29.8	29.8
Mayotte	14.4	14.5	14.3	11.9	13.3	13.7	14.5	15.8	23.3	23.3
Morocco	24.9	26.7	28.2	28.9	28.7	29.8	30.5	33.0	33.1	33.6
Mozambique	98.0	97.5	90.5	78.6	81.8	79.0	79.0	79.1	79.1	79.4
Namibia	65.9	62.4	62.7	67.7	70.0	71.1	73.3	73.5	73.5	74.4
Niger	1.9	2.3	2.7	3.0	2.6	7.4	7.1	7.1	7.1	12.1
Nigeria	21.3	20.2	20.2	17.1	17.0	16.4	16.4	16.3	16.4	16.4
Reunion	40.2	43.9	45.3	45.5	45.5	48.2	48.7	49.2	50.2	50.2
Rwanda	53.5	59.0	51.7	52.9	50.5	51.5	54.3	56.1	56.1	50.3
Sao Tome Prn	8.1	6.9	6.4	6.5	5.5	5.6	5.6	5.6	5.6	5.6
Senegal	5.4	5.6	5.5	8.2	16.0	15.2	20.7	26.9	30.4	29.1
Seychelles	6.9	7.6	7.8	7.1	7.6	9.0	9.6	10.8	15.5	18.7
Sierra Leone	59.9	66.7	55.4	55.5	57.5	49.1	41.7	41.7	41.7	42.9
Somalia	2.7	2.8	3.6	8.5	11.5	9.6	9.6	16.0	20.4	32.3
South Africa	3.3	5.8	7.2	9.3	12.3	14.3	14.2	16.1	16.8	17.0
South Sudan	0.2	0.2	0.2	0.5	0.3	0.6	0.5	0.5	0.8	7.8
Sudan	46.4	46.5	46.5	46.1	46.2	47.4	47.7	48.2	48.4	49.2
Tanzania	38.4	40.0	41.6	38.2	38.2	33.7	33.9	33.9	33.9	33.9
Togo	27.9	27.9	27.9	27.9	28.2	28.9	29.5	30.0	36.1	36.1
Tunisia	6.0	6.2	6.6	6.5	6.5	7.3	7.2	6.7	6.7	7.7
Uganda	88.2	84.9	85.2	85.2	85.8	89.8	92.0	92.1	92.1	92.2
Zambia	97.0	94.2	93.1	83.8	82.2	82.3	82.9	82.9	84.5	86.3
Zimbabwe	41.8	41.8	42.2	42.3	42.5	49.8	49.8	49.9	50.2	49.4
Asia	24.2	25.7	27.2	28.6	30.4	31.7	33.1	35.7	37.6	39.8
Afghanistan	55.4	55.8	56.1	59.6	61.1	61.1	57.9	57.9	58.3	64.0
Bangladesh	2.9	2.8	2.8	2.6	2.8	2.3	2.4	2.3	3.0	3.1
Bhutan	99.3	99.3	99.3	99.5	99.5	99.5	99.7	99.6	99.6	99.6
Brunei Darism	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4
Cambodia	61.1	63.5	58.0	57.2	55.3	63.3	60.6	55.9	57.5	52.5
China	28.5	30.3	31.7	33.1	35.2	36.6	37.7	40.8	42.9	45.3
China HK SAR		0.0	0.0	0.2	0.4	0.5	1.4	1.4	1.4	1.3
Chinese Taipei	7.2	7.7	8.3	8.9	10.0	11.3	13.3	16.0	18.6	22.3
India	22.5	22.9	22.7	24.8	27.1	28.1	29.0	29.9	31.5	33.7
Indonesia	15.7	15.4	15.7	15.5	15.2	15.1	14.8	14.4	15.5	15.4
Japan	15.1	17.7	20.8	22.7	24.8	26.5	28.8	30.1	31.1	32.8
Kazakhstan	12.7	13.4	13.5	13.3	13.6	14.8	17.8	20.4	21.8	23.4
Korea DPR	59.2	59.3	60.3	61.5	61.8	59.0	59.0	59.4	59.4	59.4
Korea Rep	4.7	5.7	7.0	8.3	9.2	10.8	13.5	14.9	17.1	19.3
Kyrgyzstan	81.8	82.3	85.3	85.3	85.4	85.3	85.3	85.3	79.9	79.9
Lao PDR	100.0	100.0	77.7	72.4	73.4	74.7	77.3	81.3	82.6	83.7
Malaysia	18.7	21.6	24.2	25.7	22.2	22.6	21.9	23.2	23.0	23.3
Maldives	2.2	3.6	4.2	4.0	5.4	3.3	4.0	5.1	5.8	6.6

Renewable energy share of electricity capacity

La part d'énergie renouvelable dans la puissance installée

Proporción de energía renovable en la capacidad eléctrica

%	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Mongolia	7.4	7.4	7.4	8.3	13.9	18.4	19.4	18.4	18.0	22.9
Myanmar	72.6	68.9	65.7	65.6	59.1	54.9	53.6	45.3	45.2	44.6
Nepal	93.4	93.6	94.0	94.1	94.9	95.5	95.9	96.3	97.5	97.8
Pakistan	31.0	31.6	31.6	33.5	29.1	32.8	31.4	31.7	31.4	31.1
Philippines	27.2	28.5	29.1	28.2	28.0	27.6	26.4	26.5	26.5	26.4
Singapore	1.4	1.6	1.9	2.3	2.4	2.8	3.8	4.4	5.7	6.8
Sri Lanka	52.3	45.3	47.3	48.7	50.0	51.9	51.7	53.0	57.7	58.9
Tajikistan	93.8	92.3	92.3	87.5	87.5	87.8	88.0	88.0	88.0	88.0
Thailand	19.8	20.6	21.2	21.8	20.7	21.8	22.3	22.1	22.1	21.1
Timor Leste	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Turkmenistan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uzbekistan	14.0	14.2	13.3	13.1	12.6	13.5	12.0	12.3	13.0	12.8
Viet Nam	45.7	45.5	42.7	42.8	41.7	41.2	47.7	55.8	56.1	57.1
C America + Carib	26.0	27.0	29.6	32.3	34.0	34.9	36.4	36.9	38.3	39.0
Anguilla	0.2	4.0	4.0	7.3	7.3	4.6	6.0	6.0	6.0	6.0
Antigua Barb	0.3	0.3	2.8	4.2	5.1	9.7	9.7	26.5	26.5	26.5
Aruba	11.2	12.8	13.2	13.2	13.2	15.5	15.0	15.0	15.0	17.4
Bahamas	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Barbados	0.2	0.6	1.2	5.4	5.9	6.1	11.2	15.7	19.5	19.1
Belize	41.5	41.7	41.7	41.7	44.5	49.2	51.7	51.7	51.7	51.7
BES Islands	29.2	29.2	29.7	32.5	36.0	37.6	39.0	32.5	32.5	32.5
Br Virgin Is	1.0	1.0	2.4	2.7	2.0	2.0	2.4	2.7	2.7	2.7
Cayman Is				1.6	4.8	5.4	6.0	6.8	7.3	7.3
Costa Rica	77.8	78.3	79.6	83.5	86.0	86.2	86.9	86.8	87.1	88.0
Cuba	9.1	9.6	10.0	9.4	10.4	11.4	16.6	18.8	18.9	18.7
Curacao	18.0	19.9	17.7	18.0	26.1	26.4	23.3	23.7	23.7	23.7
Dominica	26.1	26.1	26.1	27.2	27.2	26.4	26.4	25.0	25.0	25.0
Dominican Rep	13.5	13.5	14.3	16.7	17.6	20.6	24.9	26.0	28.0	30.9
El Salvador	56.3	57.2	55.0	56.5	60.7	62.9	66.3	67.4	69.7	70.0
Grenada	1.1	1.5	2.1	4.2	4.3	4.8	5.8	6.6	6.3	6.3
Guadeloupe	29.8	25.2	27.5	26.4	27.0	27.6	30.9	31.3	32.5	32.9
Guatemala	55.4	57.5	58.3	63.2	67.4	69.6	69.7	69.7	69.7	69.7
Haiti	12.9	13.0	13.0	13.0	13.1	17.1	17.1	17.1	17.1	17.1
Honduras	45.9	46.3	59.7	59.9	61.2	62.1	63.0	64.7	64.9	63.1
Jamaica	10.6	10.8	10.8	17.5	19.5	19.5	18.8	17.5	17.4	17.4
Martinique	11.9	13.4	14.0	14.3	14.6	20.8	23.8	24.1	24.2	25.0
Montserrat							3.5	3.5	12.6	12.6
Nicaragua	43.1	44.9	45.6	47.3	45.4	45.5	45.2	45.2	45.4	45.4
Panama	59.8	59.9	63.1	63.7	64.5	60.0	56.0	58.0	63.9	67.3
Puerto Rico	4.9	5.0	7.2	7.8	8.7	8.8	9.0	9.7	11.3	13.3
St Barth				0.1	0.1	0.1	0.1	0.1	0.1	0.1
St Kitts Nevis	4.8	4.7	4.7	5.4	5.4	4.9	4.9	6.2	6.2	6.2
St Lucia	0.1	0.1	0.9	1.1	1.1	4.3	4.3	4.3	4.3	4.3
St Martin	4.4	5.0	7.9	3.1	0.2	0.2	0.9	1.7	1.7	1.7
St Vincent Gren	11.8	11.8	12.2	12.8	14.4	15.4	19.2	16.5	17.3	17.3
Trinidad Tobago	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Turks Caicos			0.0	0.0	0.2	0.5	1.0	1.0	1.0	1.0
US Virgin Is	0.3	1.6	2.8	2.9	2.1	3.0	3.0	3.0	3.0	3.0
Eurasia	25.4	24.5	25.9	25.4	26.1	26.9	27.3	28.6	29.6	30.1
Armenia	31.6	31.7	36.5	36.9	37.2	37.8	38.3	39.3	38.5	39.8
Azerbaijan	15.0	15.2	14.8	15.0	15.0	16.3	16.9	17.0	16.5	16.0
Georgia	79.6	77.4	72.3	72.6	74.8	74.6	73.8	73.5	75.2	76.0
Russian Fed	21.0	19.8	20.5	19.5	19.5	19.5	19.7	20.2	20.6	20.7
Türkiye	39.9	40.2	43.1	43.9	45.5	47.7	48.6	51.3	53.3	53.9
Europe	38.1	39.3	41.2	42.9	44.4	45.4	47.8	49.8	51.8	53.8
Albania	94.8	94.6	94.8	95.1	95.4	95.5	95.7	96.1	96.3	96.3
Andorra	100.0	100.0	100.0	96.2	96.8	96.8	96.9	96.9	97.0	97.0
Austria	72.1	73.4	74.7	76.7	78.6	79.5	80.2	80.3	80.7	82.2
Belarus	0.8	0.8	1.0	2.2	2.9	3.8	4.1	4.8	4.3	5.2
Belgium	27.5	28.6	30.1	31.3	33.6	36.5	39.8	43.9	45.3	47.5
Bosnia Herzg	42.8	43.0	43.1	40.8	40.6	41.6	42.2	42.5	43.4	44.0
Bulgaria	35.3	36.2	37.9	38.6	39.5	38.1	38.5	39.7	40.4	43.8
Croatia	57.6	58.5	56.9	57.6	58.7	59.5	65.1	69.8	71.6	72.4
Cyprus	11.3	12.8	13.9	14.3	15.5	16.1	17.7	21.1	24.5	29.8
Czechia	19.4	19.0	19.3	19.2	19.2	19.2	19.8	20.7	21.6	23.1
Denmark	47.7	49.5	50.8	52.1	57.2	59.4	61.3	62.9	65.9	68.5
Estonia	17.8	18.5	20.7	23.6	24.2	21.6	26.1	30.3	42.0	45.1
Faroe Islands	43.7	48.0	46.4	46.3	46.3	44.8	40.4	36.0	35.4	35.4
Finland	33.0	35.3	36.8	41.2	43.6	44.0	45.0	50.2	52.6	59.4
France	29.9	31.3	32.5	33.8	36.1	37.6	39.4	40.9	42.6	44.6
Germany	45.2	45.7	48.1	50.2	52.3	52.0	54.0	56.3	57.2	58.6
Greece	40.7	42.4	43.0	44.0	44.7	46.1	48.5	52.5	60.1	59.2
Hungary	8.9	11.8	12.5	12.0	13.8	17.5	22.9	28.2	33.7	33.6
Iceland	95.9	95.9	95.8	95.8	95.9	96.1	96.1	96.1	95.8	95.8
Ireland	25.1	28.0	28.5	31.1	34.6	36.8	40.7	42.2	43.2	44.6

Renewable energy share of electricity capacity

La part d'énergie renouvelable dans la puissance installée

Proporción de energía renovable en la capacidad eléctrica

%	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Italy	39.2	40.7	43.1	44.8	45.6	46.1	46.7	47.7	48.5	49.2
Kosovo*	4.6	4.6	4.6	8.2	8.6	8.6	9.7	10.7	16.7	16.7
Latvia	60.6	60.8	60.8	60.7	61.1	61.0	62.1	62.0	62.0	63.9
Lithuania	12.2	13.5	19.3	20.9	23.7	24.9	25.4	26.8	31.2	38.8
Luxembourg	11.6	11.1	11.8	17.6	18.6	18.9	21.7	23.8	26.8	29.8
Malta	4.8	8.5	11.7	17.1	16.5	18.8	21.3	24.6	26.3	26.3
Moldova Rep	2.2	2.3	2.3	2.3	2.7	3.5	3.6	3.8	5.1	6.3
Montenegro	73.7	74.4	74.7	74.9	76.9	77.0	78.0	78.5	78.5	78.9
Netherlands	13.7	14.7	17.0	21.0	23.5	28.1	33.8	44.0	49.9	58.3
North Macedonia	36.0	38.8	40.0	39.5	39.8	40.1	40.5	42.9	42.9	42.9
Norway	95.5	95.7	95.7	97.0	97.0	97.1	97.2	97.4	97.8	98.2
Poland	14.3	15.7	18.5	20.7	18.6	19.3	21.5	24.9	31.1	36.9
Portugal	59.0	60.5	61.9	64.1	64.7	64.9	65.4	65.6	70.6	72.0
Romania	44.2	46.9	47.3	47.6	47.5	47.6	53.7	54.3	59.5	60.3
Serbia	32.8	33.4	33.4	33.7	33.4	35.2	36.9	37.0	36.4	35.1
Slovakia	27.9	29.4	30.6	31.0	31.1	30.6	31.5	30.8	32.1	32.1
Slovenia	39.8	40.7	42.3	39.9	40.9	38.8	39.5	41.0	41.8	41.7
Spain	44.2	44.1	44.7	45.1	46.2	46.5	49.8	52.9	55.9	58.2
Sweden	65.0	65.9	67.7	69.0	70.8	70.8	72.8	71.9	75.8	77.5
Switzerland	76.1	76.4	76.7	78.0	78.9	79.2	79.5	81.4	81.8	82.3
UK	21.3	25.7	31.9	36.6	38.1	40.5	44.4	45.5	46.4	48.1
Ukraine	10.3	10.7	10.8	10.7	12.2	14.2	21.7	23.8	25.2	25.2
European Union (27)	70.4	71.2	72.3	73.2	74.2	75.1	76.3	78.0	79.4	80.9
Middle East	5.7	5.9	5.6	5.7	5.7	6.2	7.0	7.2	7.7	8.4
Bahrain	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Iran IR	14.8	15.0	14.0	14.1	14.4	14.3	14.3	14.0	13.8	13.7
Iraq	8.5	9.0	7.4	7.2	6.1	5.9	5.9	5.5	5.3	5.1
Israel	3.2	4.2	4.8	5.5	6.0	7.8	11.3	13.5	17.1	20.8
Jordan	0.5	0.4	3.5	12.0	14.5	19.2	27.2	33.3	35.3	39.1
Kuwait	0.0	0.0	0.0	0.2	0.2	0.3	0.5	0.5	0.5	0.5
Lebanon	8.1	8.2	8.1	8.6	8.8	9.3	10.0	10.1	13.7	20.8
Oman	0.0	0.0	0.0	0.0	0.1	0.1	0.6	1.5	1.8	6.3
Palestine	0.4	2.1	7.0	13.5	18.1	20.1	33.9	42.4	52.7	54.6
Qatar	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	7.2
Saudi Arabia	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.5
Syrian AR	10.4	15.4	16.5	16.0	15.4	14.9	14.9	14.9	15.1	15.3
United Arab Em	0.4	0.5	0.5	0.5	1.1	1.9	5.8	5.9	7.6	7.9
Yemen	0.2	0.3	3.8	5.0	6.2	14.1	13.4	13.6	12.8	12.8
N America	21.5	22.4	24.0	25.5	26.4	27.3	28.6	30.4	32.3	33.8
Canada	64.7	65.5	66.3	66.4	66.9	67.2	67.2	67.1	68.6	68.9
Greenland	48.7	48.7	48.7	48.7	48.7	48.8	48.8	48.9	48.9	48.9
Mexico	23.7	25.0	25.7	26.2	26.5	25.8	27.8	29.6	30.5	31.0
St Pierre Mq	2.3									
USA	16.0	16.8	18.2	19.9	21.0	22.0	23.5	25.7	27.7	29.5
Oceania	30.4	31.4	30.5	32.1	34.1	35.6	39.3	43.2	45.0	47.0
Amer Samoa	6.6	6.6	6.6	10.6	9.7	11.5	11.5	11.5	11.5	9.9
Australia	24.3	25.5	24.7	26.4	28.6	30.5	35.1	40.0	42.2	44.5
Cook Is	5.6	11.8	17.8	14.3	14.3	21.0	23.4	23.4	23.4	23.4
Fiji	61.3	61.3	55.9	56.1	57.9	58.0	55.1	55.1	56.1	56.1
Fr Polynesia	23.5	25.6	26.4	27.4	28.3	28.8	29.7	30.5	30.2	30.2
Guam	0.2	0.3	6.1	7.4	6.9	7.3	8.7	9.0	9.3	20.0
Kiribati	7.1	10.3	26.1	30.4	30.4	30.4	30.4	30.4	30.4	30.4
Marshall Is	2.0	3.4	3.4	5.3	5.5	5.6	5.6	5.6	5.6	5.8
Micronesia	2.2	5.7	6.7	7.7	7.1	9.8	10.4	10.4	10.4	10.4
Nauru	2.1	1.8	1.8	5.7	4.1	4.7	9.3	9.3	10.9	11.8
New Caledon	18.2	12.9	13.1	13.3	14.9	15.1	17.7	19.1	19.4	19.2
New Zealand	73.3	73.8	76.8	78.1	78.2	78.3	78.4	77.6	78.3	78.4
Niue	2.6	14.1	14.1	14.1	14.1	14.1	31.1	31.1	31.1	31.1
Palau	1.9	3.4	3.4	6.2	6.2	7.2	9.3	9.3	13.6	13.6
Papua N Guin	35.5	34.5	34.8	34.7	33.7	33.7	31.9	30.6	30.6	30.8
Samoa	22.2	28.4	31.0	34.5	45.7	45.8	47.3	48.0	48.0	48.0
Solomon Is	2.9	4.0	4.8	6.4	6.7	6.6	6.4	6.4	6.4	9.2
Tokelau	86.8	86.8	86.8	87.8	87.8	87.8	88.0	88.0	88.0	88.0
Tonga	17.2	14.5	19.2	22.5	30.1	30.9	34.7	34.7	31.2	46.3
Tuvalu	3.9	5.0	28.1	41.5	41.5	41.7	41.7	42.4	42.4	42.4
Vanuatu	22.7	25.7	25.9	28.8	30.0	35.5	34.7	34.3	34.3	34.4
S America	63.6	64.2	64.5	65.4	66.1	67.0	67.5	67.8	68.6	70.0
Argentina	32.9	32.3	31.2	31.0	29.3	29.4	31.5	33.1	34.6	34.7
Bolivia	29.5	27.9	26.3	27.3	31.6	35.7	30.1	30.3	31.4	32.6
Brazil	78.8	79.5	80.0	80.8	81.4	83.2	83.3	83.0	83.3	84.3
Chile	42.5	42.9	42.6	41.2	45.7	46.8	47.8	50.7	54.1	58.6
Colombia	68.1	70.5	70.0	70.0	70.2	68.7	68.6	68.9	67.9	68.6

Renewable energy share of electricity capacity

La part d'énergie renouvelable dans la puissance installée

Proporción de energía renovable en la capacidad eléctrica

%	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ecuador	43.4	42.6	43.3	56.4	58.6	60.8	60.8	60.8	60.3	61.1
Falklands Malv	16.8	16.8	15.6	15.6	15.6	15.6	30.8	19.9	19.9	19.9
Fr Guiana	58.2	54.2	53.2	50.6	47.7	47.8	48.2	47.6	47.6	47.6
Guyana	14.7	15.5	16.7	15.1	14.5	14.9	14.8	14.6	13.0	13.0
Paraguay	99.8	99.8	99.8	100.0	100.0	100.0	99.7	99.7	99.7	99.7
Peru	35.6	37.3	39.3	40.3	40.7	41.5	42.5	42.7	43.0	42.1
South Georgia	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
Suriname	37.7	35.9	36.1	36.1	35.9	36.1	36.1	35.7	33.1	33.3
Uruguay	61.3	65.7	72.4	83.5	81.8	75.8	76.0	76.0	76.1	76.1
Venezuela	49.3	48.9	48.8	51.3	51.1	50.9	50.4	50.4	50.4	50.4



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