

# 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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For further information or to provide feedback, please contact the IRENA Statistics team (statistics@irena.org).

This report is available for download from: www.irena.org/Publications. Data can be downloaded at: www.irena.org/Data.

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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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#### NOTES TO THE TABLES

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	République démocratique du	*
	Congo	Congo	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	Gambie	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 Déverses	Nigeria
Reunion	Réunion	Réunion	Reunión
Rwanda	Rwanda	Rwanda	Rwanda
Saint Helena	Saint Helena, Ascension and	Sainte-Hélène, Ascension et	Santa Helena, Ascensión y
Can Tama Drn	Tristan da Cunha	Tristan de Cunha	Tristán de Acuña
Sao Tome Prn	Sao Tome and Principe	Sao Tomé-et-Principe	Santo Tomé y Príncipe
Senegal	Senegal Seychelles	Sénégal Sovehollos	Senegal
Seychelles Sierra Leone	Sierra Leone	Seychelles Sierra Leone	Seychelles Sierra Leona
Somalia	Somalia	Sierra Leone Somalie	Somalia
South Africa	South Africa	Afrique du Sud	Sudáfrica
South Sudan	South Sudan	Soudan du Sud	Sudán del Sur
Sudan	Sudan	Soudan	Sudán
Judun	Juduli	Joudan	Juduii

Label/En-tête/Rótulo	English	Français	Español
Tanzania Togo Tunisia Uganda	United Republic of Tanzania Togo Tunisia Uganda	République-Unie de Tanzanie Togo Tunisie Ouganda	Togo Túnez 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 Darsm	Brunei Darussalam	Brunéi Darussalam	Brunei Darussalam
Cambodia	Cambodia	Cambodge	Camboya
China	China	Chine	China
China HK SAR	China, Hong Kong Special	Chine, région administrative	China, región administrativa
	Administrative Region	spéciale de Hong Kong	especial de Hong Kong
China Mac SAR	China, Macao Special	Chine, région administrative	China, región administrativa
China Mac SAIX	Administrative Region	spéciale de Macao	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	République démocratique	República Democrática Popular
200 : 211	Republic	populaire lao	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		CENTROAMÉRICA Y EL
	CARIBBEAN	CARAÏBES	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 BES Islands	Belize	Belize	Belice
BES Islands	Bonaire, Sint Eustatius and	Bonaire, Saint-Eustache et	Bonaire, San Eustaquio y Saba

Cayman Is Cayman Islands Îles Caïmanes Islas Caimán Costa Rica Costa Rica Costa Rica Costa Rica Cuba Cuba Cuba Cuba Curaçao Curacao Curacao Curacao Dominica Dominica Dominique Dominica

Saba

British Virgin Islands

Br Virgin Is

Dominican Republic République dominicaine República Dominicana

Saba

Îles Vierges britanniques

Islas Vírgenes Británicas

#### Label/En-tête/Rótulo **Enalish Francais** 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 Martinica Martinique Martinique 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 Sint Maarten Saint Martin (partie San Martín (parte neerlandesa) St Maarten néerlandaise) St Martin Saint Martin Saint Martin (partie française) San Martín (parte francesa) St Vincent Gren Saint Vincent and the Saint-Vincent-et-les San Vicente y las Granadinas Grenadines Grenadines 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 EURASIA EURASIE** Armenia Armenia Arménie Armenia Azerbaijan Azerbaijan Azerbaïdjan Azerbaiyán Georgia Georgia Georgia Géorgie Russian Fed Russian Federation Fédération de Russie Federación de Rusia

Turkiye	Turkiye	Turkiye	Turkiye
EUROPE	EUROPE	EUROPE	EUROPA

Albania Albania Albanie Albania Andorra Andorre Andorra 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 Bulgaria Croatia Croatia Croprus Cyprus Czechia Czech Republic République tchèque Repúblic

República Checa Denmark Denmark Danemark Dinamarca Estonia Estonie Estonia Estonia Faroe Islands Faroe Islands Îles Féroé Islas Feroe Finland Finland Finlande Finlandia France France France Francia Germany Allemagne Alemania Germany Gibraltar Gibraltar Gibraltar Gibraltar Grèce Grecia Greece Greece Holy See Holy See Saint-Siège Santa Sede Hungary Hungary Hongrie Hungría Iceland Iceland Islande Islandia Ireland Ireland Irlande Irlanda Italy Italie Italia Italy Kosovo\* Kosovo\* Kosovo\* Kosovo\* Latvia Lettonie Letonia Latvia Liechtenstein Liechtenstein Liechtenstein Liechtenstein Lithuania Lithuania Lituanie Lituania Luxembourg Luxemburgo Luxembourg Luxembourg Malta Malta Malte Malta

Moldova Rep Republic of Moldova République de Moldova República de Moldovia

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	Royaume-Uni de Grande-	Reino Unido de Gran Bretaña e
	Britain and Northern Ireland	Bretagne et d'Irlande du Nord	
Ukraine	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		États-Unis d'Amérique	Estados Unidos de América
	United States of America	Etats-onis a Amerique	Estados Officios de Afficilca
OCEANIA	OCEANIA	OCÉANIE	OCEANÍA
OCEANIA Amer Samoa		•	
	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	Micronésie (États fédérés de)	Micronesia (Estados Federados
	of)		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	lle Norfolk	Isla Norfolk

Palaos

Northern Mariana Islands

Palau

Nth Mariana Is

Palau

Îles Mariannes du Nord

Islas Marianas del Norte

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	5 5	La República Bolivariana de
7 61162 d Glu	of)	bolivarienne du)	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

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	1 700 116	1 854 105	2 016 555	2 187 082	2 362 540	2 550 319	2 822 931	3 088 809	3 396 323	3 869 705
Africa	32 546	34 813	37 524	42 924	48 264	50 429	53 812	55 665	59 398	62 107
Algeria Angola	266 1 020	299 1 020	499 1 752	592 2 445	604 3 113	604 3 448	585 3 782	505 3 782	590 4 066	590 4 091
Benin	1	2	3	3	3	3	3 7 6 2	3 702	28	28
Botswana	2	2	3	3	4	6	6	6	6	6
Burkina Faso Burundi	34 55	38 55	39 56	74 54	89 54	91 54	91 54	92 61	123 76	214 76
Cabo Verde	33	33	33	33	38	41	42	44	50	53
Cameroon	738	740	742	744	746	826	827	827	828	864
Cent Afr Rep Chad	19 2	19 2	19 3	19 3	19 4	19 4	19 4	19 4	19 5	44 5
Comoros	1	1	2	3	3	3	3	2	5	5
Congo DR	2 418	2 419	2 434	2 449	2 623	2 632	2 632	2 632	2 961	3 201
Congo Rep	206	206	213	226	226	226	227	227	227	227
Cote d Ivoire Djibouti	604 0	604 0	604 0	880 0	881 0	883 0	885 0	887 20	888 20	925 80
Egypt	3 457	3 658	3 681	3 802	4 793	5 690	5 934	6 258	6 322	6 709
Eq Guinea	126	126	126	126	127	127	127	127	127	127
Eritrea Eswatini	9 169	9 169	10 169	26 169	27 169	27 169	27 169	26 179	26 179	26 179
Ethiopia	2 230	2 619	2 649	4 366	4 451	4 451	4 713	4 759	5 589	5 545
Gabon	331	332	332	332	332	332	332	332	332	332
Gambia Ghana	2 1596	2 1625	2 1 629	3 1 635	3 1665	3 1676	3 1 700	3 1 758	3 1 761	3 1 761
Guinea	129	369	369	370	382	378	604	829	830	830
Guinea Bissau		0	0	0	1	1	1	1	1	1
Kenya	1 271	1560	1 629	1 671	2 059	2 085	2 297	2 472	2 660	2 736
Lesotho Liberia	75 5	75 5	75 27	75 95	75 96	75 96	75 96	75 96	75 96	103 96
Libya	5	5	5	5	5	5	5	6	6	8
Madagascar	170	173	175	177	197	198	197	197	251	252
Malawi	399	403	403	410	417	472	472	551	592	592
Mali Mauritania	325 23	327 53	328 69	366 69	366 121	367 122	418 122	449 122	593 123	593 260
Mauritius	146	172	188	195	237	262	270	272	270	270
Mayotte	13	13	13	15	16	17	19	30	30	31
Morocco	2 143	2 307	2 417	2 539	3 272	3 272	3 522	3 638	3 725	4 105
Mozambique Namibia	2 264 347	2 265 351	2 265	2 266 427	2 266 451	2 307 504	2 310 508	2 310 508	2 351 533	2 351 533
Niger	6	331 7	383 8	9	27	27	27	27	62	92
Nigeria	2 122	2 129	2 135	2 140	2 145	2 157	2 216	2 245	2 274	2 984
Reunion	359	380	383	384	428	436	445	463	470	474
Rwanda	77	106	111	116	121	135	145	145	150	150
Sao Tome Prn Senegal	2 34	2 34	2 63	2 134	2 175	2 253	2 357	2 423	2 446	2 446
Seychelles	7	7	8	9	10	10	13	19	20	20
Sierra Leone	90	90	91	99	99	99	99	99	104	104
Somalia	2	3	7	10	11	11	19	27	51	54
South Africa	2 711 0	3 430 0	4 652 0	6 552 0	7 911	8 014 1	9 523 1	9 827 1	10 505	10 623 28
South Sudan Sudan	1 538	1 541	1547	1 557	1 1740	1 761	1 798	1 817	15 1 871	1 871
Tanzania	654	660	667	673	676	682	686	686	687	687
Togo	67	67	67	68	70	72	74	124	124	124
Tunisia	312	330	340	349	375	391	406	406	508	817
Uganda	769	782	784	827	908	1178	1 196	1 198	1 224	1 224
Zambia	2 302	2 311	2 431 879	2 441	2 442	2 531	2 532	2 838	3 297	3 332
Zimbabwe	860	875		885	1 189	1192	1 194	1 208	1 221	1 221
Asia	633 808	723 275	814 408	921 978	1 026 986	1 127 510	1 304 391	1 459 880	1 633 347	1 961 099
Afghanistan	299	303	349	372	372	381	380	388	493	493
Bangladesh	405	434	403	455	478	518	582	744	762	1 006
Bhutan	1 488	1 615	1 615	1 615	1 615	2 335	2 335	2 335	2 335	2 336
Brunei Darsm Cambodia	1 975	1 977	1 981	1 1 064	1 1 425	1 1 520	1 1 705	5 1765	5 2 205	5 2 325
China	414 651	479 103	541 016	620 856	695 463	758 870	896 412	1 017 852	1 156 126	1 453 701
China HK SAR	1	1	17	47	47	143	145	149	244	251
Chinese Taipei	3 751	4 015	4 411	4 944	5 940	7 480	9 248	11 240	13 816	17 600
India	71 894	78 584	90 416	105 259	118 227	128 475	134 774	147 390	163 209	175 929
Indonesia	8 417	8 574	9 064	9 459	9 805	10 300	10 507	11 537	12 603	13 113
Japan	56 103	67 487	76 145	84 180	91 306	99 267	108 517	115 833	121 468	127 328
Kazakhstan	2 734	2 807	2 851	2 898	3 088	3 606	4 190	4 536	5 069	5 663
Korea DPR	4 305 5 855	4 491 7 447	4 735 9 73 <i>1</i>	4 799 12 042	4 842 14 773	4 857	4 946	4 969 27 816	5 008 31 213	5 021 34 450
Korea Rep Kyrgyzstan	5 855 3 671	7 447 3 677	9 734 3 677	12 042 3 689	14 773 3 673	19 491 3 673	24 658 3 674	27 816 2 780	31 213 2 780	34 450 3 210
Lao PDR	3 333	4 435	4 911	5 150	5 522	6 366	8 166	9 122	9 812	9 923
Malaysia	6 397	7 563	7 992	7 339	7 521	7 962	8 571	8 906	9 052	9 052
Maldives	5	6	9	12	18	22	28	32	37	39

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	1833	1876	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	1069	1 410	1 460	1 659	1 858	2 200
El Salvador	831	915	971	1159	1 252	1 491	1594	1 675	1706	1745
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	1698	1746	1865	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	1762
Armenia Azerbaijan	1 120	1 154	1 184	1 194	1 277	1 289	1 403	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	1725	1776	1808	1886	1930	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	2 377	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	1140	1400
Faroe Islands	60	60	60	60	56	53	59	64	64	64
i di oc isiurius	00	00	00	00	50	33	33	04	04	04

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	1024	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	1782	1 778	1796	1779	1826	1826	1823	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	1704	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
	2 311	2 311	2 311	1594	1 594	1594	1594	1594	1599	1 599
Iraq										
Israel	686	837	968	1068	1 408	2 200	2 711	3 650	4 579	4 872
Jordan	17	200	514	635	1074	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
Svrian AR	1 501	1579	1 501	1 497	1 499	1500	1509	1530	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			.5 555	2.0	20000	20 000	00 0.0	0.000	00 017
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
		327	328	328	328	329	329	330	333	399
Papua N Guin	309									

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	1176	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
World	1 176 804	1 211 412	1 247 036	1 270 897	1 294 094	1 313 071	1 335 280	1 360 923	1 395 266	1 407 754
Africa	28 590	29 100	31 027	34 117	35 482	36 187	37 047	37 527	39 273	40 278
Algeria Angola	228 969	228 969	228 1 700	228 2 393	228 3 061	228 3 395	209 3 729	129 3 729	129 3 729	129 3 729
Benin	1	1	1	1	1	1	1	1	1	1
Burkina Faso	32	35	35	35	35	35	35	35	35	37
Burundi Cameroon	50 733	50 733	50 733	48 732	48 732	48 812	48 812	48 812	63 814	63 814
Cent Afr Rep	19	19	19	19	19	19	19	19	19	19
Comoros	1	. 1	1	1	1	1	1	1	1	1
Congo DR Congo Rep	2 417 194	2 417 194	2 429 201	2 440 214	2 598 214	2 608 214	2 608 214	2 608 214	2 932 214	3 172 214
Cote d Ivoire	604	604	604	879	879	879	879	879	879	879
Egypt	2 800	2 800	2 800	2 800	2 832	2 832	2 832	2 832	2 832	2 832
Eq Guinea Eswatini	126 62	126 62	126 62	126 62	127 62	127 62	127 62	127 62	127 62	127 62
Ethiopia	1 972	2 159	2 159	3 817	3 817	3 817	4 071	4 071	4 821	4 883
Gabon	331	331	331	331	331	331	331	331	331	331
Ghana	1 580	1 584	1 584	1584	1 584	1584	1 584	1 584	1 584	1 584
Guinea Kenya	129 828	369 827	369 830	369 841	369 845	364 852	589 854	814 858	814 858	814 859
Lesotho	74	74	74	74	74	74	74	74	74	74
Liberia	5	5	27	93	93	93	93	93	93	93
Madagascar	163	164	164	164	164 373	164 373	164 373	164	192	193
Malawi Mali	372 315	372 315	373 315	373 315	373 315	373 315	373 315	392 315	392 455	392 455
Mauritius	61	61	61	61	61	61	61	61	61	61
Morocco	1 770	1 770	1 770	1 770	1 770	1770	1 770	1770	1 770	1 770
Mozambique Namibia	2 190 330	2 191 330	2 191 347	2 191 347	2 191 347	2 191 347	2 192 351	2 192 351	2 192 351	2 192 351
Nigeria	2 110	2 111	2 111	2 111	2 111	2 111	2 151	2 151	2 151	2 851
Reunion	134	134	133	133	133	133	133	134	134	134
Rwanda	66	94	98	98	98	109	119	119	124	124
Sao Tome Prn Sierra Leone	2 56	2 56	2 56	2 61						
South Africa	2 133	2 148	3 147	3 480	3 480	3 480	3 480	3 484	3 484	3 484
Sudan	1 322	1 322	1 322	1 322	1 482	1 482	1 482	1 482	1 482	1 482
Tanzania Togo	572 67	579 67	587 67	589 67	589 67	596 67	598 67	598 67	599 67	599 67
Tunisia	62	62	62	62	66	66	66	66	66	66
Uganda	695	695	695	707	744	1004	1 011	1 011	1 033	1 033
Zambia	2 259	2 268	2 388	2 398	2 398	2 399	2 400	2 706	3 165	3 165
Zimbabwe	757	772	776	780	1 080	1 080	1 080	1 080	1 080	1 080
Asia	480 522	500 831	516 830	531 084	543 962	555 031	570 530	594 425	620 394	630 243
Afghanistan	280	284	329	349	349	349	349	357	459	459
Bangladesh Bhutan	230 1 488	230 1 614	230 1 614	230 1 614	230 1 614	230 2 334				
Cambodia	929	930	930	980	1 330	1 3 3 0	1 330	1 330	1 676	1 791
China	304 860	319 530	332 070	343 775	352 261	358 040	370 160	390 920	413 500	421 540
China HK SAR	1	1	1	1	1	1	1	1	1	1 700
Chinese Taipei India	4 683 45 406	4 691 47 104	4 691 47 622	4 691 49 521	4 694 50 102	4 695 50 279	4 695 50 763	4 696 51 566	4 700 52 005	4 706 52 117
Indonesia	5 242	5 322	5 666	5 703	5 773	5 976	6 141	6 602	6 689	6 784
Japan	49 597	50 035	50 058	50 015	50 037	50 033	50 033	50 009	50 015	50 033
Kazakhstan	2 675	2 678	2 696	2 726	2 756	2 778	2 785	2 807	2 807	2 903
Korea DPR Korea Rep	4 293 6 467	4 467 6 471	4 701 6 485	4 761 6 489	4 790 6 490	4 790 6 509	4 865 6 506	4 865 6 541	4 890 6 512	4 890 6 505
Kyrgyzstan	3 671	3 677	3 677	3 689	3 673	3 673	3 674	2 780	2 780	3 210
Lao PDR	3 292	4 393	4 869	5 102	5 380	6 224	8 013	8 956	9 646	9 756
Malaysia	4 761	5 742	6 121	6 145	6 165	6 185	6 197	6 215	6 215	6 215
Mongolia Myanmar	29 3 188	29 3 190	31 3 262	31 3 262	31 3 269	31 3 269	29 3 269	29 3 269	29 3 269	29 3 269
Nepal	737	791	811	916	1 038	1 159	1 282	1973	2 199	2 677
Pakistan	7 220	7 221	7 254	7 406	9 906	9 925	10 045	10 045	10 636	10 636
Philippines	3 594	3 613	3 623	3 632	3 719	3 761	3 780	3 783	3 773	3 826
Sri Lanka Tajikistan	1 669 4 983	1 688 4 983	1 726 4 983	1 745 4 983	1 797 4 984	1 813 5 744	1 797 5 744	1 801 5 745	1 831 5 763	1 843 5 763
Thailand	3 608	3 639	4 963 3 649	4 963 3 649	4 964 3 667	3 667	3 670	3 670	3 670	3 670
Timor Leste	0	0	0	0	0	0	0	0	0	0
Turkmenistan	1	1	1	1	1	1	1	2	2	2
Uzbekistan Viet Nam	1 871 15 745	1 880 16 628	1 880 17 849	1 858 17 809	1 915 17 989	1 908 20 326	2 021 20 817	2 052 21 847	2 225 22 535	2 415 22 639
C America + Carib	6 561	6 940	7 591	7 738	8 042	8 161	8 278	8 332	8 379	8 422
Belize	38	38	38	38	57	57	57	57	57	57
Costa Rica	1 835	1 936	2 329	2 329	2 373	2 344	2 332	2 379	2 331	2 372
Cuba	63	63	66	66	64	72	72	72	72	72
Dominica	7	7	7	7	7	7	7	7	7	7

#### 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	1574	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	1574	1 725	1 632	1 647	1 770	1 791	1 810	1 810	1845	1845
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	1340	1 350	1 3 4 5	1 3 4 5	1 358
Azerbaijan	1 078	1 103	1 105	1 106	1 131	1 145	1149	1 157	1 165	1302
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 4 3 0
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 5 6 4	1564	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 3 3 0	1 331	1 331	1 330	1 3 3 0
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 Greenland	75 474 91	79 405 91	80 304 91	80 831 91	81 570 91	81 570 91	81 575 91	83 106 91	83 481 91	83 481 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
55/1	102 270	102 301	102 040	102 031	102 302	102 017	100 000	100 073	100 240	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
World	1 067 334	1 099 510	1 130 041	1 151 054	1 173 728	1 192 459	1 212 925	1 235 882	1 260 883	1 267 903
Africa	26 726	27 236	28 164	30 921	32 286	32 991	33 851	34 331	36 077	37 082
Algeria	228 969 u	228 969 e	228 1 700 u	228 e 2 393 u	228 e 3 061 e	228 e 3 395 e	209 o 3 729 e	129 e 3 729 e	129 e 3 729 e	129 e 3 729 e
Angola Benin	969 u 1	969 e 1	1700 u	2 393 u 1	3 061 e	3 395 e 1 e	3 /29 e 1 e			
Burkina Faso	32 o	35 e	35 e	35 e	35 e	35 e	35 e	35 e	35 e	37 e
Burundi	50 e	50 e	50 e	48 e	48 e	48 e	48 e	48 e	63 e	63 e
Cameroon	733 e	733 e	733 e	732 e	732 e	812 e	812 e	812 e	814 e	814 e
Cent Afr Rep	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e	19 e
Comoros	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Congo DR	2 417 o	2 417 0	2 429 e	2 440 e	2 598 e	2 608 e	2 608 e	2 608 e	2 932 e	3 172 e
Congo Rep Cote d Ivoire	194 e 604 o	194 e 604 o	201 u 604 o	214 u 879 u	214 u 879 e	214 e 879 e	214 e 879 e	214 e 879 e	214 e 879 o	214 e 879 e
Egypt	2 800 o	2 800 o	2 800 o	2 800 o	2 832 o	2 832 o	2 832 e	2 832 e	2 832 e	2 832 o
Eq Guinea	126 o	126 o	126 o	126 e	127 o	127 e				
Eswatini	62 e	62 e	62 e	62 e	62 e	62 e	62 e	62 e	62 e	62 e
Ethiopia	1972 e	2 159 e	2 159	3 817	3 817 e	3 817 e	4 071	4 071	4 821 e	4 883 e
Gabon	331 e	331 e	331 e	331 e	331 e	331 e	331 e	331 e	331 e	331 e
Ghana	1580 o	1584 0	1584 o	1584 o	1584 e					
Guinea Kenya	129 o 828 e	369 o 827 e	369 o 830 e	369 e 841 e	369 e 845 e	364 e 852 e	589 e 854 e	814 e 858 e	814 e 858 e	814 e 859 e
Lesotho	74	74	74	74	74	74	74	74	74	74 e
Liberia	5 e	5 e	27 e	93 e	93 e	93 e	93 e	93 e	93 e	93 e
Madagascar	163 e	164 e	164 e	164 e	164 e	164 e	164 e	164 e	192 e	193 e
Malawi	372 e	372 e	373 e	373 e	373 e	373 e	373 e	392 e	392 e	392 e
Mali	315 e	315 e	315 e	315 e	315 e	315 e	315 e	315 e	455 e	455 e
Mauritius	61 e	61 e	61 e	61 e	61 e	61 e	61 e	61 e	61 e	61 e
Morocco	1 306 2 190 e	1 306 2 191 e	1 306 2 191 e	1 306 2 191 e	1 306 2 191 e	1 306 e 2 191 e	1 306 e 2 192 e	1 306 e 2 192 e	1 306 o 2 192 e	1 306 e 2 192 e
Mozambique Namibia	2 190 e 330	330	2 191 e 347	2 191 e 347 o	2 191 e 347 o	2 191 e 347	2 192 e 351 u	2 192 e 351 e	2 192 e 351 e	2 192 e 351 e
Nigeria	2 110 o	2 111 o	2 111 o	2 111 o	2 111 o	2 111 e	2 151 e	2 151 e	2 151 e	2 851 e
Reunion	134 o	134 o	133 o	133 o	133 o	133 o	133 o	134 o	134 e	134 o
Rwanda	66 e	94 e	98 e	98 e	98 e	109 e	119 e	119 e	124 e	124 e
Sao Tome Prn	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 e	2 e
Sierra Leone	56 e	56 e	56 e	61 e	61 e	61 e	61 e	61 e	61 e	61 e
South Africa	733 e	748 e	748 e	748 e	748 e	748 e	748 e	752 e	752 e	752 e
Sudan Tanzania	1 322 o 572 e	1 322 o 579 e	1 322 o 587 e	1322 o 589 e	1 482 o 589 e	1 482 o 596 e	1 482 o 598 e	1 482 e 598 e	1 482 e 599 e	1 482 e 599 e
Togo	67 o	67 o	67 o	67 o	67 o	67 e	67 e	67 e	67 e	67
Tunisia	62 o	62 o	62 o	62 o	66 o	66 o	66 o	66 o	66 e	66 e
Uganda	695 e	695 e	695 e	707 e	744 e	1004 e	1 011 e	1 011 e	1033 e	1033 e
Zambia	2 259 e	2 268 e	2 388 e	2 398 e	2 398 e	2 399 e	2 400 e	2 706 e	3 165 e	3 165 e
Zimbabwe	757 e	772 e	776 e	780 e	1080 e					
Asia	423 304	442 494	454 860	466 413	478 691	489 460	503 759	522 754	539 404	544 103
Afghanistan	280 e	284 e	329 e	349 e	349 e	349 e	349 e	357 u	459 u	459 e
Bangladesh	230 o	230 o	230 o	230 o	230 e	230 o	230 o	230 о	230 o	230 o
Bhutan	1 488 o	1 614 o	1 614 o	1 614 o	1 614 o	2 334 u	2 334 e	2 334 o	2 334 o	2 334 e
Cambodia	929 o 282 750	930 o 296 500	930 o 305 380	980 o 314 385	1 330 o 322 271	1330 o	1 330 o 338 670	1330 o	1 676 o 367 710	1 791 o 370 600
China China HK SAR	202 /30	296 500	305 380	314 365	1	327 750 o 1	338 670	354 530 1	367 710	370 600 1 e
Chinese Taipei	2 081 o	2 089 o	2 089 o	2 089 o	2 092 o	2 093 o	2 093 o	2 094 o	2 098 o	2 104 o
India	40 621 e	42 319 e	42 836 e	44 735 e	45 317 e	45 494 o	45 977 e	46 781 e	47 220 e	47 331 e
Indonesia	5 242 e	5 322 e	5 666 e	5 703 e	5 773 o	5 976 o	6 141 o	6 602 o	6 689 o	6 784 e
Japan	27 873	28 111	28 161	28 118	28 140	28 136	28 136	28 112	28 198 o	28 216 e
Kazakhstan	2 675	2 678	2 696	2 726	2 756 u	2 778 e	2 785	2 807	2 807	2 903 o
Korea DPR Korea Rep	4 293 o 1 767	4 467 o 1 771	4 701 o 1 785	4 761 o 1 789	4 790 o 1 790	4 790 o 1 809	4 865 o 1 806	4 865 o 1 841	4 890 u 1 812 o	4 890 e 1 805 o
Kyrgyzstan	3 671	3 677	3 677	3 689	3 673 o	3 673 e	3 674	2 780 o	2 780 o	3 210 e
Lao PDR	3 292 e	4 393 e	4 869 e	5 102 e	5 380 e	6 224 e	8 013 e	8 956 e	9 646 e	9 756 e
Malaysia	4 761 e	5 742 e	6 121 e	6 145 e	6 165 e	6 185 e	6 197 e	6 215 e	6 215 e	6 215 e
Mongolia	29 e	29 e	31 e	31 e	31 o	31 e	29	29	29	29 e
Myanmar	3 188 e	3 190 e	3 262 e	3 262 e	3 269 e	3 269 e	3 269 e	3 269 e	3 269 e	3 269 e
Nepal	737 e	791 e	811 e	916 e	1038 e	1159 e	1282 e	1973 e	2 199 e	2 677 e
Pakistan	7 220 e	7 221 e	7 254 e	7 406 e	9 906 e	9 925 e	10 045 e	10 045 e	10 636 e	10 636 e
Philippines Sri Lanka	2 858 o 1 669 e	2 877 o 1 688 e	2 887 o 1 726 e	2 896 o 1745 e	2 983 o 1 797 e	3 025 o 1 813 e	3 044 o 1 797 e	3 047 e 1 801 e	3 037 o 1 831 e	3 090 e
Tajikistan	4 983 u	4 983 u	4 983 u	4 983 u	1797 e 4 984 e	1815 e 5744 e	1797 e 5744 u	5 745 u	5 763 u	1843 e 5763 e
Thailand	3 048 o	3 079 o	3 089 o	3 089 o	3 107 o	3 107 o	3 110 o	3 110 e	3 110 e	3 110 e
Timor Leste	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Turkmenistan	1	1	1	1	1	1 e	1	2 e	2	2 e
Uzbekistan	1 871	1880	1880	1858	1 915 o	1 908	2 021 o	2 052 o	2 225 u	2 415 u
Viet Nam	15 745 e	16 628 e	17 849 e	17 809 e	17 989 e	20 326 e	20 817 e	21 847 e	22 535 e	22 639 e
C America + Carib	6 561	6 940	7 591	7 738	8 036	8 155	8 272	8 326	8 373	8 416
Belize	38 u	38 u	38 u	38 u	57 u	57 u	57 u	57 u	57 u	57 e
Costa Rica	1835 o	1936 o	2 329 o	2 329 o	2 373 o	2 344 o	2 332 o	2 379 o	2 331 o	2 372
Cuba	63	63	66	66	64 0	72 o	72 u	72	72 e	72 e
Dominica	7 о	7 о	7 о	7 о	7 o	7 о	7 o	7 o	7 e	7 e

## 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
D D	507	617	617	C1.4	C1.C	605	605	COF	60.4	60.4
Dominican Rep	593 o	613 o	613 o	614 o	616	625 o	625 o	625 e	624 e	624
El Salvador	490 e	497 e	495 e	575 e	575 e	576 o	575 o	573 o	573 e	573 e
Guadeloupe	9 0	9 0	9 0	11 o	11 o	11 0	11 o	11 o	11 0	11 e
Guatemala	1 013 o	1 087	1392 o	1438 o	1502 o	1574 o	1577 o	1572 o	1573 o	1574 o
Haiti	56 e	56 e	56 e	56 e	78 u	78 e 730 o	78 e 838 o	78 e	78 e	78 e 910 o
Honduras	629 o	638 o 30	677 o	682 o 30	707 o	730 o 30 e		850 o 30 e	910 o	30 e
Jamaica	30 120	138	30 142 o	142 o	30 e 142 o	30 e 157 o	30 e 157 o	30 e 158 o	30 e 159 o	30 e 160 e
Nicaragua					1770 o					
Panama Puerto Rico	1574 o 98 o	1 725 98 o	1632 o 98 o	1647 o 98 o	98 o	1 791 o 98 o	1 810 o 98 o	1 810 o 98 o	1845 o 98 o	1845 o 98 o
St Vincent Gren	6 e	6 e	6	6 e	6 e	6 e	6 u	6 u	6 e	6 e
Eurasia	78 935	81 319	82 508	83 305	84 557	85 367	88 204	88 747	88 856	88 456
Armenia	1298 o	1287 o	1 312 o	1 327	1336 o	1340 o	1350 o	1345 o	1345 e	1358 o
Azerbaijan	1 078	1 103	1 105	1 106 u	1 131 o	1 145	1149 o	1 157	1165 o	1302 u
Georgia	2 800 u	2 802 u	3 160 u	3 113 u	3 220 u	3 300 u	3 323 u	3 354 u	3 376 u	3 446 u
Russian Fed	50 116	50 259	50 250	50 486	50 579	51 079	51 398	51 398	51 398	50 571 e
Türkiye	23 643	25 868	26 681	27 273 o	28 291	28 503	30 984	31 493	31 571	31 779 o
Europe	183 626	186 049	189 296	191 108	192 253	193 182	194 709	195 523	197 129	196 858
Albania	1 725	1 798	1 913	2 047	2 105	2 162	2 387	2 507	2 493	2 493 o
Andorra	46 o	46 o	46 o	46 o	46 o	46 o	46 e	46 e	46	46 e
Austria	13 532	13 650	14 116	14 150	14 516	14 597	14 635	14 748	14 923	14 708 o
Belarus	33	34	74	95	95 o	95 e	96	96 e	96	97 u
Belgium	121	112	109	107	108	104	106	111	123	123 o
Bosnia Herzg	1 711 o	1 717 o	1760 o	1 791	1 816	1 819	1829	1 837	1838 o	1838 o
Bulgaria	2 355	2 355	2 359	2 508	2 515	2 514	2 512	2 505	2 526	2 526 e
Croatia	2 180	2 195	2 192	2 193	2 200	2 200	2 200	2 201	2 206	2 206 o
Czechia	1 080	1 088	1 0 9 0	1 093	1 093	1 094	1 0 9 4	1 113	1 115	1 116 u
Denmark	9	7	9	7	7	7	7	7	7	7 e
Estonia	5	6	6	7	7 e	6	8	6	8	8 o
Faroe Islands	39 o	39 o	39 o	39 o	40 o	40 o	40 o	40 o	40	40 e
Finland	3 132	3 133	3 133	3 156	3 152	3 157	3 164	3 171	3 171	3 177 o
France	23 799	23 824	23 893	23 979	23 999	24 141	24 227	24 263	24 236	24 139 e
Germany	5 580	5 589	5 629	5 627	5 329	5 378	5 454	5 490	5 621	5 741 e
Greece	3 389	3 392	3 392	3 392	3 409	3 412	3 417	3 421	3 421	3 427 o
Hungary	57	57	57	57	57	58	58	60	60	60 o
Iceland	1984	1987	1 987	1995	2 099	2 104	2 114	2 114	2 114 e	2 114 e
Ireland	237	237	237	237	237	237	237	237	237	237 e
Italy	18 116	18 238	18 316	18 486	18 558 o	18 601	18 755	18 809	18 933	18 848
Kosovo*	43	43	78	80	80	95	110	110	110 1 588	110 e
Latvia Lithuania	1 588 117	1 588 117	1 564 117	1 564 117	1 565 117	1 587 117	1 586 117	1 587 117	1 588	1 567 o 118 o
Luxembourg	34	34	34	35	34	34 e	35	35	34	34 o
Moldova Rep	64	64	64	64 o	64 o	64 e	64	64 e	64	64 o
Montenegro	653	662	668	675	676	676	697	697 o	697	697 e
Netherlands	37	37	37	37	37	37	37	38	38	38 o
North Macedonia	630	658	661	671	674	678	687	689	696 o	696 o
Norway	31 240	31 372	31 817	31 912	32 530	32 797	33 732	34 075	34 269	34 401 e
Poland	958	964	972	967	968	974	977	975	984	983 e
Portugal	5 715	6 168	6 960	7 226	7 236	7 262	7 241	7 255	8 189	8 188 e
Romania	6 521	6 638	6 642	6 600	6 609	6 595	6 561	6 571	6 571	6 574 e
Serbia	2 403	2 408	2 416	2 424	2 429	2 460	2 468 e	2 471 e	2 493	2 494 e
Slovakia	1 607	1 606	1608	1 607	1 612	1 611	1 613	1 615	1 616	1 616 e
Slovenia	1 116	1 115	1 113	1 167	1163	1 171	1 172	1 172	1166	1162 o
Spain	15 892	16 722	16 749	16 748	16 748	16 782	16 785	16 801	16 806 o	16 809 o
Sweden	15 897	16 230	16 367	16 502	16 431	16 462	16 406	16 407	16 399	16 399 e
Switzerland	13 288	13 346	14 279	14 826	14 980 o	15 012	15 032	15 049	15 065 o	15 279 o
UK Ukraine	2 029 4 665	2 077 4 697	2 133 4 658	2 170 e 4 704	2 177 4 734	2 180 o 4 816	2 185 o 4 819	2 190 o 4 823 u	2 190 4 823 e	2 190 4 488 u
European Union (27)	123 336	125 364	126 964	127 832	127 973	128 402	128 666	128 979	130 358	130 074
Middle East	14 854	14 385	14 601	14 255	14 401	14 484	14 494	14 492	14 842	15 018
Iran IR	10 785	10 238 e	10 538 e	10 913 e	11 059 e	11 1/12 -	11 157 ^	11 153 e	11 503 e	11 679 u
						11 142 e	11 153 e			
Iraq Israel	2 274 e 7 o	2 274 e 7 e	2 274 e 7 e	1557 e 7 e	1557 e 7 e	1557 e 7 e	1557 e 6 o	1557 e 6 e	1557 e 6 e	1557 e 6 e
Jordan	12 o	7 e 12 o	6 o	6 o	6 o	7 e 6 o	6 o	4 o	4 o	4 e
Lebanon	282 e	282 e	282 e	282 e	282 e	282 e	282 e	282 e	282 e	282 e
Syrian AR	1494 o	1572 o	1 494 o	1 490 o	1 490 o	1 490 e	1 490 e	1490 e	1490 e	1490 e
N America	171 350	175 041	176 622	177 169	177 998	178 352	178 620	180 614	183 331	183 363
Canada	75 300	79 231	80 130	80 657	81 396 o	81 396 o	81 401 o	82 932 e	83 307 e	83 307 e
Greenland	91 o	91 o	91 o	91 o	91 e	91 o	91 e	91 e	91 e	91 e
Mexico	12 464	12 223	12 580	12 628	12 628 o	13 076 o	13 301	13 303 o	13 304 o	13 304 e
USA	83 494 o	83 495 o	83 821 o	83 792 o	83 883 o	83 789 o	83 827 o	84 288 o	86 628 o	86 660 o

## 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 о	0 о	0 о	0 о	0 о	0 e	0 e	0 е	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
S America  Argentina	148 567 10 138	152 619 10 140 o	162 972 10 202 o	166 712 10 275 o	171 820 10 320 o	176 770 10 342 o	177 311 10 376 o	177 391 10 377 o	178 927 10 390 o	179 870 10 390 o
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
Argentina Bolivia	10 138 483	10 140 o 484	10 202 o 484	10 275 o 602	10 320 o 735 e	10 342 o 735 o	10 376 o 736 e	10 377 o 736 e	10 390 o 736 e	10 390 o 736
Argentina Bolivia Brazil	10 138 483 89 194 o	10 140 o 484 91 655 o	10 202 o 484 96 934 o	10 275 o 602 100 339 o	10 320 o 735 e 104 496 o	10 342 o 735 o 109 162 o	10 376 o 736 e 109 345 o	10 377 o 736 e 109 458 o	10 390 o 736 e 109 802 o	10 390 o 736 109 903 o
Argentina Bolivia Brazil Chile	10 138 483 89 194 o 6 411 o	10 140 o 484 91 655 o 6 492 o	10 202 o 484 96 934 o 6 625 o	10 275 o 602 100 339 o 6 645 o	10 320 o 735 e 104 496 o 6 634 o	10 342 o 735 o 109 162 o 6 680 o	10 376 o 736 e 109 345 o 6 934 o	10 377 o 736 e 109 458 o 6 807 o	10 390 o 736 e 109 802 o 7 289 o	10 390 o 736 109 903 o 7 471 o
Argentina Bolivia Brazil Chile Colombia	10 138 483 89 194 o 6 411 o 10 900	10 140 o 484 91 655 o 6 492 o 11 501 e	10 202 o 484 96 934 o 6 625 o 11 611 e	10 275 o 602 100 339 o 6 645 o 11 731 o	10 320 o 735 e 104 496 o 6 634 o 11 842 o	10 342 o 735 o 109 162 o 6 680 o 11 926 e	10 376 o 736 e 109 345 o 6 934 o 11 954 e	10 377 o 736 e 109 458 o 6 807 o 11 949 o	10 390 o 736 e 109 802 o 7 289 o 12 553 o	10 390 o 736 109 903 o 7 471 o 13 211 o
Argentina Bolivia Brazil Chile Colombia Ecuador	10 138 483 89 194 o 6 411 o 10 900 2 248 o	10 140 o 484 91 655 o 6 492 o 11 501 e 2 408 o	10 202 0 484 96 934 0 6 625 0 11 611 e 4 446 0	10 275 0 602 100 339 0 6 645 0 11 731 0 4 516 e	10 320 o 735 e 104 496 o 6 634 o 11 842 o 5 066 o	10 342 o 735 o 109 162 o 6 680 o 11 926 e 5 076 o	10 376 o 736 e 109 345 o 6 934 o 11 954 e 5 098 o	10 377 o 736 e 109 458 o 6 807 o 11 949 o 5 099 o	10 390 o 736 e 109 802 o 7 289 o 12 553 o 5 191	10 390 o 736 109 903 o 7 471 o 13 211 o 5 192
Argentina Bolivia Brazil Chile Colombia Ecuador Fr Guiana	10 138 483 89 194 o 6 411 o 10 900 2 248 o 120 o	10 140 o 484 91 655 o 6 492 o 11 501 e 2 408 o 120 o	10 202 0 484 96 934 0 6 625 0 11 611 e 4 446 0 120 0	10 275 0 602 100 339 0 6 645 0 11 731 0 4 516 e 120 0	10 320 o 735 e 104 496 o 6 634 o 11 842 o 5 066 o 120 o	10 342 0 735 0 109 162 0 6 680 0 11 926 e 5 076 0 120 0	10 376 o 736 e 109 345 o 6 934 o 11 954 e 5 098 o 120 o	10 377 o 736 e 109 458 o 6 807 o 11 949 o 5 099 o 120 o	10 390 o 736 e 109 802 o 7 289 o 12 553 o 5 191 120 o	10 390 o 736 109 903 o 7 471 o 13 211 o 5 192 120 e
Argentina Bolivia Brazil Chile Colombia Ecuador Fr Guiana Guyana	10 138 483 89 194 o 6 411 o 10 900 2 248 o 120 o 2 e	10 140 o 484 91 655 o 6 492 o 11 501 e 2 408 o 120 o 2 o	10 202 0 484 96 934 0 6 625 0 11 611 e 4 446 0 120 0 2 e	10 275 0 602 100 339 0 6 645 0 11 731 0 4 516 e 120 0 2 e	10 320 o 735 e 104 496 o 6 634 o 11 842 o 5 066 o 120 o 2 e	10 342 0 735 0 109 162 0 6 680 0 11 926 e 5 076 0 120 0 2 0	10 376 o 736 e 109 345 o 6 934 o 11 954 e 5 098 o 120 o 2 e	10 377 o 736 e 109 458 o 6 807 o 11 949 o 5 099 o 120 o 2 e	10 390 o 736 e 109 802 o 7 289 o 12 553 o 5 191 120 o 2 e	10 390 o 736 109 903 o 7 471 o 13 211 o 5 192 120 e 2 e
Argentina Bolivia Brazil Chile Colombia Ecuador Fr Guiana Guyana Paraguay	10 138 483 89 194 o 6 411 o 10 900 2 248 o 120 o 2 e 8 810	10 140 o 484 91 655 o 6 492 o 11 501 e 2 408 o 120 o 2 o 8 810	10 202 o 484 96 934 o 6 625 o 11 611 e 4 446 o 120 o 2 e 8 810	10 275 o 602 100 339 o 6 645 o 11 731 o 4 516 e 120 o 2 e 8 810	10 320 o 735 e 104 496 o 6 634 o 11 842 o 5 066 o 120 o 2 e 8 810 o	10 342 o 735 o 109 162 o 6 680 o 11 926 e 5 076 o 120 o 2 o 8 810	10 376 o 736 e 109 345 o 6 934 o 11 954 e 5 098 o 120 o 2 e 8 810 o	10 377 o 736 e 109 458 o 6 807 o 11 949 o 5 099 o 120 o 2 e 8 810 e	10 390 o 736 e 109 802 o 7 289 o 12 553 o 5 191 120 o 2 e 8 810 e	10 390 o 736 109 903 o 7 471 o 13 211 o 5 192 120 e 2 e 8 810 o
Argentina Bolivia Brazil Chile Colombia Ecuador Fr Guiana Guyana Paraguay Peru	10 138 483 89 194 o 6 411 o 10 900 2 248 o 120 o 2 e 8 810 3 651 o	10 140 o 484 91 655 o 6 492 o 11 501 e 2 408 o 120 o 2 o 8 810 4 139 o	10 202 0 484 96 934 0 6 625 0 11 611 e 4 446 0 120 0 2 e 8 810 5 179 0	10 275 o 602 100 339 o 6 645 o 11 731 o 4 516 e 120 o 2 e 8 810 5 113 o	10 320 o 735 e 104 496 o 6 634 o 11 842 o 120 o 2 e 8 810 o 5 230 o	10 342 0 735 0 109 162 0 6 680 0 11 926 e 5 076 0 120 0 2 0 8 810 5 387 0	10 376 o 736 e 109 345 o 6 934 o 11 954 e 5 098 o 120 o 2 e 8 810 o 5 406 o	10 377 o 736 e 109 458 o 6 807 o 11 949 o 5 099 o 120 o 2 e 8 810 e 5 503 o	10 390 o 736 e 109 802 o 7 289 o 12 553 o 5 191 120 o 2 e 8 810 e 5 504 o	10 390 o 736 109 903 o 7 471 o 13 211 o 5 192 120 e 2 e 8 810 o 5 504 e
Argentina Bolivia Brazil Chile Colombia Ecuador Fr Guiana Guyana Paraguay Peru South Georgia	10 138 483 89 194 0 6 411 0 10 900 2 248 0 120 0 2 e 8 810 3 651 0	10 140 o 484 91 655 o 6 492 o 11 501 e 2 408 o 120 o 2 o 8 810 4 139 o 0	10 202 o 484 96 934 o 6 625 o 11 611 e 4 446 o 120 o 2 e 8 810 5 179 o	10 275 o 602 100 339 o 6 645 o 11 731 o 4 516 e 120 o 2 e 8 810 5 113 o 0	10 320 o 735 e 104 496 o 6634 o 11 842 o 5066 o 120 o 2 e 8 810 o 5230 o 0	10 342 0 735 0 109 162 0 6 680 0 11 926 e 5 076 0 120 0 2 0 8 810 5 387 0	10 376 o 736 e 109 345 o 6 934 o 11 954 e 5 098 o 120 o 2 e 8 810 o 5 406 o 0 e	10 377 o 736 e 109 458 o 6 807 o 11 949 o 5 099 o 120 o 2 e 8 810 e 5 503 o 0 e	10 390 o 736 e 109 802 o 7 289 o 12 553 o 5 191 120 o 2 e 8 810 e 5 504 o 0 e	10 390 o 736 109 903 o 7 471 o 13 211 o 5 192 120 e 2 e 8 810 o 5 504 e 0 e

#### 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	1864	1 864	2 863	3 196	3 196	3 196	3 196	3 196	3 196	3 196
Morocco South Africa	464 1400 u	464 1 400 u	464 2 399 u	464 o 2 732 u	464 2 732 e	464 e 2 732 e	464 e 2 732 e	464 e 2 732 u	464 o 2 732 e	464 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 Chinese Taipei India Japan Korea Rep Mongolia Philippines Thailand	22 110 2 602 o 4 786 o 21 724 4 700 0 736 o 560 o	23 030 2 602 0 4 786 0 21 924 4 700 0 736 0 560 0	26 690 2 602 o 4 786 o 21 897 4 700 0 736 o 560 o	29 390 e 2 602 o 4 786 o 21 897 4 700 o 0 736 o 560 o	29 990 2 602 0 4 786 e 21 897 4 700 0 0 736 0 560 0	30 290 2 602 0 4 786 0 21 897 4 700 0 0 e 736 0 560 0	31 490 2 602 o 4 786 e 21 897 4 700 o 0 736 o 560 o	36 390 2 602 o 4 786 e 21 897 4 700 o 0 736 e 560 e	45 790 2 602 o 4 786 e 21 817 o 4 700 o 0 736 o 560 e	50 940 2 602 0 4 786 e 21 817 0 4 700 0 0 e 736 0 560 e
C America + Carib					6	6	6	6	6	6
Honduras					6 о	6 о	6 о	6 о	6 о	6 о
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	1356 e	1 356	1356 e
Europe	28 199	28 380	28 680	28 464	28 360	28 360	28 365	28 689	28 676	28 871
Belgium Bosnia Herzg Bulgaria Czechia France Germany Ireland Italy Lithuania Luxembourg Poland Romania Serbia Slovakia Slovakia Slovenia Spain Sweden Switzerland UK Ukraine	1307 420 o 864 1172 1728 5 654 292 3 982 760 1 296 1 406 92 614 916 180 3 331 99 456 2 444	1 307 420 0 864 1172 1728 5 666 292 3 982 760 1 296 1 406 92 614 916 180 3 331 99 469 2 600 1 186	1 307 420 o 864 1172 1728 5 578 292 3 982 760 1 296 1 413 92 614 916 180 3 331 99 527 2 600 1 509	1307 420 o 864 1172 1728 5 493 292 3 940 760 1296 e 1423 92 614 916 e 180 e 3 331	1307 420 e 864 1172 1728 o 5 355 292 3 940 o 760 1296 e 1 423 92 614 o 916 180 3 331	1307 420 o 864 1172 1728 5355 292 3 940 760 1296 e 1423 92 614 e 916 e 180 e 3 331	1307 420 o 864 1172 o 1728 5 354 292 3 940 760 1 296 1 423 92 614 e 916 e 180 3 331	1307 420 o 864 1172 1728 5354 292 3 940 760 1 296 1 423 92 614 e 916 e 180 o 3 331	1307 420 864 1172 1728 5353 292 3 928 760 1 296 1 423 92 614 916 180 3 331 o	1307 o 420 o 864 e 1172 u 1742 o 5 423 o 292 e 4 039 760 o 1296 o 1423 e 92 e 614 e 916 e 180 e 3 331 o
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 Iraq Israel	240	1 040 240	1040 240 e	1 040 240 e	1040 o 240 e	1040 e 240 e	1040 e 240 e 300 u	1040 o 240 e 300 e	1040 e 240 e 300 e	1040 e 240 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 USA	174 18 776	174 18 866	174 o 19 027	174 e 19 059	174 e 19 079	174 o 19 025	174 o 19 263 o	174 o 16 585 o	174 o 16 621 o	174 e 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 о	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 0	0 e	0	0 е
France	220	218	220	219	218	214	212	211	212	212 e
Italy	0 u	0 u	0 u	0 е	0 е	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 е	0 е	0 e	0 e	0 e	0	0 е
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 о						
Oceania	1	1	1	1		0	0	0	0	
Australia	1	1	1	1 e		0		e		
New Zealand						0 о	0 0	0 e	0 e	
S America	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	0	0	0 о	0 о	0 о	0 о	0 о	0 о

## 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 Cabo Verde	10 27	10 27	10 27	10 27	10 27	10 27	10 27	10 27	10 27	10 27
Chad			1	1	1	1	1	1	1	1
Djibouti Egypt	555	755	755	755	1 130	1 132	1 380	20 1 640	20 1 643	80 1 890
Egypt Eritrea	555 1	755	/55 1	/55 1	1 130	1 132	1 360	1 640	1 043	1 690
Ethiopia	171	324	324	324	324	324	324	324	404	324
Gambia Ghana	1	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 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 1	34 1	34 11	34	34 11	34	34 11	34	34 11	137
Mauritius Morocco	797	797	902	11 1 022	1 225	11 1 225	1 435	11 1 471	1 558	11 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 Seychelles	6	6	6	6	6	55 6	159 6	159 6	159 6	159 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 Tunisia	233	240	240	240	245	245	2 245	2 245	2 245	2 245
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 China	0 96 819	0 131 048	0 148 517	0 164 374	0 184 665	0 209 582	0 281 993	0 328 973	0 365 964	0 441 895
China HK SAR	30 013	151 040	140 317	1	1	1	1	1	1	1
Chinese Taipei	637	647	682	692	713	845	937	1 033	1 581	2 674
India Indonesia	22 465 1	25 088 1	28 700 1	32 848 1	35 288 144	37 505 154	38 559 154	40 067 154	41 930 154	44 736 154
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	1108	1 440
Korea DPR Korea Rep	1 612	1 847	1 1 067	1 1 215	1 1 420	1 1 494	2 1 645	2 1 724	2 1 908	2 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 Nepal	0	0	0	0	0	0	0	0	0	0
Pakistan	206	308	591	789	1 186	1 236	1 236	1 335	1845	1845
Philippines	337	427	427	427	427	443	443	443	443	443
Singapore Sri Lanka	121	131	131	0 131	0 128	0 128	0 179	0 252	0 252	0 267
Thailand	225	234	507	628	1 103	1507	1 507	1545	1545	1545
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 Bahamas	30 0	30 0	30 0	30 0	30 0	30 0	30 0	30 0	30 0	30 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 Br Virgin Is	11 1	11 1	11 1	11 1	11 1	11 1	11 1	11 1	11 1	11 1
Cayman Is		Į.	1	1	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 Dominica	30 0	30 0	30 0	47 0	47 0	47 0	47 0	47 0	47 0	47 0
Dominican Rep	80	86	135	135	183	370	370	370	417	417
El Salvador							36	54	54	54
Grenada Guadeloupe	0 26	0 27	0 27	0 27	0 43	0 48	0 42	0 52	0 52	0 52
Guatemala	20	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 Martinique	42 1	42 1	102 1	102 1	102 1	102 14	102 15	102 14	102 14	102 14
Nicaragua	186	186	186	186	186	186	186	186	186	186
Panama Duranta Disa	55	205	270	270	270	270	270	270	336	336
Puerto Rico St Kitts Nevis	99 2	99 2	99 2	99 2	99 2	99 2	99 2	99 2	99 2	99 2
Trinidad Tobago	4	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	1143
Cyprus	147	158	158	158	158	158	158	158	158	158
Czechia	278	281	282	308 5 400	316 6 127	339	339	339	339	343
Denmark Estonia	4 886 275	5 077 300	5 245 310	5 489 312	6 123 310	6 111 316	6 259 317	7 004 315	7 084 316	7 482 408
Faroe Islands	273	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 Moldova Rep	0 1	0 1	0 2	0 9	0 33	0 35	0 41	0 67	0 115	0 141
Montenegro	ı	'	2	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	1040	1 564	1 871
Bahrain Iran IR	1 149	1 153	1 191	1 259	1 282	1 305	1 308	1 310	3 342	3 365
Israel	6	6	27	259	282	305 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 Mexico	2 569	3 271	4 051	4 180	0 4 180	0 6 541	0 6 995	0 7 155	0 7 318	0 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 0 5 9
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 0 3 4	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
World	340 915	404 600	452 599	496 208	540 250	594 481	699 350	770 336	839 263	944 536
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 e	10 e	10 e	10 e	10 e	10 e	10 e
Cabo Verde	27	27	27	27	27 o					
Chad			1 u	1 e	1 e	1 e	1 o	1 e	1 e	1 e
Djibouti Egypt	555 o	755 o	755 o	755 o	1130 o	1 132 e	1380 e	20 u 1640 e	20 e 1643 e	80 e 1890 e
Eritrea	1 e	755 0 1 e	755 U	755 U	1 iso 0	1 is 2 e	1 360 e	1 640 e	1 043 e	1 e
Ethiopia	171	324	324 u	324 e	324 e	324 e	324	324	404 e	324 e
Gambia	1 0	1 0	1 0	1 0	1 e	1 e	1 e	1 e	1 e	1 e
Ghana		0 0	0 е	0 е	0 e	0 e	0 e	0 e	0 о	0 e
Kenya	6 o	26 e	26 e	26 e	336 e	336 e	336 e	436 e	436 e	436 e
Madagascar	0 о	0 о	0 о	0 е	0 е	0 е	0 e	0 е	0 е	0 е
Mauritania	4 0	34 0	34 o	34 0	34 e	137 e				
Mauritius Morocco	1 797	1 797	11 o 902 o	11 e 1 022 o	11 e 1 225 o	11 e 1 225 e	11 e 1 435 e	11 e 1 471 e	11 e 1 558 e	11 e 1 858 e
Namibia	0 e	0 e	0 e	5 e	5 e	5 e	5 e	5 e	5 e	5 e
Reunion	15 o	15 o	17 o	17 e	17 o	17 e	17 e	17 e	15 o	15 e
Senegal						55 o	159 o	159 e	159 e	159 e
Seychelles	6 o	6 o	6 o	6 o	6 e	6 e	6 e	6 o	6 o	6 e
Somalia	2 u	3 u	3 u	4 u	4 e	4 e	4	4 e	4 e	4 e
South Africa	569 o	1079 o	1 473 o	2 094 o	2 094 o	2 094 e	2 516 u	2 495 u	3 163 u	3 442 u
Tanzania Tunisia	233 o	240 o	240 o	240 o	245 o	245 o	2 u 245 o	2 e 245 e	2 e 245 e	2 e 245 e
Asia	123 821	161 077	182 459	202 011	224 261	251 373	322 529	356 948	393 946	468 200
Afghanistan	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Bangladesh	2 0	3 o	3 0	3 0	3 e	3 0	3 0	3 0	3 0	3 o
Bhutan		1 u	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Cambodia	0 e	0 e	0 e	0 е	0 е	0 e	0 e	0 e	0 e	0 e
China	96 379	130 489	147 037	161 586	180 077	203 652 e	273 003 o	302 583 e	335 504 e	404 605 e
China HK SAR				1	1	1	1	1	1	1 e
Chinese Taipei	637 o	647 o	682 o	684 o	705 o	717 o	809 o	796 o	836 o	1105 o
India Indonesia	22 465 o 1 o	25 088 o 1 o	28 700 o 1 o	32 848 o 1 o	35 288 o 144 o	37 505 o 154 o	38 559 o 154 e	40 067 o 154 o	41 930 o 154 o	44 736 o 154 e
Japan	2 703	2 749	3 140	3 418	3 433	3 886	4 061	4 210	4 320 o	5 079 u
Kazakhstan	53	72	98	112	121 o	284 e	486	684	1108	1440 o
Korea DPR	1 u	1 u	1 u	1 u	1 u	1 u	2 u	2 e	2 e	2 e
Korea Rep	602	837	1 027	1 170	1 347	1 421	1509 u	1588 u	1772 o	2 031 e
Maldives	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Mongolia	51 e	51 e	51 e	101 e	156 o	156 e	156	156	156 e	156 e
Myanmar	0 u	0 e 0 u	0 e 0 u	0 e 0 e	0 e 0 o	0 e 0 o	0 e 0 e	0 e 0 e	0 e 0 e	0 e 0 e
Nepal Pakistan	206 e	308 e	591 e	789 e	1 186 e	1236 e	1 236 e	1 335 e	1845 e	1845 e
Philippines	337 o	427 o	427 o	427 o	427 o	443 o	443 o	443 e	443 o	443 e
Singapore				0 u	0 e	0 e	0 e	0 e	0 е	0 e
Sri Lanka	121 o	131 o	131 o	131 o	128 o	128 e	179 o	252 o	252 o	267 o
Thailand	225	234	507	628 o	1103 o	1507 o	1507 o	1545 o	1545 o	1545 o
Uzbekistan Viet Nam	37 u	37 u	61 e	1 o 106 e	1 o 138 u	1 e 275 e	1 419 e	1 e 3 124 e	1 4 071 e	1 e 4 784 e
C America + Carib	927	1 296	1 535	1 660	1 787	2 005	2 019	2 042	2 156	2 174
	327	1230	1 333	1000	1707	2 003	2 013	2 042	2 150	21/4
Antigua Barb Aruba	30	30	30	30	30 e	30 o	30 e	30 e	30 e	30 e
Bahamas	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e	0 e
Barbados	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 u	1 u	1 e
Belize	0 u	0 u	0 u	0 u	0 u	0 u	0 u	0 е	0 u	0 e
BES Islands	11 o	11 o	11 o	11 o	11 o	11 e				
Br Virgin Is	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 o	1 u
Cayman Is	40.0	070	740		1 u	1 e	1 e	1 e	1 e	1 e
Costa Rica	196 o	278 o	319 o	378 o	408 o	411 o	394 o	390 o	390 o	408
Cuba Curacao	16 o 30	66 o 30	66 o 30	66 o 47 o	66 o 47 o	66 e 47 o	66 e 47 o	66 e 47 e	66 e 47 e	66 e 47 e
Dominica	0 0	0 0	0 0	0 0	0 0	0 e	0 e	47 e	47 e	47 e
Dominican Rep	80	86	135 o	135 o	183 o	370 o	370 o	370	417 o	417
El Salvador	33		.00 0	.00 0		0,00	36 o	54 o	54 e	54 o
Grenada	0 u	0 u	0 u	0 u	0 u	0 e	0 e	0 e	0 e	0 e
Guadeloupe	26 o	27 o	27 o	27 o	43 o	48 o	42 o	52 o	52 o	52 e
Guatemala		76	76	76	107 o	107 о				
Haiti					0 u	0 e	0 e	0 e	0 e	0 e
Honduras	152	156 e	179 e	229 e	229 e	239 o				
Jamaica	42 e	42 e	102 e	102 e	102 e	102 e	102 e	102 e	102 e	102 e
Martinique	1 0	1 0	1 0	1 e	1 0	14	15	14	14 e	14 e
Nicaragua Panama	186 55	186 205 o	186 270	186 270	186 o 270 o	186 o 270	186 o 270 e	186 e 270 o	186 e 336 o	186 e 336 o
Puerto Rico	99 o	205 0 99 o	99 o	99 o	99 o	99 o	270 e 99 o	270 0 99 o	99 o	99 o
St Kitts Nevis	2	2	2	2 u	2 e	2 e	2 e	2 e	2 e	2 e
Trinidad Tobago	_	0	0	0	0 e	0 e	0 e	0 e	0 e	0 e
US Virgin Is	0 о	0 о	0 о	0 о	0 e	0 e	0 e	0 e	0 e	0

#### 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 о	3 e	3 о	3 e	3 e	3 e	3	3 о
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 3 630	11 e 4 503	11 e 5 751	11 e 6 516	52 e 7 005	102 e 7 591	945 8 832	1 955 o 10 607	2 218 11 396	2 518 e 11 697 o
Türkiye	3 630	4 503	5 /51	6 516	7 005	/ 591	8 832	10 607	11 396	11 697 0
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 0 o	1 469 0 o	1 622 0 o	1 902 0 o	2 119 51	2 308 87	2 411 87	2 687 135 u	3 042	3 242 u 135 o
Bosnia Herzg Bulgaria	699	699	699	698	699	703	703	704	135 702	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 Finland	20 o 601 e	20 o 973 e	20 o 1533 e	20 e 1 971	16 o 1 968 o	13 o 2 211	19 o 2 513	23 o 3 184	23 5 604	23 e 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 Kanana*	8 683 1	9 137	9 384	9 737	10 230 34	10 679 34	10 871 34	11 254 34	11 821	12 308
Kosovo* Latvia	69	1 68	1 70	34 77	78	34 78	34 78	34 77	68 82	137 u 141 u
Lithuania	288	436	509	518	533	534	540	671	946	1287 o
Luxembourg	58	64	120	120	123	136	153	136	165	221 o
Malta	0	0	0	0	0 е	0 e	0	0	0	0 e
Moldova Rep	1	1	2 o	9 о	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 Norway	37 857	37 865 e	37 881 e	37 u 1205 o	37 u 1 708	37 o 2 912	37 o 4 028	37 u 5 047	73 o 5 060	110 o 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 Sweden	22 920 4 875	22 938 e 5 606	22 985 6 232	23 119 6 408	23 400 7 097	25 585 8 478	26 814 9 773	27 903 11 923	30 109 14 086	31 021 o 16 059 u
Switzerland	4 6/5 60	60	75	6 408 75 u	7 097 75 o	6 476 75 e	9 773 87	11 923 87	14 086 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	1258 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 0	6 e	27 e	27 e	27 e	27 e	27 e	27 e	136 u	316 u
Jordan Kuwait	1 o 2 e	118 o 2 e	184 o 2 e	198 o 2 e	295 o 12 e	384 o 12 e	529 o 12 e	632 o 12 e	614 e 12 e	614 e 12 e
Lebanon	2 e 3 u	2 e 3 e	2 e 3 e	2 e 3 e	3 e	3 e	3 e	3 e	3 e	3 e
Oman	5 u	5 0	5 0	3.0	5.0	50	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		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 о	0 о	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	70 707	01 477	07.001	04.677	107.000	110 67 4	170.070	141 677	147.070
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		
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 0	0 0	0 e	0 e	0 e	0 e	0 e	0 e
Marshall Is	0 e	0 е	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	1059 o
Samoa	1 o	1 o	1 o	1 o	1 o	1 e	1 e	1 e	1 e	1 e
Tokelau						0 о	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 о	3 о	3 о	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	1609	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	1034 o	1305 o	1524 o	1620 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 е	0 e	0 e	0 e	0 е	0 е	0 е	0 е	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 е	0 е	0 е	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 Chinese Taipei	440	559	1 480	2 788 u 8 u	4 588 u 8 u	5 930 128 o	8 990 128 o	26 390 237 o	30 460 745 o	37 290 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	1264	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

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 Burkina Faso	2 2	2 3	3 3	3 38	4 54	6 55	6 56	6 57	6 87	6 177
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 0	1 0	5 0	7 0	22 0	22 0	22 1	22 1	25 1	25 1
Congo Rep Cote d Ivoire	0	0	0	1	2	4	6	8	9	46
Djibouti	Ö	Ö	0	Ö	0	0	0	0	0	0
Egypt	35	36	59	180	764	1647	1 643	1663	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 0	12 0	12 0	12 0	20	21	21	21
Gabon Gambia	0	0 1	1	1	1	2	0 2	1 2	1 2	1 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 Madagascar	5 7	5 9	5 11	5 13	5 33	5 33	5 33	6 33	6 59	8 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 Niger	16 6	21 7	36 8	75 9	99 27	151 27	151 27	151 27	176 62	176 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 Somalia	0	0	0 5	4 7	4 7	4 7	4 16	4 24	9 47	9 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	4 300	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 Darsm	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	676	00.4	1045	1	1	89	91	95	185	191
Chinese Taipei	636 7 776	884 5 607	1 245	1768	2 738	4 150	5 817	7 700	9 724	12 418 77 100
India Indonesia	3 776 42	5 697 79	9 982 88	18 257 97	27 485 65	35 250 155	39 705 185	49 950 225	63 390 313	73 109 574
Japan	23 339	79 34 150	42 040	49 500	56 162	63 192	71 868	78 413	83 057	87 068
Japan Kazakhstan	23 339 5	34 150 57	42 040 57	49 500 59	209	542	912	78 413 1 038	1146	1306
Korea DPR	11	23	32	36	50	65	79	1038	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 Lao PDR	2	2	2	8	34	34	45	59	59	0 59
Malaysia	205	266	344	8 394	545	34 894	45 1 483	1 787	1 933	1 933
Maldives	205 4	200 5	344 7	394 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
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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	1244
Philippines	28	172	784	908	919	982	1 058	1 378	1 625	1675
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,			220	000	0	0	0	0
Thailand	1304	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	Ö	0	1	1	7	7	7	7	7
BES Islands	O	Ö	2	5	6	7	7	7	7	8
Br Virgin Is	0	1	1	1	1	1	1	1	1	2
Cayman Is	Ü		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
	13	22	70	93	188	331	382	580	732	1 073
Dominican Rep	0	11	12	93 110	167	410	362 479	543	571	586
El Salvador										
Grenada	1 70	1 70	2	2 70	3 72	3	4	4	4	4
Guadeloupe			70 07			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
	2	5	1 25					146		
Azerbaijan	2	5	0	28	35 1	33	35	48	51	282
Georgia	-	C1		1		1 276	1 420	18	23	58
Russian Fed Türkiye	5 41	61 250	76 834	225 3 422	535 5 064	1 276 5 996	1 428 6 668	1 661 7 817	1 816 9 426	2 170 11 293
Europe	91 096	99 605	106 175	112 307	121 572	142 339	162 795	190 928	233 821	288 122
• *					<b></b>					
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 0 9 6	1 2 6 9	1 455	1702	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 0 3 0	1 031	1 033	1044	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	1704	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	2 900 7	4 233 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	736 29 795
HOLV	10 000	10 307	15 205	15 000	20 114	20 0/1	21 000	22 000	24 301	23133

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 0 0 7	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	1646	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 0 3 4
Spain	7 001 60	7 008	7 017	7 027 244	7 068	11 111 714	12 440 1 107	16 019 1 606	25 615 2 388	31 016
Sweden Switzerland	1 061	104 1 394	153 1 664	1906	428 2 173	2 498	2 973	3 655	2 300 4 340	3 488 5 840
UK	5 528	9 601	11 914	12 760	13 060	13 345	2 973 13 551	3 655 13 915	4 340 14 651	15 657
Ukraine	819	841	955	12 700	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	1990
Kuwait	4	5	22	23	34	84	84	84	102	102
Lebanon	5	11	24	37	55	76	90	190	875	1005
Oman	1	2	2	8	26	26	129	155	655	672
Palestine	3 4	12	25 5	35 5	40 5	82 5	117	178	192	192
Qatar Caudi Arabia	24	4					5	5 470	805	805
Saudi Arabia Syrian AR	24	24	24	34 0	84 1	109 2	109 12	439 33	440 60	2 285 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	1047	2 510	2.665	2.072	3 095	3 327	7.000	4.554	5 312	5 757
Canada Greenland	1843	2 519	2 665	2 932	2 092	3 327	3 609 0	4 554 1	5 31Z	5 /5/
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 Fiji	2 2	3 4	3 6	3 8	5 8	6 8	6 9	6 9	6 9	6 11
Fr Polynesia	26	30	32	35	o 38	6 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

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	1829	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 е	0 e	0 е	0 е	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 е	1 e	2 e	2 e	2 e	2 e	2 e	9 e	9 e	9 e
Cabo Verde	6 0	6 o	6 o	6 0	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 е	0 e	0 e	0 e	1 e	1 e	1 e	1 e	2 e	2 e
Comoros	1.0	1.0	1 e 5 e	1 e 7 e	1 e 22 e	1 e 22 e	1 e 22 e	0 e 22 e	4 e 25 e	4 e 25 e
Congo DR	1 e 0 e	1 e 0 e	о е О е	7 e 0 e	22 e 0 e	22 e 0 e	22 e 1 e	22 e 1 e	25 e 1 e	25 e 1 e
Congo Rep 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	1627 o	1 623 o	1643 o	1704 u	1836 e
Eq Guinea	.5		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	е	0 е	0 e	0 e	0 е	0 e	0 е	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 е	0 е	0 e	13 e	14 e	15 e	15 e	16 e	16 e
Guinea Bissau		0 е	0 e	0 е	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 0	1 0	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 8 e	9 e 12 e	11 e	13 e 19 e	33 26 e	33 80 e	33 e 80 e	33 e 140 e	59 e 181 e	59 e 181 e
Malawi Mali	ое 4 е	12 e 6 e	12 e 7 e	19 e 10 e	26 e 10 e	80 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	75 e 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				
Sao Tome Prn	e	e	0 e	0 e	0 е	0 e	0 e	0 е	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	1064 e	1253 e	1976 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 20 u	0 u	0 u 36 u	1 e 59 u	1 u	1 e	1 u 136 u	15 e 190 e	28 e 190 e
Sudan Tanzania	17 u 11 e	20 u 13 e	26 u 12 e	13 e	17 e	80 u 16 e	117 u 16 e	16 e	190 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	10 -	20 -	22 -	22.0	72 ^	71 ^	71 -	77 -	77 -
Bangladesh	169 e	19 e 196 e	20 e 165 e	22 e 217 e	22 e 240 e	32 e 280 e	31 e 343 e	31 e 506 e	33 e 524 e	33 e 767 e
Bhutan	0 e	0 e	0 e	217 e 0 e	240 e 0 e	280 e 0 e	0 e	0 e	0 e	767 e 1 u
Brunei Darsm	1 u	0 e 1 u	0 e 1 u	0 e 1 u	0 e 1 u	0 e 1 u	0 e 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	20 300	-5 550	,, ,00	130 001	1/3 010	89	91	95	185	191 e
Chinese Taipei	636 o	884 o	1245 o	1768 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 0	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	1038 e	1146 e	1306 o
Korea DPR	11 u	23 u	37 e 32 u	36 u	50 e	65 e	79 e	1038 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	2 020	5 045	- <del>1</del> 002	0 733	0 321	12 / 1/	17 323	21204	240/00	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	1787 e	1933 e	1933 e
Maldives	4 0	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 0	48 o	88 u	84 e	110 e	181 e	181 e
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## Solar photovoltaic Solaire photovoltaique 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	1078 e	1244 e	1244 e
Philippines	28 e	172 e	784 e	908 e	919 e	982 e	1058 e	1 378 e	1625 e	1675 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	22 6	37 6	71 6	134 6	220 E	330 E	0	024 6	0	0
	1 200	1 420	2.446	2.607	2.062 -	2.007 -				
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 0	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 0	11 o	12 o	110 o	167 o	410 o	479 o	543 o	571 o	586 e
Grenada		10								
	1 0		2	2	3 o	3 0	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 o
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 0	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 0	0 0	0 0	0 e	0	0 e	0 0	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 0	0 0	0 e	1 0	1	1	2 0	2 0
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 0	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	1276 e	1 428	1661 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 0	0 0	0 о	0 о	1 0	2 o	3 о	4 o	4 e	4 e
Austria	785	937	1 096	1 269	1 455	1702	2 043	2 783	3 792	6 832 o
Belarus	4	6	47	80	154	154	160	163	273	273 u
Belgium	3 O15	3 132	3 329	3 621	4 000	4 637	5 573	6 012	6 756	8 549 u
Bosnia Herzg	7 o	8 0	14 o	16	18 o	22	35 o	57	102 o	132 o
Bulgaria	1 029	1 028	1030	1 031	1 033	1044	1 100	1 275	1737	2 937 e
•					68	85			222	461 u
Croatia	33 64	48 76	56 84	60 110			109	138		
Cyprus					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 Fatania	607	782	851	906	998 o	1 080	1304	1704	3 070	3 529
Estonia	3 u	7 u	10	15	32	121	208	395	520	690 o
Faroe Islands			<del></del> -	-		0	0 0	0 0	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
Iceland Ireland Italy						7 e 96 20 865		7 e 228 22 594		

## Solar photovoltaic Solaire photovoltaique 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	1165 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	1007	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	1646	2 646	3 876 e
Romania	1 293	1 326	1 372	1 374	1 386	1 3 9 8	1 383	1394	1809	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	1034 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	1606	2 388	3 488 e
Switzerland	1 061	1 394	1664	1906 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	1200 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	42 e	42 e						
Israel	650	790	900	1 000	1340	1 890	2 410	3 349	4 169	4 282
Jordan	0 о	57 o	311 e	418 o	760 o	971 o	1541 o	1 811 u	1966 e	1990 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	1005 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	1835 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	1843	2 519	2 665	2 932	3 095	3 327	3 609 o	4 554 o	5 312	5 757
Greenland					0 0	0 0	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
					11 671	10 407		26 252		
Oceania	5 356	6 082	6 866	7 514	11 631	16 483	21 230		30 643	34 494
Amer Samoa	2 0	2 0	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 0	32 o	35 o	36 e	38 e	40 e	41 e	43 e	105 e	105 e
Kiribati	1 0	2 0	3 0	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 0	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 0
Niue	0 e	0 e	0 e	0 e	0 e	1 u	1 e	1 e	1 e	1 e
Palau Papua N Guin	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 Salaman Is	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 7 e	1 e	1 e	1 e
Tonga Tuvalu	3 o 0 e	4 o 4 o	5 o	7 o 4 o	7 u 4 e	7 e 4 e	7 e 4 e	7 e 4 e	14 e 4 e	15 e
Vanuatu	0 e 0 e	4 0 0 e	4 e 2 e	4 0 3 e	4 e 4 o	4 e 5 u	4 e 5 u	4 e 5 u	4 e 5 u	4 e 5 e
v di ludiu	U e	U e	2 e	з е	4 0	эu	ъu	ъu	эu	э е

## Solar photovoltaic Solaire photovoltaique 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	1080 o	1 116	1408 o
Bolivia	6	5	5	5	5 o	5 o	121	170	171	172
Brazil	21 e	46 e	128 e	1207 e	2 453 e	4 698 o	8 452 o	14 499 o	25 520 e	37 449 e
Chile	203 o	545 o	1050 o	1829 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 0	0 0	0 0	0 0	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 о	0 0	0 0	0 0	0 0	0 о	0	0	1	1 e
Peru	130 e	135 e	146 e	298 e	324 o	335 o	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					
Egypt	20	20	20	20 o	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 о	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	343 u	343 u	343 u	343 e	343 u				
Korea Rep	0 е	0 е	0 е	0 е						
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 о	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 о	6 o	6 e	6 e	6 e	6 e	6	6
Romania				0	0	0	0	0	0	0 е
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	1667 o	1758 o	1748 o	1480 o	1480 o	1480 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 Bioénergie 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 Chad	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 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 Gabon	71	119 1	145 1	205 1	290 1	290 1	290 1	335 1	335 1	310 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 Mali	19 6	19 6	19 6	19 41	19 41	19 41	19 41	19 41	19 41	19 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 8	0 8	0 9	0 9	0 9	0 9	0 13	0 21	0 21	0 21
Nigeria Reunion	44	6 45	46	46	9 87	9 87	13 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 Sudan	246 199	251 199	256 199	260 199	265 199	265 199	265 199	265 199	265 199	265 199
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 China HK SAR	6 653	7 977	9 269 17	11 234 45	13 235 45	16 537 52	21 855 52	27 345 52	29 390 58	31 255 58
Chinese Taipei	396	395	395	395	397	393			30	30
India							4()()	408	408	398
IIIQId	5 032	5 480	8 897	9 418	10 138	10 226	400 10 533	408 10 592	408 10 669	398 10 752
Indonesia	5 032 1 729	5 480 1 734	8 897 1 775	9 418 1 849	10 138 1 875	10 226 1 884	10 533 1 896	10 592 2 270	10 669 3 087	10 752 3 183
Indonesia Japan	5 032 1 729 1 630	5 480 1 734 1 901	8 897 1 775 2 213	9 418 1 849 2 608	10 138 1 875 3 033	10 226 1 884 3 506	10 533 1 896 3 906	10 592 2 270 4 559	10 669 3 087 5 404	10 752 3 183 6 384
Indonesia Japan Kazakhstan	5 032 1 729 1 630 0	5 480 1 734 1 901 0	8 897 1 775 2 213 0	9 418 1 849 2 608 1	10 138 1 875 3 033 1	10 226 1 884 3 506 2	10 533 1 896 3 906 8	10 592 2 270 4 559 8	10 669 3 087 5 404 8	10 752 3 183 6 384 14
Indonesia Japan Kazakhstan Korea Rep	5 032 1 729 1 630 0 601	5 480 1 734 1 901 0 729	8 897 1 775 2 213 0 1 745	9 418 1 849 2 608 1 2 348	10 138 1 875 3 033 1 2 387	10 226 1 884 3 506 2 3 215	10 533 1 896 3 906 8 3 628	10 592 2 270 4 559 8 2 731	10 669 3 087 5 404 8 3 159	10 752 3 183 6 384 14 3 176
Indonesia Japan Kazakhstan	5 032 1 729 1 630 0	5 480 1 734 1 901 0	8 897 1 775 2 213 0	9 418 1 849 2 608 1	10 138 1 875 3 033 1	10 226 1 884 3 506 2	10 533 1 896 3 906 8	10 592 2 270 4 559 8	10 669 3 087 5 404 8	10 752 3 183 6 384 14
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives	5 032 1 729 1 630 0 601 40 1 431	5 480 1 734 1 901 0 729 40 1 555	8 897 1 775 2 213 0 1 745 40 1 526	9 418 1 849 2 608 1 2 348 40 800	10 138 1 875 3 033 1 2 387 107 810	10 226 1 884 3 506 2 3 215 107 883 0	10 533 1 896 3 906 8 3 628 107 891	10 592 2 270 4 559 8 2 731 107 904 0	10 669 3 087 5 404 8 3 159 107 904 0	10 752 3 183 6 384 14 3 176 107 904 0
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar	5 032 1729 1 630 0 601 40 1 431	5 480 1 734 1 901 0 729 40 1 555	8 897 1 775 2 213 0 1 745 40 1 526	9 418 1 849 2 608 1 2 348 40 800	10 138 1 875 3 033 1 2 387 107 810	10 226 1 884 3 506 2 3 215 107 883 0 59	10 533 1 896 3 906 8 3 628 107 891 0 59	10 592 2 270 4 559 8 2 731 107 904 0 59	10 669 3 087 5 404 8 3 159 107 904 0	10 752 3 183 6 384 14 3 176 107 904 0 59
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal	5 032 1 729 1 630 0 601 40 1 431 52 7	5 480 1 734 1 901 0 729 40 1 555 48 7	8 897 1 775 2 213 0 1 745 40 1 526 49 7	9 418 1 849 2 608 1 2 348 40 800	10 138 1 875 3 033 1 2 387 107 810	10 226 1 884 3 506 2 3 215 107 883 0 59	10 533 1 896 3 906 8 3 628 107 891 0 59 6	10 592 2 270 4 559 8 2 731 107 904 0 59 7	10 669 3 087 5 404 8 3 159 107 904 0 59 7	10 752 3 183 6 384 14 3 176 107 904 0 59 7
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan	5 032 1729 1 630 0 601 40 1 431	5 480 1 734 1 901 0 729 40 1 555 48 7 333	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374	9 418 1 849 2 608 1 2 348 40 800	10 138 1 875 3 033 1 2 387 107 810	10 226 1 884 3 506 2 3 215 107 883 0 59 7	10 533 1 896 3 906 8 3 628 107 891 0 59 6	10 592 2 270 4 559 8 2 731 107 904 0 59 7	10 669 3 087 5 404 8 3 159 107 904 0 59 7	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal	5 032 1 729 1 630 0 601 40 1 431 52 7 325	5 480 1 734 1 901 0 729 40 1 555 48 7	8 897 1 775 2 213 0 1 745 40 1 526 49 7	9 418 1 849 2 608 1 2 348 40 800 52 7 374	10 138 1 875 3 033 1 2 387 107 810 57 7 432	10 226 1 884 3 506 2 3 215 107 883 0 59	10 533 1 896 3 906 8 3 628 107 891 0 59 6	10 592 2 270 4 559 8 2 731 107 904 0 59 7	10 669 3 087 5 404 8 3 159 107 904 0 59 7	10 752 3 183 6 384 14 3 176 107 904 0 59 7
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Phillippines Singapore Sri Lanka	5 032 1 729 1 630 0 601 40 1 431 52 7 325 143 154 20	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26	10 138 1 875 3 033 1 2 387 107 810 57 7 432 341 169 27	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40	10 533 1 896 3 906 8 3 628 107 891 0 59 6 432 513 164 45	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand	5 032 1 729 1 630 0 601 40 1 431 52 7 325 143 154	5 480 1 734 1 901 0 729 40 1 555 48 7 7 333 233 168	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170	10 138 1 875 3 033 1 1 2 387 107 810 57 7 432 341 169	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166	10 533 1 896 3 906 8 3 628 107 891 0 59 6 432 513 164	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45 4 705
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Phillippines Singapore Sri Lanka	5 032 1 729 1 630 0 601 40 1 431 52 7 325 143 154 20	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26	10 138 1 875 3 033 1 2 387 107 810 57 7 432 341 169 27	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40	10 533 1 896 3 906 8 3 628 107 891 0 59 6 432 513 164 45	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322	9 418 1 849 2 608 1 2 348 40 800 52 7 374 276 170 26 3 728	10 138 1 875 3 033 1 2 387 107 810 57 7 432 341 169 27 4 037	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097	10 533 1 896 3 906 8 3 628 107 891 0 59 6 432 513 164 45 4 241	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45 4 705
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam	5 032 1 729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796	5 480 1 734 1 901 0 729 40 1 555 48 7 7 333 233 168 20 3 165	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 332 341 169 27 4 037	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097	10 533 1 896 3 906 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603	10 752 3 183 6 384 14 3 176 107 904 0 59 7 4 32 615 246 45 4 705 0 408
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165 220	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274	10 138 1 875 3 033 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 432 513 164 45 4 241 390	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45 4 705 0 408
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Phillippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846	5 480 1 734 1 901 0 729 40 1 555 48 7 7 333 233 168 20 3 165 220 2 140	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 2	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696	10 226 1 884 3 506 2 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b>	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 <b>2 988</b>
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165 220 2 140 2 140	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 3 6 6 2	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80	10 533 1 896 3 906 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 1 36 81	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 <b>2 988</b> 2 1 36 81
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Phillippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 2 8 4 4 499	5 480 1734 1901 0 729 40 1555 48 7 333 233 168 20 3 165 220 2 140 2 1 2 8 49 530	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49 49 495	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49 532	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 3 6 6 2 5 5 4	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 3 680 817	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 432 513 164 45 4 241 390 3 139 2 1 1 3 6 80 956	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 2 971 2	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 3 6 8 1 966	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45 4 705 0 408 2 988 2
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165 220 2 140 2 140	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 3 6 6 2	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80	10 533 1 896 3 906 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 1 36 81	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 <b>2 988</b> 2 1 36 81
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 28 44 499 21 136 31	5 480 1 734 1 901 0 729 40 1 555 48 7 7 333 233 168 20 3 165 220 2 140 2 1 2 8 49 530 2 1 2 02 3 1	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49 495 22 259 31	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49 532 82 270 33	10 138 1 875 3 033 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 36 62 554 83 305 34	10 226 1 884 3 506 2 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80 817 83 300 34	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139 2 1 3 36 80 956 83 300 51	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81 953 83 301 51	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 3 6 81 966 85 303 51	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 <b>2 988</b> 2 1 1 36 81 966 85 303 51
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep El Salvador Guadeloupe Guatemala	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 28 44 499 21 136 31 719	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165 220 2 140 2 1 28 49 530 21 202 31 878	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49 495 22 259 31	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49 532 82 270 33 1 028	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 332 341 169 27 4 037 382 2 696 2 1 3 6 6 2 5 5 4 8 3 3 05 3 4 1 081	10 226 1 884 3 506 2 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80 817 83 300 34 1 036	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139 2 1 3 6 80 956 83 300 51 1 036	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 2 971 2 1 36 81 953 83 301 51 870	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 <b>2 988</b> 2 1 3 6 8 1 966 85 303 51 870	10 752 3 183 6 384 14 3 176 107 904 0 59 7 4 432 615 246 45 4 705 0 408 2 988 2 1 3 6 8 1 966 8 5 303 51 870
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep El Salvador Guadeloupe Guatemala Honduras	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 2 8 44 499 21 136 31 719 138	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165 220 2 140 2 1 28 49 530 21 202 31 878 169	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 1 28 49 495 22 259 31 992 213	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 1 36 49 532 82 270 33 1 028 213	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 36 62 554 83 305 34 1 081 213	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 3 6 80 817 83 300 34 1 036 225	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139 2 1 3 6 80 956 83 300 51 1 036 225	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81 953 83 301 51 870 225	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 1 36 81 966 85 303 51 870 225	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 2 988 2 1 1 36 81 966 85 303 51 870 225
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Phillippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep El Salvador Guadeloupe Guatemala Honduras Jamaica	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 1 28 44 499 21 136 31 719 138 32	5 480 1 734 1 901 0 729 40 1 555  48 7 333 233 168 20 3 165  220  2 140  2 1 28 49 530 21 202 31 878 169 32	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49 495 22 259 31 992 213 32	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 1 36 49 532 82 270 33 1 028 213 32	10 138 1 875 3 033 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 36 62 554 83 305 34 1 081 213 32	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80 817 83 300 34 1 036 225 32	10 533 1 896 3 906 8 3 628 107 891 0 59 6 432 513 164 45 4 241 390 3 139 2 1 36 80 956 83 300 51 1 036 225 32	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81 953 83 301 51 870 225 32	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 1 36 81 966 85 303 51 870 225 32	10 752 3 183 6 384 14 3 176 107 904 0 59 7 432 615 246 45 4 705 0 408 2 988 2 1 3 36 8 1 966 8 5 303 51 870 225 32
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep El Salvador Guadeloupe Guatemala Honduras	5 032 1729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 2 8 44 499 21 136 31 719 138	5 480 1 734 1 901 0 729 40 1 555 48 7 333 233 168 20 3 165 220 2 140 2 1 28 49 530 21 202 31 878 169	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 1 28 49 495 22 259 31 992 213	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 1 36 49 532 82 270 33 1 028 213	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 36 62 554 83 305 34 1 081 213	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 3 6 80 817 83 300 34 1 036 225	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139 2 1 3 6 80 956 83 300 51 1 036 225	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81 953 83 301 51 870 225	10 669 3 087 5 404 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 1 36 81 966 85 303 51 870 225	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 2 988 2 1 1 36 81 966 85 303 51 870 225
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep El Salvador Guadeloupe Guatemala Honduras Jamaica Martinique	5 032 1 729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 2 8 44 499 21 136 31 719 138 32 2	5 480 1 734 1 901 0 729 40 1 555 48 7 7 333 233 168 20 3 165 220 2 140 2 1 2 28 4 9 530 2 1 2 02 3 1 8 78 8 169 3 2 3 3	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 1 28 49 495 22 259 31 992 213 322	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49 532 82 270 33 1 028 213 32 3	10 138 1 875 3 033 1 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 36 62 554 83 305 34 1 081 1 081 2 13 2 44	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80 817 83 300 34 1 036 225 32 44	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 432 513 164 45 4 241 390 3 139 2 1 3 36 80 956 83 300 51 1 036 225 32 44	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81 953 83 301 51 870 225 324	10 669 3 087 5 404 8 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 36 81 966 85 303 51 870 225 32 44	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 2 988 2 1 36 81 966 85 303 51 870 225 32
Indonesia Japan Kazakhstan Korea Rep Lao PDR Malaysia Maldives Myanmar Nepal Pakistan Philippines Singapore Sri Lanka Thailand Timor Leste Viet Nam  C America + Carib  Aruba Bahamas Belize Costa Rica Cuba Dominican Rep El Salvador Guadeloupe Guatemala Honduras Jamaica Martinique Nicaragua	5 032 1 729 1 630 0 601 40 1 431 52 7 325 143 154 20 2 796 195 1 846 2 1 28 44 499 21 136 31 719 138 32 2	5 480 1 734 1 901 0 729 40 1 555  48 7 333 233 168 20 3 165 220 2 140  2 1 28 49 530 21 202 31 878 169 32 3 134	8 897 1 775 2 213 0 1 745 40 1 526 49 7 374 259 169 24 3 322 256 2 368 2 1 28 49 495 22 259 31 992 213 32 3 179	9 418 1 849 2 608 1 1 2 348 40 800 52 7 374 276 170 26 3 728 274 2 531 2 1 36 49 532 82 270 33 1 028 213 32 3 179	10 138 1 875 3 033 1 2 387 107 810 57 7 4 32 341 169 27 4 037 382 2 696 2 1 36 62 554 83 305 34 1 081 213 32 44 179	10 226 1 884 3 506 2 3 215 107 883 0 59 7 432 393 166 40 4 097 389 2 980 2 1 36 80 817 83 300 34 1 036 225 32 44 220	10 533 1 896 3 906 8 8 3 628 107 891 0 59 6 6 432 513 164 45 4 241 390 3 139 2 1 3 36 80 956 83 300 51 1 036 225 32 44 220	10 592 2 270 4 559 8 2 731 107 904 0 59 7 432 519 176 45 4 476 373 <b>2 971</b> 2 1 36 81 953 83 301 51 870 225 32 44	10 669 3 087 5 404 8 8 3 159 107 904 0 59 7 432 633 234 45 4 603 393 2 988 2 1 36 81 966 85 303 51 870 225 32 44 220	10 752 3 183 6 384 14 3 176 107 904 0 59 7 7 432 615 246 45 4 705 0 408 2 988 2 1 36 81 966 85 303 51 870 225 32 44 220

# Bioenergy Bioénergie Bioenergía

Albania   1   1   1   1   1   1   1   1   1	CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Businsh Fed   1370	Eurasia	1 628	1 679	1 767	1 887	2 005	2 201	2 515	3 000	3 278	3 411
Europe   33 297   34 725   35 730   37 170   40 014   41 348   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 597   42 436   41 861   41 87 87 87 87 87 87 87 87 87 87 87 87 87	Azerbaijan	37	38	38	43	45	45	45	45	45	38
Albenia											1 373
Albania   1   1   1   1   1   1   1   1   1	Turkiye	221	2/1	359	4/2	587	784	1097	1 583	1861	2 001
Androra 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Europe	33 297	34 725	35 730	37 170	40 014	41 348	41 861	41 597	42 436	42 818
Belarus 355 55 40 41 48 53 125 127 1249 125 1717 1195 Belarus 55 55 40 41 48 53 125 120 139 Belarus 915 943 923 912 887 906 922 817 870 11 11 11 1 1 2 2 2 10 11 11 11 11 11 11 11 11 11 11 11 11											1
Belgium   915											5 1 195
Bosnia Herrg											141
Bulgaria							906	922			871
Croatala   25	-	40	F.4								11
Cyprus         10         10         10         10         13         13         13         13         14           Czechia         745         777         777         802         781         833         86         853         86           Denmark         1248         1243         1305         1791         1774         1982         206         2152         2007           Estonia         278         281         281         281         281         282         2573         296         295         296         295         202         206         225         2073         296         296         296         1932         2046         206         298         600         20         227         2706         2711         3197         757         772         103         103         103         103         103         103         103         107         100         108         108         108         108         104         107         108         108         108         108         108         108         108         108         108         108         108         108         108         108         108         108         108	-										50 161
Denmark											14
Estonia 278 281 281 281 259 273 296 296 296 Farce Islands		745	771	773	802	781	831	846	853	861	865
Finland 1977 1987 2009 2230 2230 2227 2706 2711 3197 France 1463 1531 1561 1712 1925 2008 1932 2066 2711 3197 France 1463 1531 1561 1712 1925 2008 1932 2066 271 3197 France 1463 1531 1561 1712 1925 2008 1932 2066 271 3197 France 1463 1531 1561 1561 1712 1925 2008 1932 2066 2067 Germany 8202 8429 8600 8882 9862 9994 10320 9792 9830 Greece 477 519 519 427 491 513 504 5509 551 553 silend 70 70 70 70 72 1003 103 107 107 107 108 108 108 108 109 128 109 128 109 128 109 128 109 128 109 128 109 128 109 128 109 128 109 109 128 109 128 109 109 128 109 109 109 108 108 108 109 109 109 109 109 109 109 109 109 109											2 007
Finland		278	281	281	281	259	273				294 2
Germany		1 977	1 987	2 009	2 230	2 230	2 227				3 059
Greece	France	1 463	1 531	1 661	1 712	1 925	2 008	1 932	2 046	2 067	2 187
Hungary   549   519   427   491   513   504   509   551   533   Ireland   70   70   72   103   103   107   107   108   108   Italy   3 359   3 367   3 439   3 450   3 491   3 454   3 439   3 420   3 392   Latvia   121   126   143   154   134   158   156   152   144   Lithuania   71   71   72   79   104   105   116   116   118   Luxembourg   23   24   25   36   36   56   56   56   56   56   5	•										9 950
Ireland											128 534
Italy											108
Lithuania 71 71 72 79 104 105 116 116 118 Luxembourg 23 24 25 36 36 36 56 56 56 56 56 16 Malta 3 3 3 3 5 5 5 5 5 5 5 5 5 3 Moldova Rep 3 3 3 3 3 6 6 6 6 6 7 7 7 15 Netherlands 752 792 772 785 827 818 866 936 934 North Macedonia 4 5 7 8 8 10 10 10 11 14 Norway 140 140 87 87 87 81 77 77 77 77 Poland 816 961 974 968 1004 1010 1045 1100 1217 Portugal 561 577 587 582 648 702 715 717 706 Romania 94 118 1123 140 141 139 165 140 185 Serbia 6 6 6 11 15 19 28 31 36 39 Slovakia 237 242 253 246 243 226 225 250 264 Slovenia 62 63 60 62 60 60 67 67 67 67 Spain 1032 1035 1037 1045 1057 1112 1264 1278 1279 Sweden 4 483 4716 4850 4822 5021 5299 4 462 4376 4 507 Switzerland 229 240 241 242 242 241 242 241 242 244 241 242 242											3 434
Luxembourg         23         24         25         36         36         56         56         56         56           Malta         3         3         5         5         5         5         5         5         5         3           Moldova Rep         3         3         3         6         6         6         7         7         15           Netherlands         752         792         7772         785         827         818         866         936         934           North Macedonia         4         5         7         7         8         10         10         11         14           Norway         140         140         87         87         81         77         77         77         77         77         77         70         104         100         104         110         111         14         100         101         111         14         100         101         110         117         77         77         77         77         77         77         77         77         77         77         77         77         77         77         77         77         7											133
Malta         3         3         5         5         5         5         5         5         3           Moldova Rep         3         3         3         6         6         6         7         7         15           Netherlands         752         792         772         785         827         818         866         936         954           North Macedonia         4         5         7         8         10         10         11         14           Norway         140         140         87         87         81         77         77         77           Poland         816         961         974         968         1004         1010         1045         1100         1217           Portugal         561         577         587         582         648         702         715         717         706           Romania         94         118         123         140         141         139         165         140         185           Serbia         6         6         11         15         19         28         31         36         39           Slovalia											215
Moldova Rep   3   3   3   6   6   6   6   7   7   15     Netherlands   752   792   772   785   827   818   866   936   934     North Macedonia   4   5   7   8   10   10   11   14     Norway   140   140   87   87   87   81   77   77   77     Poland   816   961   974   968   1004   1010   1045   1100   1217     Portugal   561   577   587   582   648   702   715   717   706     Romania   94   118   123   140   141   139   165   140   185     Serbia   6   6   11   15   19   28   31   36   39     Slovakia   237   242   253   246   243   226   225   250   264     Slovenia   62   63   60   62   60   60   67   67   67     Spain   1032   1035   1037   1045   1057   1112   1264   1278   1279     Sweden   4 483   4 716   4 850   4 822   5 021   5 299   4 462   4 376   4 507     Switzerland   229   240   241   242   242   241   242   234   234     Ukraine   50   53   60   73   98   180   212   275   275      European Union (27)   28 515   29 350   29 923   31 049   32 403   33 465   33 805   33 414   34 152   34 152      Middle East   60   81   88   88   86   86   84   84   96      Iran IR   11   11   11   11   11   11   11	-										95 3
Netherlands											15
Norway         140         140         87         87         87         81         77         77         77         77         79         79         79         79         79         79         79         79         79         79         79         79         79         70         <		752	792	772	785	827	818	866	936	934	934
Poland         816         961         974         968         1 004         1 010         1 045         1 100         1 217           Portugal         561         577         587         582         648         702         715         717         706           Romania         94         118         123         140         141         139         165         140         185           Serbia         6         6         11         15         19         28         31         36         39           Slovenia         62         63         60         62         60         60         67         89         190         99         4 62         4 376											14
Portugal         561         577         587         582         648         702         715         717         706           Romania         94         118         123         140         141         139         165         140         185           Serbia         6         6         11         15         19         28         31         36         39           Slovakia         237         242         253         246         243         226         225         250         264           Slovenia         62         63         60         62         60         60         67											79 1 231
Romania         94         118         123         140         141         139         165         140         185           Serbia         6         6         6         11         15         19         28         31         36         39           Slovakia         237         242         253         246         243         226         225         250         264           Slovakia         62         63         60         62         60         60         67         67         67           Spain         1032         1035         1037         1045         1057         1112         1264         1278         1279           Sweden         4 483         4 716         4 850         4 822         5021         5299         4 462         4 376         4 507           Switzerland         229         240         241         242         242         241         242         234         234           Ukr         4 240         4 808         5 250         5 513         7 044         7 230         7 302         7 387         7 438           Ukraine         50         53         60         73         98											704
Slovakia   237   242   253   246   243   226   225   250   264   265   260   60   67   67   67   67   67   67	-										185
Slovenia   62   63   60   62   60   60   67   67   67   67   Spain   1032   1035   1037   1045   1057   1112   1264   1278   1279   Sweden   4 483   4716   4 850   4 822   5 021   5 299   4 462   4 376   4 507   Switzerland   229   240   241   242   242   241   242   234											39
Spain         1 032         1 035         1 037         1 045         1 057         1 112         1 264         1 278         1 279           Sweden         4 483         4 716         4 850         4 822         5 021         5 299         4 462         4 376         4 507           Switzerland         229         240         241         242         242         241         242         234         234           UK         4 240         4 808         5 250         5 513         7 044         7 230         7 302         7 387         7 438           Ukraine         50         53         60         73         98         180         212         275         275           European Union (27)         28 515         29 350         29 923         31 049         32 403         33 465         33 805         33 414         34 152         33 415           Middle East         60         81         88         88         86         86         84         84         96           Iran IR         11         11         11         11         11         11         11         11         11         11         14           Israel         1											264 96
Sweden         4 483         4 716         4 850         4 822         5 021         5 299         4 462         4 376         4 507           Switzerland         229         240         241         242         242         241         242         234         234           UK         4 240         4 808         5 250         5 513         7 044         7 230         7 302         7 387         7 438           Ukraine         50         53         60         73         98         180         212         275         275           European Union (27)         28 515         29 350         29 923         31 049         32 403         33 465         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 414         34 152         33 805         33 805         33 414         34 152         34 152         34 152         34 15											1 279
UK         4 240         4 808         5 250         5 513         7 044         7 230         7 302         7 387         7 438           Ukraine         50         53         60         73         98         180         212         275         275           European Union (27)         28 515         29 350         29 923         31 049         32 403         33 465         33 805         33 414         34 152         34 152           Middle East         60         81         88         88         86         86         84         84         96           Iran IR         11											4 507
Ukraine         50         53         60         73         98         180         212         275         275           European Union (27)         28 515         29 350         29 923         31 049         32 403         33 465         33 805         33 414         34 152         33 415           Middle East         60         81         88         88         86         86         84         84         96           Iran IR         11 <td></td> <td>234</td>											234
European Union (27)         28 515         29 350         29 923         31 049         32 403         33 465         33 805         33 414         34 152         34 152         34 152         34 152         35 15         34 152         35 15         34 152         35 15         34 152         35 15         34 152         35 15         36 15         34 152         35 15         36 15         34 152         36 15         37 15											7 477 301
Middle East         60         81         88         88         86         86         84         84         96           Iran IR         11	European Union (27)	28 515	29 350	29 923	31 049	32 403	33 465	33 805	33 414	34 152	34 466
Iran IR         11         14         14         15         14         14         15         14         14         15         14         14         14         15         14         14         14         15         14         14         14         14         14         15         13         14         14         14 <t< th=""><th></th><th>60</th><th>81</th><th>88</th><th>88</th><th>86</th><th>86</th><th>84</th><th>84</th><th>96</th><th>111</th></t<>		60	81	88	88	86	86	84	84	96	111
Israel         17         28         28         28         28         28         28         26         26         26         26           Jordan         4         13         19         19         19         19         19         19         19         19         19         19         <											14
Lebanon         2         2         9         9         7         7         7         7         7           Palestine         0											26
Palestine         0	Jordan										13
Qatar         19		2	2	9							7 0
Syrian AR         7         7         7         7         7         7         7         7         7         7         7         7         9         1         9		19	19	19							19
Yemen         0         0           N America         15 698         16 334         16 522         16 591         16 380         15 692         15 537         14 990         14 750           Canada Greenland         2 651         2 628         2 696         2 779         2 792         2 668         2 674         2 674         2 682           Greenland         1         1         1         1         1         1         1         1         1											7
Canada         2 651         2 628         2 696         2 779         2 792         2 668         2 674         2 674         2 682           Greenland         1         1         1         1         1         1         1         1         1         1         1		1	1	1	1	1	1	1			24 0
Greenland 1 1 1 1 1 1 1 1 1 1	N America	15 698	16 334	16 522	16 591	16 380	15 692	15 537	14 990	14 750	14 660
											2 682
Maying 637 776 00F 077 071 074 000 000											1
Mexico         627         736         925         973         971         971         974         982         966           USA         12 420         12 969         12 901         12 838         12 616         12 053         11 889         11 334         11 102											987 10 990
Oceania 1036 1044 1079 1095 1095 1095 1097 1104 1111											1 112
Australia 824 826 864 864 864 871 871 878											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           Papua N Guin         18											145 18
Samoa 18 18 18 18 18 18 18 18 18 18 18 18 18		10	10	10	10	10	10				10
Solomon Is 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Solomon Is							1	1	1	1
Vanuatu 3 3 3 3 3 3 3 3 3	Vanuatu	3	3	3	3	3	3	3	3	3	3

# Bioenergy Bioénergie Bioenergía

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									
Burundi	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Chad	2 o 0 e	2 0	2 0	2 o 2 e	2 o 3 e	2 o 3 e	2 o 3 e	2 e 3 e	2 e 3 e	2 e 3 e
Congo DR Congo Rep	12 e	0 e 12 e	0 e 12 e	2 e 12 e	3 e 12 e	3 e 12 e	зе 12 е	зе 12 е	3 e 12 e	3 e 12 e
Egypt	67	67	67	67	67	67	67 e	67 e	67 e	67 e
Eswatini	106	106	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 o	0 e 0 o	0 e 0 o	0 e 0 e						
Madagascar Malawi	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 e								
Mozambique	73	73	73	73	73	75	75	75	75	75
Namibia	0	0	0 e	0 e	0 е	0	0 e	0 e	0 е	0 е
Nigeria	8 e	8 e	9 e	9 e	9 e	9 e	13 e	21 e	21 e	21 e
Reunion Rwanda	42 e 1 e	41 o 1 e	41 e 1 e							
Senegal	25 e									
Sierra Leone	34 e									
South Africa	242 e									
Sudan	199 e	199 u	199 e	199 e						
Tanzania	70 o	67 e	67 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 Zimbabwe	43 e 100 e	43 o 100 e	43 e 100 e	43 o 100 e						
Ziiiibabwe	100-е	100 6	100 e	100 e	100 €	100 e	100-е	100 6	100 6	100 6
Asia	20 036	22 705	28 853	31 965	35 557	39 545	46 195	52 255	56 537	59 405
Bangladesh		0 о	0 о	0 о	0 о	0 о	0 о	0 о	0 о	0 0
Cambodia	36 o	33 o	31 o	51 o	51 o	51 e	44 e	42 e	51 u	51 e
China China LIIK CAD	6 343	7 646	8 920	10 780	12 605	15 738	20 965	26 235	28 160	29 765
China HK SAR Chinese Taipei	396 o	393 o	393 o	28 393 o	28 395 o	28 391 o	28 399 o	28 407 o	28 e 406 o	28 e 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	1709 o	1679 o	1 711 o	1748 o	1766 e	1771 e	1775 e	2 135 e	2 937 e	3 034 e
Japan	1 615	1878	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	1535 o	1468 o	738 o	740 e	780 e 0 o	780 e 0 e	780 e 0 e	780 e 0 e	780 e 0 e
Maldives Myanmar	51 e	46 e	48 e	51 e	55 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 0	26 o	27 o	40 o	45 o	45 u	45 o	45 e
Thailand Viet Nam	2 485 e 193 e	2 793 e 218 e	2 887 e 252 e	3 253 e 263 e	3 532 e 368 u	3 567 e 376 e	3 684 e 376 e	3 841 e 360 e	3 951 e 379 e	4 053 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 -	2 -	2 -	2 -
Aruba Belize	2 28	2 28	2 28 u	2 36 u	2 36 u	2 36 u	2 e 36 u	2 e 36 u	2 e 36 u	2 e 36 e
Costa Rica	42 o	45 o	45 o	45 o	57 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					
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	1022 o	1 075 o	1 030 o	1030 o	864 0	864 0	864 0
Honduras	137 o	168 o	209 o	209 o	209 o	221 0	221 o	221 o	221 o	221 o
Jamaica Martinique	32 2 o	32 2 o	32 2 o	32 2 o	32 e 42 u	32 e 42 e				
Nicaragua	134 o	134 o	177	177	42 u 177 o	218 o	42 e 218 o	42 e 218 e	218 e	218 e
Panama	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 solides 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	1370 e	1370 e	1370 e	1373 e	1 373	1373 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 о	5 o	5 o	5 o	5 о	5 o	5 e	5 e	5	5 e
Austria	1221 e	1202 e	1188 e	1108 e	1094 o	1085 e	1086 e	1005 e	1 029	1029 0
Belarus Belgium	13 681 e	13 716 e	13 691 e	13 685 e	16 652 e	16 665 e	86 700 e	83 594 e	101 635 e	101 u 636 o
Bosnia Herzg	001 6	710 E	031 E	005 e	032 e	003 e	700 e	9	9 e	9 0
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	1152 e	1139 e	1 198 e	1683 e	1666 e	1862 e	1955 e	2 023 e	1 882	1882 e
Estonia	270	270	270	270 e	250	265	285 o	285	285	283 o
Finland	1877 e	1885 e	1895 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	1248	1 435	1 482	1364 e	1465 e	1 476 o	1596 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	406	2 e 447	2 e 351	3 e 409	12 437	13 425	14	16	16	16 o 450 o
Hungary Ireland	486 16 e	16 e	351 16 e	409 47 e	437 47 e	425	424 48 o	466 48 e	449 48	450 0 48 e
Italy	1 0 3 3 e	1 0 31 e	1094 e	1092 e	1145 e	1 124 e	1128 e	1 120 e	1097 e	1097
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
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 Serbia	79 e 1 e	104 e 1 e	107 e 1 e	119 e 2 e	119 e 2 e	119 e 2 e	136 e 2 e	109 e 2 e	161 2 e	161 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 17 01F	39	39 0	52 0	87	109	152 u	152 e	178 e <b>20 783</b>
European Union (27)  Middle East	17 500 18	17 915 18	18 231 18	18 980 18	19 633 18	20 004	19 849 15	19 955 15	20 595 15	20 783
riidale Last	10	10	10	10	10	10	15	15	15	30
Israel	3 e	3 e	3 e	3 e	3 e	3 e	0			
Qatar	15 e									
United Arab Em Yemen								0 о	0 е	15 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 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	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						
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 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

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
14 391	15 031	15 670	16 325	16 579	17 076	17 351	18 095	18 971	19 748
172 e	201 o	201 o	204 o	218 o	220 o	276 e	296 e	296 o	301 o
52	116	131	115	139	144	144	143	192	251
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
884 u	417 u	410 u	444 u	444 o	442 o	410 o	430 o	429 o	462 o
215 u	237 u	253 u	306 u	316 u	316 e	319 e	342 e	343 u	343 e
144 o	144 o	144 o	144 e	144 e	144 o	144 o	144 o	144	144
2 o	2 o	2 o	2 o	2 o	5 o	5 e	5 o	5 o	5 e
51	51	42	42	42 e	42 e	42 e	42 e	42 e	42 e
39	39	39	39	39 e	39 e	39 e	39 e	39 e	39 e
149 o	187 o	176 o	186 o	186 o	208 o	208 e	177 o	192 o	192 e
	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 o	2 e
416 o	426 o	426 o	415 o	415 o	415 e	415 o	415 e	415 o	729 o
122 o	122 o	122 o	122 o	122 o	122 o	122 o	168 o	168 o	168 o
	14 391  172 e 52 12 145 884 u 215 u 144 o 2 o 51 39 149 o	14 391 15 031  172 e 201 o 52 116 12 145 13 088 o 884 u 417 u 215 u 237 u 144 o 144 o 2 o 2 o 51 51 39 39 149 o 187 o 2 o 416 o 426 o	14 391 15 031 15 670  172 e 201 o 201 o 52 116 131  12 145 13 088 o 13 722 o 884 u 417 u 410 u 215 u 237 u 253 u 144 o 144 o 144 o 2 o 2 o 2 o 2 o 51 51 51 42 39 39 149 o 187 o 176 o 2 o 2 o 416 o 426 o 426 o	14 391 15 031 15 670 16 325  172 e 201 o 201 o 204 o 52 116 131 115  12 145 13 088 o 13 722 o 14 305 o 884 u 417 u 410 u 444 u 215 u 237 u 253 u 306 u 144 o 144 o 144 o 144 e 2 o 2 o 2 o 2 o 2 o 51 51 51 42 42 39 39 39 39 149 o 187 o 176 o 186 o 2 o 2 o 2 o 416 o 426 o 426 o 415 o	14 391 15 031 15 670 16 325 16 579  172 e 201 o 201 o 204 o 218 o 52 116 131 115 139  12 145 13 088 o 13 722 o 14 305 o 14 511 o 884 u 417 u 410 u 444 u 444 o 215 u 237 u 253 u 306 u 316 u 144 o 144 o 144 o 144 e 144 e 2 o 2 o 2 o 2 o 2 o 2 o 2 o 51 51 51 42 42 42 e 39 39 39 39 e 149 o 187 o 176 o 186 o 186 o 2 o 2 o 2 o 2 o 2 o 416 o 426 o 426 o 415 o 415 o	14 391 15 031 15 670 16 325 16 579 17 076  172 e 201 o 201 o 204 o 218 o 220 o 52 116 131 115 139 144  12 145 13 088 o 13 722 o 14 305 o 14 511 o 14 979 o 884 u 417 u 410 u 444 u 444 o 442 o 215 u 237 u 253 u 306 u 316 u 316 e 144 o 144 o 144 o 144 e 144 e 144 o 2 o 2 o 2 o 2 o 2 o 2 o 5 o 51 51 51 42 42 42 e 42 e 42 e 39 39 39 39 9 39 e 39 e 149 o 187 o 176 o 186 o 186 o 208 o 2 o 2 o 2 o 2 o 2 o 2 o 2 o 2 o 2 o	14 391         15 031         15 670         16 325         16 579         17 076         17 351           172 e         201 o         201 o         204 o         218 o         220 o         276 e           52         116         131         115         139         144         144           12 145         13 088 o         13 722 o         14 305 o         14 511 o         14 979 o         15 226 o           884 u         417 u         410 u         444 u         444 o         442 o         410 o           215 u         237 u         253 u         306 u         316 u         316 e         319 e           144 o         144 o         144 e         144 e         144 o         144 o         144 o           2 o         2 o         2 o         2 o         2 o         5 o         5 e           51         51         42         42         42 e         42 e         42 e           3 9         39         39         39 e         39 e         39 e         39 e           149 o         187 o         176 o         186 o         186 o         208 o         208 e           2 o         2 o         2 o         2 o	14 391         15 031         15 670         16 325         16 579         17 076         17 351         18 095           172 e         201 o         201 o         204 o         218 o         220 o         276 e         296 e           52         116         131         115         139         144         144         143           12 145         13 088 o         13 722 o         14 305 o         14 511 o         14 979 o         15 226 o         15 894 o           884 u         417 u         410 u         444 u         444 o         442 o         410 o         430 o           215 u         237 u         253 u         306 u         316 u         316 e         319 e         342 e           144 o         144 o         144 e         144 e         144 o         144 o	14 391         15 031         15 670         16 325         16 579         17 076         17 351         18 095         18 971           172 e         201 o         201 o         204 o         218 o         220 o         276 e         296 e         296 o           52         116         131         115         139         144         144         143         192           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           884 u         417 u         410 u         444 u         444 o         442 o         410 o         430 o         429 o           215 u         237 u         253 u         306 u         316 u         316 e         319 e         342 e         343 u           144 o         144 o         144 e         144 e         144 o         145 o         42 e         42 e

## Bagasse Bagasse Bagazo

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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
A I-	F1 -	F1 -	F1 -	F1 -	F1 -	F1 -	F1 -	F1 -	F1 -	F1 -
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 0	2 o	2 o	2 o	2 o	2 0	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					
Mauritius	77 o	87 o	87 o	87 o	87 o	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
	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Rwanda										
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 u	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
Asia	2 301	2704	2 002	1 330	3 134	3 201	3 204	3 240	3 100	3 000
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					
	51 e	46 e		40 e		54 e	54 e			54 e
Myanmar			48 e		52 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	1470 e	1767 e	958 e	924 e	1842 e	1874 e	1797 e	1775 e	1567 e	1567 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				
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	1074 o	1029 o	1029 o	863 o	863 o	863 o
Honduras	113 o	125 o	125 o	125 o	125 o	135 o				
Jamaica	32	32	32	32	32 e					
Martinique					40 u	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
Europo		2	2	2	2	2	2	2	2	2
Europe		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				
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				
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					
Paraguay	39	39	39	39	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
4 CHEZUCIO	122 U	122 0	122 0	122 0	122 0	122 0	122 0	122 0	122 0	122 0

#### 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	
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 Chinese Taipei	1 893 315 o	2 342 315 o	2 870 315 o	3 640 315 o	4 575 316 o	6 009 316 o	7 665 316 o	10 645 316 o	11 930 316 o	12 885 316 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 0	8 0	8 0	8 0	8 0	8 e	14 o	12 o	12 e
Japan	876	900	919	935	958	975	1 027	1 050	1044 o	1 021 o
Korea Rep	50	95	77	54	64	64	91	91	118 e	119 e
Malaysia	9	7 o	7 о	7 o	7 о	7 0	7 o	7 0	7 e	7
Maldives Myanmar				0 u	0 e	0 o 0 e	0 e 0 e	0 e 0 e	0 e 0 e	0 e 0
Singapore	128 o	197 o	197 o							
Sri Lanka	.20 0	.20 0	.20 0	.20 0	.20 0	.20 0	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 0	2 0	2 o	2 o	2 0	2 o	2 o	2 0	2 o	2 e
Eurasia	37	37	37	42	45	46	46	98	98	91
Azerbaijan Türkiye	37	37	37 e	42	44 o 1	44 e 2	44 2	44 e 54	44 54	37 u 54 o
Europe	4 146	4 513	4 777	4 888	4 999	5 093	5 129	4 977	4 962	5 043
	4 140	4 313	4///							
Albania	<b>.</b>	<b>.</b>	<b>-</b> -	1 u	1 u	1 u	1 e	1 e	1	1 0
Andorra Austria	5 o 262	5 o 263	5 o 271	5 o 271	5 o 270	5 o 272	5 e 270	5 e 240	5 245	5 e 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 643	134 e 602	148 e 619	148 e 624	148 o 607	148 608	148 555	197 566	246 565	246 o 625 o
France Germany	944	962	979	1004	1 063	1 084	1 024	1 041	1 023	1023 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 9	5 9	8 9	9 9	7 9 e	7 9 e	17 9	21	19 9	18 o 9 o
Luxembourg Netherlands	325	338	338	334	389	389	390	9 394	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 Sweden	117 230	117 438	117 564	121 567	121 566	121 568	121 623	133 386	133 o 336	133 o 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	0			
Qatar United Arab Em	15 e	15 e	15 e 15							
N America	1 175	1 178	1 244	1 260	1 255	1 198	1 198	1 196	1 163	1 163
Canada	70	70	70	70	70 -	70 -	70 -	70 -	70 -	70 -
Canada Greenland	39 1 o	39 1 o	39 1 o	38 1 o	38 e 1 o	38 e 1 o	38 e 1 o	38 e 1 o	38 e 1 o	38 e 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	1060 o	1 061 o	1058 o	1 025 o	1 025 o
Oceania									0	0
Australia									0 е	0 e
S America			3	3	5	13	14	29	34	41
Brazil			3 o	3 о	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 е	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 0 e
Madagascar Mali	0 o 1 e	0 o 1 e	0 o 1 e	0 e 1 e	0 e 1 e	0 e 1 e	0 e 1 e	0 e 1 e	0 e 1 e	0 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 Zimbabwe	24 o 1 e	21 e 1 e	21 e 1 e	24 e 1 e	24 e 1 e	24 e 1 e	24 e 1 e	24 e 1 e	24 e 1 e	24 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 о	0 о	0 о	0 о	0 о	0 о	0 о	0 о	0 о
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	01 -	70 -	70 -	28	28	28	28	28	28 e	28 e
Chinese Taipei India	81 o 4 899 o	79 o 5 332 o	79 o 8 746 o	79 o 9 258 o	79 o 9 965 o	75 o 10 046 o	83 o 10 331 o	91 o 10 361 o	91 o 10 395 o	81 o 10 447 o
Indonesia	1 472 o	1 452 o	1 484 o	1522 o	1540 e	1545 e	1548 e	1881 e	2 665 e	2 752 e
Japan	739	978	1 260	1626	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	1404 o	1528 o	1462 o	732 o	734 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 0	80 o	107 o	136 o	142 o	223 o	229 o
Singapore Sri Lanka	26 e 20 o	40 e 20 o	41 e 24 o	41 e 26 o	40 e 27 o	37 e 40 o	35 e 40 o	47 e 40 o	37 e 40 o	49 e 40 e
Thailand	982 e	960 e	1857 e	2 233 e	1 531 e	1536 e	1720 e	1 871 e	2 198 e	2 305 e
Viet Nam	11 u	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 о	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 0	1 0	1 0	1 u	1 e	1 e	18 e	18 e	18 e	18 e
Guatemala	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0
Honduras St Lucia	24 o	43 o	84 o 0	84 o 0 e	84 o O e	86 o 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 Türkiye	1 370 e 10	1 370 e 12	1 370 e 55	1 373 e 83	1 373 e 129	1 373 e 214	1 373 e 332	1 373 e 491 e	1 373 616	1 373 e 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 о
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 Denmark	355 e 989 e	380 e 973 e	376 e 1032 e	402 e 1501 e	385 e 1 485 e	434 e 1681 e	452 e 1 777 e	456 e 1848 e	455 1 707	455 u 1 707 e
Estonia	165	165	165	165	165	180	200	200	200	1707 e
Finland	1 751	1 751	1747	1 966	1 966	1963	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	1589 o	1592 e	1600 o	1601 e	1585 e	1598 e	1571 e	1587 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 15	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	79 e	70 -	27 -	27 e	1 o 27 e	2 o 27 e	2 e 20 e	3 27 e	3 e 27 e	3 e 27 e
Norway Poland	79 e 629 e	79 e 737 e	27 e 727 e	27 e 709 e	27 e 735 e	27 e 732 e	20 e 734 e	27 e 803 e	27 e 894 e	27 e 894 e
Poland Portugal	629 e 456	737 e 469	727 e 475	709 e 469	735 e 534	732 e 587	734 e 601	803 e 601 e	894 e 591	894 e 591 e
Romania	456 79 e	469 104 e	475 107 e	469 119 e	119 e	119 e	136 e	109 e	161	161 e
Serbia	7 9 e	104 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 0	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				
New Zealand	99	99	99	104	104	104	98	98 o	98 o	99 o
Papua N Guin	15 u	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 о	0 о			6 o	6 o	6 o
Fr Guiana	2 o	2 o	2 0	2 o	2 o	5 o	5 e	5 o	5 o	5 e
Guyana		0	0	0	16 e					
Suriname		2 o	2 o	2 o	2 o	2 o	2 0	2 0	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 Tanzania	0 u	0 e	0 e	0 e	41 o O e	41 o O e	41 o 0 e	41 o O e	41 e O e	41 e O 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 о
Belgium	51	49	45	45	45	45 e	23	19	30	30 o
Denmark		1	0	1	1		4-			
France	070	3	4	0	0	0	15	10	11	11 e
Germany	232	232	231	230	230	231	231 e	201	196	196 e
Italy	990 0 e	1 000 0 e	993 e	987 O e	971 O e	948	932 O e	919 O e	909 0	909 e
Poland Slovenia	0 e 1	0 e 1	0 e 1	0 e 1	0 e 1	0 e 1 o	0 e 1	0 e 1 e	1	0 e 1 e
Spain	ı	'	'	'	6	6	6	6	6 0	6 e
Sweden	522	576	515	547	535	895	895	895	895	895 e
UK	322	370	313	547	45	47	46	36	36	36
OK					45	47	40	30	30	30
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 е	0 e	0 e	0 e
New Caledon	0 о	0 о	0 0	0 о	0 о	0 e	0 е	0 e	0 е	0 e
Solomon Is	0 e	0 е	0 e	0 е	0 е	0 e	0 е	0 е	0 е	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 о	5 о	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		1 e	1 e	1.0	1 e	12 o 1 e	12 e 1 e	56 e 1 e	56 e 1 e	64 o 1 e
Gabon Ghana		0 o	0 o	1 e 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 0
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 е	0 e	0 e	0 е	0 е	0 e	0 e	0 e	0 e
Reunion	2 o	3 о	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				
Tanzania	1 o	1 o	1 u	1 e	1 e	1 e	1 e	1 e	1 e	1 e
Asia	851	976	1 161	1 378	1 631	1 881	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	710	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	1 110	1 230	1490
China HK SAR		1 -	17	17	17	24	24	24	30 e	30 e
Chinese Taipei	9 e	1 o 11 e	1 o 12 e	1 0	1 e	1 0	1 0	1 e 14 e	1 e	1 e
India Indonesia	9 e 19 o	II e 55 o	12 e 64 e	14 e 101 e	14 e 109 e	14 e 112 o	14 e 120 e	14 e 135 e	14 e 149 e	14 e 149 e
Japan	19 0	23	64 e 34	47	109 e 59	70	120 e 78	135 e 88	97 o	149 e 108 o
Kazakhstan	0	0	0	1 0	10	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	121	115	.23	.50 0	0 0	0 0	0 0	0 0	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	1 u	1 u	1 u
Pakistan	9 e	9 e	9 e	9 e	9 е	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 о	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 Viet Nam	2 u	2 u	4 e	11 e	14 e	0 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 0	5 0	5 0	5 0	5 0	5 0	5 0	5 0	5 0	5
Cuba	1 e 1	1 e 2 o	1 e 2	1 e 2	1 e 2	1 e 2	1 e 2	2 e 2	15 e 4	15 e 4
Dominican Rep El Salvador	6 o	7 o	7 o	7 o	7	7	7 o	2 6 e	4 8 o	4 8 o
Guadeloupe	0	0	0	2 0	, 4 o	4 0	4 0	4 0	4 0	4 e
Guatemala	ŭ	2 o	2 o	6 o	6 0	6 0	6 0	6 o	6 o	6 0
Honduras	1 e	1 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e	4 e
Martinique		1	1 0	1 0	1	1	1	1 e	1 e	1 e
Nicaragua			2 0	2 0	2 e	2 e	2 e	2 e	2 e	2 e
Panama				8 o	8 e	8 o	8 e	8 o	8	8 o
Puerto Rico		0	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 Türkiye	204 e	1 252 e	1 297 e	1 377 e	1 o 438 e	1 e 548 e	1 741 e	1 987 e	1 1126 o	1 u 1266 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	22 181	22 179	27 188	28 183	33 o	38 e 197	37	37 e 204	39	40 u
Belgium Bosnia Herzg	101	179	100 1 u	1 e	190 1	197	199 1	1	205 2 o	205 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	50 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 0	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	1336 e	1336 e	1352 e	1372 e	1375 e	1382 e	1379 e	1382 e	1387 e	1429 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 0
Luxembourg	10 3	12 3	12 5	12 e 5	12 e	12 e	12 0	12 0	11 3	14 0
Malta	3	3	Э	Э	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	1628 o	1773 o	1 818 o	1838 o	1844 o	1845 o	1923 o	1935 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	26 e	26 e	26 e	26 e				
Jordan	4 o	13 u	13 u	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 е	0 e	0 е	0 е	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	1964 o	1941 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	.2 0	3. 0	4	4	4 0	4 0	9 0	9	9	9
Ecuador			2 0	7 o	7 o	7 o	7 o	8 0	8	8
Paraguay	0 e	0 e	0 e	0 e	0 e	2 0	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 0	8 0	8 e	9 0	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 0	7	7	7 0	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 Chinese Taipei	26	26	26	26	26 0 o	26 e 0 o	26 e 0 o	26 e 5 o	26 e 5 o	26 e 7 o
Indonesia	1404 o	1438 o	1533 o	1808 o	1948 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	1928 o	1928 o	1928 o	1928 o	1932 o	1952 o
Thailand	0	0	0	0	0 e	0 о	0 о	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	229 o				
Guadeloupe	12	15	15 o	15 u	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	1064 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 о
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 25	768 25	767 25	767 29	767 e 29	767 29	772 29	772 29	772 29 o	772 29 o
Portugal Romania	25 0 o	25 0 o	25 0 o	29 0	29 0	29 0	29 0	0	29 0	29 0 0 e
Kullialila	0 0	0 0	0 0	U	U	U	U	U	U	0 6
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 0 0 9	1 009	1 043	1 0 4 3	1050 o	1050 e
Papua N Guin	50 e	50 e	50 e	50 e	50 e	50 e				
S America					40	40	40	40	51	83
Chile				0	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
World	6 452.167	7 139.998	7 578.541	7 514.900	9 287.065	9 404.212	10 009.683	10 720.993	12 169.362	12 754.586
Africa	355.574	432.260	516.381	670.489	823.134	944.952	1 042.622	1 160.464	1 278.938	1 317.347
Algeria	11.300	29.100	29.100	29.100	28.900	28.900	28.900	28.900	48.200	48.200
Angola	23.179	23.179	23.187	35.703	35.716	36.645	36.653	36.720	36.739	36.739
Benin			1.500	1.500	1.500	1.500	1.540	1.540	1.540	1.540
Botswana	0.560	0.853	1.926	2.061	2.366	2.365	2.365	2.365	2.365	2.365
Burkina Faso	1.974	5.500	5.915	6.202	21.645	22.789	23.279	24.064	24.659	24.659
Burundi	5.103	5.403	6.203	6.603	7.103	7.103	7.303	6.703	6.603	6.603
Cabo Verde	0.074	0.268	0.268	0.426	0.998	1.139	1.305	1.427	1.623	1.796
Cameroon	5.900	7.700	9.300	11.850	14.399	14.399	14.524	14.524	14.524	14.524
Cent Afr Rep	0.500	0.500	0.500	0.500	0.500	0.516	0.516	0.516	0.516	0.516
Chad	0.050	0.172	1.273	1.290	1.662	1.662	1.657	1.706	2.192	2.192
Comoros			0.805	1.146	1.146	1.165	1.152	0.362	0.034	0.034
Congo DR	1.421	1.515	5.274	20.129	45.591	55.491	55.491	55.491	55.491	55.491
Congo Rep	0.018	0.020	0.040	0.057	0.064	0.062	0.522	0.565	0.640	0.640
Cote d Ivoire	0.009	0.284	0.450	1.007	2.097	4.206	6.402	7.749	8.999	8.999
Djibouti	0.300	0.300	0.362	0.362	0.362	0.362	0.362	20.362	20.362	20.362
Egypt	20.000	21.000	35.000	35.000	49.200	35.200	37.000	35.500	71.000	71.000
Eq Guinea			0.160	0.354	0.354	0.336	0.325	0.189	0.006	0.006
Eritrea	8.684	8.684	9.839	26.179	26.689	26.744	26.731	25.950	25.610	25.610
Eswatini	2.604	2.604	2.604	2.604	2.604	2.604	2.639	2.639	2.639	2.639
Ethiopia	10.410	11.169	15.325	13.779	13.631	13.631	21.469	22.469	22.469	22.469
Gabon	0.580	1.880	1.880	1.880	1.880	1.880	1.880	2.280	2.280	2.280
Gambia	0.278	0.338	0.799	1.110	1.149	1.152	1.142	1.129	1.045	1.045
Ghana	12.970	17.322	18.891	20.311	20.777	21.594	22.214	22.711	23.140	23.140
Guinea	2.291	2.293	2.447	2.646	15.120	16.234	16.850	17.181	18.279	18.279
Guinea Bissau		0.312	0.312	0.312	1.169	1.169	1.169	1.169	1.169	1.169
Kenya	24.096	38.240	43.679	55.909	64.247	79.748	98.462	121.036	133.244	133.244
Lesotho	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.543	0.543	0.543
Liberia	4.970	4.987	5.049	7.431	7.608	7.608	7.608	7.608	7.608	7.608
Libya	4.900	4.900	4.900	5.110	5.110	5.110	5.111	6.333	6.333	6.333
Madagascar	11.791	14.633	16.692	18.807	18.867	19.167	18.967	18.967	18.967	19.527
Malawi	8.254	12.677	12.977	20.057	26.742	81.379	81.379	81.379	81.379	81.379
Mali	9.675	10.703	11.234	48.074	48.568	49.603	49.870	80.871	81.386	81.386
Mauritania	7.551	7.566	24.166	24.166	25.466	25.609	25.609	25.609	25.609	59.609
Mauritius	0.807	0.834	1.615	3.987	4.140	5.515	4.848	4.080	2.064	2.064
Morocco	23.800	23.800	25.870	27.895	27.895	27.903	28.000	28.000	28.000	28.000
Mozambique	1.863	2.655	2.655	2.678	2.678	2.728	3.721	3.721	3.721	3.721
Namibia	14.176	14.176	14.176	14.176	21.929	23.869	23.869	23.869	23.869	23.869
Niger	6.000	7.000	8.000	9.041	20.041	20.041	20.041	20.041	20.041	20.041
Nigeria	11.471	18.507	22.899	28.285	32.715	44.777	60.589	76.466	101.825	101.825
Reunion						1.340	1.340	1.340	1.340	1.340
Rwanda	2.875	3.501	4.722	6.152	11.145	14.664	14.664	14.664	14.664	14.664
Sao Tome Prn	7.000	7.000	0.154	0.348	0.348	0.349	0.339	0.203	0.013	0.013
Senegal	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000	7.000
Seychelles	0.068	0.068	0.068	0.068	1.022	1.022	1.022	1.022	1.022	1.022
Sierra Leone	0.645	0.670	0.734	8.720	9.136	9.136	9.136	9.176 27.088	9.176	9.176
Somalia	2.300	2.970	7.470	10.444	10.618	10.618	19.088		50.588	54.088
South Africa South Sudan	9.389	9.864	10.139	12.921 0.449	12.782 0.737	13.210 0.835	12.975 0.835	12.871 1.278	12.800 2.469	12.800
Sudan	0.160 16.584	0.160 19.911	0.428 26.219	35.800	59.478	80.199	116.840	135.570	135.570	2.469 135.570
Tanzania	47.924	53.971	56.358	60.831	65.101	64.106	65.806	66.306	66.626	66.626
Togo	0.022	0.062	0.082	0.972	3.490	5.460	6.460	6.493	6.493	6.493
Tunisia	1.563	1.710	2.060	2.076	2.076	7.076	7.076	7.076	7.076	7.076
Uganda	23.906	25.906	27.906	30.506	30.506	30.666	30.826	30.985	31.145	31.305
Zambia	1.996	1.972	2.006	2.006	2.136	2.776	2.776	2.776	2.804	2.820
Zimbabwe	3.240	3.078	3.420	4.126	4.588	4.247	4.632	3.882	3.439	3.439
Asia	5 220.252	5 685.619	5 994.823	5 721.365	7 145.269	7 100.102	7 586.547	8 118.857	9 392.782	9 893.034
Afghanistan	46.109	50.126	54.844	58.734	58.509	58.024	57.446	57.734	59.781	59.781
Bangladesh	173.787	198.156	158.086	201.717	197.868	208.042	213.676	209.845	174.895	180.575
Bhutan	8.353	8.353	8.353	8.353	8.590	8.590	8.590	8.610	8.610	8.738
Brunei Darsm	0.014	0.014	0.014	0.015	0.015	0.016	0.027	0.047	0.047	0.047
Cambodia	2.992	4.995	5.673	5.777	5.246	5.048	4.520	5.278	5.267	5.287
China	586.930	655.530	710.490	747.190	786.950	826.710	866.470	906.230	945.990	985.750
India	1 206.308	1360.565	1 571.153	1 811.896	2 111.785	2 128.767	2 559.518	2 681.925	3 019.478	3 301.886
Indonesia	1 671.391	1 682.135	1 689.671	1 726.814	2 671.190	2 682.150	2 744.610	3 116.860	3 979.640	4 137.050
Korea DPR	11.708	23.654	32.504	36.110	49.660	63.210	77.030	90.580	104.130	117.680
Lao PDR	3.066	3.418	3.573	3.573	3.863	3.863	3.875	3.909	3.909	3.909
Malaysia	1 102.113	1240.848	1 246.170	534.960	540.004	540.015	540.199	540.230	540.279	540.279
Maldives	5.289	6.206	8.895	12.198	17.885	22.012	28.112	32.212	37.212	38.462
Mongolia	8.583	8.583	8.583	8.583	8.583	8.583	8.577	8.571	8.566	8.566
Myanmar	62.041	76.114	88.649	102.819	111.270	114.260	110.274	106.225	153.878	153.878
Nepal	33.797	39.314	41.487	83.299	85.545	85.694	88.641	90.470	93.204	93.204
Pakistan	18.394	19.794	22.612	34.474	35.621	39.785	41.089	41.184	40.851	40.851
Philippines	32.016	35.260	44.283	44.577	55.458	89.331	89.628	90.087	88.145	88.145
Sri Lanka	12.170	12.171	12.206	12.189	12.105	12.105	12.105	12.105	12.105	12.105

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

Tajjikistan         43.200         43.200         43.200         43.200         44.160         44.160         44.160         45.260         45
Timor Leste         1.501         1.693         1.687         1.372         1.147         0.922         0.685         0.680         0.720         0           Uzbekistan         1.000         1.000         2.200         3.025         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.           Antigua Barb         0.010         0.414 <t< td=""></t<>
C America + Carib         110.556         119.710         117.431         150.376         151.055         164.973         174.044         180.929         189.833         199.833           Antigua Barb         0.010         0.414
Antigua Barb Bahamas 0.801 1.167 1.220 1.166 1.135 1.078 1.078 1.078 5.078 5.078 5.078 5.078 5.078 5.078 5.078 6.079 0.185 0.189 0.189 0.189 0.189 0.196 0.196 0.196 0.790 0.7
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         0.177         1.344         1.423         1.541         1.548
Belize         0.185         0.189         0.189         0.196         0.196         0.790         1.785         1.980         1.980         1.980         2.200         2.207         1.000           Cuba         1.077         1.344         1.432         1.541         1.548         1.581         1.581         1.640         1.770         1.770         1.770         1.770         1.000         1.000         1.000         1.0
BES Islands           Br Virgin Is         0.551         1.263         1.423         1.421         1.429         1.785         1.990         1.980         1.980         2.           Costa Rica         1.077         1.344         1.432         1.541         1.568         1.581         1.640         1.770         1.770         1           Cuba         0.004         0.004         0.047         0.835         9.350         9.574         10.297         10.297         10           Curacao         0.004         0.000         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010         0.010
Costa Rica         1.077         1.344         1.432         1.541         1.568         1.581         1.640         1.770         1.770         1           Cuba         0.467         0.835         9.350         9.574         10.297         10.297         10           Curacao         0.004         0.001         0.010<
Cuba         0.467         0.835         9.350         9.574         10.297         10.297         10           Curacao         0.004         0.0
Curacao         0.004         0.000         0.010         <
Dominica         0.010
Dominican Rep         21.863         22.641         23.118         54.387         54.639         54.976         55.696         57.696         65.480         72           El Salvador         0.184         0.205         0.205         0.229         0.229         4.217         5.163         5.205         5.205         5           Guatemala         5.434         8.308
El Salvador         0.184         0.205         0.205         0.229         0.229         4.217         5.163         5.205         5.205         5           Guatemala         5.434         8.308         <
Guatemala         5.434         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.308         8.208         8.308
Haiti 0.927 1.154 1.425 1.505 1.548 1.601 1.522 1.522 1.522 1
Honduras 15.300 19.200 14.174 14.753 14.765 16.175 23.199 23.199 23.224 23
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
Panama 63.711 63.711 63.711 63.711 63.711 60.020 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.
St Kitts Nevis 0.001 0.0
St Lucia 0.176 0.1
Middle East 53.503 108.623 129.145 151.680 306.494 310.458 316.609 317.614 328.433 348
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 37.840 40.340 40.
Jordan 0.236 0.557 0.588 0.588 0.623 0.670 2.385 3.335 3.335 3
Kuwait 2.400 2.400 2.400 2.400 2.400 2.400 2.400 2.400 2.400 2.
Lebanon 3.390 3.397 3.507 3.527 7.880 7.880 7.880 7.890 7.890 7.
Oman 0.011 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
Saudi Arabia         0.014
Syrian AR         0.600         0.600         0.600         0.600         0.600         0.600         0.600         0.600         0.600         2.600         2.           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.
Oceania 154.439 158.307 162.712 164.837 167.036 170.442 171.133 172.015 174.232 175.
Amer Samoa 1.504 1.854 1.854 1.504 1.504 1.504 1.504 1.
Cook Is 0.047 0.047 0.047 0.047 1.869 2.606 2.606 2.606 2.606 2.
Fiji 1.402 2.648 4.651 4.718 5.131 5.222 5.324 5.613 5.904 7.
Fr Polynesia 2.948 3.148 3.248 3.548 3.448 3.548 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
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 0.395 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.
New Caledon 0.500 0.500 0.500 0.575 0.607 0.656 0.711 0.786 0.869 0.
Palau 0.170 0.170 0.170 0.235 0.538 0.538 0.538 0 Papua N Guin 145.296 145.835 146.186 146.152 145.915 147.653 147.767 148.303 148.394 148
Papua N Guin 145.296 145.835 146.186 146.152 145.915 147.653 147.767 148.303 148.394 148. Samoa 0.014 0.014 0.014 0.039 0.039 0.197 0.262 0.262 0.262 0
Solomon Is 1.765 1.765 1.946 2.321 2.321 2.208 2.208 3.918 3
Tokelau 0.021 0.021 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

## 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
World	605.451	639.232	653.412	674.105	1 627.416	1 651.708	1 675.521	1 673.967	1 673.379	1 674.307
Africa	78.889	90.604	97.394	132.602	143.308	155.275	156.820	157.320	157.678	158.238
Angola	22.859 u	22.859 u	22.859 u	35.279 u	35.279 e					
Burkina Faso		2.600 e								
Burundi	1.103 e	1.103 e	1.103 e	1.103 e	1.603 e					
Cameroon	0.300 e									
Cent Afr Rep	0.200 e	0.200 e 30.700 e	0.200 e	0.200 e	0.200 e 30.700 e	0.200 e 30.700 e				
Congo DR Eswatini	1.800 e	1.800 e	1.800 e	10.800 e 1.800 e	20.800 e 1.800 e	1.800 e	30.700 e 1.800 e	30.700 e 1.800 e	1.800 e	1.800 e
Ethiopia	1.279 e	1.279 e	1.279	1.279	1.279 e	1.279 e	1.279	1.279	1.279 e	1.279 e
Gabon	0.580 e									
Ghana							0.045 e	0.045 e	0.045 e	0.045 e
Guinea	2.220 o	2.220 o	2.220 o	2.220 e						
Kenya	10.135 e	10.135 e	13.655 e	19.775 e	19.793 e	19.819 e	19.819 e	19.819 e	19.857 e	19.857 e
Lesotho	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.180 e
Liberia	4.860 e									
Madagascar	4.380 e	5.222 e	5.281 e	5.396 e	5.456 e	5.756 e	5.556 e	5.556 e	5.556 e	6.116 e
Malawi	1.420 e	1.420 e	1.720 e	1.720 e	1.848 e	2.056 e				
Mali	0.003 e									
Mauritius	0.700 e									
Mozambique	0.563 e	1.355 e	1.355 e	1.378 e						
Nigeria Rwanda	1.640 e	0.400 o 1.640 e	0.400 o 1.651 e	0.400 o 1.651 e	0.400 o 1.651 e	0.400 e 1.664 e				
Sierra Leone	0.250 e	0.250 e	0.250 e	4.890 e						
South Africa	7.500 e	7.650 e								
Tanzania	10.505 e	17.445 e	20.345 e	21.435 e	21.435 e	22.335 e	24.035 e	24.535 e	24.855 e	24.855 e
Uganda	3.906 e									
Zambia	1.936 e	1.912 e	1.912 e	1.912 e	1.912 e	2.552 e				
Zimbabwe	0.570 e	0.585 e	0.585 e	0.585 e	0.585 e	0.565 e				
Asia	281.805	299.618	308.833	313.596	1 254.116	1 267.605	1 288.711	1 291.940	1 290.046	1 290.046
Afghanistan	27.646 e	31.095 e	34.544 e	37.993 e	37.993 e	37.993 e	37.993 e	38.108 u	38.138 u	38.138 e
Bhutan	8.078 o	8.078 o	8.078 o	8.078 o	8.315 o	8.315 o	8.315 o	8.335 o	8.335 o	8.335 e
India	83.377 e	84.079 e	84.675 e	84.675 e	84.675 e	84.675 o	84.675 e	84.675 e	84.675 e	84.675 e
Indonesia	12.764 e	14.457 e	14.887 e	14.887 e	944.880 o	944.880 o	964.300 o	964.300 o	963.410 o	963.410 e
Lao PDR	2.005 u	2.005 e								
Malaysia Mongolia	0.585 e 2.992 e	0.633 e 2.992 e	0.708 e 2.992 e	0.741 e 2.992 e	0.735 e 2.992 o	0.765 e 2.992 e	0.765 e 2.992	0.765 e 2.992	0.765 e 2.992	0.765 e 2.992 e
Myanmar	2.332 e 3.395 e	7.420 e	7.420 e	7.420 e	7.420 e	7.420 e	7.420 e	7.420 e	7.420 e	7.420 e
Nepal	22.858 e	26.504 e	28.414 e	29.659 e	30.915 e	7.420 e 32.368 e	34.054 e	36.048 e	37.184 e	37.184 e
Pakistan	17.539 e	18.789 e	21.544 e	21.580 e	21.660 e	23.666 e				
Philippines	9.595 o	12.595 o	12.595 o	12.595 o	20.595 o	30.595 o	30.595 o	30.595 e	28.425 o	28.425 e
Sri Lanka	4.446 e									
Tajikistan	43.200	43.200	43.200	43.200	44.160 e	44.160 e	44.160	45.260 u	45.260	45.260 e
Timor Leste Viet Nam	0.325 e 43.000 e									
C America + Carib	8.240	8.516	8.237	8.368	8.448	10.485	11.447	11.447	11.622	11.622
Belize	0.150 u	0.150 e								
Cuba						1.900 o	1.900 u	1.900	1.900 e	1.900 e
Dominican Rep	0.920 o	1.196 o	1.317 o	1.448 o	1.528	1.665 o	1.685 o	1.685 e	1.860 e	1.860
El Salvador	0.140 e	0.140 o	1.082 o	1.082 o	1.082 o	1.082 e				
Honduras	6.630 o									
Nicaragua	0.400	0.400								
Middle East	1.340	1.340	1.340	1.340	1.340	1.340	1.340	1.340	1.340	1.340
Iraq	1.340 e									
Oceania	77.039	77.039	77.192	77.192	77.192	77.192	77.192	77.192	77.192	77.192
Fiji	0.130 u	0.130 e								
Papua N Guin	76.645 e									
Solomon Is	0.189 o	0.189 o	0.339 o	0.339 o	0.339 o	0.339 e				
Vanuatu	0.075 e	0.075 e	0.078 e							

## 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	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	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						
Venezuela	12.254 o									

## Off-grid solar photovoltaic Solaire photovoltaïque hors réseau Solar fotovoltaica aislada

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	1 321.474	1 648.309	1 899.520	2 376.547	2 955.449	3 198.383	3 691.387	3 963.194	4 556.090	4 961.106
Africa	196.308	261.909	336.539	415.044	556.493	666.344	762.469	859.811	977.931	1 015.780
Algeria	1.100	18.900 e	18.900 e	18.900 u	38.200 u	38.200 e				
Angola	0.320 e	0.320 e	0.328 e	0.424 e	0.437 e	1.366 e	1.374 e	1.441 e	1.460 e	1.460 e
Benin			1.500	1.500	1.500	1.500 e	1.540 o	1.540 e	1.540 e	1.540 e
Botswana	0.560 e	0.853 e	1.926 e	2.061 e	2.366 e	2.365 e	2.365 e	2.365 e	2.365 e	2.365 e
Burkina Faso	1.824 e	2.750 e	3.165 e	3.452 e	18.895 e	20.039 e	20.529 e	21.314 e	21.909 e	21.909 e 1.000 e
Burundi Cabo Verde	e 0.074 o	0.300 e 0.268 o	1.100 e 0.268 o	1.500 e 0.426 o	1.500 e 0.998 o	1.500 e 1.139 o	1.700 e 1.305 o	1.100 e 1.427 o	1.000 e 1.623 o	1.796 o
Cameroon	5.600 e	7.400 e	9.000 e	11.550 e	14.099 e	14.099 e	14.224 u	14.224 e	14.224 e	14.224 e
Cent Afr Rep	0.300 e	0.316	0.316 e	0.316 e	0.316 e	0.316 e				
Chad	0.050 e	0.172 e	0.173 e	0.190 e	0.562 e	0.562 e	0.557 e	0.606 e	1.092 e	1.092 e
Comoros			0.805 e	1.146 e	1.146 e	1.165 e	1.152 e	0.362 e	0.034 e	0.034 e
Congo DR	1.261 e	1.355 e	5.114 e	7.169 e	21.831 e	21.831 e	21.831 e	21.831 e	21.831 e	21.831 e
Congo Rep	0.018 e	0.020 e	0.040 e	0.057 e	0.064 e	0.062 e	0.522 e	0.565 e	0.640 e	0.640 e
Cote d Ivoire	0.009 e 0.300 e	0.284 e 0.300 e	0.450 e 0.362 u	1.007 e 0.362 u	2.097 e 0.362 u	4.206 e 0.362 u	6.402 e 0.362 e	7.749 e 0.362 e	8.999 e 0.362 e	8.999 e 0.362 e
Djibouti Egypt	15.000 e	16.000 e	30.000 o	30.000 o	44.200 o	30.200 o	32.000 o	30.500 o	66.000 u	66.000 e
Eg Guinea	15.000	10.000 0	0.160 e	0.354 e	0.354 e	0.336 e	0.325 e	0.189 e	0.006 e	0.006 e
Eritrea	7.859 e	7.859 e	9.014 e	25.354 e	25.864 e	25.919 e	25.906 e	25.125 e	24.785 e	24.785 e
Eswatini	0.804 e	0.839 e	0.839 e	0.839 e	0.839 e					
Ethiopia	9.131	9.890	14.040	12.494	12.346	12.346	20.184	21.184	21.184 e	21.184 e
Gabon	е	0.100 e	0.100 e	0.500 e	0.500 e	0.500 e				
Gambia	0.278 e	0.338 e	0.799 e	1.110 e	1.149 e	1.152 e	1.142 e	1.129 e	1.045 e	1.045 e
Ghana	4.696 e	9.028 e	10.597 e	12.017 e	12.483 e	13.300 e	13.875 e	14.372 e	14.801 e	14.801 e
Guinea Guinea Bissau	0.071 e	0.073 e 0.312 e	0.227 e 0.312 e	0.426 e 0.312 e	12.900 e 1.169 o	14.014 e 1.169 e	14.630 e 1.169 e	14.961 e 1.169 e	16.059 e 1.169 e	16.059 e 1.169 e
Kenya	13.407 e	27.501 e	29.420 e	35.420 e	43.850 e	59.325 e	78.039 e	100.613 e	112.787 e	112.787 e
Lesotho	0.163 e	0.163 e	0.363	0.363	0.363 e					
Liberia	0.040 u	0.057 u	0.059 u	2.406 u	2.583 u	2.583 e				
Libya	4.900 u	4.900 u	4.900 u	5.110 u	5.110 e	5.110 e	5.111 e	6.333 u	6.333 e	6.333 e
Madagascar	7.000 e	9.000 e	11.000 e	13.000 e	13.000	13.000	13.000 e	13.000 e	13.000 e	13.000 e
Malawi	6.834 e	11.257 e	11.257 e	18.337 e	24.894 e	79.323 e	79.323 e	79.323 e	79.323 e	79.323 e
Mali	4.306 e	5.334 e	5.865 e	7.705 e	8.199 e	9.234 e	9.501 e	40.502 e	41.017 e	41.017 e
Mauritania	3.151 o	3.166 o	19.766 o	19.766 o	21.066 u	21.209 u	21.209 e	21.209 e	21.209 e	55.209 u
Mauritius Morocco	0.107 e 18.800	0.134 e 18.800	0.915 e 20.870	3.287 e 22.895 o	3.440 e 22.895 o	4.815 e 22.903 o	4.148 e 23.000	3.380 e 23.000 e	1.364 e 23.000 e	1.364 e 23.000 e
Mozambigue	1.300	1.300	1.300	1.300	1.300	1.350	2.343	23.000 e	23.000 e	23.000 e
Namibia	14.176 u	14.176 e	14.176 e	14.176 u	21.929 u	23.869 u	23.869 e	23.869 e	23.869 e	23.869 e
Niger	6.000 e	7.000 e	8.000 e	9.041 u	20.041 u	20.041 u	20.041 e	20.041 e	20.041 e	20.041 e
Nigeria	3.964 e	10.600 e	13.482 e	18.868 e	23.298 e	35.360 e	51.172 e	67.049 e	92.408 e	92.408 e
Reunion						1.340 u	1.340 e	1.340 e	1.340 e	1.340 e
Rwanda	1.235 e	1.861 e	3.071 e	4.501 e	9.494 e	13.000 e				
Sao Tome Prn	e	е	0.154 e	0.348 e	0.348 e	0.349 e	0.339 e	0.203 e	0.013 e	0.013 e
Senegal	7.000 e	7.000 e	7.000 e	7.000 e	7.000 e					
Seychelles Sierra Leone	0.068 o 0.395 u	0.068 o 0.420 u	0.068 o 0.484 u	0.068 e 3.830 u	1.022 e 4.246 u	1.022 e 4.246 e	1.022 e 4.246 e	1.022 e 4.286 u	1.022 e 4.286 e	1.022 e 4.286 e
Somalia	0.100 e	0.420 u 0.170 e	4.670 e	6.894 e	7.068 e	7.068 e	15.538 u	23.538 u	47.038 u	50.538 u
South Africa	1.889 e	2.214 e	2.489 e	5.271 e	5.132 e	5.560 e	5.325 e	5.221 e	5.150 e	5.150 e
South Sudan	0.160 e	0.160 e	0.428 u	0.449 u	0.737 e	0.835 u	0.835 e	1.278 u	2.469 e	2.469 e
Sudan	16.584 u	19.911 u	26.219 u	35.800 u	59.478 u	80.199 u	116.840 u	135.570 u	135.570 e	135.570 e
Tanzania	11.159 e	12.766 e	12.228 e	13.111 e	17.381 e	15.486 e	15.486 e	15.486 e	15.486 e	15.486 e
Togo	0.022 e	0.062 e	0.082 e	0.972 e	3.490 o	5.460 o	6.460 o	6.493 u	6.493 e	6.493 e
Tunisia	1.563 e	1.710 e	2.060 e	2.076 e	2.076 e	7.076 u	7.076 e	7.076 e	7.076 e	7.076 e
Uganda Zambia	20.000 e 0.060 e	22.000 e 0.060 e	24.000 e 0.094 e	26.600 e 0.094 e	26.600 e 0.224 e	26.760 e 0.224 o	26.920 e 0.224 o	27.079 e 0.224 o	27.239 e 0.252 o	27.399 e 0.268 o
Zimbabwe	2.670 e	2.493 e	2.835 e	3.541 e	4.003 e	3.682 e	4.067 e	3.317 e	2.874 e	2.874 e
Asia	998.658	1 187.402	1 334.834	1 695.322	1 984.991	2 087.425	2 464.140	2 614.419	3 044.563	3 365.535
Afghanistan	18.363 e	18.931 e	20.200 e	20.641 e	20.416 e	19.931 e	19.353 e	19.526 e	21.543 u	21.543 e
Bangladesh	168.667 e	191.506 e	151.036 e	194.667 e	190.818 e	200.992 e	206.326 e	202.495 e	167.545 e	173.225 e
Bhutan	0.275 e	0.275 e	0.275 e	0.275 e	0.403 u					
Brunei Darsm	0.014 u	0.014 u	0.014 u	0.015 u	0.015 u	0.016 u	0.027 u	0.047 u	0.047 u	0.047 e
Cambodia China	0.742 e 337.800	1.245 e 357.800	1.923 e 367.800	2.027 e 376.800	1.496 e 385.800	1.298 e 394.800 e	0.770 e 403.800 o	1.528 e 412.800 e	1.517 e 421.800 e	1.537 e 430.800 e
India	384.835 e	489.620 e	640.976 e	875.977 e	1 130.251 e	1 177.163 e	1 510.674 e	1 633.081 e	1966.434 e	2 196.842 e
Indonesia	32.627 e	41.678 e	41.784 e	42.927 e	41.050 o	50.010 o	61.490 o	69.750 o	122.820 o	183.740 e
Korea DPR	10.958 u	22.794 u	31.534 u	34.780 u	48.330 e	61.880 e	75.430 e	88.980 e	102.530 e	116.080 e
Lao PDR	1.061 e	1.413 e	1.568 e	1.568 e	1.568 e	1.568 e	1.580 e	1.614 e	1.614 e	1.614 e
Malaysia	1.528 e	2.415 e	2.462 e	2.579 e	7.629 e	7.610 e	7.794 e	7.825 e	7.874 e	7.874 e
Maldives	3.882 o	4.799 o	7.488 o	10.791 o	16.478 o	20.605 u	26.705 u	30.805 u	35.805 o	37.055 e
Mongolia	4.585 e	4.585 e	4.585 e	4.585 e	4.585 o	4.585 e	4.585	4.585	4.585	4.585 e
Myanmar	6.271 o	20.819 0	32.008 o	43.781 o	47.542 o	48.482 0	44.496 o	40.447 e	88.100 e	88.100 e
Nepal	10.870 e	12.741 e	13.004 e	53.137 e	54.027 e	52.693 e	53.954 e	53.231 e	54.709 e	54.709 e
Pakistan	0.294 e	0.444 e	0.507 e	12.315 e	13.382 e	15.540 e	16.844 e	16.939 e	16.606 e	16.606 e

#### Off-grid solar photovoltaic Solaire photovoltaïque hors réseau Solar fotovoltaica aislada

CAP (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Philippines	1.496 e	1.740 e	1.858 e	2.152 e	5.033 e	12.906 e	13.203 e	13.662 e	13.890 e	13.890 e
Sri Lanka	7.724 e	7.725 e	7.760 e	7.743 e	7.659 e	7.659 e	7.659 e	7.659 e	7.659 e	7.659 e
Timor Leste	1.176 e	1.368 e	1.362 e	1.047 e	0.822 e	0.597 e	0.360 u	0.355 e	0.395 e	0.411 e
Uzbekistan	1.000	1.000	2.200	3.025	3.325	3.325 e	3.325	3.325 e	3.325	3.325 e
Viet Nam	4.490 e	4.490 e	4.490 e	4.490 e	4.490 e	5.490 e	5.490 e	5.490 e	5.490 e	5.490 e
C America + Carib	16.929	21.405	16.971	18.687	19.140	30.270	38.379	45.264	51.653	61.205
Antigua Barb			0.010 e	0.414 e	0.414 e	0.414 e	0.414 e	0.414 e	0.414 e	0.414 e
Bahamas	0.501 u	0.867 u	0.920 u	0.866 u	0.835 u	0.778 u	0.778 e	4.778 u	4.778 e	4.778 e
Belize BES Islands	0.015 u	0.019 u	0.019 u	0.026 u	0.026 u	0.620 u	0.620 e	0.620 e	0.620 u	0.620 e 0.130 u
Br Virgin Is	0.051 u	0.763 u	0.923 u	0.921 u	0.929 u	0.984 u	1.189 u	1.179 u	1.179 u	2.179 u
Costa Rica	1.077 e	1.344 e	1.432 e	1.541 e	1.568 e	1.581 e	1.640 e	1.770 e	1.770 e	1.770 e
Cuba				0.467 u	0.835 u	7.000 u	7.224 u	7.947	7.947 e	7.947 e
Curacao	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 o	0.004 e
Dominican Rep			0.010 o	0.050 o	0.100 o	0.300 o	1.000 o	3.000 o	8.269 o	15.587 o
El Salvador	0.044 o	0.065 o	0.065 o	0.089 o	0.089 o	4.077 o	4.081 o	4.123 o	4.123 o	4.123 e
Guatemala	5.434 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 e	8.308 o
Haiti	0.927 e	1.154 e	1.425 u	1.505 u	1.524 u	1.577 u	1.498 u	1.498 e	1.498 e	1.498 e
Honduras	5.156 e	5.156 e	0.130 o	0.709 o	0.721 o	2.131 o	9.155 o	9.155 o	9.180 o	9.180 o
Jamaica	0.008 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e	0.013 e
Nicaragua	7 711	7 711	7 711	7 711 -	7 711 -	2.400 o	2.400 o	2.400 e	3.495 o	4.599 e
Panama Duanta Diag	3.711	3.711	3.711	3.711 o	3.711 e	0.020 u	0.020 e	0.020 o	0.020 e	0.020 o
Puerto Rico St Kitts Nevis	0.001 e	0.001 e	0.001 e	0.062 e 0.001 e	0.062 e 0.001 e	0.062 e 0.001 e	0.034 e 0.001 e	0.034 e 0.001 e	0.034 e 0.001 e	0.034 o 0.001 e
Middle East	46.163	101.283	121.805	144.340	299.154	303.118	309.259	310.259	321.078	341.446
Iran IR	0.378	0.378	0.378	0.378	0.378 e	0.378 e	0.378 e	0.378 e	0.378 e	0.378 e
Iraq	36.500 o	36.500 e	36.500 e	36.500 e	36.500 e	36.500 e	36.500 e	36.500 e	39.000 e	39.000 e
Jordan	0.236 o	0.557 o	0.588 e	0.588 o	0.623 o	0.670 o	2.375 o	3.325 u	3.325 e	3.325 e
Lebanon	0.390 e	0.397 e	0.507 e	0.527 e	4.880 o	4.880 o	4.880 e	4.890 o 0.011 e	4.890 e	4.890 e
Oman Palestine			0.011 e	0.011 e	0.011 e	0.011 e 1.833 o	0.011 e 1.833 e	1.833 e	0.011 e 1.833 e	0.011 e 1.833 e
Saudi Arabia	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e	0.014 e
Syrian AR	0.014 6	0.014 6	0.014 6	0.014 6	0.014 6	0.014 6	0.014 6	0.014 6	2.000 o	2.000 e
United Arab Em	3.192 e	3.208 e	3.208 e	3.238 u	3.407 o	4.672 o	5.597 u	5.597 e	5.897 u	2.000 0
Yemen	5.453 e	60.229 e	80.599 e	103.084 e	253.341 e	254.160 e	257.671 e	257.711 e	263.730 e	289.995 u
Oceania	8.266	12.174	16.426	18.551	20.749	24.155	24.846	25.728	27.945	29.177
Amer Samoa			1.504 e	1.854 e	1.854 e	1.504 u	1.504 o	1.504 o	1.504 o	1.504 e
Cook Is	0.047 e	0.047 e	0.047 e	0.047 e	1.869 u	2.606 u	2.606 e	2.606 e	2.606 e	2.606 e
Fiji	1.248 u	2.494 u	4.497 u	4.564 u	4.977 u	5.068 u	5.170 u	5.459 u	5.750 u	6.881 e
Fr Polynesia	2.700 o	2.900 o	3.000 o	3.300 o	3.200 o	3.300 o	3.300 o	3.300 e	3.300 e	3.300 e
Kiribati	0.743 o	1.389 o	1.397 o	1.397 o	1.397 e	1.397 e	1.397 e	1.397 e	1.397 e	1.397 e
Marshall Is	0.650 e	0.650 e	0.650 e	0.710 e	0.726 e	0.726 e	0.726 e	0.726 e	0.726 e	0.726 e
Micronesia	0.388 e	0.388 e	0.388 e	0.388 e	0.395 u	0.395 e	0.395 e	0.395 e	0.395 e	0.395 e
Nauru	0.008 e	0.008 e	0.008 e	0.009 e	0.009 e	0.167 e	0.158 e	0.158 e	0.158 e	0.158 e
New Caledon	0.500 o	0.500 o	0.500 o	0.575 o	0.607 o	0.656 o	0.711 o	0.786 o	0.869 o	0.960 e
Palau			0.170 o	0.170 o	0.170 e	0.235 u	0.538 o	0.538 e	0.538 e	0.538 e
Papua N Guin	0.339 e	0.878 u	1.229 u	1.195 u	0.958 u	2.696 e	2.810 e	3.346 e	3.437 e	3.437 e
Samoa	0.014 e	0.014 e	0.014 e	0.039 e	0.039 e	0.197 e	0.262 u	0.262 e	0.262 e	0.262 e
Solomon Is	1.076 e	1.076 e	1.107 e	1.482 e	1.482 e	1.369 e	1.369 e	1.369 e	3.079 e	3.079 e
Tokelau	0.021 u	0.021 u	0.021 u	0.021 e	0.021 e	0.021 e 0.437 e	0.021 e	0.021 e	0.021 e	0.021 e
Tonga Tuvalu	0.234 o	0.240 o	0.277 o	0.277 o	0.437 u		0.437 e	0.437 e	0.437 e	0.437 e
	0.102	1700 0						1772 0	1772 0	1772 0
Vanuatu	0.192 o 0.106 e	1.308 o 0.261 e	1.316 o 0.301 e	1.321 o 1.202 e	1.332 o 1.276	1.332 o 2.049 u	1.332 e 2.110 u	1.332 e 2.092 u	1.332 e 2.134 u	1.332 e 2.144
Vanuatu S America			1.316 o	1.321 o	1.332 o	1.332 o	1.332 e			
S America	0.106 e <b>55.150</b>	0.261 e <b>64.136</b>	1.316 o 0.301 e <b>72.945</b>	1.321 o 1.202 e <b>84.603</b>	1.332 o 1.276 <b>74.922</b>	1.332 o 2.049 u <b>87.071</b>	1.332 e 2.110 u <b>92.294</b>	2.092 u <b>107.713</b>	2.134 u <b>132.920</b>	2.144 <b>147.963</b>
S America Argentina	0.106 e <b>55.150</b> 7.321	0.261 e <b>64.136</b> 7.321	1.316 o 0.301 e <b>72.945</b> 7.320	1.321 o 1.202 e <b>84.603</b> 7.320	1.332 o 1.276 <b>74.922</b> 7.320	1.332 o 2.049 u <b>87.071</b> 7.330	1.332 e 2.110 u <b>92.294</b> 6.868	2.092 u <b>107.713</b> 10.890	2.134 u 132.920 12.242	2.144 <b>147.963</b> 11.502
S America Argentina Bolivia	0.106 e <b>55.150</b> 7.321 5.535	0.261 e 64.136 7.321 5.160	1.316 o 0.301 e <b>72.945</b> 7.320 5.160	1.321 o 1.202 e <b>84.603</b> 7.320 4.860	1.332 o 1.276 <b>74.922</b> 7.320 4.860 o	1.332 o 2.049 u <b>87.071</b> 7.330 5.250 o	1.332 e 2.110 u <b>92.294</b> 6.868 5.480	2.092 u 107.713 10.890 5.280	2.134 u 132.920 12.242 5.280	2.144 <b>147.963</b> 11.502 5.280
S America Argentina Bolivia Brazil	0.106 e <b>55.150</b> 7.321  5.535  0.721 e	0.261 e <b>64.136</b> 7.321  5.160  3.930 e	1.316 o 0.301 e <b>72.945</b> 7.320 5.160 4.091 e	1.321 o 1.202 e <b>84.603</b> 7.320 4.860 7.212 e	1.332 o 1.276 <b>74.922</b> 7.320 4.860 o 7.227 e	1.332 o 2.049 u <b>87.071</b> 7.330 5.250 o 7.241 o	1.332 e 2.110 u <b>92.294</b> 6.868 5.480 7.241 o	2.092 u 107.713 10.890 5.280 7.241 o	2.134 u 132.920 12.242 5.280 7.241 e	2.144 <b>147.963</b> 11.502 5.280 7.241 e
S America  Argentina Bolivia Brazil Colombia	0.106 e <b>55.150</b> 7.321 5.535 0.721 e 1.418	0.261 e <b>64.136</b> 7.321  5.160  3.930 e  1.463	1.316 o 0.301 e 72.945 7.320 5.160 4.091 e 1.520	1.321 o 1.202 e <b>84.603</b> 7.320 4.860 7.212 e 1.520	1.332 o 1.276 <b>74.922</b> 7.320 4.860 o 7.227 e 3.577	1.332 o 2.049 u <b>87.071</b> 7.330 5.250 o 7.241 o 7.473	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o	2.092 u <b>107.713</b> 10.890 5.280 7.241 o 22.262 o	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o	2.144 147.963 11.502 5.280 7.241 e 50.800 o
S America  Argentina Bolivia Brazil Colombia Ecuador	0.106 e <b>55.150</b> 7.321  5.535  0.721 e	0.261 e  64.136  7.321 5.160 3.930 e 1.463 1.940	1.316 o 0.301 e 72.945 7.320 5.160 4.091 e 1.520 2.010	1.321 o 1.202 e 84.603 7.320 4.860 7.212 e 1.520 2.010	1.332 o 1.276 <b>74.922</b> 7.320 4.860 o 7.227 e 3.577 3.169 o	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192	2.144 147.963 11.502 5.280 7.241 e 50.800 o 6.388
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv	0.106 e <b>55.150</b> 7.321 5.535 0.721 e 1.418 1.940	0.261 e  64.136  7.321 5.160 3.930 e 1.463 1.940 0.070 o	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o	1.321 o 1.202 e 84.603 7.320 4.860 7.212 e 1.520 2.010 0.070 o	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192 0.070 e	2.144 <b>147.963</b> 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv Fr Guiana	0.106 e  55.150  7.321 5.535 0.721 e 1.418 1.940  0.161 o	0.261 e 64.136 7.321 5.160 3.930 e 1.463 1.940 0.070 o 0.161 o	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o 0.161 o	1.321 o 1.202 e 84.603 7.320 4.860 7.212 e 1.520 2.010 0.070 o 0.161 o	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o 0.161 o	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e 0.161 o	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e 0.161 e	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e 0.161	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192 0.070 e 0.161	2.144 <b>147.963</b> 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e 0.161 e
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv	0.106 e <b>55.150</b> 7.321 5.535 0.721 e 1.418 1.940	0.261 e  64.136  7.321 5.160 3.930 e 1.463 1.940 0.070 o 0.161 o 1.476	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o 0.161 o 1.652	1.321 o 1.202 e 84.603 7.320 4.860 7.212 e 1.520 2.010 0.070 o 0.161 o 1.665	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o 0.161 o 1.684	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e 0.161 o 1.808	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192 0.070 e	2.144 <b>147.963</b> 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv Fr Guiana Guyana	0.106 e  55.150  7.321 5.535 0.721 e 1.418 1.940  0.161 o 1.061	0.261 e 64.136 7.321 5.160 3.930 e 1.463 1.940 0.070 o 0.161 o	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o 0.161 o	1.321 o 1.202 e 84.603 7.320 4.860 7.212 e 1.520 2.010 0.070 o 0.161 o	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o 0.161 o	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e 0.161 o	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e 0.161 e 1.808 e	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e 0.161 1.808 e	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192 0.070 e 0.161 1.808 e	2.144 <b>147.963</b> 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e 0.161 e 1.808 e
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv Fr Guiana Guyana Paraguay	0.106 e  55.150  7.321 5.535 0.721 e 1.418 1.940  0.161 o 1.061 0.057 o	0.261 e  64.136  7.321 5.160 3.930 e 1.463 1.940 0.070 o 0.161 o 1.476 0.057 o	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o 0.161 o 1.652 0.057 o	1.321 o 1.202 e  84.603  7.320 4.860 7.212 e 1.520 2.010 0.070 o 0.161 o 1.665 0.057 o	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o 0.161 o 1.684 0.057 o	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e 0.161 o 1.808 0.057 o	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e 0.161 e 1.808 e 0.150	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e 0.161 1.808 e 0.150	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192 0.070 e 0.161 1.808 e 1.166	2.144 147.963 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e 0.161 e 1.808 e 1.166 e
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv Fr Guiana Guyana Paraguay Peru	0.106 e  55.150  7.321 5.535 0.721 e 1.418 1.940  0.161 o 1.061 0.057 o 34.484 e	0.261 e  64.136  7.321 5.160 3.930 e 1.463 1.940 0.070 o 0.161 o 1.476 0.057 o 38.914 e	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o 0.161 o 1.652 0.057 o 46.147 e	1.321 o 1.202 e  84.603  7.320 4.860 7.212 e 1.520 2.010 0.070 o 0.161 o 1.665 0.057 o 53.379 e	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o 0.161 o 1.684 0.057 o 39.675	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e 0.161 o 1.808 0.057 o 45.746	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e 0.161 e 1.808 e 0.150 45.746 e	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e 0.161 1.808 e 0.150 45.746 o	2.134 u 132.920 12.242 5.280 7.241 e 37.233 o 4.192 0.070 e 0.161 1.808 e 1.166 45.746 e	2.144 147.963 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e 0.161 e 1.808 e 1.166 e 45.746 e
S America  Argentina Bolivia Brazil Colombia Ecuador Falklands Malv Fr Guiana Guyana Paraguay Peru Suriname	0.106 e  55.150  7.321 5.535 0.721 e 1.418 1.940  0.161 o 1.061 0.057 o 34.484 e 1.195 e	0.261 e  64.136  7.321 5.160 3.930 e 1.463 1.940 0.070 o 0.161 o 1.476 0.057 o 38.914 e 1.195 e	1.316 o 0.301 e  72.945  7.320 5.160 4.091 e 1.520 2.010 0.070 o 0.161 o 1.652 0.057 o 46.147 e 1.660	1.321 o 1.202 e  84.603  7.320 4.860 7.212 e 1.520 2.010 0.070 o 0.161 o 1.665 0.057 o 53.379 e 2.632	1.332 o 1.276  74.922  7.320 4.860 o 7.227 e 3.577 3.169 o 0.070 o 0.161 o 1.684 0.057 o 39.675 2.764 e	1.332 o 2.049 u 87.071 7.330 5.250 o 7.241 o 7.473 3.169 o 0.070 e 0.161 o 1.808 0.057 o 45.746 2.764 e	1.332 e 2.110 u 92.294 6.868 5.480 7.241 o 11.826 o 3.169 o 0.070 e 0.161 e 1.808 e 0.150 45.746 e 3.420 e	2.092 u 107.713 10.890 5.280 7.241 o 22.262 o 3.192 o 0.070 e 0.161 1.808 e 0.150 45.746 o 3.420 e	2.134 u  132.920  12.242 5.280 7.241 e 37.233 o 4.192 0.070 e 0.161 1.808 e 1.166 45.746 e 3.420 e	2.144 147.963 11.502 5.280 7.241 e 50.800 o 6.388 0.070 e 0.161 e 1.808 e 1.166 e 45.746 e 3.420 e

## 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
World		4 525.242	4 852.457	5 025.609	4 464.248	4 704.200	4 554.121	4 642.775	5 083.832	5 939.893	6 119.173
Africa		80.377	79.747	82.448	122.843	123.333	123.333	123.333	143.333	143.329	143.329
Algeria		10.200	10.200	10.200	10.200 e	10.000 e	10.000 e		10.000 e	10.000 e	10.000 e
Burkina Faso		0.150 u	0.150 u	0.150 e	0.150 e	0.150 e	0.150 e		0.150 e	0.150 e	0.150 e
Burundi Chad	е	4.000 e	4.000 e	4.000 e 1.100 u	4.000 e 1.100 e	4.000 e 1.100 e	4.000 e 1.100 e		4.000 e 1.100 e	4.000 e 1.100 e	4.000 e 1.100 e
Congo DR	е	0.160 e	0.160 e	0.160 d	2.160 e	2.960 e	2.960 e		2.960 e	2.960 e	2.960 e
Djibouti									20.000 u	20.000 e	20.000 e
Egypt	0	5.000 o	5.000 o	5.000 o	5.000 o	5.000 c	5.000 c		5.000 e	5.000 e	5.000 e
Eritrea	е	0.825 e		0.825 e	0.825 e	0.825 e					
Ethiopia Gabon			1.200 e	0.006 u 1.200 e	0.006 e 1.200 e	0.006 e 1.200 e	0.006 e 1.200 e		0.006 1.200 e	0.006 e 1.200 e	0.006 e 1.200 e
Ghana	е	8.274 e	8.294 e		8.294 e	8.294 e	8.294 e				
Kenya	e	0.554 e	0.604 e	0.604 e	0.714 e	0.604 e	0.604 e		0.604 e	0.600 e	0.600 o
Liberia		0.070 e	0.070 e	0.130 e	0.165 e	0.165 e	0.165 e	0.165 e	0.165 e	0.165 e	0.165 e
Madagascar	0	0.411 o	0.411 o	0.411 o	0.411 e	0.411 e	0.411 e		0.411 e	0.411 e	0.411 e
Mali	e	5.366 e	5.366 e	5.366 e	40.366 e	40.366 e	40.366 e		40.366 e	40.366 e	40.366 e
Mauritania Morocco	е	4.400 o 5.000	4.400 o 5.000	4.400 o 5.000	4.400 o 5.000	4.400 e 5.000	4.400 e 5.000 e		4.400 e 5.000 e	4.400 e 5.000 e	4.400 e 5.000 e
Nigeria	е	7.507 e	7.507 e	9.017 e	9.017 e	9.017 e	9.017 e		9.017 e	9.017 e	9.017 e
Somalia	u	2.200 u	2.800 u	2.800 u	3.550 u	3.550 e	3.550 e		3.550 e	3.550 e	3.550 e
Tanzania	0	26.260 u	23.760 e	23.785 e	26.285 e	26.285 e	26.285 e	26.285 e	26.285 e	26.285 e	26.285 e
Asia		3 939.789	4 198.599	4 351.156	3 712.447	3 906.162	3 745.072	3 833.696	4 212.498	5 058.173	5 237.453
Afghanistan	u	0.100 e	0.100 e	0.100 e	0.100 e	0.100 e					
Bangladesh	е	5.120 e	6.650 e	7.050 o	7.050 o	7.050 e	7.050 e		7.350 e	7.350 e	7.350 e
Cambodia	е	2.250 e	3.750 e		3.750 e	3.750 e	3.750 e				
China India	е	249.130 738.096 e	297.730 786.866 e	342.690 845.502 e	370.390 851.244 e	401.150 896.859 e	431.910 e 866.929 e		493.430 e 964.169 e	524.190 e 968.369 e	554.950 e 1 020.369 e
Indonesia	0	1626.000 o	1626.000 c		1669.000 e	1685.260 e	1 687.260 e		2 082.810 e	2 893.410 e	2 989.900 e
Korea DPR	u	0.750 u	0.860 u	0.970 u	1.330 u	1.330 u	1.330 u		1.600 e	1.600 e	1.600 e
Lao PDR						0.290 c	0.290 a	0.290 c	0.290 o	0.290 e	0.290 e
Malaysia	0	1100.000 o	1237.800 o		531.640 o	531.640 e	531.640 e		531.640 e	531.640 e	531.640 e
Maldives	u e	1.407 e 1.006 e	1.407 e 1.006 e	1.407 e 1.006 e	1.407 e 1.006 e	1.407 e 1.006 c	1.407 e 1.006 e		1.407 e 0.994	1.407 e 0.989 e	1.407 e 0.989 e
Mongolia Myanmar	e	52.375 e	47.875 e	49.221 e	51.618 e	56.308 e	58.358 e		58.358 e	58.358 e	58.358 e
Nepal	C	0.069 u	0.069 u	0.069 u	0.503 e	0.603 u	0.633 u		1.191 e	1.311 e	1.311 e
Pakistan	е	0.561 e	0.561 e	0.561 e	0.579 e	0.579 e	0.579 e		0.579 e	0.579 e	0.579 e
Philippines Timor Leste	u	20.925 e	20.925 e	29.830 e	29.830 e	29.830 e	45.830 c	45.830 e	45.830 e	45.830 o	45.830 e 0.030 e
Viet Nam	е	142.000 e	167.000 e	193.000 e	193.000 e	289.000 e	107.000 e		19.000 e	19.000 e	19.000 e
C America + Carib		85.387	89.789	92.223	123.321	123.467	124.218	124.218	124.218	126.558	126.558
Bahamas	е	0.300 e		0.300 e	0.300 e	0.300 e					
Belize	u	0.020 u	0.020 u	0.020 u	0.020 u	0.020 u	0.020 u		0.020 e	0.020 u	0.020 e
Br Virgin Is Cuba	0	0.500 o	0.500 o	0.500 o	0.500 o	0.500 c	0.801 c 0.450 e		0.801 o 0.450 e	0.801 o 0.450 e	0.801 u 0.450 e
Dominica	0	0.010 o	0.010 o	0.010 o	0.010 o	0.010 c	0.430 e		0.430 e	0.430 e	0.430 e
Dominican Rep	e	20.943 e	21.445 e	21.791 e	52.889 e	53.011 e	53.011 e		53.011 e	55.351 e	55.351
Haiti						0.024 u	0.024 e	0.024 e	0.024 e	0.024 e	0.024 e
Honduras	0	3.514 e	7.414 e		7.414 e	7.414 e	7.414 e				
Nicaragua		60,000 -	60,000 -	1.912 0	1.912 0	1.912 e	1.912 e		1.912 e	1.912 e	1.912 e
Panama St Lucia	е	60.000 e	60.000 e	60.000 e 0.176	60.000 e 0.176 e	60.000 e 0.176 e	60.000 e 0.176 e		60.000 e 0.176 e	60.000 e 0.176 e	60.000 o 0.176 e
US Virgin Is		0.100 o	0.100 o	0.100 o	0.100 o	0.100 e	0.100 e		0.100 e	0.100 e	0.100
Middle East		6.000	6.000	6.000	6.000	6.000	6.000	6.010	6.015	6.015	6.015
Jordan								0.010 c	0.010 o	0.010 e	0.010 e
Kuwait		2.400 e	2.400 e	2.400 e	2.400 e	2.400 e					
Lepanon	u	3.000 u	3.UUU e	3.000 e	3.000 e	3.000 e	3.UUU e		3.000 e	3.UUU e	3.000 e
Syrian AR Yemen	е	0.600 e	0.600 e	0.600 e 0.005 o	0.600 e 0.005 e	0.600 e 0.005 e					
Oceania		69.134	69.094	69.094	69.094	69.095	69.095	69.095	69.095	69.095	69.095
Fiji	u	0.024 u	0.024 u	0.024 u	0.024 u	0.024 u	0.024 e	0.024 e	0.024 e	0.024 e	0.024 e
Fr Polynesia	e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e	0.248 e		0.248 e	0.248 e	0.248 e
Marshall Is	е	0.010 e	0.010 e	0.010 e	0.010 e	0.011 u	0.011 e		0.011 e	0.011 e	0.011 e
Papua N Guin	е	68.312 e		68.312 e	68.312 e	68.312 e					
Solomon Is	e	0.500 e	0.500 u	0.500 u	0.500 u	0.500 u	0.500 e	0.500 e	0.500 e	0.500 e	0.500 e
Vanuatu	е	0.040 e									

## 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 o	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	0	0.059 o	0.059 o	0.059 o	0.099 o	0.099 c	0.059 e	0.059 e	5.579 e	5.579 o	5.579 e
Ecuador		4.650 o	4.650 o	4.650 o	4.650 o	4.650 e	4.650 c	4.650 c	4.650 o	4.650	4.650
Falklands Malv	е	0.340 e	0.340 o	0.340 o	0.340 o	0.340 o	0.340 e				
Fr Guiana							3.100 c	3.100 e	3.100 o	3.100	3.100 e
Guyana	е	43.325 e	43.438 e	33.898 e	33.898 e	34.498 e					
Paraguay								0.020	0.020	0.020	0.020 e
Peru	0	39.400 o	41.300	66.300 o	76.300 o	74.400 e	74.400 e	74.400 e	66.000 o	73.250 e	73.250 e
South Georgia		0.006	0.006	0.006	0.006	0.006	0.006	0.006 e	0.006 e	0.006 e	0.006 e
Suriname			1.500 o	1.500 o	1.500 o	1.500 c	1.500 o	1.500 c	1.500 o	1.500 o	1.500 e
Uruguay		0.800	0.800	0.800	5.900	11.300	13.500	13.500 o	13.500 e	14.300 o	14.300 e
Venezuela	0	140.500 o	140.500 o	140.500 o	140.500 o	140.500 c	140.500 o	140.500 o	186.500 o	186.500 o	186.500 o

Other indicators

**Autres indicateurs** 

Otros indicadores

%	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
World	28.2	29.5	30.8	32.1	33.1	34.6	36.6	38.4	40.4	43.2
Africa	19.4	19.9	19.9	20.9	21.4	21.6	22.4	22.7	23.6	24.3
Algeria	1.6	1.7	2.5	2.9	2.7	2.5	2.3	2.0	2.2	2.1
Angola	43.6	42.6	55.9	51.1	57.1	59.4	61.6	61.6	63.3	63.4
Benin	0.7	1.7	1.7	1.7	1.9	1.1	1.1	1.1	8.6	8.6
Botswana Burkina Faso	0.2 11.7	0.2 11.4	0.4 11.7	0.4 20.3	0.4 23.6	0.6 21.1	0.6 21.2	0.7 19.2	0.7 24.0	0.7 35.2
Burundi	72.7	72.8	73.1	51.5	51.8	51.8	51.9	54.8	60.1	60.1
Cabo Verde	23.2	18.6	18.8	18.9	21.1	23.5	22.7	23.7	23.2	25.1
Cameroon	57.8	55.5	55.6	51.3	51.4	54.0	54.0	53.9	54.0	55.0
Cent Afr Rep	46.5	46.5	46.5	46.5	46.5	46.6	46.6	21.0	21.0	38.0
Chad	0.7	0.8	1.1	1.2	1.3	1.3	1.5	1.5	1.6	1.6
Comoros	6.3	6.3	9.4	10.7	10.7	10.8	10.7	7.7	20.2	20.2
Congo DR	98.9	98.8	98.8	98.8	98.8	98.8	98.8	98.8	97.5	97.7
Congo Rep	32.7	32.7 33.3	33.4	34.6 39.9	34.6 39.9	34.6	27.5 39.5	27.5	27.5	27.5 37.0
Cote d Ivoire Djibouti	36.2 0.2	0.2	31.3 0.3	0.3	0.3	39.5 0.3	0.3	38.9 14.2	36.0 14.2	37.0 39.5
Egypt	10.6	10.4	9.5	8.4	8.6	9.7	10.0	10.5	10.6	11.2
Eq Guinea	36.1	36.1	33.8	31.8	31.8	31.8	31.8	31.7	31.7	31.7
Eritrea	5.9	5.2	5.8	11.3	11.5	11.5	11.5	11.2	11.1	11.1
Eswatini	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.8	94.8	94.8
Ethiopia	92.1	94.8	96.4	97.8	98.1	97.7	97.8	97.9	98.2	98.2
Gabon	55.2	55.2	52.9	53.5	54.3	54.3	54.3	54.3	54.3	54.3
Gambia	1.7	1.8	2.3	2.7	2.4	2.9	2.9	2.5	2.4	2.4
Ghana Guinea	56.4 38.0	50.3 61.1	42.7 62.0	35.3 60.3	34.8 60.7	32.5 62.5	31.8 61.6	31.4 66.0	31.0 66.0	31.0 66.0
Guinea Bissau	36.0	1.1	1.1	1.1	4.0	4.0	4.0	4.0	4.0	4.0
Kenya	65.4	65.3	66.1	67.6	71.8	72.1	75.4	76.7	79.6	80.0
Lesotho	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9
Liberia	5.1	5.1	21.6	49.3	49.4	49.4	49.4	49.4	49.4	49.4
Libya	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Madagascar	24.9	25.2	25.4	23.6	24.1	24.1	24.1	24.1	28.8	28.8
Malawi	93.5 48.0	93.8	91.8	81.3	77.6	78.1	78.1	80.7	81.8	81.8 53.8
Mali Mauritania	8.8	47.8 11.3	43.9 14.3	44.3 14.3	44.4 21.2	43.8 20.8	46.4 20.8	48.0 19.5	53.8 19.7	34.0
Mauritius	19.0	21.7	22.7	21.5	27.0	29.0	20.8	29.8	29.7	29.7
Mayotte	14.5	14.3	11.9	13.3	13.7	14.5	15.8	23.3	23.3	24.0
Morocco	26.7	28.2	28.9	28.7	29.8	30.5	33.0	33.1	34.3	36.5
Mozambique	87.5	81.1	81.7	81.7	78.7	78.4	78.4	78.4	78.6	78.6
Namibia	62.4	62.7	67.7	70.0	71.1	73.3	73.5	73.5	74.4	74.4
Niger	2.3	2.7	3.0	2.6	7.4	7.1	7.1	7.1	12.1	17.0
Nigeria	20.1	20.1	17.0	17.0	16.4	16.5	16.8	16.9	17.1	20.9
Reunion Rwanda	43.9 59.0	45.3 51.6	45.5 49.3	45.5 50.4	48.2 51.4	48.7 54.2	49.2 56.0	50.2 56.0	50.8 50.2	51.1 50.2
Sao Tome Prn	10.3	8.2	7.0	7.6	7.6	7.4	7.4	7.0	6.4	6.4
Senegal	5.6	5.5	8.2	16.0	15.2	20.7	26.9	30.4	29.1	29.0
Seychelles	7.6	7.8	7.1	7.6	9.0	8.5	10.8	15.4	16.0	16.0
Sierra Leone	66.7	55.4	55.5	57.5	49.1	41.7	41.7	41.7	42.9	42.9
Somalia	2.8	3.6	8.5	11.5	9.6	9.6	16.0	20.4	32.3	33.8
South Africa	5.8	7.2	9.2	12.3	14.1	14.2	15.8	15.9	16.8	17.0
South Sudan	0.2	0.2	0.5	0.3	0.6	0.5	0.5	0.8	8.5	12.7
Sudan Tanzania	46.5 40.1	46.5 41.6	46.1 38.3	46.2 38.4	47.4 33.9	47.7 34.1	48.2 34.2	48.4 34.3	49.2 34.3	49.2 34.3
Togo	27.9	27.9	36.3 27.9	28.2	28.9	29.5	34.2 30.0	34.3 36.1	34.3 36.1	34.3 36.1
Tunisia	6.2	6.6	6.5	6.5	7.3	7.2	6.7	6.7	7.7	11.9
Uganda	85.0	85.2	85.2	85.8	89.8	92.0	92.2	92.2	92.4	92.4
Zambia	94.2	93.1	83.8	82.2	82.3	82.9	82.9	84.4	86.3	86.4
Zimbabwe	41.7	42.2	42.3	42.4	49.7	49.8	49.9	50.2	49.4	39.7
Asia	25.8	27.2	28.6	30.4	31.7	33.1	35.7	37.7	39.7	43.5
Afghanistan	55.8	56.1	59.6	61.1	61.1	57.9	57.9	58.4	64.0	64.0
Bangladesh	3.2	3.1	2.6	2.9	2.4	2.4	2.5	3.1	3.0	3.5
Bhutan	99.3	99.3	99.5	99.5	99.5	99.7	99.6	99.6	99.6	99.6
Brunei Darsm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4
Cambodia China	63.5 30.3	58.0 31.7	57.2 33.1	55.3 35.2	63.5 36.6	60.8 37.7	56.1 40.7	57.7 42.8	56.6 45.1	57.8 49.8
China HK SAR	0.0	0.0	0.2	0.4	0.5	1.4	1.4	1.4	2.3	2.3
Chinese Taipei	7.7	8.3	8.9	10.0	11.3	13.3	16.0	18.6	22.3	27.5
India	22.9	22.7	24.8	27.1	28.1	29.0	29.9	31.4	33.5	34.9
Indonesia	15.4	15.7	15.5	15.2	15.1	14.8	14.4	15.5	15.0	14.9
Japan	17.7	20.8	22.5	24.5	26.2	28.6	30.3	32.0	33.7	35.3
Kazakhstan	13.1	13.2	12.9	13.1	13.7	15.6	17.7	18.9	20.7	21.9
Korea DPR	59.3	60.3	61.5	61.9	59.0	59.1	59.5	59.7	59.7	59.6
Korea Rep	5.8	7.2	8.6	9.6	11.3	14.4	17.3	19.1	20.8	22.1
Kyrgyzstan Lao PDR	82.3 100.0	85.3 78.0	85.3 74.8	85.4 75.7	85.3 77.0	85.3 79.4	85.3 83.2	75.1 84.7	75.1 85.6	77.6 85.7
Malaysia	21.6	24.2	25.7	22.2	22.6	21.9	23.2	23.0	22.8	22.8
Maldives	3.6	4.2	4.0	5.4	3.3	4.0	5.1	5.8	6.6	6.8

%	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Mongolia	7.4	7.4	8.3	13.9	18.4	19.4	18.4	18.0	18.0	18.0
Myanmar	69.4	64.8	64.8	58.1	53.8	52.6	44.5	49.5	49.1	49.1
Nepal	93.4	93.8	94.0	94.8	95.4	95.8	96.2	97.5	97.7	98.1
Pakistan	31.6	31.6	33.5	29.1	32.8	31.4	31.7	31.4	31.0	30.6
Philippines	28.5	29.1	28.2	28.0	27.6	26.4	26.5	26.5	26.4	26.6
Singapore	1.4	1.6	2.0	2.1	2.4	3.5	4.1	5.4	6.8	7.9
Sri Lanka	45.3	47.3	48.5	49.8	51.6	51.5	53.0	57.6	61.4	62.9
Tajikistan	92.3	92.3	87.4	87.4	87.4	88.9	88.9	88.9	88.9	88.9
Thailand	20.6	21.2	21.8	20.7	21.8	22.3	22.1	22.1	21.4	21.4
Timor Leste	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2
Turkmenistan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uzbekistan	14.4	14.2	13.3	12.9	13.5	12.0	12.2	13.0	14.0	14.9
Viet Nam	46.7	43.7	43.8	41.7	41.1	47.7	55.8	56.2	56.7	55.6
C America + Carib	28.0	30.9	33.1	34.5	35.3	36.4	36.6	38.0	38.4	39.4
Anguilla	4.1	4.1	7.7	7.7	4.7	6.1	6.1	6.1	6.1	6.1
Antigua Barb	0.3	2.8	4.2	5.1	10.7	9.8	14.6	19.2	19.2	13.1
Aruba	12.8	13.2	13.5	13.5	15.8	15.4	15.4	15.4	17.8	17.8
Bahamas	0.4	0.5	0.5	0.5	0.5	0.6	0.6	1.1	1.2	1.2
Barbados	0.6	1.2	5.4	5.9	6.1	11.2	15.7	19.5	19.2	19.2
Belize	41.7	41.7	41.7	44.5	49.2	51.7	51.7	51.7	51.7	51.7
BES Islands	29.2	29.7	32.5	36.0	37.6	39.0	32.5	32.5	32.5	33.9
Br Virgin Is	1.2	2.7	3.0	2.2	2.2	2.8	32.3	3.1	32.3	4.6
Cayman Is	1.2	2.7	1.6	4.8	5.8	6.4	7.2	7.7	7.5	7.5
Costa Rica	79.4	80.7	83.6	83.9	84.4	86.9	86.8	88.2	89.2	89.4
Cuba	10.0	10.9	10.6	11.5	11.7	16.2	18.7	18.7	18.3	19.3
Curacao	19.9	17.7	18.0	25.9	26.1	22.2	22.6	22.6	22.6	22.7
Dominica	26.1	26.1	27.2	27.2	26.4	26.4	25.0	25.0	27.6	27.6
Dominican Rep	17.5	18.0	20.9	22.5	23.1	25.7	26.4	28.2	31.2	33.9
El Salvador	52.3	54.7	56.2	60.3	62.3	65.9	67.4	68.5	59.7	60.3
Grenada	1.5	2.1	4.2	4.3	4.8	5.8	6.6	6.3	6.3	6.4
Guadeloupe	28.6	26.2	26.3	28.1	30.4	32.3	37.2	38.6	38.9	38.9
Guatemala	57.7	58.4	61.8	65.9	69.5	69.8	69.7	70.6	70.7	70.7
Haiti	12.7	12.7	12.8	12.9	16.8	16.8	16.8	16.8	16.9	17.0
Honduras	48.2	59.5	59.9	61.3	61.9	62.8	64.5	64.7	63.7	63.6
Jamaica	46.2 11.1	59.5 11.0	15.9	17.8	17.5	18.1	16.4	16.3	16.3	16.4
Martinique	13.4	14.0	14.3	14.6	21.4	24.4	24.6	25.2	26.1	26.9
Montserrat	13.4	14.0	14.3	14.0	21.4	3.5	3.5	12.6	12.6	12.8
Nicaragua	44.8	45.6	47.4	45.5	45.5	45.2	45.2	45.4	45.8	45.9
Panama	59.6	66.2	62.4	62.2	58.8	59.7	56.4	65.1	67.6	67.9
Puerto Rico	5.0	7.2	7.8	8.7	8.8	9.0	9.7	11.3	13.3	17.1
St Barth	5.0	7.2	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2
St Kitts Nevis	5.2	5.2	5.8	5.5	5.6	5.6	6.9	6.9	6.6	6.6
St Lucia	0.1	0.9	1.2	1.2	4.4	4.6	4.7	4.7	4.7	4.8
St Martin	5.0	7.9	3.1	0.2	0.2	0.9	1.7	1.7	3.2	3.6
St Vincent Gren	12.4	15.1	15.2	17.0	19.2	22.6	18.2	18.1	17.6	18.3
Trinidad Tobago	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Turks Caicos	0.2	0.2	0.2	0.2	0.2	1.0	1.0	2.8	3.5	3.7
US Virgin Is	1.6	2.8	2.9	2.1	3.0	3.0	3.0	3.0	3.0	3.0
•										
Eurasia	24.6	26.0	25.5	26.2	27.0	27.5	28.7	29.7	30.1	30.8
Armenia	31.7	36.5	36.9	37.2	37.8	37.9	38.5	37.1	38.5	44.1
Azerbaijan	15.2	14.8	15.0	15.0	16.3	16.9	17.0	16.5	16.6	20.3
Georgia	79.3	75.2	77.5	77.2	77.8	78.2	73.8	74.1	74.2	74.8
Russian Fed	19.8	20.5	19.5	19.5	19.5	19.7	20.2	20.6	20.7	20.7
Türkiye	40.2	43.1	43.9	45.5	47.7	48.6	51.3	53.3	53.9	55.0
Europe	39.3	41.3	42.9	44.5	45.5	47.9	49.8	51.9	54.4	56.9
Albania	94.6	94.8	95.1	95.4	95.5	95.7	96.1	96.3	96.3	96.5
Andorra	100.0	100.0	96.2	96.8	96.8	96.9	97.0	97.0	97.0	97.0
Austria	73.4	74.7	76.7	78.6	79.5	80.2	80.3	80.7	83.3	85.0
Belarus	0.8	1.0	2.2	2.9	3.8	4.1	4.8	4.3	5.5	5.5
Belgium	28.6	30.1	31.3	33.6	36.5	39.8	43.9	45.3	49.1	54.6
Bosnia Herzg	43.0	43.1	40.8	40.6	41.6	42.2	42.5	43.5	44.1	44.4
Bulgaria	36.2	37.9	38.6	39.5	38.1	38.5	39.7	40.4	42.3	47.6
Croatia	58.5	56.9	57.6	58.7	59.5	65.1	69.8	71.6	72.1	72.5
Cyprus	12.8	13.9	14.3	15.5	16.1	17.7	21.1	24.5	28.5	34.3
Czechia	19.0	19.3	19.2	19.2	19.2	19.9	20.7	21.6	22.4	22.7
Denmark	49.5	50.8	52.1	57.2	59.4	61.3	63.8	67.2	69.1	70.6
Estonia	18.5	20.7	23.6	24.2	21.6	26.1	30.3	42.0	44.8	51.7
Faroe Islands	48.0	46.4	46.3	46.3	44.8	40.4	36.0	35.9	35.9	35.9
Finland	35.3	36.8	41.2	43.6	44.0	45.0	50.2	52.6	60.9	59.5
France	31.3	32.5	33.8	36.1	37.5	39.3	40.8	42.4	44.2	45.7
Germany	45.7	48.1	50.2	52.3	52.0	54.0	56.3	57.3	59.6	63.3
Greece	42.4	43.0	44.0	44.7	46.1	48.5	52.5	56.8	57.1	60.6
Hungary	11.8	12.5	12.0	13.8	17.5	22.9	28.2	33.7	40.5	47.2
Iceland	95.9	95.8	95.8	95.9	96.1	96.1	96.1	95.8	95.8	95.8
Ireland	28.0	28.5	31.1	34.7	36.9	40.9	42.5	43.7	45.5	48.8

%	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 18.2	74.8	76.8	76.9	77.9	78.4	78.4	78.8	79.2 59.1
Netherlands North Macedonia	14.7 38.8	40.0	21.7 39.5	24.1 39.8	28.3 40.0	34.1 40.2	43.4 42.6	49.1 38.7	54.4 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 65.9	44.7	45.1	46.2	46.5	49.8	52.9	55.9 75.9	60.3	62.2 78.7
Sweden Switzerland	76.4	67.7 76.7	69.0 78.0	70.8 78.9	70.8 79.2	72.8 79.5	71.8 79.9	75.8 81.7	77.4 82.3	76.7 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 Irag	14.9 9.0	14.0 7.4	14.1 7.2	14.4 6.1	14.3 5.9	14.3 5.9	14.0 5.5	13.8 5.3	13.8 5.1	13.5 5.0
Israel	4.2	4.8	7.2 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 United Arab Em	15.4 0.5	16.5 0.5	16.0 0.5	15.4 1.1	14.9 1.9	14.9 5.8	14.9 6.6	15.1 8.3	15.3 9.4	15.3 14.0
Yemen	0.3	3.8	5.0	6.4	14.3	13.6	13.6	12.9	13.1	14.3
	22.4	24.0	25.5	26.4	27.2	28.6	30.5	32.4	34.1	35.7
N America										
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 St Pierre Mg	25.1 2.3	25.7	26.2	26.5	24.3	27.9	29.9	30.5	31.2	32.2
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 Fiji	11.6 61.3	17.6 56.5	14.1 56.8	14.1 58.5	20.8 58.5	23.3 55.7	23.3 55.7	23.3 56.6	23.3 56.7	23.3 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 Niue	73.2 14.1	76.2 14.1	77.6 14.1	77.7 14.1	77.8 14.1	77.8 31.1	77.1 31.1	77.7 31.1	80.4 31.1	80.7 31.1
Niue Palau	14.1 3.4	14.1 3.4	6.2	6.2	14.1 7.4	31.1 8.2	31.1 8.8	31.1 12.6	31.1 12.6	31.1 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

%	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

