

RENEWABLE CAPACITY STATISTICS 2024

STATISTIQUES DE CAPACITÉ RENOUVELABLE 2024

ESTADÍSTICAS DE CAPACIDAD RENOVABLE 2024

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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 achieved in the global energy transition, this latest edition of IRENA's *Renewable capacity statistics* illustrates the growth of renewables in new installed power generation capacity in 2023.

By the end of 2023, renewables accounted for 43% 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 still need to 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.

2023 saw the largest increase in renewable energy capacity to date - with the addition of 473 gigawatts (GW) of renewables - expanding the stock of renewable power by 13.9%. Renewables accounted for a record 86% of global power additions, largely due to significant growth in solar and wind power. Solar power alone accounted for nearly three-quarters of renewable additions, with a record 346 GW, while 116 GW of wind energy was added.

Despite these unprecedented renewable additions in 2023, the world is still falling short of what is required to achieve the goal adopted at COP 28 to triple installed renewable power capacity by 2030 to reach 11 TW. With one less year to meet the goal, the world now needs additions of some 1 050 GW each year for the rest of this decade to keep the world on a 1.5°C pathway in accordance with the *World Energy Transitions Outlook 1.5°C Scenario*.

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 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 Centroafricana
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	Azerbaiján
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)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Mongolia	85	85	97	180	251	276	280	280	280	280
Myanmar	3 247	3 259	3 344	3 358	3 374	3 417	3 413	3 439	3 509	3 509
Nepal	755	811	832	978	1 101	1 221	1 354	2 070	2 316	2 799
Pakistan	7 915	8 128	8 808	9 224	12 204	12 349	12 567	12 890	14 156	14 156
Philippines	5 281	5 625	6 272	6 423	6 598	6 772	6 986	7 315	7 671	7 774
Singapore	180	214	266	286	330	437	496	662	867	1 020
Sri Lanka	1 833	1 876	1 953	2 057	2 181	2 332	2 457	2 723	2 929	3 122
Tajikistan	4 983	4 983	4 983	4 983	4 984	5 744	5 744	5 745	5 763	5 763
Thailand	7 373	7 902	9 369	10 147	11 215	11 700	11 843	12 197	12 444	12 547
Timor Leste	2	2	2	1	1	1	1	1	1	1
Turkmenistan	1	1	1	1	1	1	1	2	2	2
Uzbekistan	1 872	1 882	1 883	1 861	1 919	1 912	2 025	2 156	2 478	2 668
Viet Nam	15 999	16 990	18 271	18 296	18 713	26 084	38 386	43 000	44 691	46 012
C America + Carib	10 283	12 021	13 337	14 158	15 083	16 406	16 990	17 607	18 180	19 021
Anguilla	1	1	2	2	1	2	2	2	2	2
Antigua Barb	0	3	4	4	9	9	13	15	15	16
Aruba	37	38	39	39	47	47	47	47	47	47
Bahamas	3	3	3	3	3	5	5	10	11	12
Barbados	1	3	15	16	17	33	49	64	71	71
Belize	66	66	66	74	93	99	99	99	99	99
BES Islands	11	11	13	16	17	18	18	18	18	19
Br Virgin Is	1	1	1	1	1	2	2	2	2	3
Cayman Is			3	9	11	12	14	15	15	15
Costa Rica	2 298	2 490	2 918	2 982	3 082	3 145	3 124	3 183	3 139	3 197
Cuba	599	683	664	729	758	1 114	1 327	1 349	1 362	1 384
Curacao	38	40	41	58	58	58	60	60	60	60
Dominica	7	7	8	8	7	7	7	7	7	7
Dominican Rep	707	742	840	924	1 069	1 410	1 460	1 659	1 858	2 200
El Salvador	831	915	971	1 159	1 252	1 491	1 594	1 675	1 706	1 745
Grenada	1	1	2	2	3	3	4	4	4	4
Guadeloupe	146	150	151	157	175	192	206	219	222	222
Guatemala	1 793	2 183	2 603	2 691	2 840	2 870	2 871	2 700	2 705	2 711
Haiti	58	58	59	59	81	81	81	81	81	82
Honduras	924	1 359	1 481	1 614	1 698	1 746	1 865	1 881	1 941	1 941
Jamaica	108	111	192	220	220	271	271	271	271	274
Martinique	66	70	71	73	116	133	135	140	140	146
Montserrat						0	0	1	1	1
Nicaragua	596	613	663	676	676	733	733	734	748	750
Panama	1 696	2 036	2 055	2 116	2 311	2 354	2 383	2 647	2 778	2 818
Puerto Rico	276	406	443	502	505	537	583	689	841	1 157
St Barth			0	0	0	0	0	0	0	0
St Kitts Nevis	4	4	4	4	4	4	5	5	5	5
St Lucia	0	1	1	1	4	4	4	4	4	4
St Martin	2	3	2	0	0	1	1	1	2	2
St Vincent Gren	6	8	8	8	9	10	10	10	10	11
Trinidad Tobago	4	4	4	4	4	4	4	4	4	4
Turks Caicos		0	0	0	0	1	1	3	3	4
US Virgin Is	5	9	9	5	10	10	10	10	10	10
Eurasia	84 742	88 542	91 912	96 576	100 719	104 278	110 463	115 841	119 154	122 145
Armenia	1 301	1 289	1 316	1 332	1 357	1 364	1 403	1 494	1 583	1 762
Azerbaijan	1 120	1 154	1 184	1 194	1 277	1 289	1 296	1 316	1 325	1 688
Georgia	2 800	2 802	3 180	3 134	3 241	3 324	3 349	3 393	3 420	3 525
Russian Fed	51 581	51 781	51 787	52 170	52 614	53 913	55 219	56 462	56 880	56 708
Türkiye	27 940	31 516	34 446	38 746	42 230	44 389	49 195	53 175	55 946	58 462
Europe	439 951	465 127	488 676	513 004	537 489	574 845	609 130	651 439	715 542	786 788
Albania	1 726	1 799	1 914	2 049	2 107	2 177	2 409	2 531	2 517	2 657
Andorra	51	51	51	51	52	53	54	55	55	55
Austria	17 839	18 473	19 336	19 596	20 376	20 774	21 156	22 110	23 489	26 712
Belarus	81	97	222	300	390	415	491	492	628	632
Belgium	5 982	6 368	6 695	7 419	8 300	9 511	11 273	11 888	13 053	15 047
Bosnia Herzg	1 719	1 725	1 776	1 808	1 886	1 930	1 953	2 039	2 086	2 116
Bulgaria	4 123	4 136	4 145	4 289	4 316	4 319	4 364	4 532	5 015	6 215
Croatia	2 577	2 713	2 793	2 916	2 979	3 068	3 255	3 490	3 585	3 980
Cyprus	221	244	252	278	289	322	400	485	595	778
Czechia	4 170	4 214	4 212	4 278	4 271	4 375	4 451	4 552	4 735	4 823
Denmark	6 750	7 109	7 410	8 194	8 902	9 180	9 656	10 867	12 167	13 024
Estonia	561	594	607	615	609	716	829	1 012	1 140	1 400
Faroe Islands	60	60	60	60	56	53	59	64	64	64

Total renewable energy

Total énergies renouvelables

Total energías renovables

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Finland	5 747	6 142	6 746	7 512	7 563	7 890	8 774	9 564	12 709	14 093
France	40 733	43 024	45 059	48 036	50 687	53 544	55 847	59 700	64 692	69 301
Germany	90 325	97 851	104 436	112 514	118 905	125 068	131 686	139 077	149 143	166 939
Greece	8 010	8 138	8 424	8 686	9 020	9 923	10 921	12 456	13 681	15 805
Hungary	1 024	1 077	1 048	1 224	1 630	2 288	3 024	3 906	5 155	6 756
Iceland	2 653	2 658	2 659	2 711	2 862	2 869	2 879	2 879	2 880	2 880
Ireland	2 593	2 763	3 122	3 688	4 067	4 567	4 803	4 911	5 170	5 889
Italy	49 526	50 417	51 195	52 128	53 161	54 373	55 493	56 856	59 479	65 157
Kosovo*	44	44	81	121	121	139	154	158	192	267
Latvia	1 778	1 782	1 778	1 796	1 779	1 826	1 826	1 823	1 927	2 194
Lithuania	545	693	768	787	836	859	937	1 159	1 753	2 785
Luxembourg	225	239	301	318	324	386	430	504	572	782
Malta	58	78	98	116	137	160	193	210	225	234
Moldova Rep	69	69	71	81	106	110	116	153	255	308
Montenegro	653	662	668	747	748	794	817	817	837	857
Netherlands	4 661	5 748	7 203	7 937	9 867	12 569	18 663	23 472	29 329	35 627
North Macedonia	682	716	720	731	736	742	820	828	973	1 354
Norway	32 252	32 394	32 814	33 251	34 396	35 912	37 999	39 406	39 766	40 161
Poland	5 638	6 919	7 881	7 982	8 301	9 361	12 275	16 457	22 522	27 331
Portugal	11 573	12 153	13 208	13 541	13 753	14 118	14 208	15 074	17 109	18 415
Romania	11 152	11 212	11 162	11 145	11 169	11 169	11 121	11 120	11 580	11 763
Serbia	2 423	2 440	2 461	2 482	2 695	2 910	2 928	2 957	3 067	3 181
Slovakia	2 380	2 384	2 397	2 385	2 329	2 431	2 377	2 406	2 433	2 515
Slovenia	1 405	1 420	1 408	1 479	1 474	1 512	1 612	1 704	1 863	2 296
Spain	46 850	47 708	47 798	47 948	48 283	54 601	57 313	62 011	73 818	80 136
Sweden	25 528	26 869	27 805	28 179	29 180	31 156	31 951	34 505	37 573	40 646
Switzerland	14 638	15 040	16 259	17 049	17 470	17 826	18 334	19 025	19 726	21 440
UK	24 880	30 800	35 436	40 046	43 907	46 664	47 518	49 263	53 064	55 561
Ukraine	6 048	6 105	6 199	6 530	7 455	12 189	13 764	14 921	14 921	14 612
European Union (27)	352 565	371 093	387 892	405 572	423 192	450 804	479 589	516 677	575 334	641 478
Middle East	15 962	15 905	16 719	17 087	18 645	21 432	23 318	25 876	30 485	35 542
Bahrain	6	6	7	7	7	10	11	22	48	59
Iran IR	10 954	10 411	10 783	11 367	11 638	11 803	11 901	11 930	12 399	12 653
Iraq	2 311	2 311	2 311	1 594	1 594	1 594	1 594	1 594	1 599	1 599
Israel	686	837	968	1 068	1 408	2 200	2 711	3 650	4 579	4 872
Jordan	17	200	514	635	1 074	1 374	2 088	2 460	2 597	2 621
Kuwait	6	7	24	25	46	97	97	97	114	114
Lebanon	292	298	318	331	347	368	382	482	1 167	1 297
Oman	1	2	2	8	26	76	179	205	705	722
Palestine	3	12	25	35	40	82	118	178	192	192
Qatar	23	23	24	24	24	24	24	24	824	824
Saudi Arabia	24	24	24	37	87	113	113	443	843	2 689
Syrian AR	1 501	1 579	1 501	1 497	1 499	1 500	1 509	1 530	1 557	1 557
United Arab Em	133	134	136	354	601	1 936	2 334	3 003	3 597	6 052
Yemen	5	60	81	103	253	254	258	258	264	290
N America	287 273	309 129	332 861	349 300	367 118	390 849	423 879	461 778	495 043	529 922
Canada	89 508	95 612	97 484	98 638	100 119	100 631	101 439	104 439	106 587	108 764
Greenland	92	92	92	92	92	92	92	93	93	93
Mexico	16 702	17 415	19 112	19 856	21 311	26 306	28 955	30 618	31 950	33 517
St Pierre Mq	1									
USA	180 970	196 010	216 174	230 714	245 596	263 820	293 392	326 629	356 413	387 549
Oceania	25 354	26 521	27 479	29 230	34 626	40 963	48 079	53 680	58 426	63 908
Amer Samoa	2	2	4	4	5	5	5	5	5	5
Australia	17 370	18 415	19 339	21 024	26 351	32 605	39 629	44 896	49 104	54 328
Cook Is	2	3	3	3	5	6	6	6	6	6
Fiji	191	198	200	215	216	216	216	224	224	226
Fr Polynesia	73	77	80	83	86	90	94	95	102	102
Guam	1	32	35	37	38	40	42	43	105	105
Kiribati	1	2	3	3	3	3	3	3	3	3
Marshall Is	1	1	2	2	2	2	2	2	2	2
Micronesia	2	2	2	2	4	4	4	4	4	4
Nauru	0	0	1	1	1	2	2	3	3	3
New Caledon	120	123	126	143	156	191	215	266	319	324
New Zealand	7 253	7 300	7 309	7 331	7 375	7 407	7 464	7 734	8 137	8 306
Niue	0	0	0	0	0	1	1	1	1	1
Palau	1	1	2	2	3	3	3	4	4	20
Papua N Guin	309	327	328	328	328	329	329	330	333	399

Total renewable energy Total énergies renouvelables Total energías renovables

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Samoa	13	17	24	27	28	31	35	35	35	35
Solomon Is	2	2	3	4	4	4	4	4	5	6
Tokelau	1	1	1	1	1	1	1	1	1	1
Tonga	3	4	5	7	7	8	8	8	16	16
Tuvalu	0	4	4	4	4	4	4	4	4	4
Vanuatu	8	8	9	10	11	12	12	12	12	12
S America	170 197	178 771	193 639	202 825	213 611	223 608	232 868	247 043	266 748	289 173
Argentina	10 532	10 563	10 625	10 745	11 512	12 664	14 102	15 114	15 185	15 886
Bolivia	543	609	647	754	905	911	1 027	1 176	1 226	1 294
Brazil	106 445	112 646	121 378	128 425	136 613	144 657	150 685	161 483	176 709	194 085
Chile	8 272	8 412	9 172	10 285	10 996	11 511	13 013	14 991	18 185	21 061
Colombia	11 134	11 757	11 888	12 071	12 194	12 291	12 384	12 500	13 405	14 258
Ecuador	2 440	2 599	4 640	4 715	5 267	5 277	5 298	5 300	5 394	5 448
Falklands Malv	3	3	3	3	3	3	3	3	3	3
Fr Guiana	158	173	173	173	173	179	180	180	181	181
Guyana	56	58	49	50	51	53	53	53	53	53
Paraguay	8 849	8 849	8 849	8 849	8 849	8 851	8 852	8 852	8 853	8 853
Peru	4 078	4 711	5 751	5 847	6 123	6 312	6 368	6 431	6 578	6 744
South Georgia	0	0	0	0	0	0	0	0	0	0
Suriname	186	188	188	189	190	190	191	191	193	193
Uruguay	2 441	2 888	3 267	3 711	3 722	3 731	3 735	3 743	3 758	4 089
Venezuela	15 057	15 316	17 007	17 007	17 013	16 978	16 978	17 025	17 025	17 026

Hydropower Hydroélectricité Hidroeléctrica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Dominican Rep	593	613	613	614	616	625	625	625	624	624
El Salvador	490	497	495	575	575	576	575	573	573	573
Guadeloupe	9	9	9	11	11	11	11	11	11	11
Guatemala	1 013	1 087	1 392	1 438	1 502	1 574	1 577	1 572	1 573	1 574
Haiti	56	56	56	56	78	78	78	78	78	78
Honduras	629	638	677	682	713	736	844	856	916	916
Jamaica	30	30	30	30	30	30	30	30	30	30
Nicaragua	120	138	142	142	142	157	157	158	159	160
Panama	1 574	1 725	1 632	1 647	1 770	1 791	1 810	1 810	1 845	1 845
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	80 151	82 535	83 724	84 521	85 773	86 583	89 420	90 103	90 212	89 812
Armenia	1 298	1 287	1 312	1 327	1 336	1 340	1 350	1 345	1 345	1 358
Azerbaijan	1 078	1 103	1 105	1 106	1 131	1 145	1 149	1 157	1 165	1 302
Georgia	2 800	2 802	3 160	3 113	3 220	3 300	3 323	3 354	3 376	3 446
Russian Fed	51 332	51 475	51 466	51 702	51 795	52 295	52 614	52 754	52 754	51 927
Türkiye	23 643	25 868	26 681	27 273	28 291	28 503	30 984	31 493	31 571	31 779
Europe	211 825	214 429	217 976	219 572	220 614	221 543	223 074	224 212	225 805	225 729
Albania	1 725	1 798	1 913	2 047	2 105	2 162	2 387	2 507	2 493	2 493
Andorra	46	46	46	46	46	46	46	46	46	46
Austria	13 532	13 650	14 116	14 150	14 516	14 597	14 635	14 748	14 923	14 708
Belarus	33	34	74	95	95	95	96	96	96	97
Belgium	1 428	1 419	1 416	1 414	1 415	1 411	1 413	1 418	1 430	1 430
Bosnia Herzg	2 131	2 137	2 180	2 211	2 236	2 239	2 249	2 257	2 258	2 258
Bulgaria	3 219	3 219	3 223	3 372	3 379	3 378	3 376	3 369	3 390	3 390
Croatia	2 180	2 195	2 192	2 193	2 200	2 200	2 200	2 201	2 206	2 206
Czechia	2 252	2 260	2 262	2 265	2 264	2 265	2 265	2 285	2 286	2 287
Denmark	9	7	9	7	7	7	7	7	7	7
Estonia	5	6	6	7	7	6	8	6	8	8
Faroe Islands	39	39	39	39	40	40	40	40	40	40
Finland	3 132	3 133	3 133	3 156	3 152	3 157	3 164	3 171	3 171	3 177
France	25 526	25 552	25 621	25 707	25 727	25 868	25 954	25 991	25 964	25 881
Germany	11 234	11 255	11 207	11 120	10 684	10 733	10 808	10 844	10 974	11 164
Greece	3 389	3 392	3 392	3 392	3 409	3 412	3 417	3 421	3 421	3 427
Hungary	57	57	57	57	57	58	58	60	60	60
Iceland	1 984	1 987	1 987	1 995	2 099	2 104	2 114	2 114	2 114	2 114
Ireland	529	529	529	529	529	529	529	529	529	529
Italy	22 098	22 220	22 298	22 426	22 499	22 541	22 695	22 750	22 861	22 887
Kosovo*	43	43	78	80	80	95	110	110	110	110
Latvia	1 588	1 588	1 564	1 564	1 565	1 587	1 586	1 587	1 588	1 567
Lithuania	877	877	877	877	877	877	877	877	877	878
Luxembourg	1 330	1 330	1 330	1 331	1 330	1 330	1 331	1 331	1 330	1 330
Moldova Rep	64	64	64	64	64	64	64	64	64	64
Montenegro	653	662	668	675	676	676	697	697	697	697
Netherlands	37	37	37	37	37	37	37	38	38	38
North Macedonia	630	658	661	671	674	678	687	689	696	696
Norway	31 240	31 372	31 817	31 912	32 530	32 797	33 732	34 075	34 269	34 401
Poland	2 364	2 370	2 385	2 390	2 391	2 397	2 400	2 398	2 407	2 406
Portugal	5 715	6 168	6 960	7 226	7 236	7 262	7 241	7 255	8 189	8 188
Romania	6 613	6 730	6 734	6 692	6 701	6 686	6 652	6 662	6 663	6 666
Serbia	3 017	3 022	3 030	3 038	3 043	3 074	3 082	3 085	3 107	3 108
Slovakia	2 523	2 522	2 524	2 523	2 528	2 527	2 529	2 531	2 532	2 532
Slovenia	1 296	1 295	1 293	1 347	1 343	1 351	1 352	1 352	1 346	1 342
Spain	19 223	20 053	20 080	20 079	20 080	20 114	20 117	20 132	20 137	20 140
Sweden	15 996	16 329	16 466	16 502	16 431	16 462	16 406	16 407	16 399	16 399
Switzerland	13 744	13 815	14 806	15 353	15 542	15 574	15 594	15 611	15 627	15 841
UK	4 473	4 677	4 733	4 770	4 777	4 780	4 785	4 790	4 790	4 790
Ukraine	5 851	5 883	6 167	6 213	6 243	6 325	6 334	6 662	6 662	6 327
European Union (27)	146 415	148 455	149 974	150 626	150 628	151 057	151 321	151 634	152 999	152 911
Middle East	15 094	15 665	15 881	15 535	15 681	15 764	16 074	16 072	16 422	16 598
Iran IR	10 785	11 278	11 578	11 953	12 099	12 182	12 193	12 193	12 543	12 719
Iraq	2 514	2 514	2 514	1 797	1 797	1 797	1 797	1 797	1 797	1 797
Israel	7	7	7	7	7	7	306	306	306	306
Jordan	12	12	6	6	6	6	6	4	4	4
Lebanon	282	282	282	282	282	282	282	282	282	282
Syrian AR	1 494	1 572	1 494	1 490	1 490	1 490	1 490	1 490	1 490	1 490
N America	190 300	194 081	195 823	196 402	197 251	197 551	198 057	197 373	200 126	200 280
Canada	75 474	79 405	80 304	80 831	81 570	81 570	81 575	83 106	83 481	83 481
Greenland	91	91	91	91	91	91	91	91	91	91
Mexico	12 464	12 223	12 580	12 628	12 628	13 076	13 301	13 303	13 304	13 304
USA	102 270	102 361	102 848	102 851	102 962	102 814	103 090	100 873	103 249	103 404

Hydropower Hydroélectricité Hidroeléctrica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Oceania	14 221	14 239	14 239	14 243	14 496	14 508	14 514	14 514	14 755	15 548
Australia	8 271	8 271	8 271	8 271	8 523	8 523	8 523	8 523	8 523	9 250
Fiji	138	138	138	138	138	138	138	138	138	138
Fr Polynesia	47	47	47	48	48	49	49	49	49	49
Micronesia	1	1	1	1	1	1	1	1	1	1
New Caledon	78	78	78	78	78	78	81	81	81	81
New Zealand	5 435	5 435	5 435	5 435	5 435	5 443	5 443	5 443	5 680	5 680
Papua N Guin	240	258	258	258	258	258	258	258	261	327
Samoa	9	9	9	13	13	16	20	20	20	20
Solomon Is	0	0	0	0	0	0	0	0	0	0
Vanuatu	1	1	1	1	1	1	1	1	1	2
S America	149 541	153 593	163 946	167 686	172 794	177 744	178 285	178 365	179 901	180 844
Argentina	11 112	11 114	11 176	11 249	11 294	11 316	11 350	11 351	11 364	11 364
Bolivia	483	484	484	602	735	735	736	736	736	736
Brazil	89 194	91 655	96 934	100 339	104 496	109 162	109 345	109 458	109 802	109 903
Chile	6 411	6 492	6 625	6 645	6 634	6 680	6 934	6 807	7 289	7 471
Colombia	10 900	11 501	11 611	11 731	11 842	11 926	11 954	11 949	12 553	13 211
Ecuador	2 248	2 408	4 446	4 516	5 066	5 076	5 098	5 099	5 191	5 192
Fr Guiana	120	120	120	120	120	120	120	120	120	120
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	3 651	4 139	5 179	5 113	5 230	5 387	5 406	5 503	5 504	5 504
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	14 892	15 149	16 840	16 840	16 846	16 811	16 811	16 811	16 811	16 811

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

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Oceania	13 411	13 429	13 429	13 433	13 686	13 698	13 704	13 704	13 945	14 738
Australia	7 461	7 461	7 461	7 461	7 713 o	7 713 o	7 713 o	7 713 o	7 713 e	8 440 e
Fiji	138 u	138 u	138 u	138 u	138 u	138 e	138 e	138 e	138 e	138 e
Fr Polynesia	47 o	47 o	47 o	48 o	48 o	49 o	49 e	49 e	49 o	49 e
Micronesia	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 e	1 e	1 e
New Caledon	78 o	78 o	78 o	78 o	78 o	78 e	81 o	81 e	81 e	81 e
New Zealand	5 435	5 435	5 435	5 435	5 435	5 443	5 443	5 443	5 680 o	5 680 e
Papua N Guin	240 e	258 e	258 e	258 e	258 e	258 e	258 e	258 e	261 e	327 e
Samoa	9 e	9 e	9 e	13	13	16	20	20 e	20 e	20 e
Solomon Is	0 o	0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e
Vanuatu	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	2 e
S America	148 567	152 619	162 972	166 712	171 820	176 770	177 311	177 391	178 927	179 870
Argentina	10 138	10 140 o	10 202 o	10 275 o	10 320 o	10 342 o	10 376 o	10 377 o	10 390 o	10 390 o
Bolivia	483	484	484	602	735 e	735 o	736 e	736 e	736 e	736
Brazil	89 194 o	91 655 o	96 934 o	100 339 o	104 496 o	109 162 o	109 345 o	109 458 o	109 802 o	109 903 o
Chile	6 411 o	6 492 o	6 625 o	6 645 o	6 634 o	6 680 o	6 934 o	6 807 o	7 289 o	7 471 o
Colombia	10 900	11 501 e	11 611 e	11 731 o	11 842 o	11 926 e	11 954 e	11 949 o	12 553 o	13 211 o
Ecuador	2 248 o	2 408 o	4 446 o	4 516 e	5 066 o	5 076 o	5 098 o	5 099 o	5 191	5 192
Fr Guiana	120 o	120 o	120 o	120 o	120 o	120 o	120 o	120 o	120 o	120 e
Guyana	2 e	2 o	2 e	2 e	2 e	2 o	2 e	2 e	2 e	2 e
Paraguay	8 810	8 810	8 810	8 810	8 810 o	8 810	8 810 o	8 810 e	8 810 e	8 810 o
Peru	3 651 o	4 139 o	5 179 o	5 113 o	5 230 o	5 387 o	5 406 o	5 503 o	5 504 o	5 504 e
South Georgia	0	0	0	0	0	0	0 e	0 e	0 e	0 e
Suriname	180 e	180 e	180 e	180 e	180 e	180 e	180 e	180 e	180 e	180 e
Uruguay	1 538	1 538	1 538	1 538	1 538 o	1 538 e	1 538 o	1 538 e	1 538 o	1 538 o
Venezuela	14 892 o	15 149 o	16 840 e	16 840 e	16 846 o	16 811 o	16 811 o	16 811 o	16 811 o	16 811 o

Pure pumped storage Accumulation par pompage Hidroeléctrica de bombeo pura

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	109 471	111 902	116 995	119 844	120 366	120 612	122 355	125 041	134 384	139 851
Africa	1 864	1 864	2 863	3 196	3 196	3 196	3 196	3 196	3 196	3 196
Morocco	464	464	464	464 o	464	464 e	464 e	464 e	464 o	464 e
South Africa	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	2 732 u
Asia	57 218	58 338	61 971	64 671	65 271	65 571	66 771	71 671	80 991	86 141
China	22 110	23 030	26 690	29 390 e	29 990	30 290	31 490	36 390	45 790	50 940
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 e	4 786 o	4 786 e	4 786 e	4 786 e	4 786 e
Japan	21 724	21 924	21 897	21 897	21 897	21 897	21 897	21 897	21 817 o	21 817 o
Korea Rep	4 700	4 700	4 700	4 700 o	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 e	0	0	0	0 e
Philippines	736 o	736 o	736 o	736 o	736 o	736 o	736 o	736 e	736 o	736 o
Thailand	560 o	560 o	560 o	560 o	560 o	560 o	560 o	560 e	560 e	560 e
C America + Carib					6	6	6	6	6	6
Honduras					6 o	6 o	6 o	6 o	6 o	6 o
Eurasia	1 216	1 216	1 216	1 216	1 216	1 216	1 216	1 356	1 356	1 356
Russian Fed	1 216	1 216	1 216	1 216	1 216	1 216	1 216	1 356 e	1 356	1 356 e
Europe	28 199	28 380	28 680	28 464	28 360	28 360	28 365	28 689	28 676	28 871
Belgium	1 307	1 307	1 307	1 307	1 307	1 307	1 307	1 307	1 307	1 307 o
Bosnia Herzg	420 o	420 o	420 o	420 o	420 e	420 o	420 o	420 o	420	420 o
Bulgaria	864	864	864	864	864	864	864	864	864	864 e
Czechia	1 172	1 172	1 172	1 172	1 172	1 172	1 172 o	1 172	1 172	1 172 u
France	1 728	1 728	1 728	1 728	1 728 o	1 728	1 728	1 728	1 728	1 742 o
Germany	5 654	5 666	5 578	5 493	5 355	5 355	5 354	5 354	5 353	5 423 o
Ireland	292	292	292	292	292	292	292	292	292	292 e
Italy	3 982	3 982	3 982	3 940	3 940 o	3 940	3 940	3 940	3 928	4 039
Lithuania	760	760	760	760	760	760	760	760	760	760 o
Luxembourg	1 296	1 296	1 296	1 296 e	1 296 e	1 296 e	1 296	1 296	1 296	1 296 o
Poland	1 406	1 406	1 413	1 423	1 423	1 423	1 423	1 423	1 423	1 423 e
Romania	92	92	92	92	92	92	92	92	92	92 e
Serbia	614	614	614	614	614 o	614 e	614 e	614 e	614	614 e
Slovakia	916	916	916	916 e	916	916 e	916 e	916 e	916	916 e
Slovenia	180	180	180	180 e	180	180 e	180	180 o	180	180 e
Spain	3 331	3 331	3 331	3 331	3 331	3 331	3 331	3 331	3 331 o	3 331 o
Sweden	99	99	99	99	99	99	99	99	99	99
Switzerland	456	469	527	527 e	562	562	562 e	562 o	562	562 e
UK	2 444	2 600	2 600	2 600	2 600	2 600 o	2 600 o	2 600 o	2 600	2 600
Ukraine	1 186	1 186	1 509	1 509 o	1 509 o	1 509 e	1 515	1 839	1 839 e	1 839 e
European Union (27)	23 079	23 091	23 010	22 794	22 655	22 655	22 654	22 654	22 641	22 836
Middle East	240	1 280	1 280	1 280	1 280	1 280	1 580	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	1 040 e
Iraq	240	240	240 e	240 e	240 e	240 e	240 e	240 e	240 e	240 e
Israel							300 u	300 e	300 e	300 e
N America	18 950	19 040	19 201	19 233	19 253	19 199	19 437	16 759	16 795	16 918
Canada	174	174	174 o	174 e	174 e	174 o	174 o	174 o	174 o	174 e
USA	18 776	18 866	19 027	19 059	19 079	19 025	19 263 o	16 585 o	16 621 o	16 744 o
Oceania	810	810	810	810	810	810	810	810	810	810
Australia	810	810	810	810	810	810 o	810 o	810 o	810 e	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	974 o

Marine energy Énergie marine Energía marina

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	514	513	524	528	528	526	525	524	525	527
Asia	260	260	260	260	260	261	261	261	261	261
China	4	4	4	4	4	4 e	5 u	5 e	5 e	5 e
Korea DPR	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Korea Rep	255 o	255	255	255 o	255 o	256	256	256	256 o	256 o
Singapore	0	0	0	0 e	0 o	0 e	0 e	0 e	0 e	0 e
Eurasia	2	2	2	2	2	2	2	2	2	3
Russian Fed	2 u	2 u	2 u	2 u	2 o	2 e	2	2 e	2	3 e
Europe	231	231	241	245	246	244	242	241	242	242
Faroe Islands		0 u					0 o	0 e	0	0 e
France	220	218	220	219	218	214	212	211	212	212 e
Italy	0 u	0 u	0 u	0 e	0 e	0 e	0	0	0	0
Netherlands	0 u	2 u	2 e	2 e	2 e	2 u	2 e	2 e	2	2 e
Norway	0 u	0 u	0 u	0 e	0 e	0 e	0 e	0 e	0	0 e
Portugal	1			0	0					
Spain	0 u	0 u	5	5	5	5	5	5	5	5 e
Sweden	0 u	0 u	0 u	0 e	0 e					
UK	9	9	13	18	20	22	22	22	22	22
European Union (27)	222	221	227	227	226	221	219	218	219	219
N America	20	20	20	20	20	20	20	20	21	21
Canada	20	20	20	20	20 e	20 e	20 e	20 e	21 e	21 e
USA	0 e	0 u	0 u	0 o						
Oceania	1	1	1	1		0	0	0	0	
Australia	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 o	0 o	0 o	0 o	0 o	0 o

Wind energy

Énergie éolienne

Energía eólica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	349 418	416 335	466 956	515 045	563 840	622 773	733 719	824 602	901 231	1 017 199
Africa	2 399	3 320	3 831	4 578	5 471	5 528	6 514	6 909	7 745	8 654
Algeria	10	10	10	10	10	10	10	10	10	10
Cabo Verde	27	27	27	27	27	27	27	27	27	27
Chad			1	1	1	1	1	1	1	1
Djibouti								20	20	80
Egypt	555	755	755	755	1 130	1 132	1 380	1 640	1 643	1 890
Eritrea	1	1	1	1	1	1	1	1	1	1
Ethiopia	171	324	324	324	324	324	324	324	404	324
Gambia	1	1	1	1	1	1	1	1	1	1
Ghana		0	0	0	0	0	0	0	0	0
Kenya	6	26	26	26	336	336	336	436	436	436
Madagascar	0	0	0	0	0	0	0	0	0	0
Mauritania	4	34	34	34	34	34	34	34	34	137
Mauritius	1	1	11	11	11	11	11	11	11	11
Morocco	797	797	902	1 022	1 225	1 225	1 435	1 471	1 558	1 858
Namibia	0	0	0	5	5	5	5	5	5	5
Reunion	15	15	17	17	17	17	17	17	15	15
Senegal						55	159	159	159	159
Seychelles	6	6	6	6	6	6	6	6	6	6
Somalia	2	3	3	4	4	4	4	4	4	4
South Africa	569	1 079	1 473	2 094	2 094	2 094	2 516	2 495	3 163	3 442
Tanzania							2	2	2	2
Tunisia	233	240	240	240	245	245	245	245	245	245
Asia	124 337	161 805	184 144	205 017	229 095	257 670	331 941	384 757	426 333	508 452
Afghanistan	0	0	0	0	0	0	0	0	0	0
Bangladesh	2	3	3	3	3	3	3	3	3	3
Bhutan		1	1	1	1	1	1	1	1	1
Cambodia	0	0	0	0	0	0	0	0	0	0
China	96 819	131 048	148 517	164 374	184 665	209 582	281 993	328 973	365 964	441 895
China HK SAR				1	1	1	1	1	1	1
Chinese Taipei	637	647	682	692	713	845	937	1 033	1 581	2 674
India	22 465	25 088	28 700	32 848	35 288	37 505	38 559	40 067	41 930	44 736
Indonesia	1	1	1	1	144	154	154	154	154	154
Japan	2 753	2 809	3 205	3 483	3 498	3 952	4 120	4 262	4 372	5 232
Kazakhstan	53	72	98	112	121	284	486	684	1 108	1 440
Korea DPR	1	1	1	1	1	1	2	2	2	2
Korea Rep	612	847	1 067	1 215	1 420	1 494	1 645	1 724	1 908	2 167
Maldives	1	1	1	1	1	1	1	1	1	1
Mongolia	51	51	51	101	156	156	156	156	156	156
Myanmar		0	0	0	0	0	0	0	0	0
Nepal	0	0	0	0	0	0	0	0	0	0
Pakistan	206	308	591	789	1 186	1 236	1 236	1 335	1 845	1 845
Philippines	337	427	427	427	427	443	443	443	443	443
Singapore				0	0	0	0	0	0	0
Sri Lanka	121	131	131	131	128	128	179	252	252	267
Thailand	225	234	507	628	1 103	1 507	1 507	1 545	1 545	1 545
Uzbekistan				1	1	1	1	1	1	1
Viet Nam	53	136	160	205	237	375	518	4 118	5 065	5 888
C America + Carib	927	1 296	1 535	1 660	1 787	2 005	2 019	2 042	2 156	2 174
Aruba	30	30	30	30	30	30	30	30	30	30
Bahamas	0	0	0	0	0	0	0	0	0	0
Barbados	0	0	0	0	0	0	0	0	1	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
Cayman Is					1	1	1	1	1	1
Costa Rica	196	278	319	378	408	411	394	390	390	408
Cuba	16	66	66	66	66	66	66	66	66	66
Curacao	30	30	30	47	47	47	47	47	47	47
Dominica	0	0	0	0	0	0	0	0	0	0
Dominican Rep	80	86	135	135	183	370	370	370	417	417
El Salvador							36	54	54	54
Grenada	0	0	0	0	0	0	0	0	0	0
Guadeloupe	26	27	27	27	43	48	42	52	52	52
Guatemala		76	76	76	107	107	107	107	107	107
Haiti					0	0	0	0	0	0
Honduras	152	156	179	229	229	239	239	239	239	239
Jamaica	42	42	102	102	102	102	102	102	102	102
Martinique	1	1	1	1	1	14	15	14	14	14
Nicaragua	186	186	186	186	186	186	186	186	186	186
Panama	55	205	270	270	270	270	270	270	336	336
Puerto Rico	99	99	99	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	0
US Virgin Is	0	0	0	0	0	0	0	0	0	0

Wind energy

Énergie éolienne

Energía eólica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Eurasia	3 645	4 525	5 801	6 566	7 146	7 783	9 868	12 652	13 702	14 305
Armenia	3	3	3	3	3	3	3	3	3	3
Azerbaijan	3	8	16	16	66	66	66	66	64	67
Georgia			20	20	20	21	21	21	21	21
Russian Fed	10	11	11	11	52	102	945	1 955	2 218	2 518
Türkiye	3 630	4 503	5 751	6 516	7 005	7 591	8 832	10 607	11 396	11 697
Europe	130 198	143 015	155 727	170 616	181 787	196 110	207 896	221 517	240 278	257 111
Austria	2 110	2 489	2 730	2 887	3 133	3 224	3 226	3 408	3 579	3 977
Belarus	9	22	62	84	92	112	112	112	120	122
Belgium	1 933	2 181	2 334	2 779	3 305	3 864	4 673	4 948	5 303	5 504
Bosnia Herzg	0	0	0	0	51	87	87	135	135	135
Bulgaria	699	699	699	698	699	703	703	704	702	702
Croatia	339	418	483	576	586	646	801	987	987	1 143
Cyprus	147	158	158	158	158	158	158	158	158	158
Czechia	278	281	282	308	316	339	339	339	339	343
Denmark	4 886	5 077	5 245	5 489	6 123	6 111	6 259	7 004	7 084	7 482
Estonia	275	300	310	312	310	316	317	315	316	408
Faroe Islands	20	20	20	20	16	13	19	23	23	23
Finland	627	1 005	1 565	2 044	2 041	2 284	2 586	3 257	5 677	6 957
France	9 201	10 298	11 567	13 499	14 900	16 427	17 535	18 551	20 811	22 196
Germany	38 614	44 580	49 435	55 580	58 721	60 742	62 201	63 711	66 163	69 459
Greece	1 978	2 091	2 370	2 624	2 877	3 589	4 119	4 649	4 702	5 220
Hungary	329	329	329	329	329	323	323	324	324	324
Iceland	3	3	3	2	2	2	2	2	2	2
Ireland	2 283	2 451	2 802	3 319	3 674	4 126	4 307	4 339	4 536	4 807
Italy	8 683	9 137	9 384	9 737	10 230	10 679	10 871	11 254	11 821	12 308
Kosovo*	1	1	1	34	34	34	34	34	68	137
Latvia	69	68	70	77	78	78	78	77	82	141
Lithuania	288	436	509	518	533	534	540	671	946	1 287
Luxembourg	58	64	120	120	123	136	153	136	165	221
Malta	0	0	0	0	0	0	0	0	0	0
Moldova Rep	1	1	2	9	33	35	41	67	115	141
Montenegro				72	72	118	118	118	118	118
Netherlands	2 865	3 391	4 257	4 202	4 393	4 484	6 648	7 674	8 755	10 749
North Macedonia	37	37	37	37	37	37	37	37	73	110
Norway	859	867	883	1 207	1 710	2 914	4 030	5 049	5 062	5 065
Poland	3 836	4 886	5 747	5 759	5 766	5 838	6 298	6 967	8 150	9 307
Portugal	4 857	4 937	5 124	5 124	5 172	5 223	5 122	5 427	5 538	5 617
Romania	3 244	3 130	3 025	3 030	3 032	3 038	3 013	3 015	3 015	3 087
Serbia	1	10	17	25	227	398	398	398	398	511
Slovakia	3	3	3	4	3	4	4	4	4	4
Slovenia	3	3	3	3	3	3	3	3	3	3
Spain	22 925	22 943	22 990	23 124	23 405	25 590	26 819	27 908	30 114	31 028
Sweden	5 088	5 819	6 435	6 611	7 300	8 681	9 976	12 116	14 279	16 252
Switzerland	60	60	75	75	75	75	87	87	87	87
UK	13 074	14 305	16 126	19 585	21 606	23 887	24 458	25 748	28 762	30 215
Ukraine	514	514	526	553	621	1 258	1 402	1 761	1 761	1 761
European Union (27)	115 661	127 216	138 020	148 957	157 272	167 219	177 145	188 030	203 635	218 766
Middle East	165	286	409	494	623	786	934	1 040	1 564	1 871
Bahrain	1	1	1	1	1	1	1	1	3	3
Iran IR	149	153	191	259	282	305	308	310	342	365
Israel	6	6	27	27	27	27	27	27	136	316
Jordan	1	118	184	198	295	384	529	632	614	614
Kuwait	2	2	2	2	12	12	12	12	12	12
Lebanon	3	3	3	3	3	3	3	3	3	3
Oman						50	50	50	50	50
Saudi Arabia				3	3	3	3	3	403	403
Syrian AR	1	1	1	1	1	1	1	1	1	1
United Arab Em	2	2						0	0	104
N America	76 694	87 252	97 526	104 261	111 662	123 597	139 394	154 433	164 257	172 327
Canada	9 694	11 214	11 973	12 250	12 816	13 220	13 735	14 259	15 265	16 989
Greenland					0	0	0	0	0	0
Mexico	2 569	3 271	4 051	4 180	4 180	6 541	6 995	7 155	7 318	7 318
St Pierre Mq	1									
USA	64 430	72 767	81 502	87 831	94 666	103 836	118 664	133 019	141 674	148 020

Wind energy Énergie éolienne Energía eólica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Oceania	4 531	4 922	5 066	6 149	7 152	8 625	10 951	11 522	11 624	12 461
Australia	3 797	4 181	4 324	5 407	6 409	7 881	10 207	10 555	10 555	11 327
Cook Is										
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	0
Marshall Is	0	0	0	0	0	0	0	0	0	0
Micronesia					1	1	1	1	1	1
New Caledon	38	38	38	38	38	38	38	38	58	58
New Zealand	682	689	690	690	690	690	690	913	994	1 059
Samoa	1	1	1	1	1	1	1	1	1	1
Tokelau						0	0	0	0	0
Tonga	0	0	0	0	0	1	1	1	1	1
Vanuatu	4	4	4	3	3	3	3	3	3	3
S America	6 521	9 914	12 916	15 703	19 117	20 670	24 201	29 730	33 572	39 845
Argentina	188	188	188	228	751	1 609	2 624	3 292	3 310	3 706
Bolivia	3	3	27	27	27	27	27	128	128	135
Brazil	4 888	7 633	10 129	12 304	14 843	15 438	17 198	21 161	24 163	29 135
Chile	732	907	1 034	1 305	1 524	1 620	2 340	3 137	3 830	4 510
Colombia	18	18	18	18	18	18	18	18	18	18
Ecuador	21	21	21	21	21	21	21	21	21	71
Falklands Malv	3	3	3	3	3	3	3	3	3	3
Guyana	0	0	0	0	0	0	0	0	0	0
Paraguay							0	0	0	0
Peru	143	240	240	240	372	372	409	409	539	705
South Georgia	0	0	0	0	0	0	0	0	0	0
Uruguay	481	857	1 211	1 513	1 513	1 516	1 516	1 516	1 516	1 516
Venezuela	43	43	43	43	43	43	43	43	43	43

Onshore wind energy

Énergie éolienne terrestre

Energía eólica terrestre

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Eurasia	3 645	4 525	5 801	6 566	7 146	7 783	9 868	12 652	13 702	14 305
Armenia	3	3	3 o	3 e	3 o	3 e	3 e	3 e	3	3 o
Azerbaijan	3	8	16 u	16 u	66 o	66 e	66	66	64 o	67 u
Georgia			20	20	20	21	21 o	21 o	21 u	21 u
Russian Fed	10 e	11 e	11 e	11 e	52 e	102 e	945	1 955 o	2 218	2 518 e
Türkiye	3 630	4 503	5 751	6 516	7 005	7 591	8 832	10 607	11 396	11 697 o
Europe	122 212	132 008	143 084	154 814	163 060	174 143	182 969	195 102	210 739	224 742
Austria	2 110	2 489	2 730	2 887	3 133	3 224	3 226	3 408	3 579	3 977 o
Belarus	9	22	62	84	92	112	112	112	120	122 u
Belgium	1 225	1 469	1 622	1 902	2 119	2 308	2 411	2 687	3 042	3 242 u
Bosnia Herzg	0 o	0 o	0 o	0 o	51	87	87	135 u	135	135 o
Bulgaria	699	699	699	698	699	703	703	704	702	702 e
Croatia	339	418	483	576	586	646	801	987	987	1 143 o
Cyprus	147	158	158	158	158	158 o	158 o	158	158	158 e
Czechia	278	281	282	308	316	339	339	339	339	343 u
Denmark	3 615	3 806	3 974	4 225	4 422	4 410	4 558	4 698	4 778	4 832 u
Estonia	275	300	310	312	310	316	317	315	316	408 o
Faroe Islands	20 o	20 o	20 o	20 e	16 o	13 o	19 o	23 o	23	23 e
Finland	601 e	973 e	1 533 e	1 971	1 968 o	2 211	2 513	3 184	5 604	6 884
France	9 191	10 287	11 556	13 497	14 898	16 425	17 533	18 549	20 809	22 194 u
Germany	37 620 o	41 297 o	45 303	50 174	52 328	53 187	54 414	55 904	58 014	61 052
Greece	1 978	2 091	2 370	2 624	2 877	3 589	4 119	4 649	4 702	5 220 o
Hungary	329	329	329	329	329	323	323	324	324	324 o
Iceland	3	3	3	2	2	2	2	2	2	2 e
Ireland	2 258	2 426	2 776	3 294	3 649	4 101	4 282	4 314	4 511	4 782 o
Italy	8 683	9 137	9 384	9 737	10 230	10 679	10 871	11 254	11 821	12 308
Kosovo*	1	1	1	34	34	34	34	34	68	137 u
Latvia	69	68	70	77	78	78	78	77	82	141 u
Lithuania	288	436	509	518	533	534	540	671	946	1 287 o
Luxembourg	58	64	120	120	123	136	153	136	165	221 o
Malta	0	0	0	0	0 e	0 e	0	0	0	0 e
Moldova Rep	1	1	2 o	9 o	33	35	41	67 o	115 o	141 o
Montenegro				72 u	72	118 u	118 e	118 u	118	118 e
Netherlands	2 637 o	3 034	3 300	3 245	3 436	3 527	4 188	5 214	6 185	6 771 o
North Macedonia	37	37	37	37 u	37 u	37 o	37 o	37 u	73 o	110 o
Norway	857	865 e	881 e	1 205 o	1 708	2 912	4 028	5 047	5 060	5 063 o
Poland	3 836	4 886	5 747	5 759	5 766	5 838	6 298	6 967	8 150	9 307 o
Portugal	4 855	4 935	5 124	5 124	5 172	5 223	5 097	5 402	5 513	5 592 o
Romania	3 244	3 130	3 025	3 030	3 032	3 038	3 013	3 015	3 015	3 087 u
Serbia	1	10 e	17	25 u	227	398	398	398 o	398	511 o
Slovakia	3	3	3	4 u	3	4	4	4	4	4 e
Slovenia	3	3	3	3	3	3	3	3	3	3 e
Spain	22 920	22 938 e	22 985	23 119	23 400	25 585	26 814	27 903	30 109	31 021 o
Sweden	4 875	5 606	6 232	6 408	7 097	8 478	9 773	11 923	14 086	16 059 u
Switzerland	60	60	75	75 u	75 o	75 e	87	87	87 u	87 e
UK	8 573	9 212	10 833	12 597	13 425	13 999	14 075	14 493	14 835	15 470
Ukraine	514	514	526	553	621 o	1 258 o	1 402	1 761 u	1 761 e	1 761 e
European Union (27)	112 178	121 305	130 671	140 145	146 728	155 143	162 603	172 873	188 026	201 144
Middle East	165	286	409	494	623	786	934	1 040	1 564	1 871
Bahrain	1	1	1	1	1	1	1	1	3	3
Iran IR	149	153	191	259 o	282 o	305	308	310 o	342 u	365 u
Israel	6 o	6 e	27 e	27 e	27 e	27 e	27 e	27 e	136 u	316 u
Jordan	1 o	118 o	184 o	198 o	295 o	384 o	529 o	632 o	614 e	614 e
Kuwait	2 e	2 e	2 e	2 e	12 e	12 e	12 e	12 e	12 e	12 e
Lebanon	3 u	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e
Oman					50	50 e	50 e	50 e	50 e	50 e
Saudi Arabia				3 u	3 e	3 o	3 e	3 e	403 o	403 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	2 e	2 e	u	u	u	u	u	0	0	104
N America	76 694	87 252	97 497	104 232	111 633	123 568	139 365	154 392	164 215	172 286
Canada	9 694	11 214	11 973	12 250	12 816	13 220	13 735	14 259	15 265	16 989
Greenland					0 o	0 o	0 e	0 e	0	0 e
Mexico	2 569	3 271	4 051	4 180	4 180	6 541	6 995	7 155	7 318 o	7 318 e
St Pierre Mq	1 e									
USA	64 430 o	72 767 o	81 473 o	87 801 o	94 637 o	103 806 o	118 634 o	132 978 o	141 633 o	147 979 o

Onshore wind energy

Énergie éolienne terrestre

Energía eólica terrestre

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Oceania	4 531	4 922	5 066	6 149	7 152	8 625	10 951	11 522	11 624	12 461
Australia	3 797	4 181	4 324	5 407	6 409	7 881	10 207	10 555	10 555 e	11 327 o
Cook Is	u	u	u	u	u	u	u	u	u	u
Fiji	10 u	10 u	10 u	10 u	10 o	10 o	10 o	10 o	10 e	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	0 e
Marshall Is	0 e	0 e	0 e	0 e	0 u	0 e	0 e	0 e	0 e	0 e
Micronesia					1 u	1 e	1 e	1 e	1 e	1 e
New Caledon	38 o	38 o	38 o	38 o	38 o	38 e	38 e	38 e	58	58 e
New Zealand	682	689	690	690	690	690	690	913	994 o	1 059 o
Samoa	1 o	1 o	1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e
Tokelau						0 o	0 e	0 e	0 e	0 e
Tonga	0 e	0 u	0 u	0 u	0 u	1 e	1 e	1 e	1 e	1 e
Vanuatu	4 o	4 o	4 o	3 o	3 o	3 o	3 e	3 e	3 e	3 e
S America	6 521	9 914	12 916	15 703	19 117	20 670	24 201	29 730	33 572	39 845
Argentina	188 o	188 o	188	228	751	1 609	2 624 o	3 292 o	3 310	3 706 o
Bolivia	3	3	27	27	27	27	27	128	128	135
Brazil	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	29 135 o
Chile	732 o	907 o	1 034 o	1 305 o	1 524 o	1 620 o	2 340 o	3 137 o	3 830 o	4 510 o
Colombia	18 o	18 o	18 o	18 o	18 o	18 o	18	18	18	18
Ecuador	21 o	21 o	21 o	21 o	21 e	21 o	21 o	21 o	21 o	71
Falklands Malv	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e	3 e
Guyana	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Paraguay							0	0	0	0 e
Peru	143	240 o	240 o	240 o	372 e	372 e	409 e	409 o	539 e	705 e
South Georgia	0	0	0	0	0	0	0 e	0 e	0 e	0 e
Uruguay	481	857	1 211	1 513 o	1 513 o	1 516 o	1 516 o	1 516 e	1 516 o	1 516 o
Venezuela	43 o	43 o	43 o	43 o	43 o	43 o	43 o	43 o	43 o	43 o

Offshore wind energy

Énergie éolienne maritime

Energía eólica marina

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	8 503	11 735	14 358	18 837	23 590	28 292	34 369	54 265	61 967	72 663
Asia	516	729	1 685	3 006	4 833	6 296	9 412	27 809	32 387	40 253
China	440	559	1 480	2 788 u	4 588 u	5 930	8 990	26 390	30 460	37 290
Chinese Taipei				8 u	8 u	128 o	128 o	237 o	745 o	1 569 o
Japan	50	60	65	65 u	65 u	66	59	52	52 o	154 u
Korea Rep	11	11	41	46 e	73 u	73 u	136 u	136 e	136 e	136 e
Viet Nam	16 u	99 u	99 o	99 o	99 e	99 u	99 e	994 e	994 e	1 104 o
Europe	7 986	11 006	12 644	15 802	18 727	21 967	24 928	26 415	29 539	32 369
Belgium	708	712	712	877	1 186	1 556	2 262	2 262	2 262	2 262 u
Denmark	1 271	1 271	1 271	1 264	1 701	1 701	1 701	2 306	2 306	2 650 u
Finland	26 u	32 u	32 u	73	73 o	73	73 u	73	73	73
France	11	11	11	2 u	2 o	2 u	2	2	2	2 u
Germany	994 o	3 283 o	4 132 o	5 406	6 393	7 555	7 787	7 807	8 149	8 407
Ireland	25	25	25	25 u	25 o	25	25 o	25 e	25	25 e
Netherlands	228 o	357 o	957 o	957	957	957	2 460	2 460	2 570	3 978 o
Norway	2 u	2 u	2 u	2 o	2 u	2 u	2 e	2 e	2	2 e
Portugal	2	2					25	25	25	25 e
Spain	5 u	5 u	5 u	5 u	5	5 o	5 e	5 o	5	7 u
Sweden	213	213	203	203	203	203	203	193	193	193 e
UK	4 501	5 093	5 293	6 988	8 181	9 888	10 383	11 256	13 928	14 746
European Union (27)	3 483	5 911	7 348	8 812	10 545	12 077	14 542	15 157	15 609	17 621
N America	0	0	29	29	29	29	29	41	41	41
USA	0 u	0 u	29 o	29 o	29 o	29 o	29 o	41 o	41 o	41 o

Solar energy

Énergie solaire

Energía solar

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	180 759	229 058	301 186	396 316	492 641	595 492	728 405	873 858	1 073 136	1 418 969
Africa	1 668	2 171	3 346	5 106	8 023	9 412	10 756	11 635	12 702	13 479
Algeria	28	61	261	354	366	366	366	366	451	451
Angola	0	0	0	0	0	1	1	1	285	310
Benin	0	1	3	3	3	3	3	3	28	28
Botswana	2	2	3	3	4	6	6	6	6	6
Burkina Faso	2	3	3	38	54	55	56	57	87	177
Burundi	0	1	2	2	2	2	2	9	9	9
Cabo Verde	6	6	6	6	11	14	15	17	23	26
Cameroon	6	7	9	12	14	14	14	14	14	50
Cent Afr Rep	0	0	0	0	0	0	0	0	0	25
Chad	0	0	0	0	1	1	1	1	2	2
Comoros			1	1	1	1	1	0	4	4
Congo DR	1	1	5	7	22	22	22	22	25	25
Congo Rep	0	0	0	0	0	0	1	1	1	1
Cote d'Ivoire	0	0	0	1	2	4	6	8	9	46
Djibouti	0	0	0	0	0	0	0	0	0	0
Egypt	35	36	59	180	764	1 647	1 643	1 663	1 724	1 856
Eq Guinea			0	0	0	0	0	0	0	0
Eritrea	8	8	9	25	26	26	26	25	25	25
Eswatini	1	1	1	1	1	1	1	11	11	11
Ethiopia	9	10	14	12	12	12	20	21	21	21
Gabon		0	0	0	0	0	0	1	1	1
Gambia	0	1	1	1	1	2	2	2	2	2
Ghana	8	32	37	42	72	83	108	165	169	169
Guinea	0	0	0	0	13	14	15	15	16	16
Guinea Bissau		0	0	0	1	1	1	1	1	1
Kenya	16	30	35	45	105	126	146	216	318	358
Lesotho	0	0	0	0	0	0	0	1	1	29
Liberia	0	0	0	2	3	3	3	3	3	3
Libya	5	5	5	5	5	5	5	6	6	8
Madagascar	7	9	11	13	33	33	33	33	59	59
Malawi	8	12	12	19	26	80	80	140	181	181
Mali	4	6	7	10	10	11	62	93	97	97
Mauritania	18	18	35	35	87	88	88	88	89	123
Mauritius	3	19	26	33	75	99	108	110	108	108
Mayotte	13	13	13	15	16	17	19	30	30	31
Morocco	40	200	202	204	734	734	774	854	854	934
Mozambique	1	1	1	2	2	41	42	42	83	83
Namibia	16	21	36	75	99	151	151	151	176	176
Niger	6	7	8	9	27	27	27	27	62	92
Nigeria	4	11	15	20	25	37	53	73	102	112
Reunion	167	187	186	188	190	199	207	224	234	239
Rwanda	10	11	12	17	22	25	25	25	25	25
Sao Tome Prn			0	0	0	0	0	0	0	0
Senegal	9	9	38	109	150	173	173	240	263	263
Seychelles	1	1	2	3	4	4	7	13	14	14
Sierra Leone	0	0	0	4	4	4	4	4	9	9
Somalia	0	0	5	7	7	7	16	24	47	51
South Africa	1 164	1 353	2 176	3 451	4 805	4 908	5 994	6 316	6 326	6 164
South Sudan	0	0	0	0	1	1	1	1	15	28
Sudan	17	20	26	36	59	80	117	136	190	190
Tanzania	11	13	12	13	17	16	16	16	16	16
Togo	0	0	0	1	4	5	7	57	57	57
Tunisia	17	28	38	47	64	80	95	95	197	506
Uganda	20	22	24	44	67	78	88	90	95	95
Zambia	0	0	0	0	1	89	89	89	89	124
Zimbabwe	3	2	3	5	9	12	14	28	41	41
Asia	60 812	90 778	140 768	212 366	277 028	333 107	414 680	492 264	602 933	840 647
Afghanistan	18	19	20	22	22	32	31	31	33	33
Bangladesh	169	196	165	217	240	280	343	506	524	767
Bhutan	0	0	0	0	0	0	0	0	0	1
Brunei Darism	1	1	1	1	1	1	1	5	5	5
Cambodia	9	12	18	32	42	137	330	392	477	482
China	28 399	43 549	77 819	130 832	175 262	204 971	253 864	306 973	393 032	609 921
China HK SAR				1	1	89	91	95	185	191
Chinese Taipei	636	884	1 245	1 768	2 738	4 150	5 817	7 700	9 724	12 418
India	3 776	5 697	9 982	18 257	27 485	35 250	39 705	49 950	63 390	73 109
Indonesia	42	79	88	97	65	155	185	225	313	574
Japan	23 339	34 150	42 040	49 500	56 162	63 192	71 868	78 413	83 057	87 068
Kazakhstan	5	57	57	59	209	542	912	1 038	1 146	1 306
Korea DPR	11	23	32	36	50	65	79	102	116	129
Korea Rep	2 620	3 845	4 882	6 435	8 921	12 717	17 323	21 264	24 078	27 046
Kyrgyzstan										0
Lao PDR	2	2	2	8	34	34	45	59	59	59
Malaysia	205	266	344	394	545	894	1 483	1 787	1 933	1 933
Maldives	4	5	7	11	16	21	27	31	36	37
Mongolia	5	5	15	48	64	89	95	95	95	95
Myanmar	6	21	32	44	48	88	84	110	181	181

Solar energy

Énergie solaire

Energía solar

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Nepal	12	13	14	55	56	55	66	90	110	115
Pakistan	165	265	589	655	680	756	855	1 078	1 244	1 244
Philippines	28	172	784	908	919	982	1 058	1 378	1 625	1 675
Singapore	26	46	97	116	162	272	332	487	633	774
Sri Lanka	22	37	71	154	228	350	436	624	800	966
Tajikistan							0	0	0	0
Thailand	1 304	1 425	2 451	2 702	2 967	2 988	2 984	3 065	3 185	3 186
Timor Leste	1	1	1	1	1	1	0	0	0	0
Uzbekistan	1	1	2	3	4	4	4	104	253	253
Viet Nam	5	5	5	8	105	4 994	16 661	16 661	16 698	17 077
C America + Carib	312	1 006	1 213	1 564	1 900	2 544	2 838	3 549	3 928	4 682
Anguilla	1	1	2	2	1	2	2	2	2	2
Antigua Barb	0	3	4	4	9	9	13	15	15	16
Aruba	5	6	7	7	15	15	15	15	15	15
Bahamas	2	2	2	2	2	4	4	9	10	10
Barbados	1	3	15	16	17	33	49	64	69	69
Belize	0	0	0	1	1	7	7	7	7	7
BES Islands		0	2	5	6	7	7	7	7	8
Br Virgin Is	0	1	1	1	1	1	1	1	1	2
Cayman Is			3	9	10	11	13	14	14	14
Costa Rica	5	9	14	20	33	48	57	74	74	74
Cuba	22	24	37	65	74	159	233	258	258	280
Curacao	8	10	11	11	12	12	13	13	13	13
Dominica	0	0	1	1	0	0	0	0	0	0
Dominican Rep	13	22	70	93	188	331	382	580	732	1 073
El Salvador	0	11	12	110	167	410	479	543	571	586
Grenada	1	1	2	2	3	3	4	4	4	4
Guadeloupe	70	70	70	70	72	83	88	90	93	93
Guatemala	10	93	93	101	101	101	101	101	105	110
Haiti	2	2	2	3	3	3	3	3	3	4
Honduras	5	396	412	455	515	518	525	529	529	529
Jamaica	4	7	28	56	56	107	107	107	107	110
Martinique	63	65	67	68	71	76	77	82	82	88
Montserrat						0	0	1	1	1
Nicaragua	1	1	1	14	14	16	16	16	17	18
Panama	6	46	92	130	203	225	235	498	529	570
Puerto Rico	79	209	244	302	305	337	381	488	639	955
St Barth			0	0	0	0	0	0	0	0
St Kitts Nevis	1	1	2	2	2	2	3	3	3	3
St Lucia	0	1	1	1	4	4	4	4	4	4
St Martin	2	3	2	0	0	1	1	1	2	2
St Vincent Gren	1	3	3	3	3	4	4	4	4	5
Trinidad Tobago	4	4	4	4	4	4	4	4	4	4
Turks Caicos		0	0	0	0	1	1	3	3	4
US Virgin Is	5	9	9	5	10	10	10	10	10	10
Eurasia	48	316	937	3 678	5 652	7 329	8 187	9 690	11 551	14 204
Armenia			1	2	17	21	51	146	235	402
Azerbaijan	2	5	25	28	35	33	35	48	51	282
Georgia			0	1	1	3	5	18	23	58
Russian Fed	5	61	76	225	535	1 276	1 428	1 661	1 816	2 170
Türkiye	41	250	834	3 422	5 064	5 996	6 668	7 817	9 426	11 293
Europe	91 096	99 605	106 175	112 307	121 572	142 339	162 795	190 928	233 821	288 122
Albania	1	1	1	1	1	14	21	23	23	163
Andorra	0	0	0	0	1	2	3	4	4	4
Austria	785	937	1 096	1 269	1 455	1 702	2 043	2 783	3 792	6 832
Belarus	4	6	47	80	154	154	160	163	273	273
Belgium	3 015	3 132	3 329	3 621	4 000	4 637	5 573	6 012	6 756	8 549
Bosnia Herzg	7	8	14	16	18	22	35	57	102	132
Bulgaria	1 029	1 028	1 030	1 031	1 033	1 044	1 100	1 275	1 737	2 937
Croatia	33	48	56	60	68	85	109	138	222	461
Cyprus	64	76	84	110	118	151	229	315	424	606
Czechia	2 067	2 075	2 068	2 075	2 081	2 111	2 172	2 246	2 420	2 499
Denmark	607	782	851	906	998	1 080	1 304	1 704	3 070	3 529
Estonia	3	7	10	15	32	121	208	395	520	690
Faroe Islands						0	0	0	0	0
Finland	11	17	39	82	140	222	318	425	664	900
France	6 034	7 138	7 702	8 610	9 629	10 738	11 926	14 612	17 350	20 551
Germany	37 900	39 224	40 679	42 293	45 158	48 914	53 671	60 038	67 479	81 739
Greece	2 596	2 604	2 604	2 606	2 651	2 834	3 288	4 277	5 430	7 030
Hungary	89	172	235	344	728	1 400	2 131	2 968	4 235	5 835
Iceland	1	3	4	4	5	7	7	7	7	7
Ireland	3	5	11	29	53	96	152	228	289	738
Italy	18 600	18 907	19 289	19 688	20 114	20 871	21 656	22 600	24 561	29 795

Solar energy

Énergie solaire

Energía solar

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Kosovo*		0	2	7	7	10	10	14	14	20
Latvia			1	1	2	3	5	7	113	353
Lithuania	69	69	70	74	82	103	164	255	572	1 165
Luxembourg	110	116	122	128	131	160	187	277	317	432
Malta	55	75	94	112	132	155	188	205	222	231
Moldova Rep	1	1	2	2	3	5	4	14	60	87
Montenegro							3	3	22	42
Netherlands	1 007	1 526	2 135	2 911	4 608	7 228	11 110	14 823	19 600	23 904
North Macedonia	15	17	17	17	17	17	85	91	190	535
Norway	13	15	27	45	68	120	160	205	358	616
Poland	27	108	187	287	562	1 539	3 955	7 416	12 170	15 809
Portugal	415	447	513	579	667	901	1 100	1 646	2 646	3 876
Romania	1 293	1 326	1 372	1 374	1 386	1 398	1 383	1 394	1 809	1 917
Serbia	13	16	17	18	21	23	31	52	137	137
Slovakia	533	533	533	528	471	590	535	537	549	631
Slovenia	224	239	232	247	247	278	370	461	626	1 034
Spain	7 001	7 008	7 017	7 027	7 068	11 111	12 440	16 019	25 615	31 016
Sweden	60	104	153	244	428	714	1 107	1 606	2 388	3 488
Switzerland	1 061	1 394	1 664	1 906	2 173	2 498	2 973	3 655	4 340	5 840
UK	5 528	9 601	11 914	12 760	13 060	13 345	13 551	13 915	14 651	15 657
Ukraine	819	841	955	1 200	2 003	5 936	7 331	8 062	8 062	8 062
European Union (27)	83 982	88 090	91 901	96 644	104 442	120 615	138 868	165 145	206 075	257 057
Middle East	883	1 154	1 621	2 250	3 535	6 077	7 807	10 261	13 983	18 543
Bahrain	5	5	6	6	6	10	10	21	46	57
Iran IR	9	9	43	184	286	346	430	456	539	595
Iraq	37	37	37	37	37	37	37	37	42	42
Israel	656	796	906	1 006	1 346	2 138	2 652	3 591	4 411	4 524
Jordan	0	57	311	418	760	971	1 541	1 811	1 966	1 990
Kuwait	4	5	22	23	34	84	84	84	102	102
Lebanon	5	11	24	37	55	76	90	190	875	1 005
Oman	1	2	2	8	26	26	129	155	655	672
Palestine	3	12	25	35	40	82	117	178	192	192
Qatar	4	4	5	5	5	5	5	5	805	805
Saudi Arabia	24	24	24	34	84	109	109	439	440	2 285
Syrian AR				0	1	2	12	33	60	60
United Arab Em	130	132	135	353	600	1 935	2 333	3 002	3 588	5 925
Yemen	5	60	81	103	253	254	258	258	264	290
N America	20 129	27 043	38 731	47 828	57 665	69 658	86 762	108 125	129 037	155 873
Canada	1 843	2 519	2 665	2 932	3 095	3 327	3 609	4 554	5 312	5 757
Greenland					0	0	0	1	1	1
Mexico	174	287	633	1 126	2 583	4 744	6 712	8 180	9 364	10 910
USA	18 112	24 237	35 434	43 770	51 987	61 587	76 441	95 391	114 361	139 205
Oceania	5 359	6 085	6 869	7 517	11 634	16 486	21 233	26 255	30 646	34 497
Amer Samoa	2	2	4	4	5	5	5	5	5	5
Australia	5 287	5 946	6 689	7 291	11 365	16 147	20 838	25 757	29 958	33 683
Cook Is	2	3	3	3	5	6	6	6	6	6
Fiji	2	4	6	8	8	8	9	9	9	11
Fr Polynesia	26	30	32	35	38	41	45	46	52	53
Guam	1	32	35	36	38	40	41	43	105	105
Kiribati	1	2	3	3	3	3	3	3	3	3
Marshall Is	1	1	2	2	2	2	2	2	2	2
Micronesia	1	1	2	2	2	3	3	3	3	3
Nauru	0	0	1	1	1	2	2	3	3	3
New Caledon	3	7	10	27	39	75	96	146	180	185
New Zealand	22	37	53	71	91	115	144	191	269	372
Niue	0	0	0	0	0	1	1	1	1	1
Palau	1	1	2	2	3	3	3	4	4	20
Papua N Guin	0	1	1	1	1	3	3	4	4	4
Samoa	3	8	14	14	14	14	14	14	14	14
Solomon Is	1	1	2	3	3	2	2	2	4	4
Tokelau	1	1	1	1	1	1	1	1	1	1
Tonga	3	4	5	7	7	7	7	7	14	15
Tuvalu	0	4	4	4	4	4	4	4	4	4
Vanuatu	0	0	2	3	4	5	5	5	5	5

Solar energy Énergie solaire Energía solar

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	452	902	1 526	3 701	5 631	8 539	13 348	21 150	34 534	48 921
Argentina	16	16	16	16	198	447	769	1 080	1 116	1 408
Bolivia	6	5	5	5	5	5	121	170	171	172
Brazil	21	46	128	1 207	2 453	4 698	8 452	14 499	25 520	37 449
Chile	203	545	1 050	1 829	2 294	2 673	3 229	4 516	6 525	8 475
Colombia	1	1	2	11	13	26	83	181	480	676
Ecuador	26	26	26	26	28	28	28	28	29	31
Falklands Malv		0	0	0	0	0	0	0	0	0
Fr Guiana	36	51	51	51	51	54	55	55	55	55
Guyana	2	4	4	6	6	8	8	8	8	8
Paraguay	0	0	0	0	0	0	0	0	1	1
Peru	130	135	146	298	324	335	335	332	332	332
Suriname	6	6	7	8	8	8	9	9	12	12
Uruguay	4	64	89	243	248	254	258	266	280	297
Venezuela	1	2	2	2	2	2	2	4	4	4

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	176 159	224 207	296 215	391 245	486 828	589 114	721 989	867 482	1 066 559	1 412 093
Africa	1 503	1 846	2 921	4 581	7 038	8 327	9 671	10 550	11 617	12 394
Algeria	3	36 e	236 e	329 e	341 e	341 e	341 e	341 u	426 u	426 e
Angola	0 e	0 e	0 e	0 e	0 e	1 e	1 e	1 e	285 e	310 e
Benin	0	1	3	3	3	3 e	3 e	3 e	28 e	28 e
Botswana	2 e	2 e	3 e	3 e	4 e	6 e	6 e	6 e	6 e	6 e
Burkina Faso	2 e	3 e	3 e	38 e	54 e	55 e	56 e	57 e	87 e	177 e
Burundi	0 e	1 e	2 e	2 e	2 e	2 e	2 e	9 e	9 e	9 e
Cabo Verde	6 o	6 o	6 o	6 o	11 o	14 o	15 o	17 o	23 o	26 o
Cameroon	6 e	7 e	9 e	12 e	14 e	14 e	14 u	14 e	14 e	50 e
Cent Afr Rep	0 e	0 e	0 e	0 e	0 e	0	0 e	0 e	0 e	25 e
Chad	0 e	0 e	0 e	0 e	1 e	1 e	1 e	1 e	2 e	2 e
Comoros			1 e	1 e	1 e	1 e	1 e	0 e	4 e	4 e
Congo DR	1 e	1 e	5 e	7 e	22 e	22 e	22 e	22 e	25 e	25 e
Congo Rep	0 e	0 e	0 e	0 e	0 e	0 e	1 e	1 e	1 e	1 e
Cote d'Ivoire	0 e	0 e	0 e	1 e	2 e	4 e	6 e	8 e	9 e	46 e
Djibouti	0 e	0 e	0 u	0 u	0 u	0 u	0 e	0 e	0 e	0 e
Egypt	15	16 o	39 u	160 o	744 o	1 627 o	1 623 o	1 643 o	1 704 u	1 836 e
Eq Guinea			0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Eritrea	8 e	8 e	9 e	25 e	26 e	26 e	26 e	25 e	25 e	25 e
Eswatini	1 e	1 e	1 e	1 e	1 e	1 e	1 e	11 e	11 e	11 e
Ethiopia	9	10	14	12	12	12	20	21	21 e	21 e
Gabon	e	0 e	0 e	0 e	0 e	0 e	0 e	1 e	1 e	1 e
Gambia	0 e	1 e	1 e	1 e	1 e	2 e	2 e	2 e	2 e	2 e
Ghana	8 e	32 e	37 e	42 e	72 e	83 e	108 e	165 e	169 e	169 e
Guinea	0 e	0 e	0 e	0 e	13 e	14 e	15 e	15 e	16 e	16 e
Guinea Bissau		0 e	0 e	0 e	1 o	1 e	1 e	1 e	1 e	1 e
Kenya	16 e	30 e	35 e	45 e	105 e	126 e	146 e	216 e	318 e	358 e
Lesotho	0 e	0 e	0 e	0 e	0 e	0 e	0 e	1 o	1 o	29 e
Liberia	0 u	0 u	0 u	2 u	3 u	3 e	3 e	3 e	3 e	3 e
Libya	5 u	5 u	5 u	5 u	5 e	5 e	5 e	6 u	6 e	8 e
Madagascar	7 e	9 e	11 e	13 e	33	33	33 e	33 e	59 e	59 e
Malawi	8 e	12 e	12 e	19 e	26 e	80 e	80 e	140 e	181 e	181 e
Mali	4 e	6 e	7 e	10 e	10 e	11 e	62 e	93 e	97 e	97 e
Mauritania	18 o	18 o	35 o	35 o	87 u	88 u	88 e	88 e	89 e	123 u
Mauritius	3 e	19 e	26 e	33 e	75 e	99 e	108 e	110 e	108 e	108 e
Mayotte	13	13	13 o	15 o	16	17	19	30	30	31
Morocco	20	20	22	24 o	194 o	194 o	234	314 e	314 e	394 e
Mozambique	1	1	1	2	2	41 o	42 o	42 o	83 o	83 o
Namibia	16 e	21 e	36 e	75 e	99 u	151 u	151 e	151 e	176 e	176 e
Niger	6 e	7 e	8 e	9 u	27 u	27 u	27 e	27 e	62 e	92 e
Nigeria	4 e	11 e	15 e	20 e	25 e	37 e	53 e	73 e	102 e	112 e
Reunion	167 o	187 o	186 o	188 o	190 o	199 u	207 e	224 e	234 e	239 e
Rwanda	10 e	11 e	12 e	17 e	22 e	25 e	25 e	25 e	25 e	25 e
Sao Tome Prn	e	e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Senegal	9 e	9 e	38 e	109 e	150 e	173 e	173 e	240 e	263 e	263 e
Seychelles	1 o	1 o	2 o	3 e	4 e	4 e	7 e	13 e	14 e	14 e
Sierra Leone	0 u	0 u	0 u	4 u	4 u	4 e	4 e	4 u	9 e	9 e
Somalia	0 e	0 e	5 e	7 e	7 e	7 e	16 u	24 u	47 u	51 u
South Africa	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	5 664 e
South Sudan	0 e	0 e	0 u	0 u	1 e	1 u	1 e	1 u	15 e	28 e
Sudan	17 u	20 u	26 u	36 u	59 u	80 u	117 u	136 u	190 e	190 e
Tanzania	11 e	13 e	12 e	13 e	17 e	16 e	16 e	16 e	16 e	16 e
Togo	0 e	0 e	0 e	1 e	4 e	5 e	7 o	57 u	57 e	57 e
Tunisia	17 e	28 e	38 e	47 e	64 e	80 u	95 e	95 e	197 e	506 e
Uganda	20 e	22 e	24 e	44 e	67 e	78 e	88 e	90 e	95 e	95 e
Zambia	0 e	0 e	0 e	0 e	1 e	89 o	89 e	89 o	89 o	124 o
Zimbabwe	3 e	2 e	3 e	5 e	9 e	12 e	14 e	28 e	41 e	41 e
Asia	60 467	90 433	140 404	212 001	276 449	332 364	413 883	491 347	602 015	839 730
Afghanistan	18 e	19 e	20 e	22 e	22 e	32 e	31 e	31 e	33 e	33 e
Bangladesh	169 e	196 e	165 e	217 e	240 e	280 e	343 e	506 e	524 e	767 e
Bhutan	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	1 u
Brunei Darism	1 u	1 u	1 u	1 u	1 u	1 u	1 u	5 u	5 u	5 e
Cambodia	9 e	12 e	18 e	32 e	42 e	137 e	330 e	392 e	477 e	482 e
China	28 388	43 538	77 788	130 801	175 016	204 575 e	253 414 o	306 403 e	392 462 e	609 351 e
China HK SAR				1	1	89	91	95	185	191 e
Chinese Taipei	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	12 418 o
India	3 448 e	5 368 e	9 654 e	17 928 e	27 156 e	34 908 e	39 363 e	49 607 e	63 048 e	72 767 e
Indonesia	42 e	79 e	88 e	97 e	65 o	155 o	185 o	225 o	313 o	574 e
Japan	23 339	34 150	42 040	49 500	56 162	63 192	71 868	78 413	83 057 o	87 068 o
Kazakhstan	5 e	57 e	57 e	59 e	209 e	542 e	912 e	1 038 e	1 146 e	1 306 o
Korea DPR	11 u	23 u	32 u	36 u	50 e	65 e	79 e	102 e	116 e	129 e
Korea Rep	2 620	3 845	4 882	6 435	8 921	12 717	17 323	21 264	24 078 o	27 046 o
Kyrgyzstan										0
Lao PDR	2 e	2 e	2 e	8 e	34 e	34 e	45 e	59 e	59 e	59 e
Malaysia	205 e	266 e	344 e	394 e	545 e	894 e	1 483 e	1 787 e	1 933 e	1 933 e
Maldives	4 o	5 o	7 o	11 o	16 o	21 u	27 u	31 u	36 o	37 e
Mongolia	5 e	5 e	15 e	48 e	64 e	89 e	95	95	95	95 e
Myanmar	6 o	21 o	32 o	44 o	48 o	88 u	84 e	110 e	181 e	181 e

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Nepal	12 e	13 e	14 e	55 e	56 e	55 e	66 e	90 e	110 e	115 e
Pakistan	165 e	265 e	589 e	655 e	680 e	756 e	855 e	1 078 e	1 244 e	1 244 e
Philippines	28 e	172 e	784 e	908 e	919 e	982 e	1 058 e	1 378 e	1 625 e	1 675 e
Singapore	26 o	46 o	97 o	116 o	162 o	272 o	332 o	487 o	633 o	774 o
Sri Lanka	22 e	37 e	71 e	154 e	228 e	350 e	436 e	624 e	800 e	966 e
Tajikistan							0	0	0	0
Thailand	1 299	1 420	2 446	2 697	2 962 o	2 983 o	2 979 o	3 060 o	3 180 o	3 181 o
Timor Leste	1 e	1 e	1 e	1 e	1 e	1 e	0 u	0 e	0 e	0 e
Uzbekistan	1	1	2	3	4	4 e	4 e	104 e	253	253 e
Viet Nam	5 e	5 e	5 e	8 e	105 e	4 994 e	16 661 e	16 661 e	16 698 e	17 077 e
C America + Carib	312	1 006	1 213	1 564	1 900	2 544	2 838	3 549	3 928	4 682
Anguilla	1 u	1 e	2 o	2 e	1 u	2 e	2 e	2 e	2 e	2 e
Antigua Barb	0	3	4 e	4 e	9 e	9 e	13 e	15 e	15 e	16 e
Aruba	5 e	6	7 u	7 u	15 e	15 e	15 e	15 e	15 e	15 e
Bahamas	2 u	2 e	2 u	2 e	2 u	4 u	4 e	9 u	10 e	10 e
Barbados	1 u	3 u	15 u	16 u	17 u	33 u	49 u	64 u	69	69 e
Belize	0 u	0 u	0 u	1 u	1 u	7 u	7 e	7 e	7 u	7 e
BES Islands		0	2 o	5 o	6 o	7 o	7 o	7 o	7 o	8 u
Br Virgin Is	0 u	1 u	1 u	1 u	1 u	1 u	1 u	1 u	1 u	2 u
Cayman Is			3 u	9 u	10 u	11 u	13 o	14	14 e	14 u
Costa Rica	5 e	9 e	14 e	20 e	33 e	48 e	57 e	74 e	74 e	74 e
Cuba	22	24	37	65 u	74 u	159 u	233 u	258 o	258 e	280 e
Curacao	8 o	10 o	11 o	11 o	12 o	12 o	13 o	13 e	13 e	13 e
Dominica	0	0	1	1	0 e	0 e	0 e	0 e	0 e	0 e
Dominican Rep	13 o	22 o	70 o	93 o	188 o	331 o	382 o	580 o	732 o	1 073 o
El Salvador	0 o	11 o	12 o	110 o	167 o	410 o	479 o	543 o	571 o	586 e
Grenada	1 o	1 o	2	2	3 o	3 o	4	4 e	4 e	4 u
Guadeloupe	70	70	70	70	72	83	88	90	93	93
Guatemala	10 e	93 e	93 e	101 e	101 e	101 e	101 e	101 e	105 e	110 e
Haiti	2 e	2 e	2 e	3 u	3 u	3 e	3 e	3 e	3 e	4 e
Honduras	5 e	396 e	412 o	455 o	515 o	518 o	525 o	529 o	529 o	529 o
Jamaica	4 e	7 e	28 e	56 e	56 e	107 e	107 e	107 e	107 e	110 e
Martinique	63 o	65	67	68	71	76	77 o	82 o	82 o	88 o
Montserrat						0 u	0 e	1	1 e	1 u
Nicaragua	1	1	1	14 o	14 o	16 o	16 o	16 e	17 e	18 e
Panama	6	46 o	92 o	130 o	203 e	225 u	235 e	498 o	529 e	570 o
Puerto Rico	79 o	209 o	244 o	302 e	305 e	337 e	381 e	488 e	639 e	955 o
St Barth			0 o	0 o	0 o	0 e	0	0 e	0 o	0 e
St Kitts Nevis	1 e	1 e	2 e	2 e	2 e	2 e	3 e	3 e	3 e	3 e
St Lucia	0	1	1 u	1 e	4 u	4 u	4 u	4 e	4 e	4 u
St Martin	2	3	2 o	0 o	0 e	1 o	1	1	2 o	2 o
St Vincent Gren	1 u	3 u	3 u	3 u	3	4	4	4	4	5
Trinidad Tobago	4	4	4	4	4	4	4	4 u	4 u	4 e
Turks Caicos		0 o	0 e	0 u	0 u	1 u	1 e	3 u	3 u	4 u
US Virgin Is	5 e	9 e	9 e	5 e	10	10	10	10	10 e	10
Eurasia	47	315	936	3 677	5 651	7 328	8 186	9 689	11 550	14 203
Armenia			1	2	17 o	21 e	51 e	146 e	235 e	402 o
Azerbaijan	2 u	5	25	28 u	35 o	33	35	48	51 o	282 o
Georgia			0 u	1 u	1 u	3 u	5 e	18 e	23 e	58 e
Russian Fed	5 e	61 e	76 e	225 e	535 e	1 276 e	1 428	1 661 e	1 816	2 170 e
Türkiye	40	249	833	3 421 o	5 063	5 995	6 667	7 816	9 425 o	11 292 o
Europe	88 783	97 292	103 862	109 995	119 260	140 018	160 474	188 607	231 500	285 801
Albania	1 e	1 e	1	1	1 e	14	21	23	23	163 o
Andorra	0 o	0 o	0 o	0 o	1 o	2 o	3 o	4 o	4 e	4 e
Austria	785	937	1 096	1 269	1 455	1 702	2 043	2 783	3 792	6 832 o
Belarus	4	6	47	80	154	154	160	163	273	273 u
Belgium	3 015	3 132	3 329	3 621	4 000	4 637	5 573	6 012	6 756	8 549 u
Bosnia Herzg	7 o	8 o	14 o	16	18 o	22	35 o	57	102 o	132 o
Bulgaria	1 029	1 028	1 030	1 031	1 033	1 044	1 100	1 275	1 737	2 937 e
Croatia	33	48	56	60	68	85	109	138	222	461 u
Cyprus	64	76	84	110	118	151	229	315	424	606 u
Czechia	2 067	2 075	2 068	2 075	2 081	2 111	2 172	2 246	2 420	2 499 u
Denmark	607	782	851	906	998 o	1 080	1 304	1 704	3 070	3 529
Estonia	3 u	7 u	10	15	32	121	208	395	520	690 o
Faroe Islands						0	0 o	0 o	0	0 e
Finland	11	17	39	82	140	222	318	425	664	900 o
France	6 034	7 138	7 702	8 610	9 629	10 729	11 917	14 603	17 341	20 542 e
Germany	37 898	39 222	40 677	42 291	45 156	48 912	53 669	60 036	67 477	81 737
Greece	2 596	2 604	2 604	2 606	2 651	2 834	3 288	4 277	5 430	7 030 o
Hungary	89	172	235	344	728	1 400	2 131	2 968	4 235	5 835 u
Iceland	1 e	3 e	4 e	4 e	5 e	7 e	7 e	7 e	7	7 e
Ireland	3	5	11	29	53	96	152	228	289	738 u
Italy	18 594	18 901	19 283	19 682	20 108	20 865	21 650	22 594	24 555	29 789

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Kosovo*		0	2	7	7	10	10	14	14	20
Latvia			1	1	2	3	5	7	113	353 o
Lithuania	69	69	70	74	82	103	164	255	572	1 165 e
Luxembourg	110	116	122	128	131	160	187	277	317	432 o
Malta	55	75	94	112	132	155	188	205	222	231 e
Moldova Rep	1	1	2	2	3	5	4	14	60	87 o
Montenegro							3	3	22 e	42 e
Netherlands	1 007	1 526	2 135	2 911	4 608	7 228	11 110	14 823	19 600	23 904 o
North Macedonia	15	17	17	17	17	17	85 e	91	190 o	535 o
Norway	13 u	15 u	27 u	45 u	68	120	160	205	358	616 e
Poland	27	108	187	287	562	1 539	3 955	7 416	12 170	15 809 o
Portugal	415	447	513	579	667	901	1 100	1 646	2 646	3 876 e
Romania	1 293	1 326	1 372	1 374	1 386	1 398	1 383	1 394	1 809	1 917 o
Serbia	13 e	16 e	17 e	18 e	21 e	23 e	31	52	137	137 e
Slovakia	533	533	533	528	471	590	535	537	549	631 e
Slovenia	224	239	232	247	247	278	370	461	626	1 034 o
Spain	4 697	4 704	4 713	4 723	4 764	8 807	10 136	13 715	23 311	28 712
Sweden	60	104	153	244	428	714	1 107	1 606	2 388	3 488 e
Switzerland	1 061	1 394	1 664	1 906 o	2 173	2 498	2 973	3 655	4 340 e	5 840 u
UK	5 528	9 601	11 914	12 760	13 060	13 345	13 551	13 915	14 651	15 657
Ukraine	819 o	841 o	955 o	1 200 o	2 003 o	5 936 o	7 331	8 062 u	8 062 e	8 062
European Union (27)	81 670	85 778	89 589	94 331	102 129	118 294	136 547	162 824	203 754	254 736
Middle East	776	1 046	1 514	2 142	3 377	5 627	7 363	9 817	13 340	17 599
Bahrain	5	5	6	6	6	10	10	21	46	57
Iran IR	9	9	43	184 o	286 e	346 e	430 e	456 e	539 e	595 e
Iraq	37 o	37 e	37 e	37 e	37 e	37 e	37 e	37 e	42 e	42 e
Israel	650	790	900	1 000	1 340	1 890	2 410	3 349	4 169	4 282
Jordan	0 o	57 o	311 e	418 o	760 o	971 o	1 541 o	1 811 u	1 966 e	1 990 e
Kuwait	2 o	3 o	21 e	21 e	32 e	33 e	33 e	33 e	50 e	50 e
Lebanon	5 e	11 e	24 e	37 e	55 o	76 o	90 e	190 o	875 e	1 005 e
Oman	1 e	2 e	2 e	8 e	26 e	26 e	129 e	155 e	655 e	672 e
Palestine	3	12	25	35	40	82 o	117 e	178 e	192 e	192 e
Qatar	4 u	4 e	5 u	5 e	5 e	5 e	5 e	5 e	805 u	805
Saudi Arabia	24 e	24 e	24 e	34 e	34 e	59 e	59 e	389 e	390 e	2 235 e
Syrian AR				0 u	1 u	2 u	12	33	60 o	60 e
United Arab Em	30 e	31 e	35 e	253 u	500 o	1 835 o	2 232 u	2 902 e	3 288 u	5 325
Yemen	5 e	60 e	81 e	103 e	253 e	254 e	258 e	258 e	264 e	290 u
N America	18 463	25 285	36 973	46 070	55 891	67 883	84 997	106 628	127 540	154 376
Canada	1 843	2 519	2 665	2 932	3 095	3 327	3 609 o	4 554 o	5 312	5 757
Greenland					0 o	0 o	0	1	1 e	1 e
Mexico	174 o	287 o	633 o	1 126 o	2 567 e	4 727 e	6 695 e	8 163 e	9 347 e	10 893 e
USA	16 445 o	22 479 o	33 676 o	42 012 o	50 229 o	59 829 o	74 693 o	93 911 o	112 881 o	137 725 o
Oceania	5 356	6 082	6 866	7 514	11 631	16 483	21 230	26 252	30 643	34 494
Amer Samoa	2 o	2 o	4 e	4 e	5 e	5 u	5 e	5 o	5 e	5 e
Australia	5 284	5 943	6 686	7 288	11 362	16 144	20 835	25 754	29 955 o	33 680 o
Cook Is	2 e	3 e	3 e	3 e	5 u	6 u	6 e	6 e	6 e	6 e
Fiji	2 u	4 u	6 u	8 u	8 u	8 u	9 u	9 u	9 u	11 e
Fr Polynesia	26 o	30 o	32 o	35 o	38 o	41 o	45 o	46 e	52 e	53 e
Guam	1 o	32 o	35 o	36 e	38 e	40 e	41 e	43 e	105 e	105 e
Kiribati	1 o	2 o	3 o	3 e	3 e	3 e	3 e	3 e	3 e	3 e
Marshall Is	1 e	1 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Micronesia	1 e	1 e	2 e	2 e	2 u	3 e	3 e	3 e	3 e	3 e
Nauru	0 e	0 e	1 e	1 e	1 e	2 e	2 e	3 e	3 e	3 e
New Caledon	3 o	7 o	10 o	27 o	39 o	75 o	96 o	146 o	180 o	185 e
New Zealand	22	37	53	71	91	115	144	191	269 o	372 o
Niue	0 e	0 e	0 e	0 e	0 e	1 u	1 e	1 e	1 e	1 e
Palau	1 u	1 u	2 u	2 u	3 e	3 u	3 u	4 e	4 e	20 e
Papua N Guin	0 e	1 u	1 u	1 u	1 u	3 e	3 e	4 e	4 e	4 e
Samoa	3 e	8 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e
Solomon Is	1 e	1 e	2 e	3 e	3 e	2 e	2 e	2 e	4 e	4 e
Tokelau	1 u	1 u	1 u	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Tonga	3 o	4 o	5 o	7 o	7 u	7 e	7 e	7 e	14 e	15 e
Tuvalu	0 e	4 o	4 e	4 o	4 e	4 e	4 e	4 e	4 e	4 e
Vanuatu	0 e	0 e	2 e	3 e	4 o	5 u	5 u	5 u	5 u	5 e

Solar photovoltaic Solaire photovoltaïque Solar fotovoltaica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	452	902	1 526	3 701	5 631	8 539	13 348	21 042	34 426	48 813
Argentina	16 o	16 o	16 o	16 o	198	447 o	769 o	1 080 o	1 116	1 408 o
Bolivia	6	5	5	5	5 o	5 o	121	170	171	172
Brazil	21 e	46 e	128 e	1 207 e	2 453 e	4 698 o	8 452 o	14 499 o	25 520 e	37 449 e
Chile	203 o	545 o	1 050 o	1 829 o	2 294 o	2 673 o	3 229 o	4 408 o	6 417 o	8 366 o
Colombia	1	1	2	11	13	26	83 o	181 o	480 o	676 o
Ecuador	26	26	26	26	28 o	28 o	28 o	28 o	29	31 o
Falklands Malv		0 o	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e
Fr Guiana	36 o	51 o	51 o	51 o	51 o	54 o	55 e	55	55	55 e
Guyana	2 e	4 e	4 e	6 e	6 e	8 e	8 e	8 e	8 e	8 e
Paraguay	0 o	0 o	0 o	0 o	0 o	0 o	0	0	1	1 e
Peru	130 e	135 e	146 e	298 e	324 o	335 e	335 e	332 o	332 e	332 e
Suriname	6 e	6 e	7 e	8 e	8 e	8 e	9 e	9 e	12 e	12 e
Uruguay	4 o	64 o	89 o	243 o	248 o	254 o	258 o	266 o	280 o	297 o
Venezuela	1 o	2 o	2 o	2 o	2 o	2 o	2 o	4 o	4 o	4 o

Concentrated solar power Solaire thermique à concentration Energía solar termoeléctrica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	4 600	4 851	4 971	5 072	5 812	6 378	6 416	6 377	6 576	6 876
Africa	165	325	425	525	985	1 085	1 085	1 085	1 085	1 085
Algeria	25 o	25 o	25 o	25 e	25 e	25 e	25 e	25 e	25 e	25 e
Egypt	20	20	20	20 o	20 e	20 e	20 e	20 e	20 e	20 e
Morocco	20	180	180	180 o	540	540	540	540 e	540 e	540 e
South Africa	100 o	100 o	200 o	300 o	400 o	500 u	500 o	500 e	500 e	500 u
Asia	345	345	365	365	580	744	798	918	918	918
China	11	11	31 u	31 u	246 u	396 u	450	570	570	570
India	329 u	329 u	329 u	329 u	329 u	343 u	343 u	343 u	343 e	343 u
Korea Rep	0 e	0 e	0 e	0 e						
Thailand	5	5	5	5	5 e	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 e	1 e	1 e	1	1 e
Europe	2 312	2 312	2 312	2 312	2 312	2 321	2 321	2 321	2 321	2 321
France						9 o	9 e	9 e	9	9 e
Germany	2	2	2	2 e	2	2	2 e	2	2	2 e
Italy	6 o	6 o	6 o	6 o	6 e	6 e	6 e	6 e	6	6
Romania				0	0	0	0	0	0	0 e
Spain	2 304	2 304	2 304	2 304	2 304	2 304	2 304	2 304	2 304 o	2 304 o
European Union (27)	2 312	2 312	2 312	2 312	2 312	2 321	2 321	2 321	2 321	2 321
Middle East	108	108	108	108	158	450	444	444	644	944
Israel	6 e	6 e	6 e	6 e	6 e	248 u	242 o	242 e	242 e	242 e
Kuwait	2 o	2 o	2 o	2 o	2 o	52 o	52 o	52 o	52 o	52 e
Saudi Arabia					50 u	50 e	50 e	50 e	50 e	50 e
United Arab Em	100 o	100 u	100 u	100 u	100 e	100 e	100 e	100 e	300	600
N America	1 667	1 758	1 758	1 758	1 774	1 775	1 765	1 497	1 497	1 497
Mexico					16	17	17	17	17 e	17 e
USA	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	1 480 o
Oceania	3	3	3	3	3	3	3	3	3	3
Australia	3	3	3	3	3	3	3	3 e	3 e	3 e
S America								108	108	108
Chile								108	108 o	108 o

Bioenergy Bioénergíe Bioenergía

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	90 843	96 842	105 675	111 410	118 608	125 244	133 200	139 511	145 896	150 261
Africa	1 379	1 460	1 523	1 639	1 793	1 807	1 821	1 919	1 918	1 901
Angola	51	51	51	51	51	51	51	51	51	51
Burkina Faso	0	1	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	2	3	3	3	3	3	3
Congo Rep	12	12	12	12	12	12	12	12	12	12
Egypt	67	67	67	67	67	79	79	123	123	131
Eswatini	106	106	106	106	106	106	106	106	106	106
Ethiopia	71	119	145	205	290	290	290	335	335	310
Gabon	1	1	1	1	1	1	1	1	1	1
Ghana	8	8	8	8	8	8	8	8	8	8
Kenya	56	58	84	85	88	88	99	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	6	6	6	41	41	41	41	41	41	41
Mauritius	80	91	91	91	91	91	91	91	91	91
Morocco	1	5	7	7	7	7	7	7	7	7
Mozambique	73	73	73	73	73	75	75	75	75	75
Namibia	0	0	0	0	0	0	0	0	0	0
Nigeria	8	8	9	9	9	9	13	21	21	21
Reunion	44	45	46	46	87	87	87	87	86	86
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	34
South Africa	246	251	256	260	265	265	265	265	265	265
Sudan	199	199	199	199	199	199	199	199	199	199
Tanzania	70	68	68	70	70	70	70	70	70	70
Uganda	54	65	65	76	96	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	21 242	24 042	30 374	33 701	37 536	42 446	49 176	55 112	59 656	62 805
Bangladesh	4	5	5	5	5	5	5	5	5	5
Cambodia	36	34	32	52	53	53	45	43	52	52
China	6 653	7 977	9 269	11 234	13 235	16 537	21 855	27 345	29 390	31 255
China HK SAR			17	45	45	52	52	52	58	58
Chinese Taipei	396	395	395	395	397	393	400	408	408	398
India	5 032	5 480	8 897	9 418	10 138	10 226	10 533	10 592	10 669	10 752
Indonesia	1 729	1 734	1 775	1 849	1 875	1 884	1 896	2 270	3 087	3 183
Japan	1 630	1 901	2 213	2 608	3 033	3 506	3 906	4 559	5 404	6 384
Kazakhstan	0	0	0	1	1	2	8	8	8	14
Korea Rep	601	729	1 745	2 348	2 387	3 215	3 628	2 731	3 159	3 176
Lao PDR	40	40	40	40	107	107	107	107	107	107
Malaysia	1 431	1 555	1 526	800	810	883	891	904	904	904
Maldives						0	0	0	0	0
Myanmar	52	48	49	52	57	59	59	59	59	59
Nepal	7	7	7	7	7	7	6	7	7	7
Pakistan	325	333	374	374	432	432	432	432	432	432
Philippines	143	233	259	276	341	393	513	519	633	615
Singapore	154	168	169	170	169	166	164	176	234	246
Sri Lanka	20	20	24	26	27	40	45	45	45	45
Thailand	2 796	3 165	3 322	3 728	4 037	4 097	4 241	4 476	4 603	4 705
Timor Leste										0
Viet Nam	195	220	256	274	382	389	390	373	393	408
C America + Carib	1 846	2 140	2 368	2 531	2 696	2 980	3 139	2 971	2 988	2 988
Aruba	2	2	2	2	2	2	2	2	2	2
Bahamas	1	1	1	1	1	1	1	1	1	1
Belize	28	28	28	36	36	36	36	36	36	36
Costa Rica	44	49	49	49	62	80	80	81	81	81
Cuba	499	530	495	532	554	817	956	953	966	966
Dominican Rep	21	21	22	82	83	83	83	83	85	85
El Salvador	136	202	259	270	305	300	300	301	303	303
Guadeloupe	31	31	31	33	34	34	51	51	51	51
Guatemala	719	878	992	1 028	1 081	1 036	1 036	870	870	870
Honduras	138	169	213	213	213	225	225	225	225	225
Jamaica	32	32	32	32	32	32	32	32	32	32
Martinique	2	3	3	3	44	44	44	44	44	44
Nicaragua	134	134	179	179	179	220	220	220	220	220
Panama	60	60	60	68	68	68	68	68	68	68
Puerto Rico			2	2	2	2	5	5	5	5
St Lucia			0	0	0	0	0	0	0	0

Bioenergy Bioénergíe Bioenergía

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Eurasia	1 628	1 679	1 767	1 887	2 005	2 201	2 515	3 000	3 278	3 411
Azerbaijan	37	38	38	43	45	45	45	45	45	38
Russian Fed	1 370	1 370	1 370	1 373	1 373	1 373	1 373	1 373	1 373	1 373
Türkiye	221	271	359	472	587	784	1 097	1 583	1 861	2 001
Europe	33 297	34 725	35 730	37 170	40 014	41 348	41 861	41 597	42 436	42 818
Albania				1	1	1	1	1	1	1
Andorra	5	5	5	5	5	5	5	5	5	5
Austria	1 411	1 396	1 393	1 290	1 271	1 249	1 251	1 171	1 195	1 195
Belarus	35	35	40	41	48	53	123	120	139	141
Belgium	913	943	923	912	887	906	922	817	870	871
Bosnia Herzg			1	1	1	2	2	10	11	11
Bulgaria	40	54	57	52	69	57	48	47	50	50
Croatia	25	53	63	87	115	127	135	154	161	161
Cyprus	10	10	10	10	13	13	13	13	14	14
Czechia	745	771	773	802	781	831	846	853	861	865
Denmark	1 248	1 243	1 305	1 791	1 774	1 982	2 086	2 152	2 007	2 007
Estonia	278	281	281	281	259	273	296	296	296	294
Faroe Islands							0	2	2	2
Finland	1 977	1 987	2 009	2 230	2 230	2 227	2 706	2 711	3 197	3 059
France	1 463	1 531	1 661	1 712	1 925	2 008	1 932	2 046	2 067	2 187
Germany	8 202	8 429	8 660	8 982	9 662	9 994	10 320	9 792	9 830	9 950
Greece	47	51	58	64	82	88	97	109	128	128
Hungary	549	519	427	491	513	504	509	551	533	534
Ireland	70	70	72	103	103	107	107	108	108	108
Italy	3 359	3 367	3 439	3 450	3 491	3 454	3 439	3 420	3 392	3 434
Latvia	121	126	143	154	134	158	156	152	144	133
Lithuania	71	71	72	79	104	105	116	116	118	215
Luxembourg	23	24	25	36	36	56	56	56	56	95
Malta	3	3	5	5	5	5	5	5	3	3
Moldova Rep	3	3	3	6	6	6	7	7	15	15
Netherlands	752	792	772	785	827	818	866	936	934	934
North Macedonia		4	5	7	8	10	10	11	14	14
Norway	140	140	87	87	87	81	77	77	77	79
Poland	816	961	974	968	1 004	1 010	1 045	1 100	1 217	1 231
Portugal	561	577	587	582	648	702	715	717	706	704
Romania	94	118	123	140	141	139	165	140	185	185
Serbia	6	6	11	15	19	28	31	36	39	39
Slovakia	237	242	253	246	243	226	225	250	264	264
Slovenia	62	63	60	62	60	60	67	67	67	96
Spain	1 032	1 035	1 037	1 045	1 057	1 112	1 264	1 278	1 279	1 279
Sweden	4 483	4 716	4 850	4 822	5 021	5 299	4 462	4 376	4 507	4 507
Switzerland	229	240	241	242	242	241	242	234	234	234
UK	4 240	4 808	5 250	5 513	7 044	7 230	7 302	7 387	7 438	7 477
Ukraine	50	53	60	73	98	180	212	275	275	301
European Union (27)	28 515	29 350	29 923	31 049	32 403	33 465	33 805	33 414	34 152	34 466
Middle East	60	81	88	88	86	86	84	84	96	111
Iran IR	11	11	11	11	11	11	11	11	14	14
Israel	17	28	28	28	28	28	26	26	26	26
Jordan	4	13	13	13	13	13	13	13	13	13
Lebanon	2	2	9	9	7	7	7	7	7	7
Palestine			0	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	9	24
Yemen								0	0	0
N America	15 698	16 334	16 522	16 591	16 380	15 692	15 537	14 990	14 750	14 660
Canada	2 651	2 628	2 696	2 779	2 792	2 668	2 674	2 674	2 682	2 682
Greenland	1	1	1	1	1	1	1	1	1	1
Mexico	627	736	925	973	971	971	974	982	966	987
USA	12 420	12 969	12 901	12 838	12 616	12 053	11 889	11 334	11 102	10 990
Oceania	1 036	1 044	1 079	1 095	1 095	1 095	1 097	1 104	1 111	1 112
Australia	824	826	864	864	864	864	871	871	878	878
Fiji	42	47	47	59	59	59	59	66	66	66
New Caledon	0	0	0	0	0	0	0	0	0	0
New Zealand	148	149	146	150	150	150	144	144	144	145
Papua N Guin	18	18	18	18	18	18	18	18	18	18
Samoa							1	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

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CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	14 657	15 337	16 225	16 708	17 003	17 590	17 969	18 733	19 663	20 455
Argentina	190	219	219	227	243	265	333	364	368	381
Bolivia	52	116	131	120	139	144	144	143	192	251
Brazil	12 343	13 311	14 187	14 575	14 821	15 359	15 690	16 364	17 224	17 597
Chile	926	468	463	505	504	497	470	491	490	522
Colombia	215	237	257	310	320	320	329	351	353	353
Ecuador	144	144	146	152	152	152	152	153	153	153
Fr Guiana	2	2	2	2	2	5	5	5	5	5
Guyana	51	51	42	42	42	42	42	42	42	42
Paraguay	39	39	39	39	39	41	41	41	41	41
Peru	154	197	186	196	197	218	218	187	203	203
Suriname		2	2	2	2	2	2	2	2	2
Uruguay	419	429	429	417	422	422	422	423	423	737
Venezuela	122	122	122	122	122	122	122	168	168	168

Solid biofuels and renewable waste

Biocombustibles solides et déchets renouvelables

Biocombustibles sólidos y residuos renovables

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	73 344	78 589	86 539	91 619	97 667	102 602	109 761	116 396	122 247	126 024
Africa	1 368	1 434	1 488	1 601	1 709	1 711	1 726	1 779	1 778	1 753
Angola	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e
Burundi	4 e	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 e	2 e	2 e
Congo DR	0 e	0 e	0 e	2 e	3 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 e	67 e	67 e	67 e
Eswatini	106	106	106 e	106 e	106 e	106 e	106 e	106 e	106 e	106 e
Ethiopia	71	119	145	205	290	290 e	290	335	335 e	310 e
Ghana	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e
Kenya	56 u	56 u	82 u	83 u	86 u	86 u	97 u	97 e	97 e	97 e
Liberia	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Madagascar	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Malawi	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e
Mali	6 e	6 e	6 e	41 e	41 e	41 e	41 e	41 e	41 e	41 e
Mauritius	77 o	87 o	87 o	87 o	87 o	87 e	87 e	87 e	87 e	87 e
Mozambique	73	73	73	73	73	75	75	75	75	75
Namibia	0	0	0 e	0 e	0 e	0	0 e	0 e	0 e	0 e
Nigeria	8 e	8 e	9 e	9 e	9 e	9 e	13 e	21 e	21 e	21 e
Reunion	42 e	42 e	42 e	42 e	42 e	42 e	42 e	42 e	41 o	41 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	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 u	199 e	199 e
Tanzania	70 o	67 e	67 e	70 e	70 e	70 e	70 e	70 e	70 e	70 e
Uganda	54 e	65 e	65 e	76 e	96 e	96 e	96 e	96 o	96 e	96 e
Zambia	43 e	43 e	43 e	43 e	43 e	43 e	43 e	43 o	43 e	43 o
Zimbabwe	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e
Asia	20 036	22 705	28 853	31 965	35 557	39 545	46 195	52 255	56 537	59 405
Bangladesh		0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 o
Cambodia	36 o	33 o	31 o	51 o	51 o	51 e	44 e	42 e	51 u	51 e
China	6 343	7 646	8 920	10 780	12 605	15 738	20 965	26 235	28 160	29 765
China HK SAR				28	28	28	28	28	28 e	28 e
Chinese Taipei	396 o	393 o	393 o	393 o	395 o	391 o	399 o	407 o	406 o	397 o
India	5 023 o	5 469 o	8 885 o	9 405 o	10 124 o	10 212 o	10 518 o	10 578 o	10 655 o	10 738 o
Indonesia	1 709 o	1 679 o	1 711 o	1 748 o	1 766 e	1 771 e	1 775 e	2 135 e	2 937 e	3 034 e
Japan	1 615	1 878	2 179	2 561	2 974	3 436	3 828	4 471	5 307 o	6 276 o
Korea Rep	124	255	1 256	1 853	1 899	2 056	2 538	2 102	2 434 e	2 447 e
Lao PDR	40 o	40 o	40 o	40 e	107 e	107 e	107 e	107 e	107 e	107 e
Malaysia	1 413 o	1 535 o	1 468 o	738 o	740 e	780 e	780 e	780 e	780 e	780 e
Maldives						0 o	0 e	0 e	0 e	0 e
Myanmar	51 e	46 e	48 e	51 e	55 e	57 e	57 e	57 e	57 e	57 e
Nepal	7 e	7 e	7 e	7 e	7 e	7 e	6 e	6 e	6 e	6 e
Pakistan	316 e	324 e	365 e	365 e	423 e	423 e	423 o	423 e	423 e	423 e
Philippines	112 o	202 o	219 o	235 o	287 o	339 o	457 o	463 o	578 o	559 o
Singapore	154 e	168 e	169 e	170 e	169 e	166 e	164 e	176 e	234 e	246 e
Sri Lanka	20 o	20 o	24 o	26 o	27 o	40 o	45 o	45 u	45 o	45 e
Thailand	2 485 e	2 793 e	2 887 e	3 253 e	3 532 e	3 567 e	3 684 e	3 841 e	3 951 e	4 053 e
Viet Nam	193 e	218 e	252 e	263 e	368 u	376 e	376 e	360 e	379 e	394 e
C America + Carib	1 834	2 120	2 341	2 490	2 653	2 938	3 094	2 924	2 924	2 924
Aruba	2	2	2	2	2	2	2 e	2 e	2 e	2 e
Belize	28	28	28 u	36 u	36 u	36 u	36 u	36 u	36 u	36 e
Costa Rica	42 o	45 o	45 o	45 o	57 o	76 o	76 o	76 o	76 o	76
Cuba	498	530 o	495 o	532 e	554 e	816 e	955 e	951 e	951 e	951 e
Dominican Rep	20 e	20 e	20 e	80 e	81 e	81 e	81 e	81 e	81 e	81
El Salvador	130 o	195	252	264 o	299 o	294 o	294 o	295 o	295 e	295 o
Guadeloupe	30 o	30 o	30 o	30 u	30 e	30 e	47 e	47 e	47 e	47 e
Guatemala	719 o	876 o	990 o	1 022 o	1 075 o	1 030 o	1 030 o	864 o	864 o	864 o
Honduras	137 o	168 o	209 o	209 o	209 o	221 o	221 o	221 o	221 o	221 o
Jamaica	32	32	32	32	32 e	32 e	32 e	32 e	32 e	32 e
Martinique	2 o	2 o	2 o	2 o	42 u	42 e	42 e	42 e	42 e	42 e
Nicaragua	134 o	134 o	177	177	177 o	218 o	218 o	218 e	218 e	218 e
Panama	60 e	60 e	60 e	60 e	60 e	60 e	60 e	60 e	60 e	60 o
St Lucia			0	0 e	0 e	0 e	0 e	0 e	0 e	0 e

Solid biofuels and renewable waste

Biocombustibles sólidos et déchets renouvelables

Biocombustibles sólidos y residuos renovables

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Eurasia	1 417	1 419	1 462	1 498	1 547	1 633	1 750	1 962	2 087	2 080
Azerbaijan	37	37	37 e	42	44 o	44 e	44	44 e	44	37 u
Russian Fed	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	1 373 e
Türkiye	10	12	55	83	130	216	334	545 e	670	670 e
Europe	20 654	21 564	22 159	23 157	25 256	25 832	25 834	25 975	26 687	26 924
Albania				1 u	1 u	1 u	1 e	1 e	1	1 o
Andorra	5 o	5 o	5 o	5 o	5 o	5 o	5 e	5 e	5	5 e
Austria	1 221 e	1 202 e	1 188 e	1 108 e	1 094 o	1 085 e	1 086 e	1 005 e	1 029	1 029 o
Belarus	13	13	13	13	16	16	86	83	101	101 u
Belgium	681 e	716 e	691 e	685 e	652 e	665 e	700 e	594 e	635 e	636 o
Bosnia Herzg				0	1	1	1	9	9 e	9 o
Bulgaria	30	34	19	23	33 e	24 e	15	14	15	15 e
Croatia	8	25	26	42	65	76	80	95	101	101 o
Czechia	378 e	403 e	404 e	430 e	413 e	462 e	480 e	484 e	483	483 u
Denmark	1 152 e	1 139 e	1 198 e	1 683 e	1 666 e	1 862 e	1 955 e	2 023 e	1 882	1 882 e
Estonia	270	270	270	270 e	250	265	285 o	285	285	283 o
Finland	1 877 e	1 885 e	1 895 e	2 114 e	2 114 o	2 111	2 590	2 595	3 081	2 943 o
France	1 107	1 130	1 231	1 248	1 435	1 482	1 364 e	1 465 e	1 476 o	1 596 e
Germany	2 533 o	2 554 e	2 579 o	2 605 e	2 648 e	2 682 e	2 595 e	2 628 e	2 615	2 635 e
Greece		2 e	2 e	3 e	12	13	14	16	16	16 o
Hungary	486	447	351	409	437	425	424	466	449	450 o
Ireland	16 e	16 e	16 e	47 e	47 e	48	48 o	48 e	48	48 e
Italy	1 033 e	1 031 e	1 094 e	1 092 e	1 145 e	1 124 e	1 128 e	1 120 e	1 097 e	1 097
Latvia	63	66	81	94	73	97 e	96 e	95 o	90	79 o
Lithuania	51	50	47	54	69	70	80	79 o	81	214 o
Luxembourg	12	13	13	23	24 e	44 e	44 o	44 o	45	81 o
Netherlands	515	549	548	561	620	617	661	678	678	678 e
North Macedonia				1 o	2 o	2 e	3	3 e	3 e	3 e
Norway	123 e	123 e	77 e	77 e	77 e	74 e	66 e	70 e	70 e	72 e
Poland	629 e	745 e	749 e	738 e	778 e	777 e	784 e	848 e	939 e	939 e
Portugal	495	511	519	512	577	630	644	644 e	634 o	633 e
Romania	79 e	104 e	107 e	119 e	119 e	119 e	136 e	109 e	161	161 e
Serbia	1 e	1 e	1 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Slovakia	159	151	160	155	154	144 e	143 e	169 e	187	187 e
Slovenia	30	30	30	33	32	34	35	36	36	65 o
Spain	790	789	789	793	793	839	989	1 001	1 001 o	1 001 o
Sweden	3 959 e	4 138 e	4 333 e	4 273 e	4 484 e	4 402 e	3 565 e	3 479 e	3 610	3 610 e
Switzerland	197	211	212	212 e	212 o	211 o	211 o	203	203 e	203 e
UK	2 709	3 180	3 477	3 695	5 161	5 339	5 411	5 428	5 467	5 488
Ukraine	35	35	39	39 o	52 o	87	109	152 u	152 e	178 e
European Union (27)	17 500	17 915	18 231	18 980	19 633	20 004	19 849	19 955	20 595	20 783
Middle East	18	18	18	18	18	18	15	15	15	30
Israel	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
Yemen								0 o	0 e	0 e
N America	12 873	13 539	13 713	13 714	13 496	12 997	12 950	12 537	12 392	12 303
Canada	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	2 399 e
Greenland	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 e
Mexico	591 o	700 o	878 o	917 o	916 o	916 o	917 o	917 o	918 e	918 e
USA	9 902 o	10 482 o	10 411 o	10 294 o	10 065 o	9 690 o	9 642 o	9 229 o	9 075 o	8 986 o
Oceania	754	759	835	852	852	852	846	854	854	855
Australia	598	598	674 o	674 e	674 e	674 e	674 e	674 e	674 e	674 e
Fiji	42 u	47 u	47 e	59 u	59 e	59 e	59 e	66 e	66 e	66 e
New Zealand	99	99	99	104	104	104	98	98 o	98 o	99 o
Papua N Guin	15 u	15 u	15 u	15 u	15 u	15 e	15 e	15 e	15 e	15 e
Samoa							1 e	1 e	1 e	1 e
Solomon Is	1 e	1 u	1 u	1 u	1 u	1 e	1 e	1 e	1 e	1 e

Solid biofuels and renewable waste

Biocombustibles solides et déchets renouvelables

Biocombustibles sólidos y residuos renovables

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	14 391	15 031	15 670	16 325	16 579	17 076	17 351	18 095	18 971	19 748
Argentina	172 e	201 o	201 o	204 o	218 o	220 o	276 e	296 e	296 o	301 o
Bolivia	52	116	131	115	139	144	144	143	192	251
Brazil	12 145	13 088 o	13 722 o	14 305 o	14 511 o	14 979 o	15 226 o	15 894 o	16 704 o	17 070 o
Chile	884 u	417 u	410 u	444 u	444 o	442 o	410 o	430 o	429 o	462 o
Colombia	215 u	237 u	253 u	306 u	316 u	316 e	319 e	342 e	343 u	343 e
Ecuador	144 o	144 o	144 o	144 e	144 e	144 o	144 o	144 o	144	144
Fr Guiana	2 o	2 o	2 o	2 o	2 o	5 o	5 e	5 o	5 o	5 e
Guyana	51	51	42	42	42 e	42 e	42 e	42 e	42 e	42 e
Paraguay	39	39	39	39	39 e	39 e	39 e	39 e	39 e	39 e
Peru	149 o	187 o	176 o	186 o	186 o	208 o	208 e	177 o	192 o	192 e
Suriname		2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 e
Uruguay	416 o	426 o	426 o	415 o	415 o	415 e	415 o	415 e	415 o	729 o
Venezuela	122 o	122 o	122 o	122 o	122 o	122 o	122 o	168 o	168 o	168 o

Bagasse Bagasse Bagazo

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	17 546	19 199	19 146	19 718	21 354	22 105	22 460	22 461	22 595	22 808
Africa	1 322	1 391	1 443	1 552	1 634	1 636	1 647	1 692	1 691	1 691
Angola	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e	51 e
Burundi	4 e	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 e	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 e	67 e	67 e	67 e
Eswatini	106	106	106 e	106 e	106 e	106 e	106 e	106 e	106 e	106 e
Ethiopia	71	119	145	205	265	265	265	310	310 e	310 e
Kenya	56 u	56 u	82 u	83 u	86 u	86 u	97 u	97 e	97 e	97 e
Malawi	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e
Mali	5 e	5 e	5 e	40 u	40 e	40 e	40 e	40 e	40 e	40 e
Mauritius	77 o	87 o	87 o	87 o	87 o	87 e	87 e	87 e	87 e	87 e
Mozambique	73	73	73	73	73	75	75	75	75	75
Nigeria	5 u	5 u	5 u	5 u	5 u	5 e	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	41 o	41 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	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 e	199 e
Tanzania	46 o	46 o	46 o	46 e	46 e	46 e	46 e	46 e	46 e	46 e
Uganda	54 e	65 e	65 e	76 e	96 e	96 e	96 e	96 o	96 e	96 e
Zambia	43 e	43 e	43 e	43 e	43 e	43 e	43 e	43 o	43 e	43 o
Zimbabwe	100	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e	100 e
Asia	2 381	2 764	2 002	1 998	3 194	3 261	3 264	3 246	3 100	3 086
Cambodia	16 o	16 o	16 o	36 o	36 o	36 e	27 e	27 e	27 o	27 o
Indonesia	219 o	219 o	219 o	219 o	219 o	219 e	219 e	240 e	260 e	270 e
Lao PDR	40 o	40 o	40 o	40 e	107 e	107 e	107 e	107 e	107 e	107 e
Myanmar	51 e	46 e	48 e	47 e	52 e	54 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	306 e	314 e	314 e	314 e	372 o	372 o	372 o	372 e	372 e	372 e
Philippines	92 o	149 o	161 o	161 o	208 o	233 o	321 o	321 o	355 o	330 o
Thailand	1 470 e	1 767 e	958 e	924 e	1 842 e	1 874 e	1 797 e	1 775 e	1 567 e	1 567 e
Viet Nam	182 e	207 e	241 e	251 e	353 u	360 e	360 e	344 e	353 e	353 e
C America + Carib	1 800	2 065	2 244	2 362	2 520	2 808	2 947	2 777	2 777	2 777
Belize	28	28	28 u	36 u	36 u	36 u	36 u	36 u	36 u	36 e
Costa Rica	40 o	40 o	40	40	53 o	71 o	71 o	71 o	71 o	71
Cuba	498	529	494	531 e	553 e	816 o	955 o	950 o	950 e	950 e
Dominican Rep	18 o	18 o	18 o	48 o	48 o	48 o	48 o	48 o	48 o	48
El Salvador	130 o	195	252	264 o	294 o	294 o	294 o	295 o	295 e	295 o
Guadeloupe	30 o	30 o	30 o	30 o	30 o	30 o	30 o	30 o	30 o	30 e
Guatemala	718 o	874 o	989 o	1 021 o	1 074 o	1 029 o	1 029 o	863 o	863 o	863 o
Honduras	113 o	125 o	125 o	125 o	125 o	135 o	135 o	135 o	135 o	135 o
Jamaica	32	32	32	32	32 e	32 e	32 e	32 e	32 e	32 e
Martinique					40 u	40 e	40 e	40 e	40 e	40 e
Nicaragua	134 o	134 o	177	177	177 o	218 o	218 o	218 e	218 e	218 e
Panama	60 e	60 e	60 e	60 e	60 e	60 e	60 e	60 e	60 e	60 o
Europe		2	2	2	2	2	2	2	2	2
Portugal		2	2	2	2	2	2	2 e	2	2 e
European Union (27)	72	74	74	74	114	114	114	114	113	113
N America	796	912	977	986	986	986	986	986	986	986
Mexico	569 o	685 o	796 o	816 o	816 o	816 o	816 o	816 o	816 o	816 e
USA	227 o	227 o	181 o	170 o	170 o	170 o	170 o	170 o	170 o	170 o
Oceania	453	458	534	534	534	534	534	542	542	542
Australia	424	424	500 o	500 o	500 o	500 e	500 e	500 e	500 e	500 e
Fiji	29 u	34 u	34 e	34 u	34 e	34 e	34 e	42 e	42 e	42 e
S America	10 793	11 607	11 943	12 284	12 483	12 879	13 081	13 216	13 496	13 723
Argentina	132 e	153 o	153 o	153 o	153 o	155 o	155 o	155 o	155 o	155 o
Bolivia	51	116	131	115	139	144	144	143	192	251
Brazil	9 881	10 549	10 874	11 168	11 348 o	11 715 o	11 914 o	12 064 o	12 278 o	12 446 o
Colombia	215 u	237 u	253 u	306 u	316 u	316 e	319 e	336 e	338 u	338 e
Ecuador	144 o	144 o	144 o	144 e	144 e	144 o	144 o	144 o	144	144
Guyana	51	51	42	42	27 e	27 e	27 e	27 e	27 e	27 e
Paraguay	39	39	39	39	39 e	39 e	39 e	39 e	39 e	39 e
Peru	149 o	187 o	176 o	186 o	186 o	208 o	208 e	177 o	192 o	192 e
Uruguay	10	10	10	10	10	10 e	10 o	10 e	10 o	10 o
Venezuela	122 o	122 o	122 o	122 o	122 o	122 o	122 o	122 o	122 o	122 o

Renewable municipal waste

Déchets municipaux renouvelables

Residuos municipales renovables

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	8 826	9 745	10 618	11 544	12 728	14 231	16 040	19 017	20 391	21 436
Africa					25	25	25	25	25	25
Ethiopia					25	25 e	25	25	25 o	
Asia	3 446	3 995	4 534	5 329	6 377	7 834	9 607	12 672	14 089	15 063
China	1 893	2 342	2 870	3 640	4 575	6 009	7 665	10 645	11 930	12 885
Chinese Taipei	315 o	315 o	315 o	315 o	316 o	316 o	316 o	316 o	316 o	316 o
India	124 o	137 o	139 o	146 o	159 o	165 o	188 o	217 o	260 o	291 o
Indonesia	18 o	8 o	8 o	8 o	8 o	8 o	8 e	14 o	12 o	12 e
Japan	876	900	919	935	958	975	1 027	1 050	1 044 o	1 021 o
Korea Rep	50	95	77	54	64	64	91	91	118 e	119 e
Malaysia	9	7 o	7 o	7 o	7 o	7 o	7 o	7 o	7 e	7
Maldives						0 o	0 e	0 e	0 e	0 e
Myanmar				0 u	0 e	0 e	0 e	0 e	0 e	0
Singapore	128 o	128 o	128 o	128 o	128 o	128 o	128 o	128 o	197 o	197 o
Sri Lanka							5 o	5 u	5 o	5 o
Thailand	33 o	66 o	73 o	96 o	159 o	157 o	167 o	194 o	186 o	181 o
Viet Nam				1 u	5 u	5 u	5 u	5 u	15 u	30 u
C America + Carib	4	4	4	4	4	4	4	4	4	4
Aruba	2	2	2	2	2	2	2 e	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 e
Eurasia	37	37	37	42	45	46	46	98	98	91
Azerbaijan	37	37	37 e	42	44 o	44 e	44	44 e	44	37 u
Türkiye					1	2	2	54	54	54 o
Europe	4 146	4 513	4 777	4 888	4 999	5 093	5 129	4 977	4 962	5 043
Albania				1 u	1 u	1 u	1 e	1 e	1	1 o
Andorra	5 o	5 o	5 o	5 o	5 o	5 o	5 e	5 e	5	5 e
Austria	262	263	271	271	270	272	270	240	245	245 o
Belgium	124	124	125	125	125	126	136	146	147	147 o
Czechia	23	23	28	28 e	28 o	28	28 e	28 e	28	28 u
Denmark	163	166	166	182	181	181	178	176	174	174 e
Estonia	105	105	105	105 e	85	85	85 o	85	85	85 o
Finland	126 e	134 e	148 e	148 e	148 o	148	148	197	246	246 o
France	643	602	619	624	607	608	555	566	565	625 o
Germany	944	962	979	1 004	1 063	1 084	1 024	1 041	1 023	1 023 e
Hungary	19	25	29	23	23	23	27	28	25	25 o
Ireland	11	11	11	41	41	41	41 o	41 o	41	41 e
Italy	413	415	409	408	412	396	402	418	396	396
Lithuania	5	5	8	9	7	7	17	21	19	18 o
Luxembourg	9	9	9	9	9 e	9 e	9	9	9	9 o
Netherlands	325	338	338	334	389	389	390	394	394	394 e
Norway	44	44	50	50	50	47	46	43	43	45 o
Poland		8	22	30	43	45	50	45	45	45 e
Portugal	39	40	42	41	41	41	41	41 o	41 o	40 o
Slovakia	6	6	10	6	6	6 e	6 e	6 e	7	7 e
Spain	117	117	117	121	121	121	121	133	133 o	133 o
Sweden	230	438	564	567	566	568	623	386	336	336 e
Switzerland	197	211	212	212 e	212 o	211 o	211 o	203	203 e	203 e
UK	340	465	514	545	568	655	717	725	752	773
European Union (27)	3 562	3 791	3 999	4 077	4 165	4 177	4 151	4 001	3 960	4 018
Middle East	18	18	18	18	18	18	15	15	15	30
Israel	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
N America	1 175	1 178	1 244	1 260	1 255	1 198	1 198	1 196	1 163	1 163
Canada	39	39	39	38	38 e	38 e	38 e	38 e	38 e	38 e
Greenland	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 e
Mexico	21	15	81	100	100	100	100	100	100 e	100 e
USA	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	1 025 o
Oceania									0	0
Australia									0 e	0 e
S America			3	3	5	13	14	29	34	41
Brazil			3 o	3 o	5 o	13 o	14 o	29 o	34 o	41 o

Other solid biofuels

Autres biocarburants solides

Otros biocombustibles sólidos

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	46 972	49 644	56 776	60 357	63 586	66 266	71 261	74 917	79 261	81 780
Africa	45	43	45	49	50	50	54	62	62	62
Congo DR	0 e	0 e	0 e	2 e	3 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
Ghana	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e	8 e
Liberia	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Madagascar	0 o	0 o	0 o	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Mali	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Namibia	0	0	0 e	0 e	0 e	0	0 e	0 e	0 e	0 e
Nigeria	3 e	3 e	4 e	4 e	4 e	4 e	8 e	16 e	16 e	16 e
Sierra Leone	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Tanzania	24 o	21 e	21 e	24 e	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	14 209	15 946	22 317	24 638	25 986	28 451	33 324	36 336	39 348	41 256
Bangladesh		0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 o	0 o
Cambodia	20 o	17 o	15 o	15 o	15 o	15 o	17 o	15 o	24 u	24 e
China	4 450	5 304	6 050	7 140	8 030	9 729	13 300	15 590	16 230	16 880
China HK SAR				28	28	28	28	28	28 e	28 e
Chinese Taipei	81 o	79 o	79 o	79 o	79 o	75 o	83 o	91 o	91 o	81 o
India	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	10 447 o
Indonesia	1 472 o	1 452 o	1 484 o	1 522 o	1 540 e	1 545 e	1 548 e	1 881 e	2 665 e	2 752 e
Japan	739	978	1 260	1 626	2 016	2 461	2 801	3 421	4 263 o	5 255 o
Korea Rep	74	160	1 179	1 799	1 835	1 992	2 447	2 011	2 316 e	2 328 e
Malaysia	1 404 o	1 528 o	1 462 o	732 o	734 e	774 e	774 e	774 e	774 e	774 e
Myanmar	0 e	0 e	0 e	3 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				
Pakistan	10 e	10 e	51 e	51 e	51 e	51 e	51 o	51 e	51 e	51 e
Philippines	20 o	53 o	58 o	74 o	80 o	107 o	136 o	142 o	223 o	229 o
Singapore	26 e	40 e	41 e	41 e	40 e	37 e	35 e	47 e	37 e	49 e
Sri Lanka	20 o	20 o	24 o	26 o	27 o	40 o	40 o	40 o	40 o	40 e
Thailand	982 e	960 e	1 857 e	2 233 e	1 531 e	1 536 e	1 720 e	1 871 e	2 198 e	2 305 e
Viet Nam	11 u	11 u	11 u	11 u	11 u	11 e	11 e	11 e	11 e	11 e
C America + Carib	30	51	93	124	129	126	143	143	143	143
Costa Rica	2 o	5 o	5 o	5 o	5 o	5 o	5 o	5 o	5 o	5
Cuba	1	1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e	1 o
Dominican Rep	2 e	2 e	2 e	33 e	33 e	33 e	33 e	33 e	33 e	33
Guadeloupe	1 o	1 o	1 o	1 u	1 e	1 e	18 e	18 e	18 e	18 e
Guatemala	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o
Honduras	24 o	43 o	84 o	84 o	84 o	86 o	86 o	86 o	86 o	86 o
St Lucia			0	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Eurasia	1 380	1 382	1 425	1 456	1 501	1 587	1 704	1 863	1 989	1 989
Russian Fed	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	1 373 e
Türkiye	10	12	55	83	129	214	332	491 e	616	616 e
Europe	16 509	17 049	17 380	18 266	20 256	20 737	20 702	20 996	21 723	21 879
Austria	959 e	939 e	917 e	838 e	824 o	813 e	816 e	765 e	784	784 o
Belarus	13	13	13	13	16	16	86	83	101	101 u
Belgium	558 e	591 e	566 e	559 e	526 e	539 e	564 e	448 e	489 e	490 o
Bosnia Herzg					0	1	1	9	9 e	9 o
Bulgaria	30	34	19	23	33 e	24 e	15	14	15	15 e
Croatia	8	25	26	42	65	76	80	95	101	101 o
Czechia	355 e	380 e	376 e	402 e	385 e	434 e	452 e	456 e	455	455 u
Denmark	989 e	973 e	1 032 e	1 501 e	1 485 e	1 681 e	1 777 e	1 848 e	1 707	1 707 e
Estonia	165	165	165	165	165	180	200	200	200	198 o
Finland	1 751	1 751	1 747	1 966	1 966	1 963	2 442	2 398	2 835	2 697 o
France	464	528	612	624	828	875	810 e	899 e	911 o	971 e
Germany	1 589 o	1 592 e	1 600 o	1 601 e	1 585 e	1 598 e	1 571 e	1 587 e	1 592	1 612 e
Greece		2 e	2 e	3 e	12	13	14	16	16	16 o
Hungary	467	422	322	386	414	402	397	438	424	425 o
Ireland	5 e	5 e	5 e	5 e	5 e	7	7	7 e	7	7 e
Italy	620 e	616 e	685 e	684 e	733 e	728 e	726 e	702 e	701 e	701
Latvia	63	66	81	94	73	97 e	96 e	95 o	90	79 o
Lithuania	46	45	39	45	62	63	63	58 o	62	196 o
Luxembourg	4	4	4	15	15	35	35 o	35 o	36	72 o
Netherlands	190	210	210	226	231	228	271	284	284	284 e
North Macedonia					1 o	2 o	2 e	3	3 e	3 e
Norway	79 e	79 e	27 e	27 e	27 e	27 e	20 e	27 e	27 e	27 e
Poland	629 e	737 e	727 e	709 e	735 e	732 e	734 e	803 e	894 e	894 e
Portugal	456	469	475	469	534	587	601	601 e	591	591 e
Romania	79 e	104 e	107 e	119 e	119 e	119 e	136 e	109 e	161	161 e
Serbia	1 e	1 e	1 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
Slovakia	153	145	150	149	148	138	137	163	180	180 e
Slovenia	30	30	30	33	32	34	35	36	36	65 o
Spain	673	672	672	672	672	718	868	867	867	867 o

Other solid biofuels Autres biocarburants solides Otros biocombustibles sólidos

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Sweden	3 729 e	3 700 e	3 769 e	3 706 e	3 918 e	3 834 e	2 942 e	3 093 e	3 274	3 274 e
UK	2 369	2 715	2 963	3 150	4 593	4 684	4 693	4 702	4 714	4 714
Ukraine	35	35	39	39 o	52 o	87	109	152 u	152 e	178 e
European Union (27)	13 866	14 051	14 158	14 829	15 354	15 714	15 584	15 839	16 522	16 652
Middle East								0	0	0
Yemen								0 o	0 e	0 e
N America	10 902	11 449	11 492	11 468	11 255	10 813	10 766	10 355	10 243	10 154
Canada	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	2 361 e
Mexico	1 o	1 o	1 o	1 o	1 o	1 o	1 o	2 o	2 o	2 e
USA	8 560 o	9 130 o	9 106 o	9 002 o	8 778 o	8 459 o	8 411 o	8 000 o	7 880 o	7 791 o
Oceania	300	300	300	317	317	317	312	312	312	313
Australia	174	174	174	174 e	174 e	174 o	174 e	174 e	174 e	174 e
Fiji	12 u	12 u	12 u	24 u	24 u	24 e	24 e	24 e	24 e	24 e
New Zealand	99	99	99	104	104	104	98	98 o	98 o	99 o
Papua N Guin	15 u	15 u	15 u	15 u	15 u	15 e	15 e	15 e	15 e	15 e
Samoa							1 e	1 e	1 e	1 e
Solomon Is	1 e	1 u	1 u	1 u	1 u	1 e	1 e	1 e	1 e	1 e
S America	3 597	3 424	3 724	4 038	4 091	4 185	4 257	4 850	5 441	5 984
Argentina	40 e	48 o	48 o	51 o	65 o	65 o	122 e	141 e	141 o	146 o
Bolivia	1	1	1							
Brazil	2 264	2 539 o	2 846 o	3 135 o	3 158 o	3 251 o	3 298 o	3 800 o	4 392 o	4 584 o
Chile	884 u	417 u	410 u	444 u	444 o	442 o	410 o	430 o	429 o	462 o
Colombia				0 o	0 o			6 o	6 o	6 o
Fr Guiana	2 o	2 o	2 o	2 o	2 o	5 o	5 e	5 o	5 o	5 e
Guyana		0	0	0	16 e	16 e	16 e	16 e	16 e	16 e
Suriname		2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 e
Uruguay	406 o	416 o	416 o	405 o	405 o	405 e	405 o	405 e	405 o	719 o
Venezuela								46 o	46 o	46 o

Liquid biofuels

Biocarburants liquides

Biocarburantes líquidos

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	2 304	2 379	2 282	2 317	2 428	3 326	3 235	2 738	2 835	2 838
Africa	0	0	0	0	41	41	41	41	41	41
Burkina Faso	0 u	0 u	0 e	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	41 e
Tanzania	0 u	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Asia	356	361	360	359	348	1 020	950	487	561	564
Korea Rep	356	361	360	359	348	1 020	950	487	561 e	564 e
Eurasia	7	7	7	12	19	19	23	51	65	65
Türkiye	7	7	7	12	19	19	23	51	65	65 e
Europe	1 797	1 865	1 792	1 813	1 836	2 175	2 150	2 088	2 085	2 085
Austria	1	3	3	1	1	1	0	0	0	0 o
Belgium	51	49	45	45	45	45 e	23	19	30	30 o
Denmark		1	0	1	1					
France		3	4	0	0		15	10	11	11 e
Germany	232	232	231	230	230	231	231 e	201	196	196 e
Italy	990	1 000	993 e	987	971	948	932	919	909	909 e
Poland	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0	0 e
Slovenia	1	1	1	1	1	1 o	1	1 e	1	1 e
Spain					6	6	6	6	6 o	6 e
Sweden	522	576	515	547	535	895	895	895	895	895 e
UK					45	47	46	36	36	36
European Union (27)	1 797	1 865	1 792	1 813	1 832	2 169	2 145	2 093	2 090	2 090
N America	121	115	115	125	175	62	62	62	62	62
USA	121 o	115 o	115 o	125 o	175 o	62 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 e	0 e	0 e	0 e	0 e
New Caledon	0 o	0 o	0 o	0 o	0 o	0 e	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	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	19	27	4	5	5	5	5	5	18	18
Brazil	19 e	27 e	4 o	5 o	5 o	5 o	5 o	5 o	18 o	18 o

Biogas Biogaz Biogás

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	15 195	15 875	16 853	17 474	18 512	19 316	20 204	20 377	20 815	21 399
Africa	11	26	35	38	43	54	54	99	99	107
Burkina Faso		1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e	1 e
Egypt						12 o	12 e	56 e	56 e	64 o
Gabon		1 e	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 e	0 o
Kenya	0 e	3 e	3 e	2 e	2 e	2 e	2 e	2 e	2 o	2 o
Mali	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Mauritius	3	3	3 o	3 e	3 e	3 e	3 e	3 e	3 e	3 e
Morocco	1 o	5 o	7	7	7	7	7	7 e	7 e	7 e
Nigeria	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Reunion	2 o	3 o	4 o	4 e	4 o	4 e	4 e	4 e	4 e	4 e
South Africa	4 e	9 e	14 e	18 e	23 u	23 e	23 e	23 e	23 e	23 e
Tanzania	1 o	1 o	1 u	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Asia	851	976	1161	1378	1631	1881	2 032	2 370	2 558	2 836
Bangladesh	4 e	4 e	5 o	5 o	5 e	5 e	5 o	5 e	5 e	5 e
Cambodia		2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e	2 e
China	310	331	350	454	630	799	890	1110	1 230	1 490
China HK SAR			17	17	17	24	24	24	30 e	30 e
Chinese Taipei		1 o	1 o	1 o	1 e	1 o	1 o	1 e	1 e	1 e
India	9 e	11 e	12 e	14 e	14 e	14 e	14 e	14 e	14 e	14 e
Indonesia	19 o	55 o	64 e	101 e	109 e	112 o	120 e	135 e	149 e	149 e
Japan	15	23	34	47	59	70	78	88	97 o	108 o
Kazakhstan	0	0	0	1 o	1 o	2 e	8	8 e	8	14 o
Korea Rep	121	113	129	136 o	140	139	140	142	164 e	165 e
Lao PDR				0 o	0 o	0 o	0 o	0 o	0 e	0 e
Malaysia	18 o	20 o	58 o	62 o	70 o	103 e	111 e	124 e	124 e	124 e
Myanmar	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Nepal			0 u	0 u	0 u	0 u	0 u	1 u	1 u	1 u
Pakistan	9 e	9 e	9 e	9 e	9 e	9 e	9 e	9 e	9 e	9 e
Philippines	31 e	31 e	40 e	42 e	54 e	54 o	56 e	56 e	56 o	56 e
Sri Lanka		0 o	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 u
Thailand	312	373	435	475	505 o	530 o	557 o	635 o	652 o	652 o
Timor Leste										0 e
Viet Nam	2 u	2 u	4 e	11 e	14 e	14 e	14 e	14 e	14 e	14 e
C America + Carib	13	19	26	41	42	42	45	46	64	64
Bahamas	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Costa Rica	2 o	5 o	5 o	5 o	5 o	5 o	5 o	5 o	5 o	5 e
Cuba	1 e	1 e	1 e	1 e	1 e	1 e	1 e	2 e	15 e	15 e
Dominican Rep	1	2 o	2	2	2	2	2	2	4	4
El Salvador	6 o	7 o	7 o	7 o	7	7	7 o	6 e	8 o	8 o
Guadeloupe	0	0	0	2 o	4 o	4 o	4 o	4 o	4 o	4 e
Guatemala		2 o	2 o	6 o	6 o	6 o	6 o	6 o	6 o	6 o
Honduras	1 e	1 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Martinique		1	1 o	1 o	1	1	1 e	1 e	1 e	1 e
Nicaragua			2 o	2 o	2 e	2 e	2 e	2 e	2 e	2 e
Panama			8 o	8 o	8 e	8 o	8 e	8 o	8	8 o
Puerto Rico		o	2 o	2 o	2 o	2 o	5 e	5 o	5 o	5 o
Eurasia	204	253	298	378	440	549	742	988	1 126	1 266
Azerbaijan		1	1	1	1 o	1 e	1	1	1	1 u
Türkiye	204 e	252 e	297 e	377 e	438 e	548 e	741 e	987 e	1 126 o	1 266 o
Europe	10 845	11 296	11 778	12 200	12 921	13 341	13 877	13 534	13 663	13 809
Austria	189 e	191 e	202 e	180 e	175 o	164 e	165 e	166 e	166	166 o
Belarus	22	22	27	28	33 o	38 e	37	37 e	39	40 u
Belgium	181	179	188	183	190	197	199	204	205	205 o
Bosnia Herzg			1 u	1 e	1	1	1	1	2 o	2 o
Bulgaria	10	20	38	29	36 e	33 e	33 e	33 o	35	35 e
Croatia	17	28 e	37 e	45 e	51 e	52 e	55 e	59 e	59 e	59 o
Cyprus	10	10	10	10 e	13 o	13 o	13 o	13 e	14	14 e
Czechia	367 o	368 o	369 o	372 o	369 o	369 o	366 o	370 o	378	383 u
Denmark	96 e	104 e	107 e	108 e	108 e	121 e	131 e	128 e	125	125 e
Estonia	8 e	11 e	11 e	11 e	9 e	8 e	11 e	11 o	11	11 o
Faroe Islands							0 o	2 e	2 e	2 e
Finland	100 e	102 e	114	116	116	116	116 o	116	116	116 o
France	356 o	398 o	426 o	464 o	490 o	526 o	553 o	572 o	580	580 e
Germany	5 437 o	5 643 o	5 850 o	6 147 o	6 784 o	7 081 o	7 494 e	6 963 o	7 019 o	7 119 e
Greece	47 u	49 u	56 u	62 u	70 u	75 o	83 e	92 e	111	111 o
Hungary	63	72	76	82	76	79	85	85	84	84 o
Ireland	53 e	53 e	56 e	56 e	57 e	59 e	59 e	60 e	60 e	60 e
Italy	1 336 e	1 336 e	1 352 e	1 372 e	1 375 e	1 382 e	1 379 e	1 382 e	1 387 e	1 429 e
Latvia	58 e	60 e	62 e	60	61	61 e	60 e	57 o	53	53 e
Lithuania	20	21	25 e	25 e	35 o	35 o	36 e	37 e	37	1 o
Luxembourg	10	12	12	12 e	12 e	12 e	12 o	12 o	11	14 o
Malta	3	3	5	5	5 e	5 e	5 e	5 e	3	3 e

Biogas Biogaz Biogás

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Moldova Rep	3	3	3	6	6	6	7	7 o	15 o	15 o
Netherlands	237 e	244 e	224 o	224 o	207 o	201 e	205 o	258 o	256 o	256 e
North Macedonia		4	5	7	7 o	8	8 o	8 e	11 o	11 o
Norway	17 e	17 e	10 e	10 e	10 e	7 e	11 e	7 e	7 e	7 e
Poland	187 o	216 o	225 o	229 o	225 o	233	261	251 o	278	292 e
Portugal	66	66	68	70	71	72	71	73 e	73	72 e
Romania	15	14	16	22	22	20	30	32	23	23 e
Serbia	5	5	10	13	17	26	29	34	36	36 e
Slovakia	78 e	91 e	93 e	91 e	89 e	82 e	82 e	81 e	77 e	77 e
Slovenia	31 e	32 e	29 e	27 e	27 e	25 e	30 e	30 e	30 e	30 e
Spain	243 u	245 u	248 u	251 u	258 u	267 u	269 u	271 u	272 u	272 e
Sweden	2 e	2 e	2 e	2 e	2 o	2 e	2 e	2 e	2	2 e
Switzerland	32	29	29 o	30	30	30	31	31	31 e	31 e
UK	1 531	1 628 o	1 773 o	1 818 o	1 838 o	1 844 o	1 845 o	1 923 o	1 935 o	1 953
Ukraine	15 o	18 o	21 o	34 o	46 o	93	103	123 e	123 e	123 e
European Union (27)	9 218	9 569	9 900	10 256	10 938	11 292	11 811	11 366	11 468	11 594
Middle East	42	62	69	70	68	68	69	69	81	81
Iran IR	11	11	11	11	11	11	11	11 e	14 e	14 e
Israel	14 e	25 e	25 e	25 e	25 e	25 e	26 e	26 e	26 e	26 e
Jordan	4 o	13 u	13 u	13 e	13 e	13 e	13 e	13 e	13 e	13 e
Lebanon	2 u	2 u	9 e	9 e	7 e	7 e	7 e	7 e	7 e	7 e
Palestine			0	0 e	0 e	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 e	1 u	1 u	1 e	9 e	9
N America	2 704	2 681	2 694	2 752	2 708	2 633	2 525	2 391	2 296	2 294
Canada	271 e	272 e	272 e	277 e	277 e	277 e	283 e	283 e	283 e	283 e
Mexico	36	36	47 o	57 o	55 o	55 o	57 o	64 o	48 o	70 e
USA	2 397 o	2 373 o	2 375 o	2 419 o	2 376 o	2 301 o	2 184 o	2 043 o	1 964 o	1 941 o
Oceania	279	282	241	240	240	240	247	247	253	253
Australia	226	228	190 o	190 o	190 o	190	197 o	197	204 o	204 o
New Zealand	49	50	47	46 o	46 o	46 o	46 e	46 e	46 e	46 e
Papua N Guin	4 u	4 u	4 u	4 u	4 u	4 e	4 e	4 e	4 e	4 e
S America	247	279	551	378	420	509	613	633	674	689
Argentina	19 o	19 o	19 o	24 o	25 o	46 o	57 e	68 e	72 o	80 o
Bolivia			5							
Brazil	178 o	196 o	460 o	265 o	305 o	375 o	459 o	465 o	502 o	509 o
Chile	42 o	51 o	53 o	61 o	60 o	56 o	60 o	61 o	61 o	60 o
Colombia			4	4	4 o	4 o	9 o	9	9	9
Ecuador			2 o	7 o	7 o	7 o	7 o	8 o	8	8
Paraguay	0 e	0 e	0 e	0 e	0 e	2 o	2 e	2 e	2 e	2 e
Peru	5 o	10 o	10 o	10 o	10 o	10	10 o	10 o	10 o	10 e
Uruguay	2	2	2	2	8 e	8 o	8 o	8 e	9 o	9 e

Geothermal energy Énergie géothermique Energía geotérmica

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	11 249	11 847	12 173	12 730	13 196	13 824	14 157	14 432	14 653	14 846
Africa	373	626	660	680	691	691	870	870	956	991
Ethiopia	7	7	7	7	7 e	7 o	7	7	7 o	7
Kenya	366 o	619 o	653 o	673 o	684 o	684 o	863 e	863 e	949 e	984 o
Asia	3 854	3 896	4 001	4 221	4 375	4 566	4 572	4 732	4 761	4 831
China	26	26	26	26	26	26 e	26 e	26 e	26 e	26 e
Chinese Taipei					0 o	0 o	0 o	5 o	5 o	7 o
Indonesia	1 404 o	1 438 o	1 533 o	1 808 o	1 948 o	2 131 o	2 131 o	2 286 o	2 360 o	2 418 o
Japan	508	516	526	471	473	481	487	487	437 o	428 o
Philippines	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	1 952 o
Thailand	0	0	0	0	0 e	0 o	0 o	0 e	0 e	0 e
C America + Carib	637	640	630	665	665	721	722	719	735	760
Costa Rica	217 o	217 o	207	207	207 o	262 o	262 o	259 o	263 o	263
El Salvador	204 o	204 o	204 o	204 o	204 o	204 o	204 o	204 o	204 o	229 o
Guadeloupe	12	15	15 o	15 u	15 o	15 o	15 o	15 o	15 o	15 e
Guatemala	49	49	49	49	49 o	52 o	49 o	49 o	49 o	49 o
Honduras				35 o	35 o	35 o	39 o	39 o	39 o	39 o
Nicaragua	155	155	155	155	155 o	153 o	153 o	153 e	165 o	165 e
Eurasia	483	702	899	1 138	1 357	1 596	1 687	1 750	1 765	1 765
Russian Fed	78	78	78	74	74	81	74	74	74	74 e
Türkiye	405	624	821	1 064 o	1 283	1 515	1 613 o	1 676	1 691	1 691 o
Europe	1 503	1 503	1 507	1 558	1 617	1 622	1 627	1 633	1 637	1 637
Austria	1	1	1	1	1	1 e	1 o	0	0	0 o
Croatia					10	10	10	10	10	10 o
France	15	15	16	16	16	16	16	16	16	16 e
Germany	29	29	33	32	35	40	40 e	46	50	50 o
Hungary				3	3	3	3	3	3	3 o
Iceland	665	665	665	710	756	756	756	756	756 e	756 e
Italy	768	768	767	767	767 e	767	772	772	772	772
Portugal	25	25	25	29	29	29	29	29	29 o	29 o
Romania	0 o	0 o	0 o	0	0	0	0	0	0	0 e
European Union (27)	849	852	857	863	876	881	886	891	895	895
N America	3 382	3 440	3 440	3 432	3 393	3 529	3 545	3 595	3 647	3 678
Canada										6 e
Mexico	868 o	898 o	924 o	949 o	949 o	974 o	974 o	999 o	999 o	999 e
USA	2 514 o	2 542 o	2 517 o	2 483 o	2 444 o	2 555 o	2 572 o	2 597 o	2 649 o	2 674 o
Oceania	1 016	1 040	1 035	1 035	1 059	1 059	1 093	1 093	1 100	1 100
Australia	0	0	0	0 e	0	0	0	0	0 e	0 e
New Zealand	966	990	985	985	1 009	1 009	1 043	1 043	1 050 o	1 050 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					40	40	40	40	51	83
Chile				o	40 o	40 o	40 o	40 o	51 o	83 o

Off-grid capacity

Capacité hors réseau

Capacidad aislada

Total off-grid renewable energy

Total énergies renouvelables hors réseau

Total energías renovables aislada

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Tajikistan	43.200	43.200	43.200	43.200	44.160	44.160	44.160	45.260	45.260	45.260
Timor Leste	1.501	1.693	1.687	1.372	1.147	0.922	0.685	0.680	0.720	0.766
Uzbekistan	1.000	1.000	2.200	3.025	3.325	3.325	3.325	3.325	3.325	3.325
Viet Nam	189.490	214.490	240.490	240.490	336.490	155.490	83.990	67.490	67.490	67.490
C America + Carib	110.556	119.710	117.431	150.376	151.055	164.973	174.044	180.929	189.833	199.385
Antigua Barb			0.010	0.414	0.414	0.414	0.414	0.414	0.414	0.414
Bahamas	0.801	1.167	1.220	1.166	1.135	1.078	1.078	5.078	5.078	5.078
Belize	0.185	0.189	0.189	0.196	0.196	0.790	0.790	0.790	0.790	0.790
BES Islands										0.130
Br Virgin Is	0.551	1.263	1.423	1.421	1.429	1.785	1.990	1.980	1.980	2.980
Costa Rica	1.077	1.344	1.432	1.541	1.568	1.581	1.640	1.770	1.770	1.770
Cuba				0.467	0.835	9.350	9.574	10.297	10.297	10.297
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	21.863	22.641	23.118	54.387	54.639	54.976	55.696	57.696	65.480	72.798
El Salvador	0.184	0.205	0.205	0.229	0.229	4.217	5.163	5.205	5.205	5.205
Guatemala	5.434	8.308	8.308	8.308	8.308	8.308	8.308	8.308	8.308	8.308
Haiti	0.927	1.154	1.425	1.505	1.548	1.601	1.522	1.522	1.522	1.522
Honduras	15.300	19.200	14.174	14.753	14.765	16.175	23.199	23.199	23.224	23.224
Jamaica	0.008	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Nicaragua	0.400	0.400	1.912	1.912	1.912	4.312	4.312	4.312	5.407	6.511
Panama	63.711	63.711	63.711	63.711	63.711	60.020	60.020	60.020	60.020	60.020
Puerto Rico				0.062	0.062	0.062	0.034	0.034	0.034	0.034
St Kitts Nevis	0.001	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	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	53.503	108.623	129.145	151.680	306.494	310.458	316.609	317.614	328.433	348.801
Iran IR	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378	0.378
Iraq	37.840	37.840	37.840	37.840	37.840	37.840	37.840	37.840	40.340	40.340
Jordan	0.236	0.557	0.588	0.588	0.623	0.670	2.385	3.335	3.335	3.335
Kuwait	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400	2.400
Lebanon	3.390	3.397	3.507	3.527	7.880	7.880	7.880	7.890	7.890	7.890
Oman			0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Palestine						1.833	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	0.014
Syrian AR	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	2.600	2.600
United Arab Em	3.192	3.208	3.208	3.238	3.407	4.672	5.597	5.597	5.897	
Yemen	5.453	60.229	80.599	103.084	253.341	254.160	257.671	257.716	263.735	290.000
Oceania	154.439	158.307	162.712	164.837	167.036	170.442	171.133	172.015	174.232	175.464
Amer Samoa			1.504	1.854	1.854	1.504	1.504	1.504	1.504	1.504
Cook Is	0.047	0.047	0.047	0.047	1.869	2.606	2.606	2.606	2.606	2.606
Fiji	1.402	2.648	4.651	4.718	5.131	5.222	5.324	5.613	5.904	7.035
Fr Polynesia	2.948	3.148	3.248	3.548	3.448	3.548	3.548	3.548	3.548	3.548
Kiribati	0.743	1.389	1.397	1.397	1.397	1.397	1.397	1.397	1.397	1.397
Marshall Is	0.660	0.660	0.660	0.720	0.737	0.737	0.737	0.737	0.737	0.737
Micronesia	0.388	0.388	0.388	0.388	0.395	0.395	0.395	0.395	0.395	0.395
Nauru	0.008	0.008	0.008	0.009	0.009	0.167	0.158	0.158	0.158	0.158
New Caledon	0.500	0.500	0.500	0.575	0.607	0.656	0.711	0.786	0.869	0.960
Palau			0.170	0.170	0.170	0.235	0.538	0.538	0.538	0.538
Papua N Guin	145.296	145.835	146.186	146.152	145.915	147.653	147.767	148.303	148.394	148.394
Samoa	0.014	0.014	0.014	0.039	0.039	0.197	0.262	0.262	0.262	0.262
Solomon Is	1.765	1.765	1.946	2.321	2.321	2.208	2.208	2.208	3.918	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	0.240	0.277	0.277	0.437	0.437	0.437	0.437	0.437	0.437
Tuvalu	0.192	1.308	1.316	1.321	1.332	1.332	1.332	1.332	1.332	1.332
Vanuatu	0.221	0.336	0.379	1.280	1.354	2.127	2.188	2.170	2.212	2.222

Total off-grid renewable energy
Total énergies renouvelables hors réseau
Total energías renovables aislada

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	557.843	635.479	658.049	656.153	694.077	713.285	718.728	771.114	805.144	820.555
Argentina	104.835	102.725	102.753	102.768	102.768	102.778	102.316	106.338	107.690	106.950
Bolivia	29.675	91.660	91.660	81.660	123.160	128.550	128.780	127.710	127.710	127.710
Brazil	0.721	3.930	4.091	7.212	7.227	7.241	7.241	7.241	7.241	7.241
Chile	0.765	0.765	0.765	0.765	0.765	1.445	1.445	1.445	2.225	2.225
Colombia	1.477	1.840	1.897	6.937	8.994	16.937	21.290	32.116	47.087	61.022
Ecuador	10.250	12.250	12.320	12.320	13.879	13.879	13.879	13.902	14.902	17.098
Falklands Malv	0.340	0.410	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	4.311	4.311	4.311	4.311	4.311
Guyana	46.716	47.244	37.880	37.893	38.512	38.656	38.656	38.656	38.656	38.656
Paraguay	0.057	0.057	0.057	0.057	0.057	0.057	0.170	0.170	1.186	1.186
Peru	205.543	214.442	244.947	238.135	224.136	222.219	222.419	213.866	221.109	221.109
South Georgia	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186
Suriname	1.256	2.756	3.221	4.228	4.360	4.360	5.016	5.016	5.016	5.016
Uruguay	1.340	1.361	1.937	7.585	13.554	17.398	17.751	18.889	26.557	26.577
Venezuela	153.471	154.642	154.714	154.786	154.858	154.858	154.858	200.858	200.858	200.858

Off-grid hydropower Hydroélectricité hors réseau Hidroeléctrica aislada

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	158.138	162.115	160.416	141.007	143.012	139.811	140.011	134.728	135.501	135.869
Argentina	6.179	4.069	4.098	4.098	4.098	4.098	4.098	4.098	4.098	4.098
Bolivia		1.200	1.200	0.800	0.800 e	0.800 o	0.800 e	0.800 e	0.800 e	0.800
Chile	0.765 o	0.765 o	0.765 o	0.765 o	0.765 o	1.445 o	1.445 o	1.445 o	2.225 o	2.225 o
Colombia		0.318 e	0.318 e	5.318 o	5.318 o	9.405 e	9.405 e	4.275 o	4.275 o	4.643 o
Ecuador	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	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	1.050 e
Guyana	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	2.350 e
Peru	131.659 o	134.228 o	132.500 o	108.456 o	110.061 o	102.073 o	102.273 o	102.120 o	102.113 o	102.113 e
South Georgia	0.180	0.180	0.180	0.180	0.180	0.180	0.180 e	0.180 e	0.180 e	0.180 e
Suriname	0.061 e	0.061 e	0.061 e	0.096 e	0.096 e	0.096 e	0.096 e	0.096 e	0.096 e	0.096 e
Venezuela	12.254 o	12.254 o	12.254 o	12.254 o	12.254 o	12.254 o	12.254 o	12.254 o	12.254 o	12.254 o

Other off-grid renewable energy Autres énergies renouvelables hors réseau Otras energías renovables aislada

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	344.555	409.228	424.688	430.543	476.143	486.403	486.423	528.673	536.723	536.723
Argentina	91.335	91.335	91.335	91.350	91.350	91.350 c	91.350 e	91.350 e	91.350	91.350
Bolivia	24.140	85.300	85.300	76.000	117.500	122.500	122.500	121.630	121.630	121.630
Colombia	o 0.059 o	o 0.059 o	o 0.059 o	o 0.099 o	o 0.099 c	o 0.059 e	o 0.059 e	o 5.579 e	o 5.579 o	o 5.579 e
Ecuador	o 4.650 o	o 4.650 o	o 4.650 o	o 4.650 o	o 4.650 e	o 4.650 c	o 4.650 c	o 4.650 o	o 4.650	o 4.650
Falklands Malv	e 0.340 e	o 0.340 o	o 0.340 o	o 0.340 o	o 0.340 c	o 0.340 e	o 0.340 e	o 0.340 e	o 0.340 e	o 0.340 e
Fr Guiana						o 3.100 c	o 3.100 e	o 3.100 o	o 3.100	o 3.100 e
Guyana	e 43.325 e	e 43.438 e	e 33.898 e	e 33.898 e	e 34.498 e	e 34.498 e	e 34.498 e	e 34.498 e	e 34.498 e	e 34.498 e
Paraguay							o 0.020	o 0.020	o 0.020	o 0.020 e
Peru	o 39.400 o	o 41.300	o 66.300 o	o 76.300 o	o 74.400 e	o 74.400 e	o 74.400 e	o 66.000 o	o 73.250 e	o 73.250 e
South Georgia	o 0.006	o 0.006	o 0.006	o 0.006	o 0.006	o 0.006	o 0.006 e	o 0.006 e	o 0.006 e	o 0.006 e
Suriname		o 1.500 o	o 1.500 o	o 1.500 o	o 1.500 c	o 1.500 c	o 1.500 c	o 1.500 o	o 1.500 o	o 1.500 e
Uruguay	o 0.800	o 0.800	o 0.800	o 5.900	o 11.300	o 13.500	o 13.500 c	o 13.500 e	o 14.300 o	o 14.300 e
Venezuela	o 140.500 o	o 140.500 o	o 140.500 o	o 140.500 o	o 140.500 c	o 140.500 c	o 140.500 c	o 186.500 o	o 186.500 o	o 186.500 o

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

%	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Italy	40.7	43.1	44.8	45.6	46.1	46.7	47.7	48.5	49.4	51.4
Kosovo*	4.6	4.6	8.2	8.6	8.6	9.7	10.7	10.9	13.0	17.2
Latvia	60.8	60.8	60.7	61.1	61.0	62.1	62.0	62.0	63.9	67.7
Lithuania	13.5	19.3	20.9	23.7	24.9	25.4	26.8	31.2	40.8	52.5
Luxembourg	11.1	11.8	17.6	18.6	18.9	21.7	23.8	26.8	29.2	36.0
Malta	8.5	11.7	17.1	16.5	18.8	21.3	24.6	26.3	31.2	32.0
Moldova Rep	2.3	2.3	2.3	2.7	3.5	3.6	3.8	4.9	8.0	9.5
Montenegro	74.4	74.6	74.8	76.8	76.9	77.9	78.4	78.4	78.8	79.2
Netherlands	14.7	18.2	21.7	24.1	28.3	34.1	43.4	49.1	54.4	59.1
North Macedonia	38.8	40.0	39.5	39.8	40.0	40.2	42.6	38.7	42.5	50.8
Norway	95.7	95.7	97.0	97.0	97.1	97.2	97.4	97.8	98.2	98.2
Poland	15.7	18.5	20.7	18.6	19.3	21.5	24.9	31.1	40.3	44.2
Portugal	60.5	61.9	64.1	64.7	64.9	65.4	65.6	70.6	75.7	77.6
Romania	46.9	47.3	47.6	47.5	47.6	53.7	54.3	59.5	60.2	62.2
Serbia	33.4	33.4	33.7	33.5	35.3	36.9	37.0	37.2	36.0	36.8
Slovakia	29.4	30.6	31.0	31.1	30.5	31.5	30.8	32.1	32.6	33.3
Slovenia	40.7	42.3	39.8	40.9	38.8	39.5	41.0	41.8	44.0	47.8
Spain	44.1	44.7	45.1	46.2	46.5	49.8	52.9	55.9	60.3	62.2
Sweden	65.9	67.7	69.0	70.8	70.8	72.8	71.8	75.8	77.4	78.7
Switzerland	76.4	76.7	78.0	78.9	79.2	79.5	79.9	81.7	82.3	83.4
UK	25.8	32.0	36.3	38.8	41.3	45.3	46.3	47.9	49.6	51.6
Ukraine	10.7	10.8	10.7	12.2	14.2	21.7	23.8	25.2	25.2	24.8
European Union (27)	71.2	72.3	73.1	74.1	75.0	76.3	77.9	79.3	81.6	83.6
Middle East	5.9	5.6	5.7	5.7	6.2	6.9	7.2	7.8	8.9	9.9
Bahrain	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.6
Iran IR	14.9	14.0	14.1	14.4	14.3	14.3	14.0	13.8	13.8	13.5
Iraq	9.0	7.4	7.2	6.1	5.9	5.9	5.5	5.3	5.1	5.0
Israel	4.2	4.8	5.5	6.0	7.8	11.3	13.4	17.0	20.4	20.5
Jordan	0.4	4.6	12.0	14.7	20.2	24.5	34.3	38.2	38.1	37.1
Kuwait	0.0	0.0	0.1	0.1	0.2	0.5	0.5	0.5	0.6	0.6
Lebanon	8.2	8.1	8.6	8.8	9.3	9.8	10.1	14.1	29.6	31.8
Oman	0.0	0.0	0.0	0.1	0.3	0.7	1.5	1.7	6.1	6.2
Palestine	2.1	7.0	13.5	18.1	20.1	33.9	42.4	52.7	54.6	90.6
Qatar	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	7.2	7.2
Saudi Arabia	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	1.0	2.9
Syrian AR	15.4	16.5	16.0	15.4	14.9	14.9	14.9	15.1	15.3	15.3
United Arab Em	0.5	0.5	0.5	1.1	1.9	5.8	6.6	8.3	9.4	14.0
Yemen	0.4	3.8	5.0	6.4	14.3	13.6	13.6	12.9	13.1	14.3
N America	22.4	24.0	25.5	26.4	27.2	28.6	30.5	32.4	34.1	35.7
Canada	65.5	66.3	66.4	66.9	67.5	67.5	67.5	69.2	69.3	69.3
Greenland	48.8	48.8	48.8	48.8	48.8	48.8	48.9	48.9	49.0	49.0
Mexico	25.1	25.7	26.2	26.5	24.3	27.9	29.9	30.5	31.2	32.2
St Pierre Mq	2.3									
USA	16.8	18.2	19.9	21.0	22.0	23.5	25.7	27.8	29.8	31.7
Oceania	31.2	30.4	31.9	34.3	38.0	42.2	45.5	48.0	49.6	52.6
Amer Samoa	6.6	6.6	10.6	9.7	11.5	10.8	10.8	10.8	9.3	9.3
Australia	25.5	24.7	26.4	29.1	33.8	38.8	42.9	45.8	47.4	50.7
Cook Is	11.6	17.6	14.1	14.1	20.8	23.3	23.3	23.3	23.3	23.3
Fiji	61.3	56.5	56.8	58.5	58.5	55.7	55.7	56.6	56.7	56.8
Fr Polynesia	25.8	26.8	27.4	28.2	29.0	30.0	30.8	30.4	31.9	32.1
Guam	0.3	6.1	7.4	6.9	7.3	8.7	9.0	9.3	20.0	20.0
Kiribati	10.5	26.2	30.6	30.6	32.9	32.9	32.9	32.9	32.9	32.9
Marshall Is	3.5	3.5	5.4	5.5	5.6	5.6	5.6	5.6	5.8	6.0
Micronesia	5.7	6.7	7.7	7.1	9.8	10.3	10.3	10.3	10.3	10.3
Nauru	1.8	1.8	5.7	4.1	4.7	9.3	9.3	10.9	11.8	11.8
New Caledon	12.9	13.1	13.4	15.0	16.0	19.0	20.9	24.6	23.9	24.2
New Zealand	73.2	76.2	77.6	77.7	77.8	77.8	77.1	77.7	80.4	80.7
Niue	14.1	14.1	14.1	14.1	14.1	31.1	31.1	31.1	31.1	31.1
Palau	3.4	3.4	6.2	6.2	7.4	8.2	8.8	12.6	12.6	39.4
Papua N Guin	34.5	34.8	34.7	33.7	33.7	33.4	32.0	32.0	32.2	36.1
Samoa	21.2	26.9	33.2	36.5	36.8	39.5	42.6	42.6	42.6	42.6
Solomon Is	4.0	4.8	6.4	6.7	6.6	6.4	6.4	6.4	9.2	9.7
Tokelau	86.8	86.8	87.8	87.8	87.8	88.0	88.0	88.0	88.0	88.0
Tonga	15.0	19.6	22.9	30.4	31.3	35.3	35.3	31.7	47.3	48.4
Tuvalu	6.1	40.7	53.7	53.8	53.8	53.8	54.3	54.3	54.3	55.0
Vanuatu	25.7	25.9	28.8	30.0	35.0	34.7	34.1	34.1	33.7	34.5

Renewable energy share of electricity capacity

La part d'énergie renouvelable dans la puissance installée

Proporción de energía renovable en la capacidad eléctrica

%	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S America	63.0	64.4	65.2	65.6	66.7	67.4	67.6	68.4	70.0	71.4
Argentina	28.6	30.9	30.7	29.1	29.3	31.2	32.9	34.5	34.7	35.3
Bolivia	27.6	27.8	29.9	31.6	35.5	35.7	30.5	31.5	41.2	32.6
Brazil	79.5	80.0	80.8	81.4	83.2	83.3	83.0	83.4	84.4	85.7
Chile	42.8	42.6	41.6	44.6	47.1	47.8	51.8	54.3	58.9	63.4
Colombia	70.5	70.0	70.0	70.2	68.7	68.6	68.9	67.9	68.6	69.5
Ecuador	42.6	43.3	56.4	58.6	60.8	60.8	60.8	60.3	61.1	61.2
Falklands Malv	30.3	30.8	30.8	30.8	30.8	30.8	19.9	19.9	19.9	19.9
Fr Guiana	49.5	49.7	47.5	47.5	47.5	48.3	46.7	46.7	46.7	46.7
Guyana	15.7	17.4	15.8	15.1	14.9	14.8	14.6	13.0	13.0	13.0
Paraguay	99.8	99.8	100.0	100.0	100.0	99.7	99.7	99.7	99.7	99.7
Peru	37.6	39.7	40.5	40.9	41.7	42.7	42.8	43.0	42.5	43.1
South Georgia	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
Suriname	51.0	49.0	49.0	42.3	42.4	41.6	41.7	38.4	32.7	32.7
Uruguay	65.7	72.4	83.5	81.8	75.8	76.0	76.0	76.1	76.1	77.6
Venezuela	47.1	47.5	48.8	48.9	48.9	49.2	48.7	48.8	48.8	47.7



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