

OFF-GRID RENEWABLE ENERGY STATISTICS 2021

STATISTIQUES D'ÉNERGIE RENOUVELABLE HORS RÉSEAU 2021

ESTADÍSTICAS DE ENERGÍA RENOVABLE FUERA DE LA RED 2021

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Statistical methodology (in English)
Méthodologie statistique (en anglais)
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IRENA (2018), Measurement and estimation of off-grid solar, hydro and biogas energy, International Renewable Energy Agency (IRENA), Abu Dhabi. <https://www.irena.org/publications/2018/Dec/Measurement-and-estimation-of-off-grid-solar-hydro-and-biogas-energy>

Off-grid capacity

Capacité hors réseau

Capacidad fuera de la red

Hydropower Hydroélectricité Hidroeléctrica

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	572.497	586.536	619.633	637.457	653.178	693.397	704.244	752.241	737.735	753.288
Africa	152.028	152.870	154.669	155.874	158.728	178.762	182.563	216.971	226.971	236.984
Angola	21.659	21.659	21.659	21.659	22.859	22.859	22.859	35.279	35.279	35.279
Cent Afr Rep	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
Congo DR	97.000	97.000	97.000	97.000	97.000	110.900	110.900	121.700	131.700	141.600
Eswatini	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690
Ethiopia	1.157	1.279	1.279	1.279	1.279	1.279	1.279	1.279	1.279	1.279
Guinea	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220	2.220
Kenya	9.495	9.495	9.495	9.495	10.135	10.135	13.625	19.745	19.745	19.745
Lesotho	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190
Liberia	4.800	4.800	4.800	4.800	4.860	4.860	4.860	4.860	4.860	4.860
Madagascar	0.120	0.120	0.160	0.220	0.878	0.938	0.938	1.018	1.018	1.118
Malawi	1.340	1.400	1.400	1.400	1.400	1.400	1.700	1.700	1.700	1.700
Mali	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Mauritius	0.350	0.350	0.350	0.700	0.700	0.700	0.700	0.700	0.700	0.700
Mozambique	0.065	0.065	0.065	0.065	0.065	0.549	0.549	0.549	0.549	0.549
Nigeria						0.400	0.400	0.400	0.400	0.400
Rwanda	0.440	0.740	1.140	1.840	1.840	1.840	1.851	1.851	1.851	1.864
Sierra Leone			0.250	0.250	0.250	0.250	0.250	4.890	4.890	4.890
South Africa	7.111	7.441	7.445	7.540	7.836	7.986	7.986	7.986	7.986	7.986
Tanzania	2.830	2.860	2.860	2.860	2.860	7.900	7.900	8.248	8.248	8.248
Uganda	0.301	0.302	0.406	0.406	0.406	0.406	0.406	0.406	0.406	0.406
Zambia	0.720	0.720	1.720	1.720	1.720	1.720	1.720	1.720	1.720	1.720
Zimbabwe	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338
Asia	214.211	231.524	244.486	257.524	267.604	281.764	288.679	293.388	294.812	296.265
Afghanistan	13.850	17.299	20.748	24.197	27.646	31.095	34.544	37.993	37.993	37.993
Bhutan	1.240	1.240	1.240	1.240	1.240	1.240	1.240	1.240	1.240	1.240
India	74.150	78.568	79.237	82.169	83.377	84.079	84.675	84.675	84.675	84.675
Indonesia	7.695	9.310	10.105	12.065	13.314	15.007	15.437	15.437	15.597	15.597
Malaysia	0.110	0.110	0.110	0.110	0.450	0.450	0.465	0.465	0.465	0.465
Myanmar	2.834	2.949	2.949	2.974	3.165	6.890	6.890	6.890	6.890	6.890
Nepal	33.091	35.544	38.802	42.168	45.456	49.102	51.012	52.257	53.506	54.959
Pakistan	10.820	11.596	15.104	15.554	15.619	15.619	15.619	15.619	15.634	15.634
Philippines	12.116	14.216	14.333	14.358	14.403	14.403	14.403	14.403	14.403	14.403
Sri Lanka	4.671	4.837	5.003	5.248	5.493	5.738	6.068	6.068	6.068	6.068
Tajikistan	10.051	12.272	13.272	13.858	13.858	14.358	14.558	14.558	14.558	14.558
Thailand	0.258	0.258	0.258	0.258	0.258	0.458	0.458	0.458	0.458	0.458
Timor Leste	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
Viet Nam	43.000	43.000	43.000	43.000	43.000	43.000	43.000	43.000	43.000	43.000
C America + Carib	3.290	3.373	3.508	3.789	4.076	9.784	9.915	9.945	9.945	9.945
Cuba						5.432	5.432	5.432	5.432	5.432
Dominican Rep	0.202	0.285	0.362	0.514	0.801	1.077	1.208	1.238	1.238	1.238
El Salvador	0.082	0.082	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140
Haiti	2.170	2.170	2.170	2.170	2.170	2.170	2.170	2.170	2.170	2.170
Honduras				0.129	0.129	0.129	0.129	0.129	0.129	0.129
Nicaragua	0.836	0.836	0.836	0.836	0.836	0.836	0.836	0.836	0.836	0.836
Oceania	67.995	67.995	77.395	77.395	77.395	77.395	77.395	77.395	77.395	77.395
Fiji	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Papua N Guin	66.995	66.995	76.395	76.395	76.395	76.395	76.395	76.395	76.395	76.395
S America	134.974	130.774	139.574	142.874	145.374	145.692	145.692	154.542	128.612	132.699
Argentina	2.445	2.445	2.445	2.445	2.445	2.445	2.445	2.445	2.445	2.445
Brazil	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Colombia						0.318	0.318	5.318	5.318	9.405
Peru	132.509	128.309	137.109	140.409	142.909	142.909	142.909	146.759	120.829	120.829

Solar lights and solar home systems (SHS)

Lampes solaires et systèmes solaires domestiques (SDD)

Lámparas solares y sistemas solares domésticos (SSD)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	65.657	85.793	118.995	171.870	219.419	258.741	283.472	333.668	354.702	403.599
Africa	5.999	7.528	11.785	23.747	40.704	61.466	83.664	104.746	134.998	175.306
Angola								0.001	0.005	0.044
Benin						0.064	0.246	0.277	0.248	1.138
Botswana										0.037
Burkina Faso	0.007	0.027	0.088	0.230	0.411	0.637	0.647	0.707	0.541	1.500
Burundi				0.010	0.023	0.029	0.019	0.006	0.005	0.040
Cabo Verde									0.005	0.081
Cameroon							0.089	0.133	0.273	1.621
Cent Afr Rep									0.005	0.042
Chad									0.017	0.054
Comoros										0.035
Congo DR		0.022	0.086	0.284	0.503	0.567	0.445	0.784	0.784	1.528
Congo Rep										0.037
Cote d'Ivoire						0.055	0.141	0.238	1.993	3.175
Egypt							4.889	4.889	4.889	4.889
Eq Guinea										0.076
Eritrea										0.035
Eswatini										0.037
Ethiopia		0.256	0.975	3.171	5.604	6.332	5.381	3.804	3.608	11.445
Gabon									0.005	0.042
Gambia							0.002	0.004	0.009	0.075
Ghana				0.144	0.146	0.199	0.386	0.848	0.875	1.297
Guinea									0.005	0.153
Guinea Bissau				0.051	0.102	0.152	0.203	0.254	0.259	0.335
Kenya		0.408	1.556	5.060	9.007	11.256	11.974	15.135	24.523	39.419
Lesotho			0.097	0.097	0.097	0.097	0.097			0.037
Liberia						0.024	0.052	0.158	0.152	0.201
Madagascar							0.041	2.155	2.229	2.561
Malawi		0.051	0.081	0.144	0.22213	0.568	0.802	0.975	0.735	0.967
Mali				0.070	0.140	0.326	0.479	0.782	0.753	1.571
Mauritania									0.005	0.081
Mauritius		0.049	0.087	0.126	0.107	0.134	0.230	0.311	0.356	0.502
Morocco	4.583	4.583	4.583	4.583	4.583	15.857	15.857	15.857	15.857	15.857
Mozambique				0.010	0.031	0.031	0.084	0.143	0.148	0.178
Namibia							0.010	0.053	0.088	0.115
Niger					0.015	0.015	0.015	0.007	0.020	0.345
Nigeria		0.022	0.086	0.748	1.431	2.258	3.212	8.671	13.217	18.273
Rwanda		0.056	0.212	0.692	1.235	1.815	6.959	11.586	18.611	18.970
Sao Tome Prn										0.076
Senegal				0.049	0.097	0.303	0.434	0.724	0.823	1.351
Seychelles										0.227
Sierra Leone						0.129	0.177	0.258	0.134	0.853
Somalia							0.023	0.052	0.427	0.895
South Africa				0.265	0.530	0.852	1.136	1.601	1.365	1.392
South Sudan									0.005	0.040
Sudan					0.000	0.000	0.000			
Tanzania		0.272	1.031	3.354	10.724	12.160	17.438	20.582	24.878	21.848
Togo							0.002	0.014	0.098	1.129
Tunisia	1.316	1.350	1.450	1.450	1.450	1.450	1.800	1.800	1.800	1.800
Uganda	0.093	0.260	0.563	1.295	2.171	4.087	8.752	10.309	12.108	14.281
Zambia						0.208	0.294	0.424	1.722	3.358
Zimbabwe		0.172	0.890	1.916	2.076	1.861	1.349	1.203	1.420	1.263
Asia	58.765	77.322	105.535	145.094	174.843	192.965	193.551	219.208	210.618	216.504
Afghanistan				0.470	0.941	1.509	1.637	1.766	1.297	0.830
Bangladesh	32.186	42.524	65.911	93.769	118.097	128.106	126.074	138.677	120.416	104.585
Bhutan		0.023	0.023	0.023						
Cambodia				0.541	0.735	1.238	1.892	1.907	1.312	1.228
India	11.515	17.401	21.043	29.873	33.584	38.727	40.694	53.310	63.772	75.359
Indonesia	1.636	1.660	1.726	1.926	2.195	2.179	2.031	1.947	2.735	2.846
Malaysia									0.016	0.142
Mongolia	2.954	3.239	3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524
Myanmar		0.011	0.041	0.133	0.257	0.289	0.254	0.651	0.786	10.196
Nepal	3.513	4.732	5.434	6.931	7.575	9.214	9.268	8.805	6.867	5.089
Pakistan		0.007	0.026	0.085	0.166	0.264	0.235	0.198	0.108	0.312
Philippines					0.033	0.178	0.183	0.417	1.576	4.090
Sri Lanka	6.934	7.698	7.780	7.791	7.723	7.724	7.744	8.007	8.204	8.173
Thailand									0.005	0.130
Timor Leste					0.013	0.013	0.013			
Viet Nam	0.027	0.027	0.027	0.027						
C America + Carib	0.004	0.016	0.174	0.178	0.365	0.394	0.516	0.913	1.275	1.460

Bahamas		0.011	0.020	0.025	0.126	0.147	0.200	0.146	0.115	0.058
Cuba					0.009	0.017	0.030	0.515	0.528	0.519
Dominica								0.000	0.000	0.000
Dominican Rep									0.016	0.086
Guatemala					0.005	0.005	0.005	0.006	0.022	0.080
Haiti			0.002	0.002	0.002		0.017	0.097	0.116	0.170
Honduras			0.146	0.146	0.198	0.198	0.239	0.091	0.397	0.418
Nicaragua	0.004	0.005	0.006	0.005	0.005	0.005	0.002	0.001		
Panama					0.021	0.021	0.023	0.028	0.044	0.092
Puerto Rico								0.028	0.036	0.036
Middle East		0.027	0.056	0.122	0.214	0.526	0.536	0.592	0.452	0.538
Jordan		0.027	0.056	0.122	0.214	0.526	0.536	0.592	0.426	0.349
Yemen									0.026	0.189
Oceania	0.261	0.271	0.576	0.857	1.158	1.502	1.869	2.009	2.071	4.499
Fiji	0.261	0.261	0.540	0.737	0.929	0.929	0.929	0.955	0.998	1.160
Nauru								0.009	0.009	0.167
Papua N Guin		0.010	0.037	0.119	0.229	0.572	0.894	0.860	0.623	2.361
Samoa										0.150
Vanuatu									0.168	0.403
S America	0.629	0.628	0.867	1.813	2.061	1.806	3.296	6.029	5.086	5.012
Argentina	0.423	0.423	0.423	0.423	0.423					0.044
Bolivia				0.293	0.293	0.293	0.293	0.293		0.044
Brazil							0.159	3.263	3.263	3.263
Chile								0.005	0.008	0.008
Colombia							0.873	0.873	0.873	0.917
Peru	0.206	0.205	0.444	1.096	1.345	1.513	1.971	1.595	0.943	0.737

Solar lights (<11 W)

Lampes solaires (<11 W)

Lámparas solares (<11 W)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	1.358	4.775	11.676	29.232	46.395	55.607	58.306	68.453	76.351	80.675
Africa		1.253	4.799	14.442	24.058	28.759	27.656	26.042	27.194	30.792
Angola								0.001	0.005	0.011
Benin						0.064	0.246	0.277	0.248	0.172
Botswana										0.010
Burkina Faso		0.013	0.049	0.162	0.287	0.456	0.417	0.449	0.312	0.339
Burundi				0.010	0.023	0.029	0.019	0.006	0.005	0.015
Cabo Verde									0.005	0.013
Cameroon							0.089	0.133	0.233	0.331
Cent Afr Rep									0.005	0.011
Chad									0.017	0.023
Comoros										0.010
Congo DR		0.022	0.086	0.284	0.503	0.567	0.445	0.784	0.784	0.821
Congo Rep										0.006
Cote d'Ivoire						0.055	0.141	0.238	0.217	0.258
Eq Guinea										0.008
Eritrea										0.010
Eswatini										0.010
Ethiopia		0.256	0.975	3.171	5.597	6.324	5.356	3.780	3.583	4.790
Gabon									0.005	0.011
Gambia							0.002	0.004	0.009	0.014
Ghana				0.016	0.018	0.071	0.257	0.372	0.528	0.389
Guinea									0.005	0.019
Guinea Bissau									0.005	0.013
Kenya		0.359	1.366	4.441	7.830	9.411	9.314	7.956	8.345	10.074
Lesotho										0.010
Liberia						0.024	0.052	0.158	0.152	0.132
Madagascar							0.041	0.374	0.448	0.508
Malawi		0.051	0.081	0.144	0.222	0.568	0.802	0.975	0.735	0.585
Mali						0.116	0.200	0.433	0.472	0.477
Mauritania									0.005	0.013
Mauritius		0.049	0.087	0.126	0.107	0.134	0.230	0.311	0.356	0.477
Mozambique				0.010	0.031	0.031	0.058	0.116	0.121	0.103
Namibia							0.010	0.053	0.088	0.088
Niger					0.015	0.015	0.015	0.007	0.020	0.054
Nigeria		0.022	0.086	0.282	0.500	0.861	1.204	1.302	1.295	1.358
Rwanda		0.048	0.180	0.589	1.039	1.013	1.224	1.314	1.624	1.273
Sao Tome Prn										0.008
Senegal				0.049	0.097	0.303	0.434	0.724	0.813	0.697
Seychelles										0.065
Sierra Leone						0.129	0.177	0.258	0.134	0.163
Somalia							0.023	0.052	0.427	0.521
South Africa						0.057	0.077	0.277	0.306	0.391
South Sudan									0.005	0.015
Sudan					0.000	0.000	0.000			
Tanzania		0.238	0.904	2.941	5.187	5.534	3.790	1.632	1.119	1.461
Togo							0.002	0.014	0.098	0.196
Uganda		0.024	0.093	0.303	0.528	0.926	1.596	2.642	3.078	3.154
Zambia						0.208	0.294	0.406	0.376	0.742
Zimbabwe		0.172	0.890	1.916	2.076	1.861	1.142	0.993	1.210	0.947
Asia	1.354	3.469	6.755	14.456	21.686	25.512	29.088	40.465	47.368	48.001
Afghanistan				0.342	0.683	1.025	1.025	1.025	0.684	0.344
Bangladesh						0.184	0.236	0.394	0.428	0.785
Bhutan		0.023	0.023	0.023						
Cambodia						0.055	0.103	0.118	0.064	0.023
India	1.354	3.318	6.407	13.404	19.863	22.908	26.510	37.566	44.296	44.760
Indonesia		0.024	0.090	0.290	0.560	0.543	0.395	0.310	0.422	0.378
Malaysia									0.016	0.019
Myanmar		0.011	0.041	0.133	0.257	0.289	0.254	0.151	0.286	0.524
Nepal						0.014	0.075	0.086	0.098	0.038
Pakistan		0.007	0.026	0.085	0.166	0.264	0.235	0.198	0.108	0.127
Philippines					0.033	0.106	0.111	0.222	0.369	0.434
Sri Lanka		0.085	0.168	0.178	0.111	0.112	0.132	0.395	0.592	0.561
Thailand									0.005	0.008
Timor Leste					0.013	0.013	0.013			
C America + Carib	0.004	0.016	0.029	0.033	0.136	0.156	0.224	0.281	0.339	0.390
Bahamas		0.011	0.020	0.025	0.126	0.147	0.200	0.146	0.115	0.058
Dominica								0.000	0.000	0.000
Dominican Rep									0.016	0.043
Guatemala								0.001	0.017	0.036

Haiti			0.002	0.002	0.002		0.017	0.097	0.116	0.126
Honduras					0.003	0.003	0.003		0.016	0.043
Nicaragua	0.004	0.005	0.006	0.005	0.005	0.005	0.002	0.001		
Panama							0.002	0.007	0.023	0.048
Puerto Rico								0.028	0.036	0.036
Middle East		0.027	0.056	0.122	0.214	0.526	0.536	0.592	0.452	0.538
Jordan		0.027	0.056	0.122	0.214	0.526	0.536	0.592	0.426	0.349
Yemen									0.026	0.189
Oceania		0.010	0.037	0.119	0.229	0.572	0.762	0.903	0.797	0.674
Fiji								0.026	0.068	0.076
Nauru								0.009	0.009	0.017
Papua N Guin		0.010	0.037	0.119	0.229	0.572	0.717	0.683	0.445	0.323
Samoa								0.025	0.025	0.033
Vanuatu							0.046	0.160	0.249	0.225
S America	0.000	0.001	0.001	0.060	0.072	0.082	0.038	0.170	0.201	0.280
Argentina									0.016	0.043
Bolivia	0.000	0.000	0.000	0.056	0.059	0.062	0.014	0.058	0.070	0.090
Colombia							0.003	0.003	0.003	0.028
Peru		0.000	0.001	0.004	0.014	0.020	0.022	0.109	0.112	0.119

Solar home systems (SHS 11-50 W)

Systèmes solaires domestiques (SSD 11-50 W)

Sistemas solares domésticos (SSD 11-50 W)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	46.065	61.685	87.109	121.193	145.587	162.478	163.234	179.256	170.749	169.800
Africa		0.142	0.539	1.884	3.472	5.971	9.410	13.104	23.421	39.484
Angola										0.004
Benin										0.184
Botswana										0.009
Burkina Faso										0.176
Burundi										0.014
Cabo Verde										0.014
Cameroon									0.040	0.131
Cent Afr Rep										0.003
Chad										0.003
Comoros										0.014
Congo DR										0.059
Congo Rep										0.003
Cote d'Ivoire										0.218
Eq Guinea										0.014
Eritrea										0.014
Eswatini										0.009
Ethiopia					0.007	0.007	0.024	0.024	0.024	3.572
Gabon										0.003
Gambia										0.013
Ghana				0.128	0.128	0.128	0.128	0.168	0.039	0.147
Guinea										0.024
Guinea Bissau										0.014
Kenya		0.049	0.190	0.620	1.178	1.755	2.571	4.450	10.095	16.609
Lesotho										0.009
Liberia										0.014
Madagascar								0.204	0.204	0.351
Malawi										0.210
Mali										0.156
Mauritania										0.014
Mauritius										0.014
Mozambique							0.026	0.026	0.026	0.052
Namibia										0.009
Niger										0.059
Nigeria							0.146	0.445	0.791	1.830
Rwanda		0.009	0.032	0.103	0.196	0.292	0.423	0.878	1.494	1.810
Sao Tome Prn										0.014
Senegal									0.010	0.119
Seychelles										0.091
Sierra Leone										0.133
Somalia										0.184
South Africa										0.125
South Sudan										0.014
Tanzania		0.034	0.127	0.413	0.785	1.169	1.284	1.821	3.160	3.720
Togo										0.174
Uganda		0.049	0.190	0.620	1.178	2.620	4.600	4.860	5.982	6.851
Zambia								0.019	1.347	2.016
Zimbabwe							0.208	0.210	0.210	0.269
Asia	45.859	61.338	85.981	117.774	140.255	154.479	151.423	164.267	146.218	129.173
Afghanistan				0.064	0.128	0.289	0.353	0.417	0.353	0.290
Bangladesh	32.186	42.524	65.911	93.769	118.097	127.922	125.838	138.283	119.504	102.326
Cambodia				0.541	0.735	1.183	1.789	1.789	1.248	1.067
India	10.161	14.082	14.636	16.469	13.722	15.820	14.184	14.372	17.471	19.030
Indonesia									0.064	0.077
Malaysia										0.005
Myanmar								0.500	0.500	0.889
Nepal	3.513	4.732	5.434	6.931	7.575	9.200	9.193	8.719	6.769	5.049
Pakistan										0.037
Philippines						0.065	0.065	0.187	0.308	0.397
Thailand										0.005
C America + Carib			0.146	0.146	0.221	0.221	0.262	0.117	0.117	0.109
Dominican Rep										0.014
Guatemala					0.005	0.005	0.005	0.005	0.005	0.014
Haiti										0.014
Honduras			0.146	0.146	0.195	0.195	0.236	0.091	0.091	0.054
Panama					0.021	0.021	0.021	0.021	0.021	0.014

Oceania							0.178	0.178	0.345	0.581
Fiji										0.013
Nauru										0.013
Papua N Guin							0.178	0.178	0.178	0.340
Samoa										0.013
Vanuatu									0.168	0.204
S America	0.206	0.205	0.444	1.390	1.639	1.806	1.962	1.591	0.648	0.453
Argentina										0.014
Bolivia				0.293	0.293	0.293	0.293	0.293		0.014
Chile								0.005	0.008	0.008
Colombia										0.014
Peru	0.206	0.205	0.444	1.096	1.345	1.513	1.668	1.292	0.640	0.405

Solar home systems (SHS >50 W)
Systèmes solaires domestiques (SSD >50 W)
Sistemas solares domésticos (SSD >50 W)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	18.234	19.332	20.210	21.445	27.437	40.657	61.932	85.959	107.601	153.124
Africa	5.999	6.133	6.448	7.421	13.174	26.736	46.599	65.600	84.383	105.030
Angola										0.029
Benin										0.782
Botswana										0.018
Burkina Faso	0.007	0.015	0.039	0.068	0.124	0.181	0.230	0.258	0.229	0.986
Burundi										0.012
Cabo Verde										0.054
Cameroon										1.159
Cent Afr Rep										0.028
Chad										0.028
Comoros										0.012
Congo DR										0.648
Congo Rep										0.028
Cote d'Ivoire									1.776	2.699
Egypt							4.889	4.889	4.889	4.889
Eq Guinea										0.054
Eritrea										0.012
Eswatini										0.018
Ethiopia										3.084
Gabon										0.028
Gambia										0.049
Ghana								0.308	0.308	0.762
Guinea										0.110
Guinea Bissau				0.051	0.102	0.152	0.203	0.254	0.254	0.308
Kenya						0.090	0.090	2.730	6.083	12.737
Lesotho			0.097	0.097	0.097	0.097	0.097			0.018
Liberia										0.056
Madagascar								1.577	1.577	1.702
Malawi										0.171
Mali				0.070	0.140	0.210	0.279	0.349	0.280	0.938
Mauritania										0.054
Mauritius										0.012
Morocco	4.583	4.583	4.583	4.583	4.583	15.857	15.857	15.857	15.857	15.857
Mozambique										0.022
Rwanda						0.510	5.312	9.394	15.493	15.887
Sao Tome Prn										0.054
Senegal										0.534
Seychelles										0.071
Sierra Leone										0.558
Somalia										0.190
South Africa				0.265	0.530	0.794	1.059	1.324	1.059	0.876
South Sudan										0.012
Tanzania					4.753	5.457	12.364	17.129	20.598	16.667
Togo										0.760
Tunisia	1.316	1.350	1.450	1.450	1.450	1.450	1.800	1.800	1.800	1.800
Uganda	0.093	0.186	0.279	0.372	0.466	0.540	2.557	2.808	3.048	4.275
Zambia										0.600
Zimbabwe										0.047
Asia	11.551	12.515	12.799	12.864	12.902	12.974	13.040	14.476	17.032	39.331
Afghanistan				0.065	0.130	0.195	0.259	0.324	0.259	0.196
Bangladesh									0.484	1.474
Cambodia										0.138
India								1.371	2.005	11.569
Indonesia	1.636	1.636	1.636	1.636	1.636	1.636	1.636	1.636	2.249	2.391
Malaysia										0.117
Mongolia	2.954	3.239	3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524
Myanmar										8.782
Nepal										0.002
Pakistan										0.147
Philippines						0.008	0.008	0.008	0.898	3.259
Sri Lanka	6.934	7.613	7.613	7.613	7.613	7.613	7.613	7.613	7.613	7.613
Thailand										0.117
Viet Nam	0.027	0.027	0.027	0.027						
C America + Carib					0.009	0.017	0.030	0.515	0.819	0.961
Cuba					0.009	0.017	0.030	0.515	0.528	0.519
Dominican Rep										0.030

Guatemala										0.030
Haiti										0.030
Honduras								0.291		0.321
Panama										0.030
Oceania	0.261	0.261	0.540	0.737	0.929	0.929	0.929	0.929	0.929	3.244
Fiji	0.261	0.261	0.540	0.737	0.929	0.929	0.929	0.929	0.929	1.071
Nauru										0.138
Papua N Guin										1.698
Samoa										0.138
Vanuatu										0.199
S America	0.423	0.423	0.423	0.423	0.423		1.335	4.439	4.439	4.559
Argentina	0.423	0.423	0.423	0.423	0.423					0.030
Bolivia										0.030
Brazil							0.159	3.263	3.263	3.263
Colombia							0.873	0.873	0.873	0.903
Peru							0.303	0.303	0.303	0.333

Solar mini-grids

Mini-réseaux solaires

Mini-redes solares

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	20.256	24.246	31.807	41.449	50.423	132.145	305.923	338.473	362.130	365.638
Africa	2.141	2.761	4.606	8.075	9.809	74.241	246.698	261.999	280.386	283.653
Algeria	0.454	0.454	0.454	0.454	0.454	49.100	219.100	219.100	219.100	219.100
Benin						0.102	0.706	0.706	0.746	0.786
Burkina Faso							0.086	0.135	0.195	0.783
Cabo Verde			0.027	0.027	0.040	0.149	0.149	0.149	0.149	0.186
Cameroon	0.010	0.010	0.010	0.010	0.010	0.082	0.154	11.431	23.851	23.851
Chad						0.122	0.122	0.122	0.122	0.122
Congo DR									1.032	1.132
Cote d'Ivoire						0.218	0.218	0.218	0.218	0.218
Egypt						10.000	10.000	10.000	10.125	10.180
Eritrea							0.350	0.350	2.600	2.600
Ethiopia									0.018	0.018
Gambia						0.060	0.060	0.060	0.060	0.060
Ghana					0.012	0.012	0.222	0.513	0.705	0.705
Guinea										0.077
Guinea Bissau							0.312	0.312	0.920	0.920
Kenya			0.714	0.834	0.884	0.849	0.928	0.928	0.958	1.754
Liberia								0.157	0.254	0.254
Madagascar	0.003	0.003	0.003	0.003	0.003	0.148	0.148	0.280	0.280	0.464
Mali	0.454	0.870	1.172	3.050	3.380	4.222	4.308	5.686	5.797	5.929
Mauritania					0.135	0.135	0.153	0.153	0.153	0.153
Mozambique				1.324	1.331	1.331	1.331	1.331	1.331	1.331
Namibia		0.202	0.202	0.202	0.494	0.494	0.494	0.494	0.494	0.494
Niger					0.028	0.028	0.028	0.097	0.165	0.165
Nigeria			0.083	0.191	0.360	1.043	1.212	2.025	2.152	2.538
Rwanda						3.346	3.376	3.505	3.505	3.605
Senegal	0.370	0.370	1.089	1.089	1.089	1.089	1.099	1.099	2.009	2.009
Sierra Leone				0.005	0.005	0.005	0.005	0.198	0.198	0.198
South Africa		0.001	0.001	0.001	0.001	0.001	0.001	0.033	0.033	0.033
Tanzania				0.033	0.107	0.141	0.243	0.488	0.488	0.488
Togo								0.400	0.700	0.700
Uganda	0.850	0.851	0.851	0.851	1.478	1.565	1.795	1.818	1.818	2.518
Zambia						0.001	0.001	0.113	0.113	0.185
Zimbabwe							0.099	0.099	0.099	0.099
Asia	16.724	19.369	24.935	31.109	38.345	50.007	50.732	56.033	60.028	60.270
Afghanistan	0.100	0.100	0.100	0.344	1.394	1.394	1.797	1.797	1.797	1.797
Bangladesh	0.100	0.100	0.200	0.200	0.640	2.021	2.021	5.761	7.391	7.611
India	4.420	4.720	5.030	5.340	6.420	6.940	7.080	7.460	8.000	8.010
Indonesia	11.402	11.547	16.703	22.323	25.261	34.056	34.106	35.025	36.225	36.225
Malaysia					1.525	2.412	2.412	2.412	2.412	2.412
Maldives					0.204	0.204	0.204	0.204	0.204	0.204
Myanmar						0.079	0.211	0.443	0.443	0.443
Nepal	0.702	2.902	2.902	2.902	2.902	2.902	2.902	2.932	3.058	3.069
Pakistan									0.500	0.500
C America + Carib		0.253	0.346	0.346	0.346	0.546	0.549	12.307	12.607	12.607
Cuba								11.746	11.746	11.746
El Salvador		0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044
Guatemala		0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108
Haiti			0.093	0.093	0.093	0.293	0.296	0.296	0.296	0.296
Honduras		0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063
Nicaragua		0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.339	0.339
Puerto Rico								0.012	0.012	0.012
Middle East	0.012	0.012	0.017	0.017	0.017	3.767	3.767	3.767	3.767	3.767
Palestine	0.012	0.012	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
United Arab Em						3.750	3.750	3.750	3.750	3.750
Oceania						0.555	0.555	0.555	0.555	0.555
Fiji						0.555	0.555	0.555	0.555	0.555
S America	1.379	1.850	1.903	1.903	1.907	3.030	3.622	3.813	4.787	4.787
Bolivia		0.119	0.119	0.119	0.119	0.119	0.119	0.119	0.119	0.119
Brazil			0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040

Colombia				0.004	0.004	0.596	0.787	0.809	0.809
Ecuador		0.084	0.096	0.096	0.096	0.096	0.096	1.048	1.048
Paraguay		0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079
Peru	0.002	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192
Uruguay						0.052	0.052	0.052	0.052
Venezuela	1.377	1.377	1.377	1.377	1.377	2.448	2.448	2.448	2.448

Solar pumps Pompes solaires Bombas solares

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	14.928	16.268	19.951	26.498	59.656	119.676	194.342	370.591	557.112	583.374
Africa	1.589	2.777	3.472	4.520	5.496	7.238	9.110	10.410	14.117	14.363
Algeria	0.050	0.051	0.056	0.057	0.073	0.076	0.076	0.076	0.081	0.081
Angola		0.000	0.010	0.016	0.016	0.016	0.016	0.016	0.016	0.016
Botswana			0.003	0.003	0.003	0.003	0.025	0.025	0.027	0.027
Burkina Faso		0.004	0.009	0.016	0.017	0.417	0.417	0.417	0.417	0.417
Burundi							0.002	0.002	0.002	0.002
Cabo Verde									0.041	0.041
Cameroon			0.002	0.006	0.006	0.007	0.007	0.009	0.009	0.009
Chad	0.003	0.003	0.003	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Congo DR				0.001	0.001	0.001	0.005	0.005	0.005	0.005
Congo Rep			0.003	0.015	0.019	0.020	0.032	0.032	0.032	0.032
Cote d'Ivoire					0.000	0.000	0.000	0.000	0.000	0.000
Djibouti	0.009	0.013	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043
Egypt	0.043	0.043	0.097	0.325	0.607	1.138	1.389	1.575	1.575	1.575
Eritrea	0.001	0.001	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
Ethiopia	0.002	0.018	0.031	0.031	0.041	0.058	0.102	0.129	0.160	0.160
Gabon		0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Gambia	0.163	0.163	0.163	0.223	0.249	0.249	0.561	0.562	0.569	0.569
Ghana						0.016	0.016	0.016	0.017	0.017
Guinea						0.002	0.002	0.002	0.002	0.002
Guinea Bissau	0.005	0.014	0.016	0.018	0.018	0.031	0.031	0.031	0.031	0.031
Kenya	0.025	0.027	0.069	0.111	0.220	0.298	0.349	0.422	0.562	0.562
Libya				0.004	0.004	0.004	0.004	0.004	0.004	0.004
Madagascar					0.011	0.011	0.011	0.011	0.011	0.016
Malawi			0.045	0.091	0.137	0.182	0.497	0.505	0.505	0.505
Mali	0.095	0.112	0.125	0.138	0.138	0.138	0.152	0.152	0.152	0.152
Mauritania		0.014	0.014	0.014	0.030	0.045	0.045	0.045	0.045	0.045
Morocco	0.058	0.086	0.318	0.634	0.800	1.014	1.307	1.361	1.361	1.361
Mozambique			0.001	0.001	0.008	0.011	0.021	0.021	0.021	0.021
Namibia	0.952	0.952	0.952	0.952	0.952	0.952	0.953	0.953	0.953	0.953
Niger	0.006	0.006	0.008	0.008	0.011	0.026	0.031	0.031	0.053	0.053
Nigeria	0.031	0.985	0.985	0.985	0.985	1.010	1.010	1.010	1.010	1.010
Rwanda								0.004	3.308	3.357
Senegal		0.010	0.030	0.089	0.136	0.164	0.261	0.459	0.470	0.494
Sierra Leone		0.002	0.002	0.002	0.002	0.002	0.002	0.245	0.280	0.302
Somalia	0.020	0.020	0.020	0.020	0.095	0.128	0.128	0.128	0.128	0.128
South Africa	0.012	0.016	0.076	0.076	0.087	0.090	0.100	0.100	0.100	0.100
South Sudan		0.030	0.030	0.045	0.045	0.045	0.087	0.167	0.167	0.179
Sudan	0.002	0.002	0.007	0.020	0.020	0.022	0.022	0.022	0.022	0.022
Tanzania	0.008	0.008	0.076	0.209	0.279	0.345	0.409	0.524	0.592	0.635
Tunisia	0.086	0.096	0.105	0.105	0.113	0.260	0.282	0.310	0.310	0.343
Uganda	0.020	0.077	0.122	0.167	0.212	0.260	0.515	0.533	0.573	0.632
Zambia								0.089	0.089	0.089
Zimbabwe	0.002	0.005	0.015	0.053	0.075	0.112	0.157	0.332	0.332	0.332
Asia	12.681	12.812	15.684	20.900	52.554	110.359	182.691	357.106	539.732	565.041
Afghanistan	0.002	0.020	0.022	0.029	0.029	0.029	0.092	0.117	0.118	0.118
Bangladesh	0.023	0.023	0.373	0.703	2.043	4.583	11.823	20.517	23.927	29.777
Cambodia	0.007	0.007	0.007	0.007	0.007	0.007	0.034	0.034	0.034	0.034
India	12.517	12.517	14.739	19.415	49.547	104.273	168.880	333.869	512.936	532.267
Indonesia	0.013	0.031	0.064	0.116	0.179	0.317	0.457	0.826	0.909	0.968
Korea DPR							0.004	0.004	0.004	0.004
Lao PDR	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Malaysia	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.017	0.017	0.017
Myanmar	0.005	0.024	0.052	0.054	0.061	0.061	0.095	0.101	0.102	0.132
Nepal	0.077	0.152	0.227	0.302	0.377	0.578	0.694	0.869	0.869	0.869
Pakistan	0.025	0.025	0.187	0.233	0.261	0.307	0.329	0.360	0.360	0.360
Philippines				0.006	0.007	0.130	0.140	0.187	0.234	0.259
Sri Lanka	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Thailand	0.005	0.005	0.005	0.010	0.012	0.043	0.109	0.176	0.194	0.208
Timor Leste				0.017	0.023	0.023	0.023	0.023	0.023	0.023
C America + Carib	0.008	0.009	0.075	0.146	0.209	0.285	0.404	0.538	0.556	0.624
Barbados				0.001	0.001	0.001	0.001	0.001	0.001	0.001
Belize									0.002	0.002
Cayman Is				0.000	0.000	0.000	0.000	0.000	0.000	0.000
Costa Rica			0.002	0.002	0.002	0.002	0.020	0.044	0.046	0.047
Cuba							0.000	0.000	0.000	0.000

Dominican Rep	0.001	0.001	0.004	0.007	0.007	0.007	0.019	0.101	0.101	0.127
El Salvador								0.025	0.025	0.027
Guadeloupe									0.002	0.002
Guatemala					0.001	0.011	0.025	0.025	0.027	0.066
Haiti	0.005	0.005	0.026	0.047	0.068	0.089	0.110	0.110	0.110	0.110
Honduras			0.039	0.078	0.117	0.156	0.195	0.195	0.195	0.195
Jamaica				0.006	0.008	0.013	0.013	0.013	0.013	0.013
Martinique			0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003
Nicaragua	0.002	0.002	0.002	0.002	0.002	0.002	0.012	0.015	0.024	0.024
Panama	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005
St Kitts Nevis					0.001	0.001	0.001	0.001	0.001	0.001
Middle East	0.012	0.020	0.027	0.145	0.577	0.911	1.079	1.144	1.144	1.171
Iran IR	0.007	0.007	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Iraq	0.004	0.004	0.004	0.009	0.039	0.039	0.039	0.104	0.104	0.131
Lebanon	0.002	0.002	0.002	0.032	0.269	0.269	0.269	0.269	0.269	0.269
Oman						0.002	0.013	0.013	0.013	0.013
Syrian AR		0.008	0.008	0.018	0.018	0.018	0.024	0.024	0.024	0.024
United Arab Em				0.002	0.002	0.017	0.017	0.017	0.017	0.017
Yemen				0.070	0.235	0.552	0.704	0.704	0.704	0.704
Oceania					0.001	0.001	0.027	0.027	0.028	0.028
Papua N Guin					0.001	0.001	0.001	0.001	0.001	0.001
Tonga							0.026	0.026	0.026	0.026
Vanuatu									0.001	0.001
S America	0.637	0.650	0.694	0.788	0.819	0.882	1.031	1.365	1.535	2.148
Argentina	0.001	0.002	0.006	0.035	0.037	0.037	0.064	0.236	0.301	0.521
Bolivia				0.001	0.002	0.025	0.054	0.093	0.095	0.215
Brazil	0.001	0.001	0.001	0.001	0.001	0.010	0.012	0.029	0.044	0.058
Chile	0.002	0.006	0.035	0.037	0.042	0.052	0.075	0.081	0.100	0.148
Colombia	0.003	0.009	0.012	0.023	0.032	0.038	0.042	0.088	0.099	0.188
Ecuador	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Guyana	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Paraguay	0.002	0.004	0.012	0.042	0.048	0.062	0.067	0.090	0.090	0.134
Peru	0.000	0.000	0.000	0.018	0.023	0.023	0.035	0.048	0.093	0.134
Uruguay				0.001	0.005	0.007	0.053	0.070	0.084	0.121
Venezuela	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628

Solar pumps (agriculture) Pompes solaires (agriculture) Bombas solares (agricultura)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	13.889	14.026	17.102	23.070	54.857	112.056	185.633	360.971	547.081	572.947
Africa	1.312	1.393	1.819	2.586	3.269	4.257	5.524	6.319	9.809	9.900
Algeria		0.001	0.006	0.008	0.023	0.026	0.026	0.026	0.031	0.031
Angola		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Botswana			0.003	0.003	0.003	0.003	0.014	0.014	0.014	0.014
Cameroon					0.000	0.001	0.001	0.001	0.001	0.001
Congo DR				0.001	0.001	0.001	0.001	0.001	0.001	0.001
Congo Rep			0.003	0.015	0.019	0.020	0.023	0.023	0.023	0.023
Cote d'Ivoire					0.000	0.000	0.000	0.000	0.000	0.000
Djibouti	0.009	0.013	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043
Egypt	0.043	0.043	0.097	0.325	0.607	1.138	1.358	1.543	1.543	1.543
Eritrea	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ethiopia					0.010	0.010	0.034	0.034	0.034	0.034
Gabon		0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Gambia	0.163	0.163	0.163	0.223	0.249	0.249	0.554	0.555	0.555	0.555
Ghana						0.016	0.016	0.016	0.017	0.017
Kenya	0.025	0.027	0.027	0.027	0.051	0.087	0.087	0.159	0.299	0.299
Madagascar					0.011	0.011	0.011	0.011	0.011	0.011
Malawi				0.001	0.002	0.002	0.272	0.280	0.280	0.280
Mali	0.080	0.080	0.093	0.106	0.106	0.106	0.106	0.106	0.106	0.106
Mauritania		0.000	0.000	0.000	0.016	0.016	0.016	0.016	0.016	0.016
Morocco	0.012	0.040	0.272	0.588	0.754	0.965	1.240	1.294	1.294	1.294
Mozambique			0.001	0.001	0.008	0.008	0.018	0.018	0.018	0.018
Namibia	0.839	0.839	0.839	0.839	0.839	0.839	0.840	0.840	0.840	0.840
Niger	0.006	0.006	0.006	0.006	0.006	0.006	0.010	0.010	0.032	0.032
Nigeria	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Rwanda								0.004	3.308	3.357
Senegal		0.006	0.006	0.036	0.073	0.089	0.169	0.338	0.343	0.347
Somalia					0.032	0.032	0.032	0.032	0.032	0.032
South Africa	0.012	0.016	0.076	0.076	0.087	0.090	0.099	0.099	0.099	0.099
Sudan			0.005	0.018	0.018	0.020	0.020	0.020	0.020	0.020
Tanzania	0.008	0.008	0.008	0.063	0.073	0.079	0.079	0.098	0.110	0.116
Tunisia	0.086	0.096	0.105	0.105	0.113	0.235	0.257	0.285	0.285	0.318
Uganda						0.004	0.004	0.004	0.004	0.004
Zambia								0.089	0.089	0.089
Zimbabwe		0.003	0.013	0.051	0.073	0.110	0.143	0.309	0.309	0.309
Asia	12.561	12.596	15.196	20.260	51.105	106.999	179.047	353.157	535.673	560.907
Afghanistan		0.018	0.018	0.018	0.018	0.018	0.064	0.064	0.064	0.064
Bangladesh	0.023	0.023	0.373	0.703	1.343	3.183	10.273	18.967	22.377	28.227
Cambodia							0.025	0.025	0.025	0.025
India	12.517	12.517	14.739	19.415	49.547	103.293	167.900	332.889	511.956	531.286
Indonesia		0.018	0.018	0.018	0.054	0.165	0.233	0.445	0.451	0.454
Lao PDR	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Malaysia						0.000	0.002	0.002	0.002	0.002
Myanmar			0.024	0.024	0.024	0.024	0.029	0.030	0.030	0.056
Nepal						0.117	0.233	0.350	0.350	0.350
Pakistan	0.013	0.013	0.016	0.062	0.090	0.137	0.157	0.187	0.187	0.187
Philippines				0.006	0.007	0.010	0.020	0.028	0.045	0.055
Sri Lanka	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Thailand	0.005	0.005	0.005	0.010	0.012	0.043	0.102	0.161	0.175	0.190
Timor Leste					0.006	0.006	0.006	0.006	0.006	0.006
C America + Carib	0.007	0.008	0.014	0.019	0.020	0.031	0.076	0.178	0.182	0.196
Barbados				0.001	0.001	0.001	0.001	0.001	0.001	0.001
Belize									0.002	0.002
Cayman Is				0.000	0.000	0.000	0.000	0.000	0.000	0.000
Costa Rica			0.002	0.002	0.002	0.002	0.020	0.037	0.038	0.038
Dominican Rep		0.001	0.003	0.006	0.006	0.006	0.018	0.100	0.100	0.100
El Salvador										0.002
Guatemala						0.011	0.012	0.012	0.012	0.024
Haiti	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Jamaica				0.000	0.002	0.002	0.002	0.002	0.002	0.002
Martinique			0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003
Nicaragua	0.002	0.002	0.002	0.002	0.002	0.002	0.012	0.014	0.014	0.014
Panama	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.005	0.005
Middle East	0.002	0.009	0.009	0.051	0.276	0.545	0.621	0.686	0.686	0.686

Iraq								0.065	0.065	0.065
Lebanon	0.002	0.002	0.002	0.032	0.178	0.178	0.178	0.178	0.178	0.178
Oman						0.002	0.013	0.013	0.013	0.013
Syrian AR		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
United Arab Em				0.002	0.002	0.017	0.017	0.017	0.017	0.017
Yemen				0.010	0.089	0.342	0.406	0.406	0.406	0.406
Oceania					0.001	0.001	0.001	0.001	0.002	0.002
Papua N Guin					0.001	0.001	0.001	0.001	0.001	0.001
Vanuatu									0.001	0.001
S America	0.008	0.020	0.064	0.155	0.185	0.223	0.365	0.629	0.729	1.256
Argentina	0.001	0.002	0.006	0.035	0.037	0.037	0.062	0.182	0.192	0.401
Bolivia				0.001	0.002	0.007	0.033	0.061	0.062	0.152
Brazil							0.002	0.018	0.033	0.047
Chile	0.002	0.006	0.035	0.037	0.042	0.052	0.075	0.081	0.093	0.139
Colombia	0.003	0.008	0.011	0.023	0.031	0.037	0.042	0.088	0.098	0.163
Paraguay	0.002	0.004	0.012	0.042	0.048	0.062	0.067	0.090	0.090	0.134
Peru	0.000	0.000	0.000	0.015	0.020	0.021	0.032	0.042	0.083	0.121
Uruguay				0.001	0.005	0.007	0.052	0.068	0.078	0.100

Solar pumps (public water supply)

Pompes solaires (alimentation en eau publique)

Bombas solares (suministro público de agua)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	1.038	2.242	2.850	3.428	4.798	7.621	8.709	9.620	10.030	10.426
Africa	0.277	1.384	1.653	1.934	2.227	2.981	3.586	4.091	4.307	4.462
Algeria	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Angola			0.009	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Botswana							0.012	0.012	0.012	0.012
Burkina Faso		0.004	0.009	0.016	0.017	0.417	0.417	0.417	0.417	0.417
Burundi							0.002	0.002	0.002	0.002
Cabo Verde									0.041	0.041
Cameroon			0.002	0.006	0.006	0.006	0.006	0.008	0.008	0.008
Chad	0.003	0.003	0.003	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Congo DR							0.004	0.004	0.004	0.004
Congo Rep							0.009	0.009	0.009	0.009
Egypt							0.032	0.032	0.032	0.032
Eritrea			0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Ethiopia	0.002	0.018	0.031	0.031	0.031	0.048	0.068	0.095	0.126	0.126
Gambia							0.007	0.007	0.014	0.014
Guinea						0.002	0.002	0.002	0.002	0.002
Guinea Bissau	0.005	0.014	0.016	0.018	0.018	0.031	0.031	0.031	0.031	0.031
Kenya			0.042	0.084	0.169	0.211	0.262	0.263	0.263	0.263
Libya				0.004	0.004	0.004	0.004	0.004	0.004	0.004
Madagascar								0.000	0.000	0.005
Malawi			0.045	0.090	0.135	0.180	0.225	0.225	0.225	0.225
Mali	0.015	0.032	0.032	0.032	0.032	0.032	0.046	0.046	0.046	0.046
Mauritania		0.014	0.014	0.014	0.014	0.029	0.029	0.029	0.029	0.029
Morocco	0.046	0.046	0.046	0.046	0.046	0.049	0.067	0.067	0.067	0.067
Mozambique						0.003	0.003	0.003	0.003	0.003
Namibia	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113
Niger			0.002	0.002	0.006	0.021	0.021	0.021	0.021	0.021
Nigeria	0.001	0.954	0.954	0.954	0.954	0.979	0.979	0.979	0.979	0.979
Rwanda										
Senegal		0.004	0.024	0.053	0.063	0.075	0.091	0.121	0.127	0.147
Sierra Leone		0.002	0.002	0.002	0.002	0.002	0.002	0.245	0.280	0.302
Somalia	0.020	0.020	0.020	0.020	0.063	0.095	0.095	0.095	0.096	0.096
South Africa							0.001	0.001	0.001	0.001
South Sudan		0.030	0.030	0.045	0.045	0.045	0.087	0.167	0.167	0.179
Sudan	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Tanzania			0.068	0.146	0.206	0.266	0.330	0.426	0.482	0.519
Tunisia						0.025	0.025	0.025	0.025	0.025
Uganda	0.020	0.077	0.122	0.167	0.212	0.257	0.512	0.529	0.570	0.629
Zimbabwe	0.002	0.002	0.002	0.002	0.002	0.002	0.014	0.022	0.022	0.022
Asia	0.120	0.216	0.488	0.640	1.449	3.360	3.644	3.949	4.059	4.134
Afghanistan	0.002	0.002	0.004	0.011	0.011	0.011	0.027	0.052	0.053	0.053
Bangladesh					0.700	1.400	1.550	1.550	1.550	1.550
Cambodia	0.007	0.007	0.007	0.007	0.007	0.007	0.009	0.009	0.009	0.009
India						0.980	0.980	0.980	0.980	0.981
Indonesia	0.013	0.013	0.046	0.098	0.125	0.152	0.224	0.381	0.458	0.513
Korea DPR							0.004	0.004	0.004	0.004
Lao PDR	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Malaysia	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.014	0.014	0.014
Myanmar	0.005	0.024	0.028	0.030	0.036	0.036	0.066	0.072	0.073	0.076
Nepal	0.077	0.152	0.227	0.302	0.377	0.461	0.461	0.519	0.519	0.519
Pakistan	0.012	0.012	0.170	0.170	0.170	0.170	0.173	0.173	0.173	0.173
Philippines						0.120	0.120	0.160	0.189	0.204
Thailand							0.007	0.016	0.018	0.018
Timor Leste				0.017	0.017	0.017	0.017	0.017	0.017	0.017
C America + Carib	0.001	0.001	0.061	0.127	0.189	0.254	0.327	0.360	0.374	0.428
Costa Rica								0.007	0.007	0.008
Cuba							0.000	0.000	0.000	0.000
Dominican Rep	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.027
El Salvador								0.025	0.025	0.025
Guadeloupe									0.002	0.002
Guatemala					0.001	0.001	0.013	0.013	0.016	0.043
Haiti			0.021	0.042	0.063	0.084	0.105	0.105	0.105	0.105
Honduras			0.039	0.078	0.117	0.156	0.195	0.195	0.195	0.195
Jamaica				0.006	0.006	0.012	0.012	0.012	0.012	0.012
Nicaragua								0.001	0.010	0.010
St Kitts Nevis					0.001	0.001	0.001	0.001	0.001	0.001

Middle East	0.011	0.011	0.018	0.094	0.301	0.366	0.458	0.458	0.458	0.485
Oceania							0.026	0.026	0.026	0.026
Tonga							0.026	0.026	0.026	0.026
S America	0.630	0.630	0.630	0.633	0.633	0.659	0.667	0.736	0.806	0.891
Argentina							0.002	0.054	0.109	0.120
Bolivia					0.000	0.018	0.021	0.032	0.032	0.063
Brazil	0.001	0.001	0.001	0.001	0.001	0.010	0.010	0.011	0.011	0.011
Chile								0.000	0.007	0.009
Colombia		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.025
Ecuador	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Guyana	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Peru				0.003	0.003	0.003	0.003	0.006	0.010	0.013
Uruguay							0.001	0.002	0.006	0.021
Venezuela	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628

Other off-grid solar PV Autre solaire PV hors réseau Otra solar PV fuera de la red

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	11.301	56.261	136.929	268.154	369.849	458.310	561.741	709.471	794.642	857.553
Africa	1.450	1.853	3.086	12.717	34.244	62.859	72.656	90.583	135.273	189.773
Algeria	0.685	0.685	0.685	0.685	0.685	0.685	0.685	0.685	0.685	0.685
Angola				0.021	0.320	0.320	0.320	0.320	0.320	0.320
Benin					0.050	0.050	0.061	0.061	0.061	0.061
Botswana	0.139	0.169	0.312	0.412	0.557	0.850	0.850	0.972	1.276	1.276
Burkina Faso	0.093	0.093	0.593	0.893	1.193	1.493	1.793	1.793	16.793	16.793
Burundi						0.291	0.291	0.291	0.291	0.291
Cameroon			0.011	0.011	0.011	0.017	0.023	0.023	0.023	1.298
Cent Afr Rep									0.011	0.011
Chad				0.043	0.043	0.043	0.043	0.043	0.043	0.043
Congo DR		0.001	0.001	0.104	0.104	0.104	1.787	3.446	16.106	16.106
Cote d'Ivoire					0.009	0.010	0.010	0.010	0.010	0.010
Egypt								0.011	0.011	0.011
Eritrea	0.003	0.003	0.007	0.019	7.843	7.843	7.843	7.843	7.843	7.843
Eswatini								0.003	0.003	0.003
Ethiopia	0.026	0.060	0.142	0.142	3.485	3.500	8.557	8.561	8.561	8.561
Gabon				0.026	0.026	0.038	0.038	0.038	0.038	0.038
Gambia			0.004	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Ghana					3.200	3.219	3.220	9.305	9.856	11.486
Guinea				3.371	3.371	13.271	13.276	13.276	13.276	13.276
Kenya	0.171	0.484	0.550	0.742	5.529	17.270	17.580	21.493	23.350	25.694
Liberia		0.018	0.018	0.018	0.018	0.018	0.018	0.026	0.026	0.036
Madagascar			0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.340
Malawi			0.003	0.003	0.003	0.003	0.003	0.043	0.043	0.043
Mali	0.002	0.002	0.059	0.088	0.098	0.098	0.237	0.237	0.251	0.256
Mauritania				0.010	0.010	0.010	0.010	0.010	0.010	0.010
Mozambique	0.000	0.000	0.000	0.038	0.124	0.256	0.488	0.488	0.528	0.528
Namibia									12.000	12.199
Niger				0.003	0.003	0.003	0.003	0.003	0.003	0.003
Nigeria	0.274	0.274	0.284	0.284	0.289	5.289	6.939	7.473	7.473	15.592
Rwanda	0.006	0.006	0.006	0.006	0.006	0.006	0.056	0.056	0.056	0.056
Senegal			0.008	0.008	0.008	0.012	0.012	0.012	0.012	0.012
Seychelles						0.500	0.500	0.500	1.250	1.250
Sierra Leone		0.008	0.008	0.024	0.024	0.024	0.130	0.170	0.170	0.170
Somalia		0.000	0.000	0.000	0.060	0.060	0.060	0.060	0.060	0.060
South Africa				5.240	6.044	6.044	6.044	11.468	11.572	46.115
South Sudan		0.000	0.014	0.053	0.053	0.062	0.076	0.083	0.565	0.585
Sudan				0.008	0.015	0.015	0.015	0.015	0.015	0.015
Tanzania	0.023	0.023	0.057	0.078	0.078	0.150	0.335	0.377	0.413	0.449
Togo				0.007	0.007	0.007	0.008	0.008	0.008	0.008
Tunisia										5.000
Uganda	0.027	0.027	0.077	0.122	0.167	0.212	0.258	0.283	0.302	0.411
Zambia					0.000	0.276	0.276	0.283	0.283	0.283
Zimbabwe				0.001	0.551	0.551	0.551	0.552	1.416	2.534
Asia	7.318	51.871	130.830	238.079	316.519	370.112	461.183	587.622	627.735	635.482
Afghanistan	0.000	0.000	16.000	16.000	16.000	16.000	16.644	16.644	16.644	16.644
Bangladesh					1.180	10.200	15.392	35.372	37.802	44.722
India	4.910	47.198	108.905	214.949	291.777	336.173	421.206	476.247	513.920	514.743
Indonesia	1.341	2.591	3.841	4.993	4.993	5.069	5.125	5.226	5.229	5.229
Korea DPR				0.033	0.033	0.033	0.033	0.033	0.033	0.033
Mongolia		1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
Myanmar	0.000	0.000	0.000	0.000	0.000	0.000	0.146	0.256	0.256	0.256
Nepal		0.008	0.008	0.008	0.008	0.008	0.008	40.016	40.023	40.028
Pakistan				0.000	0.026	0.031	0.031	11.231	11.231	11.231
Philippines				0.021	0.427	0.522	0.522	0.522	0.522	0.522
Timor Leste			0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Viet Nam	1.066	1.066	1.067	1.067	1.067	1.067	1.067	1.067	1.067	1.067
C America + Carib	0.554	0.555	0.610	14.552	16.134	17.967	19.280	22.447	22.447	22.970
Antigua Barb							0.010	0.414	0.414	0.414
Costa Rica							0.053	0.053	0.053	0.576
Cuba					0.006	0.332	0.332	0.332	0.332	0.332
Dominican Rep				1.500	3.000	4.500	5.750	8.490	8.490	8.490
El Salvador				12.361	12.361	12.361	12.361	12.361	12.361	12.361
Haiti	0.553	0.553	0.609	0.689	0.764	0.772	0.772	0.772	0.772	0.772
Honduras					0.001	0.001	0.002	0.002	0.002	0.002
Panama		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Puerto Rico			0.013	0.068	0.280	0.536	0.971	1.012	1.012	1.292
Middle East			0.007	0.034	0.140	0.268	0.485	0.506	0.506	0.646
Lebanon			0.002	0.029	0.122	0.129	0.238	0.258	0.258	0.258
Palestine			0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Saudi Arabia					0.014	0.014	0.014	0.014	0.014	0.154
Syrian AR						0.000	0.000	0.001	0.001	0.001
United Arab Em						0.120	0.228	0.228	0.228	0.228
Oceania	0.014	0.014	0.017	0.085	0.118	1.195	2.224	2.265	2.365	2.365
Cook Is				0.010	0.010	0.010	0.010	0.010	0.110	0.110
Fiji	0.014	0.014	0.014	0.024	0.028	0.728	1.728	1.769	1.769	1.769
Kiribati				0.010	0.010	0.017	0.017	0.017	0.017	0.017
Micronesia				0.010	0.010	0.010	0.010	0.010	0.010	0.010
Papua N Guin			0.003	0.011	0.040	0.305	0.334	0.334	0.334	0.334
Solomon Is				0.010	0.010	0.010	0.010	0.010	0.010	0.010
Vanuatu				0.010	0.010	0.116	0.116	0.116	0.116	0.116
S America	1.966	1.968	2.379	2.687	2.693	5.909	5.911	6.048	6.316	6.316
Argentina	1.285	1.285	1.285	1.285	1.285	1.285	1.285	1.285	1.285	1.285
Bolivia	0.001	0.002	0.004	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Brazil	0.680	0.680	0.680	0.680	0.680	3.880	3.880	3.880	3.880	3.880
Chile								0.133	0.133	0.133
Colombia						0.013	0.013	0.013	0.281	0.281
Paraguay								0.003	0.003	0.003
Peru			0.410	0.712	0.719	0.722	0.725	0.725	0.725	0.725
Venezuela	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Biogas (electricity) Biogaz (électricité) Biogás (electricidad)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	3.676	5.191	12.503	16.405	18.845	23.846	27.321	31.188	40.251	40.463
Africa	0.004	0.124	0.124	0.141	0.141	1.456	1.476	1.476	1.476	1.476
Gabon						1.200	1.200	1.200	1.200	1.200
Ghana		0.120	0.120	0.120	0.120	0.135	0.135	0.135	0.135	0.135
Kenya	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Mozambique							0.010	0.010	0.010	0.010
Nigeria							0.010	0.010	0.010	0.010
Senegal						0.100	0.100	0.100	0.100	0.100
Uganda				0.017	0.017	0.017	0.017	0.017	0.017	0.017
Asia	2.886	4.123	10.706	12.615	13.961	16.687	19.782	20.599	22.360	22.572
Bangladesh	1.390	2.060	2.750	3.420	4.120	4.250	4.650	4.650	4.650	4.650
Cambodia						1.500	1.500	1.500	1.500	1.500
India		0.567	1.150	2.389	3.035	4.131	4.826	5.626	6.712	6.924
Myanmar	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400
Pakistan	0.096	0.096	0.406	0.406	0.406	0.406	0.406	0.424	1.099	1.099
Philippines			5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Viet Nam							2.000	2.000	2.000	2.000
C America + Carib	0.316	0.458	1.187	3.163	3.457	4.417	4.677	4.677	6.579	6.579
Costa Rica	0.316	0.316	0.396	2.216	2.216	2.683	2.683	2.683	2.683	2.683
Dominican Rep		0.142	0.791	0.947	1.227	1.720	1.970	1.970	1.970	1.970
Honduras					0.014	0.014	0.014	0.014	0.014	0.014
Nicaragua							0.010	0.010	1.912	1.912
S America	0.070	0.086	0.086	0.086	0.886	0.886	0.986	4.036	9.436	9.436
Argentina							0.100	0.100	0.100	0.100
Bolivia								2.000	2.000	2.000
Colombia								1.050	1.050	1.050
Ecuador	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Peru		0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
Uruguay					0.800	0.800	0.800	0.800	6.200	6.200

Other Biomass (electricity) Autre Biomasse (électricité) Otra Biomasa (electricidad)

MW	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	3206.954	3440.161	3521.065	3500.154	4100.136	4320.926	4419.881	3723.533	3907.162	3898.000
Africa	63.706	79.752	82.289	86.316	102.730	110.711	116.940	118.894	118.896	123.696
Burkina Faso				0.150	0.150	0.150	0.150	0.150	0.150	0.150
Burundi	4.678	5.724	5.691	6.868	5.822	5.803	6.632	6.586	5.788	5.788
Congo DR	0.160	0.160	0.160	0.160	0.160	0.160	0.160	2.160	2.960	2.960
Ethiopia	9.000	9.000	9.000	9.000	9.000	17.000	17.000	17.000	17.000	17.000
Ghana	6.774	6.774	6.774	6.774	8.274	8.274	8.274	8.274	8.274	8.274
Madagascar	0.094	0.094	0.164	0.164	0.164	0.164	0.164	0.164	0.164	0.164
Mali	32.000	32.000	32.000	32.000	40.000	40.000	40.000	40.000	40.000	40.000
Nigeria	6.000	6.000	6.000	8.700	12.900	12.900	18.300	18.300	18.300	23.100
Tanzania	5.000	20.000	22.500	22.500	26.260	26.260	26.260	26.260	26.260	26.260
Asia	2964.035	3181.330	3222.877	3219.396	3764.245	3970.912	4059.008	3355.572	3501.577	3473.197
Bangladesh						0.400	0.400	0.400	0.400	0.400
Cambodia		2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
India	402.000	496.110	538.875	581.640	733.270	781.240	838.790	844.320	889.635	859.705
Indonesia	1864.000	1874.000	1884.000	1606.000	1617.000	1617.000	1617.000	1617.000	1617.000	1617.000
Malaysia	405.800	515.510	504.860	732.530	1100.000	1237.800	1243.000	531.640	531.640	531.640
Myanmar	42.235	43.710	43.142	47.226	50.975	46.472	47.818	50.212	54.902	56.952
Viet Nam	250.000	250.000	250.000	250.000	261.000	286.000	310.000	310.000	406.000	405.500
C America + Carib	42.863	42.723	42.537	45.474	45.463	41.675	39.245	44.339	44.461	44.461
Costa Rica								4.500	4.500	4.500
Dominican Rep	15.363	15.223	15.037	15.174	15.163	15.175	15.245	15.339	15.461	15.461
Panama	27.500	27.500	27.500	30.300	30.300	26.500	24.000	24.500	24.500	24.500
Oceania	15.046	15.052	15.058	15.064	15.064	15.064	15.064	15.064	15.064	15.064
Fiji	0.006	0.012	0.018	0.024	0.024	0.024	0.024	0.024	0.024	0.024
Papua N Guin	14.500	14.500	14.500	14.500	14.500	14.500	14.500	14.500	14.500	14.500
Solomon Is	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500
Vanuatu	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040
S America	121.304	121.304	158.304	133.904	172.634	182.564	189.624	189.664	227.164	241.582
Argentina										6.318
Bolivia	60.170	60.170	60.170	60.170	90.500	99.000	99.000	99.000	117.500	122.500
Colombia	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.099	0.099	0.099
Fr Guiana										3.100
Guyana	43.275	43.275	43.275	43.275	43.275	43.305	33.765	33.765	34.365	34.365
Peru	17.800	17.800	54.800	30.400	38.800	38.700	55.300	55.300	73.700	73.700
Suriname						1.500	1.500	1.500	1.500	1.500

Biogas production

Production de biogaz

Produccion de biogas

Total biogas production

Production totale de biogaz

Producción total de biogás

1,000 m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	16 060 840	16 883 268	16 848 333	16 856 101	16 525 607	15 845 292	15 871 902	15 840 891	15 777 534	15 709 164
Africa	3 008	7 735	17 021	25 294	35 652	41 547	47 436	51 401	56 570	55 591
Benin	8	15	20	26	39	36	34	33	38	33
Botswana	2	2	2	2	2	2	2	2	2	2
Burkina Faso	41	264	737	1 469	1 999	2 482	3 041	3 528	3 781	3 604
Burundi							2	2	2	2
Cameroon	31	45	68	85	126	143	139	132	127	113
Ethiopia	498	1 449	2 904	4 720	6 176	7 419	8 748	10 020	12 598	12 363
Gabon						610	610	610	610	610
Ghana	110	292	292	292	4 293	4 307	4 509	4 509	4 509	4 509
Kenya	503	1 899	3 933	6 940	8 638	9 725	10 337	10 598	11 619	11 413
Mali				6	76	113	161	161	160	149
Mozambique							15	15	15	15
Nigeria	347	353	353	353	298	298	325	325	325	215
Rwanda	615	1 070	4 608	5 128	6 638	7 313	8 647	8 903	8 892	8 873
Senegal	15	249	394	612	900	1 600	2 139	3 222	3 188	3 142
Tanzania	477	995	1 692	2 425	2 874	3 067	3 508	3 478	3 362	3 271
Uganda	363	1 102	1 787	3 004	3 305	3 670	3 885	4 094	4 364	4 308
Zambia					35	70	373	617	1 825	1 820
Zimbabwe			232	232	253	691	960	1 151	1 151	1 148
Asia	16 049 424	16 866 901	16 820 432	16 812 621	16 465 720	15 591 822	15 605 453	15 569 143	15 490 083	15 422 698
Afghanistan							25	25	25	25
Bangladesh	46 457	51 865	57 991	63 591	68 881	71 354	73 253	73 553	72 782	73 349
Bhutan		22	168	455	774	1 376	1 944	2 726	2 847	2 797
Cambodia	5 880	8 658	11 023	11 526	12 427	16 302	16 680	16 641	16 706	16 849
China	13 740 204	14 487 465	14 349 844	14 304 143	13 962 937	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930
India	1 959 466	1 975 503	1 996 494	1 979 659	1 918 719	1 837 628	1 819 907	1 758 722	1 665 392	1 597 522
Indonesia	1 428	4 023	6 951	9 863	12 342	13 697	16 367	17 901	18 711	19 179
Lao PDR	1 580	2 659	4 045	4 021	3 937	3 809	3 639	3 390	3 342	3 175
Myanmar	948	948	1 073	1 073	1 069	1 069	1 069	1 049	1 049	1 041
Nepal	122 035	132 393	141 880	150 666	166 689	181 965	190 188	200 472	214 832	219 452
Pakistan	620	1 367	3 367	4 577	6 320	6 501	6 695	6 606	6 415	6 120
Philippines			8 761	8 761	8 761	8 761	8 761	8 761	8 761	8 761
Sri Lanka	4 321	4 296	4 272	4 247	4 222	4 091	3 822	3 515	3 205	2 894
Thailand						490	490	768	768	768
Viet Nam	166 484	197 700	234 564	270 039	298 641	340 848	358 682	371 084	371 318	366 837
C America + Carib	6 793	6 999	7 736	14 950	17 417	17 672	20 746	21 606	21 342	21 336
Costa Rica	304	304	505	7 468	7 468	7 774	9 965	9 965	9 965	9 965
Cuba	6 487	6 568	6 536	6 649	8 795	8 021	7 919	8 563	8 299	8 299
Dominican Rep		124	693	830	1 075	1 507	1 726	1 726	1 726	1 726
El Salvador							120	120	120	120
Grenada							2	5	5	5
Haiti							0	0	0	0
Honduras					17	17	17	17	17	17
Jamaica	2	2	2	2	2	2	2	2	2	2
Nicaragua				1	61	352	738	951	951	945
Panama							250	250	250	250
S America	1 723	1 777	3 324	3 320	6 898	194 352	198 478	198 974	209 759	209 734
Argentina	5	5	5	5	5	5	4 002	4 002	4 007	4 007
Bolivia	112	148	195	191	187	196	192	371	346	321
Brazil					1	187 435	187 437	187 437	187 437	187 437
Colombia							18	335	342	342
Ecuador	146	146	146	146	146	151	264	264	322	322
Peru	1 460	1 478	1 478	1 478	1 478	1 486	1 486	1 486	1 486	1 486
Uruguay					3 580	3 580	3 580	3 580	14 320	14 320
Venezuela			1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500

Production of biogas for cooking

Production de biogaz pour la cuisson

Producción de biogás para cocinar

1,000 m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	16 051 625	16 872 812	16 823 373	16 822 237	16 482 341	15 607 209	15 624 788	15 592 213	15 516 745	15 448 375
Africa	2 880	7 413	15 239	23 503	29 202	33 227	38 417	42 199	47 368	46 389
Benin	8	15	20	26	39	36	34	33	38	33
Burkina Faso	41	264	737	1 469	1 999	2 482	3 041	3 528	3 781	3 604
Cameroon	31	45	68	85	126	143	139	132	127	113
Ethiopia	498	1 449	2 904	4 720	6 176	7 419	8 748	10 020	12 598	12 363
Ghana						1	2	2	2	2
Kenya	487	1 877	3 911	6 918	8 386	9 473	10 084	10 346	11 367	11 161
Mali				6	76	113	113	113	112	101
Nigeria	347	347	347	347	292	292	294	294	294	185
Rwanda	615	1 070	3 148	3 668	4 754	4 950	6 109	6 365	6 354	6 335
Senegal	15	249	394	612	900	1 235	1 774	2 857	2 823	2 777
Tanzania	476	995	1 692	2 424	2 870	3 063	3 497	3 467	3 351	3 260
Uganda	363	1 102	1 787	2 995	3 296	3 661	3 876	4 084	4 355	4 299
Zambia						35	70	373	617	1 825
Zimbabwe			232	232	253	288	332	340	340	337
Asia	16 048 098	16 864 671	16 807 438	16 797 924	16 450 124	15 571 455	15 583 737	15 546 528	15 466 154	15 398 769
Afghanistan							25	25	25	25
Bangladesh	46 162	51 427	57 407	62 864	68 005	70 451	72 265	72 565	71 794	72 360
Bhutan		22	168	455	774	1 376	1 944	2 726	2 847	2 797
Cambodia	5 880	8 658	11 023	11 526	12 427	13 382	13 760	13 721	13 786	13 929
China	13 740 204	14 487 465	14 349 844	14 304 143	13 962 937	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930
India	1 959 466	1 974 741	1 995 081	1 976 685	1 914 996	1 832 583	1 814 065	1 752 020	1 657 376	1 589 506
Indonesia	1 428	4 023	6 951	9 863	12 341	13 696	16 366	17 899	18 710	19 177
Lao PDR	1 580	2 659	4 045	4 021	3 937	3 809	3 639	3 390	3 342	3 175
Myanmar	27	27	152	152	148	148	148	128	128	120
Nepal	122 035	132 393	141 880	150 666	166 689	181 965	190 188	200 472	214 832	219 452
Pakistan	510	1 258	2 053	3 263	5 006	5 187	5 381	5 256	5 064	4 770
Sri Lanka	4 321	4 296	4 272	4 247	4 222	4 080	3 770	3 459	3 148	2 838
Thailand								277	277	277
Viet Nam	166 484	197 700	234 564	270 039	298 641	340 848	358 257	370 659	370 893	366 412
C America + Carib	647	728	696	810	3 014	2 527	2 634	3 487	3 223	3 216
Cuba	647	728	696	809	2 955	2 181	2 079	2 723	2 459	2 459
Nicaragua				1	59	346	555	764	763	757
S America	108	144	180	176	172	193	302	324	312	287
Argentina							0	0	5	5
Bolivia	108	144	180	176	172	180	177	173	148	124
Colombia								26	33	33
Ecuador						5	118	118	118	118
Peru						7	7	7	7	7

Production of biogas for off-grid electricity

Production de biogaz pour l'électricité hors réseau

Producción de biogás para electricidad fuera de la red

1,000 m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	1 720	2 836	14 357	19 177	21 704	27 131	28 811	30 157	35 230	35 230
Africa	6	75	75	84	199	618	655	655	655	655
Gabon						305	305	305	305	305
Ghana		64	64	64	64	69	69	69	69	69
Kenya	6	11	11	11	126	126	126	126	126	126
Mozambique							15	15	15	15
Nigeria							22	22	22	22
Senegal						110	110	110	110	110
Uganda				9	9	9	9	9	9	9
Asia	1 265	2 168	12 931	14 635	15 532	19 802	21 110	21 981	23 295	23 295
Bangladesh	295	438	584	727	876	903	988	988	988	988
Cambodia						2 920	2 920	2 920	2 920	2 920
India		761	1 413	2 974	3 723	5 045	5 843	6 701	8 015	8 015
Myanmar	921	921	921	921	921	921	921	921	921	921
Pakistan	48	48	1 253	1 253	1 253	1 253	1 253	1 266	1 266	1 266
Philippines			8 760	8 760	8 760	8 760	8 760	8 760	8 760	8 760
Viet Nam							425	425	425	425
C America + Carib	304	428	1 187	4 294	4 556	5 293	5 520	5 520	5 520	5 520
Costa Rica	304	304	494	3 464	3 464	3 770	3 770	3 770	3 770	3 770
Dominican Rep		124	693	830	1 075	1 507	1 726	1 726	1 726	1 726
Honduras					17	17	17	17	17	17
Jamaica										
Nicaragua							8	8	8	8
S America	146	164	164	164	1 417	1 417	1 527	2 001	5 760	5 760
Argentina							110	110	110	110
Bolivia								183	183	183
Colombia								292	292	292
Ecuador	146	146	146	146	146	146	146	146	146	146
Peru		18	18	18	18	18	18	18	18	18
Uruguay					1 253	1 253	1 253	1 253	5 012	5 012

Production of biogas for industry

Production de biogaz pour l'industrie

Producción de biogás para la industria

1,000 m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	5 840	5 959	7 459	11 452	17 779	18 339	18 612	18 612	25 650	25 650
Africa		119	119	119	4 119	4 679	4 790	4 790	4 790	4 790
Burundi							1	1	1	1
Gabon						305	305	305	305	305
Ghana		119	119	119	4 119	4 119	4 228	4 228	4 228	4 228
Senegal						256	256	256	256	256
C America + Carib	5 840	5 840	5 840	9 833	9 833	9 833	9 993	9 993	9 993	9 993
Costa Rica				3 993	3 993	3 993	3 993	3 993	3 993	3 993
Cuba	5 840	5 840	5 840	5 840	5 840	5 840	5 840	5 840	5 840	5 840
S America			1 500	1 500	3 827	3 827	3 829	3 829	10 867	10 867
Brazil							2	2	2	2
Ecuador									57	57
Uruguay					2 327	2 327	2 327	2 327	9 308	9 308
Venezuela			1 500	1 500	1 500	1 500	1 500	1 500	1 500	1 500

Production of biogas for commercial and public services
Production de biogaz pour services commerciaux et publics
Producción de biogás para servicios comerciales y públicos

1,000 m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	134	140	1 613	1 613	2 042	2 950	5 734	5 923	5 923	5 923
Africa	123	129	1 589	1 589	2 017	2 903	3 452	3 635	3 635	3 635
Botswana	2	2	2	2	2	2	2	2	2	2
Burundi							1	1	1	1
Ghana	110	110	110	110	111	115	205	205	205	205
Kenya	11	11	11	11	11	11	11	11	11	11
Mali							49	49	49	49
Nigeria		6	6	6	6	6	6	6	6	6
Rwanda			1 460	1 460	1 883	2 363	2 538	2 538	2 538	2 538
Tanzania	0	0	0	0	4	4	11	11	11	11
Zimbabwe						403	628	811	811	811
Asia			1	1	1	19	60	64	64	64
Philippines			1	1	1	1	1	1	1	1
Sri Lanka						11	52	56	56	56
Thailand						7	7	7	7	7
C America + Carib	2	2	2	2	2	7	2 202	2 203	2 203	2 203
Costa Rica							2 191	2 191	2 191	2 191
Grenada							2	2	2	2
Haiti							0	0	0	0
Jamaica	2	2	2	2	2	2	2	2	2	2
Nicaragua						5	6	7	7	7
S America	9	9	20	20	21	21	21	21	21	21
Argentina	5	5	5	5	5	5	5	5	5	5
Bolivia	4	4	15	15	15	15	15	15	15	15
Brazil					1	1	1	1	1	1

Production of biogas for agriculture
Production de biogaz pour l'agriculture
Producción de biogás para la agricultura

1,000 m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	1 521	1 521	1 532	1 623	1 741	189 663	193 956	193 986	193 986	193 986
Africa					115	120	122	122	122	122
Ghana						4	4	4	4	4
Kenya					115	115	115	115	115	115
Nigeria							2	2	2	2
Asia	61	61	61	61	63	546	546	570	570	570
Indonesia					1	1	1	1	1	1
Pakistan	61	61	61	61	61	61	61	85	85	85
Thailand						484	484	484	484	484
C America + Carib			11	11	12	12	398	404	404	404
Costa Rica			11	11	11	11	11	11	11	11
Cuba										
El Salvador							120	120	120	120
Grenada								3	3	3
Nicaragua					1	1	9	13	13	13
Panama							250	250	250	250
St Lucia							8	8	8	8
S America	1 460	1 460	1 460	1 460	1 460	188 894	192 798	192 798	192 798	192 798
Argentina							3 887	3 887	3 887	3 887
Brazil						187 434	187 434	187 434	187 434	187 434
Colombia							18	18	18	18
Peru	1 460	1 460	1 460	1 460	1 460	1 460	1 460	1 460	1 460	1 460

Off-grid energy access

Accès à l'énergie hors réseau

Acceso a la energía fuera de la red

Number of people connected to hydropower

Nombre de personnes connectées à l'hydroélectricité

Número de personas conectadas a la hidroelectricidad

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	4 204	4 725	5 211	5 614	5 897	6 299	6 496	6 767	6 804	6 846
Africa	254	263	302	316	318	394	399	538	538	541
Ethiopia	7	10	10	10	10	10	10	10	10	10
Guinea	28	28	28	28	28	28	28	28	28	28
Kenya	97	97	97	97	97	97	97	98	98	98
Lesotho	1	1	1	1	1	1	1	1	1	1
Liberia	62	62	62	62	63	63	63	63	63	63
Malawi	30	35	35	35	35	35	39	39	39	39
Mali	2	2	2	2	2	2	2	2	2	2
Mozambique	1	1	1	1	1	11	11	11	11	11
Rwanda	8	8	16	30	30	30	31	31	31	32
South Africa	0	0	0	0	0	0	0	0	0	0
Tanzania	13	13	13	13	13	52	52	52	52	52
Uganda	2	2	4	4	4	4	4	4	4	4
Zambia	3	3	28	28	28	28	28	28	28	28
Zimbabwe	2	2	2	2	2	2	2	2	2	2
Asia	3 903	4 415	4 862	5 246	5 524	5 831	6 021	6 152	6 189	6 228
Afghanistan	383	481	578	676	774	871	969	1 066	1 066	1 066
Bhutan	9	9	9	9	9	9	9	9	9	9
India	1 184	1 396	1 429	1 569	1 627	1 661	1 690	1 690	1 690	1 690
Indonesia	132	147	159	180	204	220	227	227	230	230
Myanmar	38	40	40	41	46	101	101	101	101	101
Nepal	883	948	1 035	1 125	1 212	1 310	1 360	1 394	1 427	1 466
Pakistan	638	683	890	917	917	917	917	917	918	918
Philippines	154	212	215	216	218	218	218	218	218	218
Sri Lanka	19	22	24	28	31	35	40	40	40	40
Tajikistan	59	72	78	81	81	84	85	85	85	85
Thailand	19	19	19	19	19	19	19	19	19	19
Timor Leste	5	5	5	5	5	5	5	5	5	5
Viet Nam	380	380	380	380	380	380	380	380	380	380
C America + Carib	41	41	42	47	50	69	71	71	71	71
Dominican Rep	3	3	4	6	9	11	13	13	13	13
El Salvador	1	1	1	1	1	1	1	1	1	1
Haiti	34	34	34	34	34	34	34	34	34	34
Nicaragua	4	4	4	4	4	4	4	4	4	4
Oceania	3	3	3	3	3	3	3	3	3	3
Fiji	3	3	3	3	3	3	3	3	3	3
S America	2	2	2	2	2	2	2	3	3	3
Argentina	2	2	2	2	2	2	2	2	2	2
Colombia								1	1	1

Number of people using solar lights (<11 W)

Nombre de personnes utilisant des lampes solaires (<11 W)

Número de personas que usan lámparas solares (<11 W)

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	977	5 808	15 668	40 074	64 416	88 916	100 853	120 173	130 837	138 293
Africa		1 680	6 465	19 784	33 229	46 758	48 531	47 318	42 097	44 094
Angola								1	11	26
Benin						143	950	1 021	942	294
Botswana										11
Burkina Faso		23	89	288	508	990	1 076	1 732	1 429	1 322
Burundi				26	58	74	48	16	12	27
Cabo Verde									8	18
Cameroon							220	381	877	1 289
Cent Afr Rep									10	25
Chad									44	59
Comoros										15
Congo DR		37	139	454	801	1 004	1 050	2 052	2 050	2 037
Congo Rep										13
Cote d'Ivoire						144	300	430	378	442
Eq Guinea										17
Eritrea										13
Eswatini										14
Ethiopia		361	1 375	4 471	7 891	10 810	9 811	7 589	5 672	7 007
Gabon									10	25
Gambia							8	16	33	42
Ghana				29	32	98	255	465	544	434
Guinea									14	44
Guinea Bissau									14	31
Kenya		452	1 720	5 594	9 864	13 487	14 070	12 359	11 220	12 693
Lesotho										13
Liberia						55	119	188	176	124
Madagascar							88	328	548	604
Malawi		70	109	195	300	606	972	1 401	1 282	1 028
Mali						277	473	822	721	666
Mauritania									16	35
Mauritius		33	60	87	74	93	159	215	246	329
Mozambique				19	62	62	103	113	123	88
Namibia							9	35	62	65
Niger					39	39	39	19	52	113
Nigeria		31	117	382	674	1 450	2 275	2 498	2 483	2 204
Rwanda		64	245	796	1 403	1 619	1 746	1 881	1 725	1 411
Sao Tome Prn										9
Senegal				190	380	744	923	1 396	1 416	1 211
Seychelles										74
Sierra Leone						100	228	409	322	331
Somalia							61	136	1 132	1 280
South Africa						200	235	422	373	433
South Sudan									12	28
Sudan					1	1	1			
Tanzania		357	1 357	4 413	7 783	10 249	8 509	5 184	2 167	1 802
Togo							1	21	73	217
Uganda		34	131	426	743	1 405	2 349	3 851	4 366	4 474
Zambia						693	957	1 131	645	1 088
Zimbabwe		217	1 123	2 415	2 616	2 417	1 495	1 204	887	570
Asia	974	4 057	9 031	19 841	30 366	40 270	50 124	70 315	86 129	91 054
Afghanistan				221	443	664	664	664	444	224
Bangladesh						329	358	901	1 436	2 216
Bhutan										
Cambodia						46	148	178	134	43
India	974	3 902	8 624	18 723	28 353	37 413	46 973	66 140	80 939	85 390
Indonesia		27	104	338	655	665	611	634	628	457
Malaysia									31	36
Myanmar		14	54	175	338	421	414	254	523	798
Nepal						59	207	232	227	80
Pakistan		14	54	176	340	403	434	526	591	591
Philippines					80	111	131	323	476	552
Sri Lanka		100	196	209	129	131	154	462	693	657
Thailand									8	11
Timor Leste					28	28	28			
C America + Carib	3	4	8	7	9	6	35	116	279	483
Dominica								1	1	1
Dominican Rep									25	67
Guatemala								4	45	96
Haiti			3	3	3		27	68	97	111

Honduras					2	2	2		31	84
Nicaragua	3	4	5	4	4	4	2	1		
Panama							3	12	39	82
Puerto Rico								31	42	42
Middle East		50	104	226	398	977	997	1100	871	1220
Jordan		50	104	226	398	977	997	1100	791	650
Yemen									80	570
Oceania		15	58	187	363	836	1095	1189	1274	1124
Fiji								86	177	188
Nauru								25	25	39
Papua N Guin		15	58	187	363	836	1067	958	760	565
Samoa								22	22	38
Vanuatu							28	98	291	294
S America	0	1	2	28	51	69	71	136	187	318
Argentina									23	63
Bolivia	0	1	1	21	27	33	25	50	73	110
Colombia							5	6	6	48
Peru		1	1	8	25	37	40	79	84	97

Number of people using SHS (11-50 W)

Nombre de personnes utilisant des SSD (11-50 W)

Número de personas que usan SSD (11-50 W)

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	6 168	8 334	11 508	15 573	18 741	21 201	21 468	20 682	20 798	21 077
Africa		43	165	571	1 055	1 825	2 470	3 195	4 982	7 541
Angola										1
Benin										33
Botswana										1
Burkina Faso										36
Burundi										3
Cabo Verde										2
Cameroon									14	34
Cent Afr Rep										1
Chad										1
Comoros										3
Congo DR										12
Congo Rep										1
Cote d'Ivoire										45
Eq Guinea										4
Eritrea										2
Eswatini										1
Ethiopia					1	1	3	3	3	637
Gabon										1
Gambia										4
Ghana				35	35	35	35	44	9	24
Guinea										6
Guinea Bissau										3
Kenya		14	53	173	330	491	674	986	1 799	2 763
Lesotho										1
Liberia										3
Madagascar								52	52	78
Malawi										36
Mali										29
Mauritania										4
Mauritius										1
Mozambique							3	3	3	8
Namibia										1
Niger										13
Nigeria							39	109	179	347
Rwanda		3	10	31	59	88	103	214	389	430
Sao Tome Prn										2
Senegal									2	35
Seychelles										13
Sierra Leone										29
Somalia										41
South Africa										14
South Sudan										3
Tanzania		11	42	138	262	390	428	542	746	799
Togo										30
Uganda		16	60	194	369	820	1 127	1 181	1 314	1 393
Zambia								3	415	546
Zimbabwe							58	58	58	68
Asia	6 152	8 274	11 284	14 857	17 507	19 180	18 749	17 289	15 685	13 362
Afghanistan				6	12	21	27	33	27	21
Bangladesh	3 540	4 678	7 440	10 291	13 288	14 155	13 929	12 383	10 466	7 917
Cambodia				55	73	115	172	172	117	102
India	1 951	2 707	2 822	3 202	2 710	3 150	2 882	2 985	3 656	3 912
Indonesia									16	18
Malaysia										1
Myanmar								49	49	129
Nepal	660	890	1 022	1 303	1 424	1 730	1 728	1 639	1 290	1 169
Pakistan										10
Philippines						10	10	28	63	82
Thailand										1
C America + Carib			21	21	34	34	38	17	17	15
Dominican Rep										2
Guatemala					2	2	2	2	2	3
Haiti										2
Honduras			21	21	27	27	31	10	10	7
Panama					5	5	5	5	5	2

Oceania							34	34	52	111
Fiji										3
Nauru										3
Papua N Guin							34	34	34	74
Samoa										4
Vanuatu									19	27
S America	16	16	37	124	145	162	177	147	62	48
Argentina										2
Bolivia				30	30	30	30	30		2
Chile								1	1	1
Colombia										2
Peru	16	16	37	94	115	132	147	116	60	41

Number of people using SHS (>50 W) Nombre de personnes utilisant des SSD (>50 W) Número de personas que usan SSD (>50 W)

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	801	836	881	943	1 019	1 274	2 119	3 280	4 357	6 885
Africa	433	438	455	507	574	839	1 607	2 663	3 570	5 034
Angola										2
Benin										49
Botswana										1
Burkina Faso	0	1	3	4	8	12	15	17	15	71
Burundi										1
Cabo Verde										3
Cameroon										85
Cent Afr Rep										2
Chad										2
Comoros										1
Congo DR										46
Congo Rep										2
Cote d Ivoire									128	194
Egypt							29	29	29	29
Eq Guinea										5
Eritrea										1
Eswatini										1
Ethiopia										163
Gabon										2
Gambia										5
Ghana								15	15	39
Guinea										10
Guinea Bissau				3	6	8	11	14	14	19
Kenya						3	3	151	296	611
Lesotho			7	7	7	7	7			1
Liberia										4
Madagascar								92	92	99
Malawi										9
Mali				5	9	14	18	23	18	62
Mauritania										5
Mauritius										0
Morocco	357	357	357	357	357	483	483	483	483	483
Mozambique										1
Namibia										1
Niger										17
Nigeria				26	52	79	105	398	636	857
Rwanda						31	249	449	632	652
Sao Tome Prn										3
Senegal										58
Seychelles										3
Sierra Leone										42
Somalia										13
South Africa				14	27	41	55	68	55	45
South Sudan										1
Tanzania						13	60	412	685	902
Togo										45
Tunisia	72	74	80	80	80	80	99	99	99	99
Uganda	3	6	9	12	15	22	122	141	157	224
Zambia										35
Zimbabwe										2
Asia	347	376	396	400	403	407	411	503	646	1 572
Afghanistan				4	8	12	15	19	15	12
Bangladesh									28	67
Cambodia										7
India								88	126	509
Indonesia	13	13	13	13	13	13	13	13	44	49
Malaysia										5
Mongolia	209	229	249	249	249	249	249	249	249	249
Myanmar										374
Nepal										0
Pakistan										8
Philippines						0	0	0	51	155
Sri Lanka	125	134	134	134	134	134	134	134	134	134
Thailand										4

Viet Nam	1	1	1	1						
C America + Carib					0	1	1	7	33	39
Cuba					0	1	1	7	7	7
Dominican Rep										1
Guatemala										2
Haiti										1
Honduras									26	27
Panama										1
Oceania	8	8	16	22	27	27	27	27	27	154
Fiji	8	8	16	22	27	27	27	27	27	34
Nauru										8
Papua N Guin										92
Samoa										9
Vanuatu										11
S America	14	14	14	14	14		72	80	80	85
Argentina	14	14	14	14	14					1
Bolivia										1
Brazil							1	8	8	8
Colombia							57	57	57	58
Peru							15	15	15	16

Number of people connected to solar mini-grids (Tier 1) Personnes connectées aux mini-réseaux solaires (N.1) Número de personas conectadas a mini-redes solares (N.1)

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	216	230	323	391	573	706	829	991	1 082	1 115
Africa	3	8	101	169	239	297	407	496	563	595
Benin						3	81	81	88	88
Burkina Faso							3	10	10	10
Cameroon	1	1	1	1	1	8	15	19	19	19
Ghana					2	2	12	12	24	24
Kenya			63	67	67	79	80	80	90	90
Liberia								16	25	25
Madagascar	2	2	2	2	2	2	2	2	2	13
Mali		5	31	84	119	144	150	157	157	165
Mauritania					16	16	16	16	16	16
Mozambique				1	3	3	3	3	3	3
Nigeria			5	12	27	37	41	54	55	58
Rwanda								10	10	13
Senegal							1	1	29	29
Sierra Leone								24	24	24
Tanzania				2	2	2	2	9	9	9
Uganda		0	0	0	0	0	0	0	0	5
Zambia						1	1	1	1	3
Asia					112	187	199	273	298	298
Bangladesh						25	25	65	65	65
India					112	152	165	197	222	223
Myanmar						10	10	11	11	11
S America	213	222	222	222	222	222	222	222	222	222
Peru	0	9	9	9	9	9	9	9	9	9
Venezuela	213	213	213	213	213	213	213	213	213	213

Number of people connected to solar mini-grids (Tier 2+)

Personnes connectées aux mini-réseaux solaires (N.2)

Número de personas conectadas a mini-redes solares (N.2)

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	381	506	629	759	856	1 199	1 503	1 843	2 147	2 242
Africa	36	46	108	151	172	336	628	798	1 052	1 141
Algeria	6	6	6	6	6	91	344	344	344	344
Benin						1	4	4	4	5
Burkina Faso							1	1	2	20
Cabo Verde			0	0	0	1	1	1	1	2
Cameroon								120	270	270
Chad						1	1	1	1	1
Congo DR									1	3
Cote d'Ivoire						4	4	4	4	4
Egypt						25	25	25	30	31
Eritrea							16	16	56	56
Ethiopia									1	1
Gambia						2	2	2	2	2
Ghana								4	4	4
Guinea										20
Guinea Bissau							7	7	24	24
Kenya				2	3	3	4	4	4	17
Liberia								1	1	1
Madagascar						6	6	9	9	11
Mali	4	13	13	44	49	65	65	80	82	92
Mozambique				11	11	11	11	11	11	11
Namibia		1	1	1	3	3	3	3	3	3
Niger					1	1	1	2	5	5
Nigeria					1	15	17	34	37	44
Rwanda						5	6	7	7	7
Senegal	17	17	78	78	78	78	78	78	107	107
Sierra Leone				0	0	0	0	0	0	0
Tanzania					2	2	4	6	6	6
Togo								4	7	7
Uganda	9	9	9	9	19	22	25	25	25	38
Zambia								3	3	5
Zimbabwe							3	3	3	3
Asia	345	460	518	605	681	798	808	897	940	945
Afghanistan	2	2	2	5	14	14	20	20	20	20
Bangladesh	2	2	4	4	14	41	41	111	147	152
India	162	173	184	197	197	197	197	197	197	197
Indonesia	148	150	195	266	319	408	408	421	422	422
Malaysia					1	3	3	3	3	3
Maldives					2	2	2	2	2	2
Myanmar							4	10	10	10
Nepal	31	133	133	133	133	133	133	133	135	135
Pakistan									4	4
C America + Carib			2	2	2	5	5	85	89	89
Cuba								80	80	80
Haiti			2	2	2	5	5	5	5	5
Nicaragua									3	3
Oceania						14	14	14	14	14
Fiji						14	14	14	14	14
S America		0	1	1	1	46	48	48	52	52
Brazil			1	1	1	1	1	1	1	1
Colombia					0	0	2	3	3	3
Ecuador			0	0	0	0	0	0	4	4
Venezuela						44	44	44	44	44

Number of people using biogas electricity

Nombre de personnes utilisant l'électricité biogaz

Número de personas que usan electricidad a partir de biogás

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	226.5	230.4	232.1	234.3	236.3	271.4	276.8	292.8	314.3	314.3
Africa				0.1	0.1	0.1	0.7	0.7	0.7	0.7
Uganda				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Mozambique							0.6	0.6	0.6	0.6
Asia	226.5	230.2	231.9	234.0	236.0	271.1	275.9	291.9	313.6	313.6
Cambodia						34.3	34.3	34.3	34.3	34.3
India		3.7	5.4	7.5	9.5	10.3	15.1	31.1	52.8	52.8
Myanmar	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5
Pakistan										
S America		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Peru		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Number of people using biogas for cooking Nombre de personnes utilisant le biogaz pour la cuisson Número de personas que usan biogás para cocinar

Thousands	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	120 018	126 505	128 131	127 647	125 117	125 632	125 758	125 630	125 288	124 938
Africa	22	59	121	191	243	284	337	385	419	410
Burkina Faso	0	3	8	16	22	27	33	39	43	41
Cameroon	0	0	1	1	1	1	1	1	1	1
Ethiopia	4	11	22	36	48	57	67	77	93	92
Kenya	4	14	30	54	65	74	78	80	86	85
Mali				0	1	2	2	2	2	2
Nigeria	3	3	3	3	2	2	2	2	2	1
Rwanda	5	8	23	27	35	37	45	47	47	47
Senegal	0	3	6	11	19	30	45	71	70	69
Tanzania	4	8	14	20	24	25	29	28	27	27
Uganda	3	8	14	23	25	28	30	31	33	33
Zambia					0	1	3	5	14	14
Zimbabwe			2	2	2	2	2	2	2	2
Asia	119 991	126 442	128 006	127 451	124 852	125 329	125 401	125 220	124 845	124 504
Bangladesh	194	217	244	269	291	303	312	314	311	315
Bhutan		0	1	4	6	12	16	23	24	23
Cambodia	50	74	94	98	106	114	117	117	118	120
China	107 442	113 523	114 668	113 938	111 355	111 938	111 938	111 938	111 938	111 938
India	10 522	10 604	10 713	10 615	10 283	9 841	9 741	9 408	8 900	8 534
Indonesia	6	17	30	42	53	58	70	76	79	82
Lao PDR	8	13	20	20	19	19	18	17	16	16
Myanmar	0	0	1	1	1	1	1	1	1	1
Nepal	1 067	1 158	1 240	1 317	1 457	1 591	1 663	1 753	1 864	1 904
Pakistan	4	11	18	27	43	44	46	45	43	41
Sri Lanka	18	18	18	18	18	17	16	15	13	12
Thailand								1	1	1
Viet Nam	680	807	957	1 102	1 219	1 391	1 462	1 513	1 536	1 518
C America + Carib	4	4	4	5	22	19	20	25	24	24
Cuba	4	4	4	5	21	17	16	20	18	18
Nicaragua				0	0	2	4	5	5	5
S America	2	2	3	3	3	3	4	4	4	3
Bolivia	2	2	3	3	3	3	3	3	2	2
Ecuador						0	1	1	1	1



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