

OFF-GRID RENEWABLE ENERGY STATISTICS 2022

STATISTIQUES D'ÉNERGIE RENOUVELABLE HORS RÉSEAU 2022

ESTADÍSTICAS DE ENERGÍA RENOVABLE AISLADA 2022

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Statistical methodology (in English)
Méthodologie statistique (en anglais)
Metodología estadística (en inglés)

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 aislada

Hydropower Hydroélectricité Hidroeléctrica

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	624.068	643.021	659.252	706.133	722.571	770.617	764.314	806.392	807.524	815.034
Africa	159.229	161.234	164.088	190.522	197.284	231.642	241.682	265.035	265.051	269.964
Angola	21.659	21.659	22.859	24.059	24.059	36.479	36.479	36.479	36.479	36.479
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	97.800	97.800	110.900	110.900	121.700	131.700	141.600	141.600	141.600
Eswatini	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690
Ethiopia	1.449	1.449	1.449	1.449	1.469	1.469	1.469	1.469	1.469	1.469
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	10.135	10.135	13.655	19.775	19.775	31.575	31.575	31.575
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	4.860	4.860	4.860	4.860	4.860	4.860	4.860	4.860
Madagascar	0.160	0.220	0.878	0.938	0.938	1.018	1.018	1.118	1.118	1.118
Malawi	1.400	1.400	1.400	1.400	1.700	1.700	1.740	1.740	1.740	2.153
Mali	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Mauritius	0.350	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700
Mozambique	0.065	0.065	0.065	0.549	0.549	0.549	0.549	0.549	0.549	0.549
Nigeria				0.400	0.400	0.400	0.400	0.400	0.400	0.400
Rwanda	1.530	2.230	2.230	2.230	2.252	2.252	2.252	2.265	2.281	2.281
Sierra Leone	0.250	0.250	0.250	0.250	0.250	4.890	4.890	4.890	4.890	4.890
South Africa	7.445	7.540	7.836	7.986	7.986	7.986	7.986	7.986	7.986	11.986
Tanzania	6.860	6.860	6.860	17.900	20.800	21.098	21.098	21.998	21.998	22.498
Uganda	0.406	0.406	0.406	0.406	0.406	0.406	0.406	0.406	0.406	0.406
Zambia	1.720	1.720	1.720	1.720	1.720	1.720	1.720	2.360	2.360	2.360
Zimbabwe	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338
Asia	244.064	257.406	267.906	282.137	291.577	296.340	305.897	319.356	320.472	322.249
Afghanistan	20.748	24.197	27.646	31.095	34.544	37.993	37.993	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	79.237	82.169	83.377	84.079	84.675	84.675	84.675	84.675	84.675	84.675
Indonesia	10.105	12.065	13.314	15.007	15.437	15.437	15.597	15.597	15.597	15.597
Malaysia	0.163	0.172	0.532	0.580	0.655	0.688	0.737	0.737	0.737	0.737
Myanmar	2.949	2.974	3.165	6.890	6.890	6.890	6.890	6.890	6.890	6.890
Nepal	38.802	42.168	45.456	49.102	51.012	52.257	53.506	54.959	56.075	57.823
Pakistan	16.104	16.874	17.339	17.339	19.789	19.825	19.905	21.911	21.911	21.911
Philippines	12.858	12.858	12.903	12.926	12.926	12.926	20.944	30.944	30.944	30.973
Sri Lanka	5.003	5.248	5.493	5.738	6.068	6.068	6.068	6.068	6.068	6.068
Tajikistan	13.272	13.858	13.858	14.358	14.558	14.558	14.558	14.558	14.558	14.558
Thailand	0.258	0.258	0.258	0.458	0.458	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	3.658	3.964	4.341	10.139	10.375	10.450	10.480	11.659	11.659	12.479
Cuba				5.432	5.432	5.432	5.432	5.432	5.432	5.432
Dominican Rep	0.362	0.514	0.801	1.077	1.208	1.238	1.268	1.343	1.343	1.343
El Salvador	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140	0.140
Guatemala	0.150	0.150	0.240	0.330	0.420	0.465	0.465	0.465	0.465	0.465
Haiti	2.170	2.170	2.170	2.170	2.185	2.185	2.185	2.185	2.185	2.185
Honduras		0.129	0.129	0.129	0.129	0.129	0.129	0.129	0.129	0.129
Nicaragua	0.836	0.861	0.861	0.861	0.861	0.861	0.861	1.965	1.965	2.785
Oceania	77.543	77.543	77.543	77.643	77.643	77.643	77.643	77.643	77.643	77.643
Fiji	1.000	1.000	1.000	1.100	1.100	1.100	1.100	1.100	1.100	1.100
Papua N Guin	76.395	76.395	76.395	76.395	76.395	76.395	76.395	76.395	76.395	76.395
Solomon Is	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148
S America	139.574	142.874	145.374	145.692	145.692	154.542	128.612	132.699	132.699	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	9.405	9.405
Peru	137.109	140.409	142.909	142.909	142.909	146.759	120.829	120.829	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	105.603	156.055	201.915	239.360	257.704	317.641	364.896	436.244	424.571	415.439
Africa	6.627	17.932	34.807	55.225	77.208	99.560	125.277	165.367	196.265	220.207
Angola					0.008	0.104	0.116	1.046	1.053	1.121
Benin				0.064	0.227	0.448	0.557	1.708	2.749	3.918
Botswana					0.001	0.014	0.014	0.013	0.012	0.045
Burkina Faso	0.088	0.230	0.411	0.637	0.753	0.990	1.071	1.628	2.118	2.902
Burundi		0.010	0.023	0.029	0.824	1.172	1.184	1.224	1.364	0.822
Cabo Verde					0.154	0.348	0.361	0.345	0.335	0.186
Cameroon					0.013	0.047	0.212	0.886	1.620	1.876
Cent Afr Rep					0.008	0.020	0.035	0.032	0.049	0.048
Chad					0.008	0.017	0.081	0.077	0.125	0.112
Comoros					0.805	1.146	1.146	1.131	1.118	0.328
Congo DR	0.086	0.284	0.503	0.567	0.378	0.774	0.701	1.697	3.877	6.862
Congo Rep					0.008	0.025	0.032	0.030	0.490	0.533
Cote d Ivoire				0.055	0.222	0.779	1.820	3.929	6.125	7.472
Egypt					4.889	4.889	4.889	4.889	4.889	4.889
Eq Guinea					0.154	0.348	0.348	0.330	0.319	0.183
Eritrea					0.805	1.146	1.146	1.143	1.130	0.348
Eswatini					0.001	0.001	0.001	0.013	0.013	0.013
Ethiopia	0.975	3.171	5.604	6.332	6.330	5.072	5.477	8.446	9.853	9.526
Gabon					0.008	0.022	0.028	0.040	0.032	0.032
Gambia					0.155	0.355	0.377	0.378	0.369	0.355
Ghana		0.144	0.146	0.199	0.515	0.904	1.173	1.989	2.565	2.836
Guinea					0.154	0.353	0.617	1.231	1.847	2.178
Guinea Bissau		0.051	0.102	0.152	0.358	0.602	0.618	0.614	0.553	0.843
Kenya	1.556	5.060	9.007	11.256	12.675	16.844	24.142	38.850	56.927	68.466
Lesotho	0.097	0.097	0.097	0.097	0.098	0.098	0.001	0.015	0.021	0.021
Liberia				0.024	0.183	0.387	0.548	0.978	1.811	2.137
Madagascar					0.805	1.212	1.429	1.690	2.182	1.930
Malawi	0.081	0.144	0.222	0.568	1.607	2.123	2.417	2.540	3.082	3.397
Mali		0.070	0.140	0.326	0.617	1.079	1.199	1.896	2.033	2.674
Mauritania					0.154	0.350	0.358	0.345	0.333	0.189
Mauritius	0.087	0.126	0.107	0.134	0.915	3.287	3.440	4.815	4.148	3.380
Morocco	0.564	0.004		10.936	10.936	10.936	10.936	10.936		
Mozambique		0.010	0.031	0.031	0.832	1.247	1.350	1.533	2.111	2.259
Namibia					0.009	0.049	0.089	0.107	0.096	0.113
Niger			0.015	0.015	0.169	0.357	0.387	0.514	0.701	0.566
Nigeria	0.086	0.748	1.431	2.258	3.218	6.152	9.570	13.060	18.405	26.573
Rwanda	0.212	0.692	1.235	1.815	2.975	4.401	6.030	9.423	10.998	12.346
Sao Tome Prn					0.154	0.348	0.348	0.349	0.339	0.203
Senegal		0.049	0.097	0.303	0.562	1.100	1.400	2.521	3.015	3.982
Seychelles					0.805	1.146	1.146	1.131	1.118	0.351
Sierra Leone				0.129	0.323	0.626	0.568	1.272	2.082	2.688
Somalia					0.799	1.183	1.776	1.948	2.312	2.078
South Africa		0.265	0.530	0.852	1.117	1.482	1.328	1.144	0.909	0.805
South Sudan					0.805	1.161	1.174	1.261	1.338	0.785
Tanzania	1.031	3.354	10.724	12.160	11.269	11.744	15.566	13.249	14.440	16.786
Togo					0.019	0.506	0.780	1.661	3.445	5.163
Tunisia	0.310	0.213	0.136	0.130	0.437	0.340	0.340	0.340	0.340	0.340
Uganda	0.563	1.295	2.171	4.087	5.771	7.770	11.100	13.743	13.126	12.928
Zambia				0.208	1.116	1.567	2.926	4.626	5.521	5.826
Zimbabwe	0.890	1.916	2.076	1.861	2.059	2.586	2.926	2.605	2.830	2.021
Asia	97.045	135.669	164.231	181.404	176.318	209.568	230.254	259.232	216.742	183.311
Afghanistan		0.470	0.941	1.509	1.672	2.089	1.642	1.157	0.579	0.409
Bangladesh	65.911	93.769	118.097	128.106	126.065	139.234	121.079	110.291	88.025	80.670
Bhutan	0.023	0.023								
Cambodia		0.541	0.735	1.238	1.889	1.993	1.436	1.212	0.684	0.049
India	21.043	29.873	33.584	38.727	35.800	54.858	91.823	118.572	100.506	75.073
Indonesia	0.358	0.557	0.574	0.543	0.400	0.214	0.344	0.330	0.320	0.706
Malaysia					0.045	0.151	0.201	0.181	0.186	0.217
Mongolia	1.381	1.105	0.829	0.553	0.276					
Myanmar	0.041	0.133	0.257	0.289	0.252	0.667	1.298	15.259	15.462	16.010
Nepal	5.434	6.931	7.575	9.214	9.287	9.105	9.771	7.997	5.482	4.248
Pakistan	0.026	0.085	0.166	0.264	0.250	0.693	1.259	2.265	3.570	3.607
Philippines			0.033	0.178	0.223	0.343	1.145	1.698	1.722	2.166
Sri Lanka	2.801	2.154	1.427	0.770	0.101	0.083				
Thailand					0.045	0.137	0.257	0.270	0.208	0.155
Timor Leste			0.013	0.013	0.013					
Viet Nam	0.027	0.027								
C America + Carib	0.168	0.173	0.340	0.368	0.526	0.854	1.196	1.579	1.533	1.490
Bahamas	0.020	0.025	0.126	0.147	0.143	0.031				
Cuba			0.009	0.017	0.030	0.515	0.528	0.880	0.871	0.859
Dominican Rep					0.027	0.045	0.060	0.042	0.024	
Guatemala			0.005	0.005	0.032	0.055	0.078	0.200	0.198	0.181
Haiti	0.002	0.002	0.002	0.027	0.027	0.072	0.086	0.081	0.063	0.079
Honduras	0.146	0.146	0.198	0.198	0.266	0.136	0.444	0.376	0.377	0.372
Nicaragua	0.006	0.005	0.005	0.005	0.002	0.001				
Panama			0.021	0.021	0.048	0.064	0.074	0.166	0.161	0.217
Puerto Rico						0.028	0.028	0.028		

Middle East	0.056	0.122	0.214	0.526	1.108	2.040	1.915	3.058	2.610	2.690
Iraq					0.162	0.301	0.301	0.377	0.239	0.239
Jordan	0.056	0.122	0.214	0.526	0.460	0.340				
Lebanon					0.162	0.457	0.496	0.732	0.443	0.443
United Arab Em					0.162	0.485	0.554	0.589	0.563	0.602
Yemen					0.162	0.457	0.565	1.360	1.366	1.406
Oceania	0.387	0.546	0.711	0.648	0.890	0.845	1.715	2.257	2.612	4.265
Australia					0.045	0.067	0.099	0.101	0.094	0.070
Fiji	0.387	0.546	0.711	0.648	0.693	0.551	0.474	0.287	0.253	0.791
Nauru					0.014	0.023	0.023	0.023	0.023	0.010
Papua N Guin					0.075	0.102	0.236	0.605	0.808	1.984
Samoa					0.014	0.026	0.026	0.026	0.026	0.013
Vanuatu					0.051	0.076	0.857	1.214	1.407	1.399
S America	1.319	1.613	1.613	1.190	1.654	4.775	4.540	4.751	4.808	3.477
Argentina	1.319	1.319	1.319	0.896	0.009	0.009	0.037	0.143	0.143	0.134
Bolivia		0.293	0.293	0.293	0.302	0.308	0.042	0.042	0.069	0.089
Brazil					0.159	3.263	3.263	3.263	3.263	3.104
Chile						0.005	0.008	0.008	0.008	0.008
Colombia					0.882	0.888	0.888	0.993	1.020	0.139
Peru					0.303	0.303	0.303	0.303	0.306	0.003

Solar lights (<11 W)
Lampes solaires (<11 W)
Lámparas solares (<11 W)

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	11.676	29.232	46.395	55.606	54.504	74.999	106.874	132.125	115.584	95.872
Africa	4.799	14.442	24.057	28.759	27.968	28.015	28.717	32.042	31.891	35.130
Angola					0.008	0.011	0.023	0.024	0.032	0.032
Benin				0.064	0.091	0.129	0.109	0.339	0.526	0.648
Botswana					0.001	0.002	0.002	0.001		0.033
Burkina Faso	0.049	0.162	0.287	0.456	0.387	0.413	0.252	0.262	0.219	0.338
Burundi		0.010	0.023	0.029	0.034	0.054	0.066	0.095	0.201	0.275
Cabo Verde					0.018	0.029	0.042	0.026	0.016	0.003
Cameroon					0.013	0.044	0.196	0.470	0.748	0.935
Cent Afr Rep					0.008	0.019	0.034	0.031	0.019	0.017
Chad					0.008	0.016	0.080	0.075	0.085	0.062
Comoros					0.015	0.027	0.027	0.013		
Congo DR	0.086	0.284	0.503	0.567	0.378	0.680	0.606	0.669	0.194	0.244
Congo Rep					0.008	0.024	0.031	0.029	0.032	0.071
Cote d'Ivoire				0.055	0.086	0.114	0.092	0.150	0.178	0.194
Eq Guinea					0.018	0.029	0.029	0.011		
Eritrea					0.015	0.027	0.027	0.024	0.012	0.020
Eswatini					0.001	0.001	0.001	0.013	0.013	0.013
Ethiopia	0.975	3.171	5.597	6.324	5.515	3.909	3.666	4.718	5.261	5.070
Gabon					0.008	0.021	0.027	0.030	0.022	0.018
Gambia					0.020	0.036	0.057	0.059	0.049	0.028
Ghana		0.016	0.018	0.071	0.250	0.396	0.443	0.292	0.202	0.144
Guinea					0.018	0.034	0.049	0.040	0.048	0.060
Guinea Bissau					0.018	0.029	0.045	0.041	0.030	0.053
Kenya	1.366	4.441	7.830	9.411	9.526	8.828	9.307	9.129	8.796	8.467
Lesotho					0.001	0.001	0.001	0.015	0.021	0.021
Liberia				0.024	0.048	0.064	0.055	0.050	0.131	0.170
Madagascar					0.015	0.066	0.180	0.317	0.447	0.607
Malawi	0.081	0.144	0.222	0.568	0.817	1.005	0.744	0.614	0.734	1.462
Mali				0.116	0.202	0.410	0.350	0.327	0.180	0.151
Mauritania					0.018	0.031	0.039	0.026	0.014	0.006
Mauritius	0.087	0.126	0.107	0.134	0.124	1.692	1.626	2.886	2.198	2.198
Mozambique		0.010	0.031	0.031	0.047	0.108	0.108	0.156	0.339	0.802
Namibia					0.009	0.049	0.087	0.105	0.094	0.105
Niger			0.015	0.015	0.033	0.034	0.046	0.040	0.048	0.048
Nigeria	0.086	0.282	0.500	0.861	1.097	1.263	1.391	1.407	1.631	2.380
Rwanda	0.180	0.589	1.039	1.013	1.337	1.429	1.687	1.148	0.856	1.468
Sao Tome Prn					0.018	0.029	0.029	0.017	0.007	0.007
Senegal		0.049	0.097	0.303	0.426	0.724	0.746	0.671	0.356	0.186
Seychelles					0.015	0.027	0.027	0.013		
Sierra Leone				0.129	0.187	0.249	0.146	0.122	0.144	0.175
Somalia					0.009	0.065	0.439	0.542	0.623	0.954
South Africa				0.057	0.058	0.146	0.181	0.213	0.165	0.164
South Sudan					0.015	0.043	0.055	0.084	0.161	0.351
Tanzania	0.904	2.941	5.187	5.534	3.746	1.571	0.822	1.466	1.859	2.221
Togo					0.018	0.030	0.054	0.069	0.077	0.100
Uganda	0.093	0.303	0.528	0.926	1.774	2.759	3.488	3.922	3.527	3.145
Zambia				0.208	0.326	0.428	0.501	0.915	1.195	1.474
Zimbabwe	0.890	1.916	2.076	1.861	1.184	0.919	0.704	0.375	0.404	0.210
Asia	6.755	14.456	21.686	25.512	24.273	43.461	74.810	96.366	80.670	57.694
Afghanistan		0.342	0.683	1.025	1.041	1.050	0.731	0.375	0.023	0.001
Bangladesh				0.184	0.208	0.437	0.434	0.552	0.376	0.210
Bhutan	0.023	0.023								
Cambodia				0.055	0.086	0.181	0.156	0.126	0.047	0.031
India	6.407	13.404	19.863	22.908	21.696	40.664	72.079	93.822	78.664	56.337
Indonesia	0.090	0.290	0.560	0.543	0.386	0.187	0.312	0.283	0.218	0.077
Malaysia					0.031	0.113	0.163	0.144	0.094	0.070
Myanmar	0.041	0.133	0.257	0.289	0.239	0.127	0.114	0.187	0.197	0.178
Nepal				0.014	0.075	0.088	0.129	0.069	0.055	0.001
Pakistan	0.026	0.085	0.166	0.264	0.231	0.178	0.116	0.129	0.468	0.434
Philippines			0.033	0.106	0.137	0.238	0.412	0.535	0.446	0.323
Sri Lanka	0.168	0.178	0.111	0.112	0.101	0.083				
Thailand					0.031	0.113	0.163	0.144	0.081	0.033
Timor Leste			0.013	0.013	0.013					
C America + Carib	0.029	0.033	0.136	0.156	0.240	0.260	0.305	0.292	0.222	0.227
Bahamas	0.020	0.025	0.126	0.147	0.143	0.031				
Dominican Rep					0.018	0.036	0.051	0.033	0.016	
Guatemala					0.018	0.036	0.058	0.080	0.078	0.070
Haiti	0.002	0.002	0.002		0.018	0.063	0.077	0.072	0.053	0.054
Honduras			0.003	0.003	0.021	0.031	0.047	0.028	0.029	0.021
Nicaragua	0.006	0.005	0.005	0.005	0.002	0.001				
Panama					0.018	0.034	0.045	0.051	0.047	0.081
Puerto Rico						0.028	0.028	0.028		

Middle East	0.056	0.122	0.214	0.526	1.108	2.040	1.837	2.351	1.903	1.983
Iraq					0.162	0.301	0.301	0.377	0.239	0.239
Jordan	0.056	0.122	0.214	0.526	0.460	0.340				
Lebanon					0.162	0.457	0.457	0.621	0.332	0.332
United Arab Em					0.162	0.485	0.554	0.520	0.494	0.534
Yemen					0.162	0.457	0.526	0.833	0.839	0.879
Oceania	0.037	0.119	0.229	0.572	0.809	0.991	0.923	0.755	0.650	0.520
Australia					0.031	0.041	0.065	0.050	0.044	0.033
Fiji					0.031	0.149	0.193	0.171	0.075	0.062
Nauru					0.031	0.034	0.034	0.003		
Papua N Guin	0.037	0.119	0.229	0.572	0.629	0.557	0.336	0.306	0.393	0.340
Samoa					0.031	0.047	0.047	0.016	0.013	0.013
Vanuatu					0.056	0.164	0.249	0.210	0.126	0.073
S America	0.001	0.060	0.072	0.082	0.106	0.232	0.282	0.319	0.248	0.318
Argentina					0.018	0.028	0.029	0.055	0.075	0.081
Bolivia	0.000	0.056	0.059	0.062	0.032	0.059	0.078	0.066	0.036	0.045
Colombia					0.018	0.034	0.049	0.082	0.078	0.109
Peru	0.001	0.004	0.014	0.020	0.037	0.111	0.126	0.115	0.060	0.083

Solar home systems (SHS 11-50 W)
Systèmes solaires domestiques (SSD 11-50 W)
Sistemas solares domésticos (SSD 11-50 W)

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	87.109	121.193	145.587	162.478	163.337	179.277	170.354	170.311	153.153	151.329
Africa	0.539	1.884	3.472	5.971	9.353	12.835	22.427	38.482	52.035	63.575
Angola						0.002	0.002	0.042	0.042	0.081
Benin					0.004	0.014	0.143	0.288	0.473	0.680
Burkina Faso					0.004	0.014	0.148	0.294	0.479	0.649
Burundi					0.135	0.157	0.157	0.168	0.202	0.085
Cabo Verde					0.004	0.014	0.014	0.014	0.014	0.010
Cameroon						0.003	0.016	0.060	0.060	0.099
Cent Afr Rep						0.001	0.001	0.001	0.001	0.001
Chad						0.001	0.002	0.002	0.040	0.049
Comoros					0.135	0.157	0.157	0.157	0.157	0.022
Congo DR						0.003	0.004	0.048	0.085	0.460
Congo Rep						0.001	0.001	0.001	0.001	0.005
Cote d'Ivoire					0.004	0.071	0.417	0.959	1.176	1.354
Eq Guinea					0.004	0.014	0.014	0.014	0.014	0.010
Eritrea					0.135	0.157	0.157	0.157	0.157	0.022
Ethiopia			0.007	0.007	0.159	0.202	0.492	1.737	2.328	2.318
Gabon						0.001	0.001	0.010	0.010	0.014
Gambia					0.004	0.014	0.014	0.014	0.014	0.010
Ghana		0.128	0.128	0.128	0.132	0.199	0.206	0.338	0.503	0.732
Guinea					0.004	0.014	0.048	0.089	0.121	0.166
Guinea Bissau					0.004	0.014	0.014	0.014	0.014	0.058
Kenya	0.190	0.620	1.178	1.755	2.403	4.254	9.129	18.553	28.888	35.557
Liberia					0.004	0.017	0.051	0.107	0.273	0.430
Madagascar					0.135	0.184	0.287	0.411	0.411	0.390
Malawi					0.135	0.157	0.354	0.481	0.540	0.552
Mali					0.004	0.014	0.048	0.179	0.341	0.637
Mauritania					0.004	0.014	0.014	0.014	0.014	0.010
Mauritius					0.135	0.178	0.191	0.199	0.219	0.108
Mozambique					0.129	0.178	0.281	0.289	0.421	0.471
Namibia							0.002	0.002	0.002	0.009
Niger					0.004	0.017	0.036	0.091	0.091	0.087
Nigeria					0.127	0.163	0.363	0.964	1.667	3.746
Rwanda	0.032	0.103	0.196	0.292	0.472	0.561	0.779	0.849	1.053	1.200
Sao Tome Prn					0.004	0.014	0.014	0.026	0.026	0.022
Senegal					0.004	0.071	0.133	0.553	0.759	1.040
Seychelles					0.135	0.157	0.157	0.157	0.157	0.046
Sierra Leone					0.004	0.071	0.117	0.263	0.448	0.750
Somalia					0.135	0.157	0.171	0.240	0.240	0.152
South Africa							0.076	0.124	0.203	0.365
South Sudan					0.135	0.157	0.157	0.215	0.215	0.128
Tanzania	0.127	0.413	0.785	1.169	1.410	1.834	2.338	2.665	2.968	3.510
Togo					0.001	0.015	0.049	0.139	0.152	0.391
Uganda	0.190	0.620	1.178	2.620	2.894	3.145	4.123	5.253	4.478	4.393
Zambia					0.135	0.178	1.107	1.851	2.104	2.398
Zimbabwe					0.219	0.249	0.446	0.454	0.474	0.358
Asia	85.981	117.774	140.255	154.479	151.501	164.351	146.190	129.059	98.243	84.399
Afghanistan		0.064	0.128	0.289	0.372	0.509	0.446	0.382	0.221	0.137
Bangladesh	65.911	93.769	118.097	127.922	125.858	138.460	119.804	103.207	78.981	69.887
Cambodia		0.541	0.735	1.183	1.803	1.813	1.279	1.085	0.637	0.017
India	14.636	16.469	13.722	15.820	14.104	13.856	16.406	16.761	13.068	9.963
Indonesia					0.014	0.026	0.031	0.047	0.094	0.151
Malaysia					0.014	0.038	0.038	0.038	0.092	0.147
Myanmar					0.014	0.540	0.658	0.880	0.942	1.017
Nepal	5.434	6.931	7.575	9.200	9.212	8.811	6.935	5.221	2.719	1.540
Pakistan					0.019	0.177	0.301	0.967	1.019	1.000
Philippines				0.065	0.079	0.098	0.199	0.345	0.342	0.417
Thailand					0.014	0.023	0.094	0.126	0.126	0.122
C America + Carib	0.146	0.146	0.221	0.221	0.305	0.172	0.174	0.310	0.310	0.284
Dominican Rep					0.009	0.009	0.009	0.009	0.009	
Guatemala			0.005	0.005	0.014	0.019	0.019	0.120	0.120	0.112
Haiti					0.009	0.009	0.010	0.010	0.010	0.001
Honduras	0.146	0.146	0.195	0.195	0.245	0.105	0.106	0.056	0.056	0.036
Panama			0.021	0.021	0.029	0.030	0.030	0.115	0.115	0.135
Middle East							0.078	0.707	0.707	0.707
Lebanon							0.039	0.112	0.112	0.112
United Arab Em								0.069	0.069	0.069
Yemen							0.039	0.527	0.527	0.527

Oceania					0.180	0.276	0.701	0.900	1.103	1.770
Australia					0.014	0.026	0.034	0.050	0.050	0.037
Fiji					0.014	0.023	0.095	0.116	0.178	0.236
Nauru					0.014	0.023	0.023	0.023	0.023	0.010
Papua N Guin					0.075	0.102	0.192	0.278	0.357	1.038
Samoa					0.014	0.026	0.026	0.026	0.026	0.013
Vanuatu					0.051	0.076	0.331	0.405	0.468	0.437
S America	0.444	1.390	1.639	1.806	1.997	1.643	0.784	0.852	0.756	0.594
Argentina					0.009	0.009	0.037	0.143	0.143	0.134
Bolivia		0.293	0.293	0.293	0.302	0.308	0.042	0.042	0.066	0.086
Chile						0.005	0.008	0.008	0.008	0.008
Colombia					0.009	0.015	0.015	0.120	0.145	0.136
Peru	0.444	1.096	1.345	1.513	1.677	1.307	0.683	0.539	0.395	0.230

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

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	7.305	6.911	11.606	23.470	42.443	65.798	89.400	135.394	157.169	169.428
Africa	1.289	1.606	7.278	20.495	39.887	58.710	74.132	94.843	112.339	121.501
Angola						0.091	0.091	0.980	0.980	1.009
Benin					0.132	0.306	0.306	1.082	1.750	2.590
Botswana						0.012	0.012	0.012	0.012	0.012
Burkina Faso	0.039	0.068	0.124	0.181	0.362	0.564	0.670	1.072	1.419	1.916
Burundi					0.656	0.961	0.961	0.961	0.961	0.462
Cabo Verde					0.132	0.306	0.306	0.306	0.306	0.174
Cameroon								0.355	0.812	0.842
Cent Afr Rep									0.029	0.029
Chad										
Comoros					0.656	0.961	0.961	0.961	0.961	0.306
Congo DR						0.091	0.091	0.980	3.598	6.158
Congo Rep									0.457	0.457
Cote d'Ivoire					0.132	0.594	1.310	2.819	4.771	5.924
Egypt					4.889	4.889	4.889	4.889	4.889	
Eq Guinea					0.132	0.306	0.306	0.306	0.306	0.174
Eritrea					0.656	0.961	0.961	0.961	0.961	0.306
Ethiopia					0.656	0.961	1.319	1.991	2.263	2.138
Gambia					0.132	0.306	0.306	0.306	0.306	0.317
Ghana					0.132	0.308	0.524	1.360	1.859	1.960
Guinea					0.132	0.306	0.521	1.102	1.678	1.952
Guinea Bissau		0.051	0.102	0.152	0.335	0.560	0.560	0.560	0.509	0.732
Kenya				0.090	0.746	3.761	5.706	11.168	19.244	24.442
Lesotho	0.097	0.097	0.097	0.097	0.097					
Liberia					0.132	0.306	0.441	0.821	1.407	1.537
Madagascar					0.656	0.961	0.961	0.961	1.323	0.933
Malawi					0.656	0.961	1.319	1.445	1.807	1.383
Mali		0.070	0.140	0.210	0.411	0.655	0.801	1.390	1.511	1.886
Mauritania					0.132	0.306	0.306	0.306	0.306	0.174
Mauritius					0.656	1.418	1.623	1.730	1.730	1.075
Morocco	0.564	0.004		10.936	10.936	10.936	10.936	10.936		
Mozambique					0.656	0.961	0.961	1.087	1.351	0.986
Niger					0.132	0.306	0.306	0.383	0.563	0.431
Nigeria		0.466	0.931	1.397	1.994	4.726	7.816	10.688	15.107	20.447
Rwanda				0.510	1.166	2.411	3.565	7.425	9.089	9.679
Sao Tome Prn					0.132	0.306	0.306	0.306	0.306	0.174
Senegal					0.132	0.306	0.521	1.297	1.900	2.756
Seychelles					0.656	0.961	0.961	0.961	0.961	0.306
Sierra Leone					0.132	0.306	0.306	0.887	1.490	1.763
Somalia					0.656	0.961	1.166	1.166	1.490	0.972
South Africa		0.265	0.530	0.794	1.059	1.336	1.071	0.806	0.541	0.276
South Sudan					0.656	0.961	0.961	0.961	0.961	0.306
Tanzania			4.753	5.457	6.113	8.338	12.406	9.119	9.613	11.054
Togo						0.462	0.677	1.453	3.217	4.672
Tunisia	0.310	0.213	0.136	0.130	0.437	0.340	0.340	0.340	0.340	
Uganda	0.279	0.372	0.466	0.540	1.103	1.866	3.488	4.569	5.122	5.390
Zambia					0.656	0.961	1.319	1.860	2.222	1.954
Zimbabwe					0.656	1.418	1.776	1.776	1.953	1.453
Asia	4.310	3.440	2.290	1.413	0.544	1.756	9.255	33.806	37.829	41.218
Afghanistan		0.065	0.130	0.195	0.259	0.530	0.465	0.400	0.335	0.270
Bangladesh						0.338	0.842	6.532	8.667	10.573
India						0.338	3.339	7.989	8.774	8.774
Indonesia	0.267	0.267	0.015		0.000	0.000	0.000	0.000	0.007	0.478
Mongolia	1.381	1.105	0.829	0.553	0.276					
Myanmar							0.526	14.192	14.323	14.816
Nepal						0.206	2.707	2.707	2.707	2.707
Pakistan						0.338	0.842	1.169	2.083	2.174
Philippines				0.008	0.008	0.008	0.534	0.817	0.933	1.426
Sri Lanka	2.634	1.975	1.317	0.658						
Viet Nam	0.027	0.027								
C America + Carib			0.009	0.017	0.030	0.515	0.819	1.171	1.162	1.196
Cuba			0.009	0.017	0.030	0.515	0.528	0.880	0.871	0.859
Haiti										0.023
Honduras							0.291	0.291	0.291	0.314
Middle East										

Oceania	0.387	0.546	0.711	0.648	0.648	0.378	0.756	1.136	1.391	2.400
Fiji	0.387	0.546	0.711	0.648	0.648	0.378	0.186			0.493
Papua N Guin							0.044	0.327	0.451	0.946
Vanuatu							0.526	0.809	0.940	0.961
S America	1.319	1.319	1.319	0.896	1.335	4.439	4.439	4.439	4.447	3.113
Argentina	1.319	1.319	1.319	0.896						
Bolivia									0.003	0.003
Brazil					0.159	3.263	3.263	3.263	3.263	3.104
Colombia					0.873	0.873	0.873	0.873	0.876	0.003
Peru					0.303	0.303	0.303	0.303	0.306	0.003

Solar mini-grids Mini-réseaux solaires Mini-redes solares

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	30.860	40.867	49.870	129.054	302.763	321.613	346.137	352.093	470.980	472.891
Africa	3.660	7.213	8.975	71.020	243.258	259.277	277.901	282.806	294.510	296.378
Algeria	0.454	0.454	0.454	49.100	219.100	219.100	219.100	219.100	219.100	219.100
Benin				0.122	0.697	0.697	0.737	0.807	0.807	0.807
Burkina Faso	0.143	0.203	0.203	0.203	0.203	0.252	0.312	0.900	0.900	0.900
Cabo Verde	0.027	0.027	0.039	0.089	0.089	0.148	0.148	0.186	0.186	0.186
Cameroon	0.010	0.010	0.010	0.082	0.154	11.431	23.851	23.851	23.851	23.851
Chad				0.122	0.122	0.122	0.122	0.122	0.122	0.122
Congo DR							1.032	1.132	2.462	2.462
Cote d'Ivoire				0.218	0.218	0.218	0.218	0.218	0.218	0.218
Egypt				10.000	10.000	10.000	10.125	10.180	10.180	10.180
Eritrea					0.350	0.350	2.600	2.600	2.600	2.600
Ethiopia							0.018	0.018	0.343	0.343
Gabon									0.400	0.400
Gambia				0.060	0.060	0.060	0.060	0.060	0.060	0.060
Ghana				0.256	0.256	0.606	0.797	0.797	0.797	0.797
Guinea								0.077	0.077	0.077
Guinea Bissau					0.312	0.312	0.920	0.920	0.920	0.920
Kenya	0.714	0.834	0.884	1.490	1.629	1.629	1.659	2.347	2.475	2.475
Liberia						0.157	0.254	0.254	0.257	0.257
Madagascar	0.003	0.003	0.003	0.148	0.148	0.280	0.280	0.464	1.084	1.084
Malawi								0.085	1.477	1.477
Mali	1.172	3.050	3.380	4.222	4.308	5.686	5.797	5.929	5.929	5.929
Mauritania			0.135	0.135	0.153	0.153	0.153	0.153	0.153	0.153
Morocco								0.008	0.008	0.008
Mozambique		1.324	1.331	1.331	1.331	1.331	1.331	1.331	1.331	1.331
Namibia	0.202	0.202	0.494	0.494	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	0.568	0.568
Nigeria	0.083	0.216	0.425	1.208	1.463	3.005	3.259	4.131	4.834	4.834
Senegal							1.020	1.020	1.020	1.020
Seychelles									5.000	5.400
Sierra Leone		0.005	0.005	0.005	0.005	0.198	0.198	1.398	2.698	4.038
South Africa	0.001	0.001	0.001	0.001	0.001	0.033	0.033	0.033	0.033	0.033
Tanzania		0.033	0.107	0.141	0.243	0.488	0.488	0.494	0.494	0.494
Togo						0.400	0.700	0.730	0.730	0.730
Uganda	0.851	0.851	1.478	1.565	1.795	1.818	1.818	2.518	2.518	2.646
Zambia				0.001	0.001	0.113	0.113	0.185	0.185	0.185
Zimbabwe					0.099	0.099	0.099	0.099	0.199	0.199
Asia	24.935	31.109	38.345	49.857	50.732	53.361	57.866	58.781	159.898	159.908
Afghanistan	0.100	0.344	1.394	1.394	1.797	1.797	1.797	1.797	1.797	1.797
Bangladesh	0.200	0.200	0.640	1.871	2.021	3.089	5.199	5.887	6.555	6.555
India	5.030	5.340	6.420	6.940	7.080	7.460	8.000	8.010	108.010	108.010
Indonesia	16.703	22.323	25.261	34.056	34.106	35.025	36.225	36.225	36.225	36.225
Malaysia			1.525	2.412	2.412	2.412	2.412	2.412	2.412	2.412
Maldives			0.204	0.204	0.204	0.204	0.204	0.204	0.204	0.204
Myanmar				0.079	0.211	0.443	0.443	0.443	0.443	0.443
Nepal	2.902	2.902	2.902	2.902	2.902	2.932	3.088	3.304	3.504	3.514
Pakistan							0.500	0.500	0.500	0.500
Thailand									0.250	0.250
C America + Carib	0.346	0.521	0.521	0.721	0.724	0.736	1.036	1.036	1.036	1.036
Belize		0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175
El Salvador	0.044	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	0.108
Haiti	0.093	0.093	0.093	0.293	0.296	0.296	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	0.063
Nicaragua	0.039	0.039	0.039	0.039	0.039	0.039	0.339	0.339	0.339	0.339
Puerto Rico						0.012	0.012	0.012	0.012	0.012
Middle East	0.017	0.017	0.017	3.767	3.767	3.767	3.767	3.767	6.767	6.767
Palestine	0.017	0.017	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	3.750	3.750
Yemen									3.000	3.000
Oceania				0.555	0.555	0.555	0.555	0.566	0.641	0.641
Australia								0.011	0.011	0.011
Fiji				0.555	0.555	0.555	0.555	0.555	0.555	0.555
Vanuatu									0.075	0.075

S America	1.903	2.008	2.012	3.135	3.727	3.918	5.012	5.138	8.128	8.161
Argentina								0.118	0.118	0.118
Bolivia	0.119	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	0.040	0.040
Colombia		0.105	0.109	0.109	0.701	0.892	1.034	1.034	3.524	3.524
Ecuador	0.096	0.096	0.096	0.096	0.096	0.096	1.048	1.048	1.048	1.048
Paraguay	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079
Peru	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.199	0.699	0.732
Uruguay				0.052	0.052	0.052	0.052	0.052	0.052	0.052
Venezuela	1.377	1.377	1.377	2.448	2.448	2.448	2.448	2.448	2.448	2.448

Middle East	0.027	0.075	0.745	1.685	1.929	2.054	2.343	2.624	2.956	2.967
Iran IR	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Iraq	0.004	0.009	0.039	0.039	0.039	0.104	0.104	0.131	0.239	0.250
Lebanon	0.002	0.032	0.269	0.269	0.269	0.269	0.269	0.269	0.269	0.269
Oman			0.002	0.002	0.013	0.013	0.013	0.013	0.013	0.013
Syrian AR	0.008	0.018	0.018	0.018	0.024	0.024	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	0.017	0.017
Yemen			0.403	1.326	1.554	1.614	1.902	2.157	2.381	2.381
Oceania	0.010	0.011	0.012	0.016	0.043	0.048	0.075	0.094	0.153	0.191
Australia	0.010	0.011	0.011	0.015	0.016	0.021	0.048	0.066	0.126	0.163
Papua N Guin			0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tonga					0.026	0.026	0.026	0.026	0.026	0.026
Vanuatu							0.001	0.001	0.001	0.001
S America	0.693	0.787	0.818	0.881	1.031	1.364	1.534	2.229	2.716	3.499
Argentina	0.006	0.035	0.037	0.037	0.064	0.236	0.301	0.521	0.733	1.026
Bolivia		0.001	0.002	0.025	0.054	0.093	0.095	0.215	0.237	0.350
Brazil				0.009	0.011	0.029	0.044	0.065	0.065	0.077
Chile	0.035	0.037	0.042	0.052	0.075	0.081	0.100	0.148	0.152	0.285
Colombia	0.012	0.023	0.032	0.038	0.042	0.088	0.099	0.193	0.307	0.340
Ecuador	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Paraguay	0.012	0.042	0.048	0.062	0.067	0.090	0.090	0.134	0.134	0.134
Peru	0.000	0.018	0.023	0.023	0.035	0.048	0.093	0.198	0.285	0.403
Uruguay		0.001	0.005	0.007	0.053	0.070	0.084	0.126	0.173	0.254
Venezuela	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.629

S America	0.064	0.155	0.185	0.223	0.365	0.629	0.729	1.337	1.735	2.473
Argentina	0.006	0.035	0.037	0.037	0.062	0.182	0.192	0.401	0.606	0.899
Bolivia		0.001	0.002	0.007	0.033	0.061	0.062	0.152	0.174	0.271
Brazil					0.002	0.018	0.033	0.055	0.055	0.067
Chile	0.035	0.037	0.042	0.052	0.075	0.081	0.093	0.139	0.143	0.276
Colombia	0.011	0.023	0.031	0.037	0.042	0.088	0.098	0.164	0.206	0.210
Paraguay	0.012	0.042	0.048	0.062	0.067	0.090	0.090	0.134	0.134	0.134
Peru	0.000	0.015	0.020	0.021	0.032	0.042	0.083	0.188	0.275	0.393
Uruguay		0.001	0.005	0.007	0.052	0.068	0.078	0.105	0.142	0.223
Venezuela										0.001

Solar pumps (public water supply)

Pompes solaires (alimentation en eau publique)

Bombas solares (suministro público de agua)

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	3.222	3.805	4.511	6.589	7.462	8.373	8.783	9.186	13.861	15.314
Africa	1.968	2.309	2.665	3.419	4.025	4.529	4.745	4.900	8.312	8.312
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	0.015	0.015
Botswana					0.012	0.012	0.012	0.012	0.012	0.012
Burkina Faso	0.009	0.016	0.017	0.417	0.417	0.417	0.417	0.417	0.417	0.417
Burundi					0.002	0.002	0.002	0.002	0.002	0.002
Cabo Verde							0.041	0.041	0.041	0.041
Cameroon	0.002	0.006	0.006	0.006	0.006	0.008	0.008	0.008	0.008	0.008
Chad	0.003	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Congo DR					0.004	0.004	0.004	0.004	0.004	0.004
Congo Rep					0.009	0.009	0.009	0.009	0.009	0.009
Egypt					0.032	0.032	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	0.014	0.014
Ethiopia	0.031	0.031	0.031	0.048	0.068	0.095	0.126	0.126	0.126	0.126
Gambia					0.007	0.007	0.014	0.014	0.014	0.014
Guinea				0.002	0.002	0.002	0.002	0.002	0.002	0.002
Guinea Bissau	0.016	0.018	0.018	0.031	0.031	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	0.263	0.263
Libya		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Madagascar							0.000	0.005	0.005	0.005
Malawi	0.045	0.090	0.135	0.180	0.225	0.225	0.225	0.225	0.311	0.311
Mali	0.032	0.032	0.032	0.032	0.046	0.046	0.046	0.046	0.046	0.046
Mauritania	0.014	0.014	0.014	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Morocco	0.046	0.046	0.046	0.049	0.067	0.067	0.067	0.067	0.067	0.067
Mozambique				0.003	0.003	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	0.021	0.021
Nigeria	0.954	0.954	0.954	0.979	0.979	0.979	0.979	0.979	0.979	0.979
Rwanda									3.300	3.300
Senegal	0.024	0.053	0.063	0.075	0.091	0.121	0.127	0.147	0.173	0.173
Sierra Leone	0.002	0.002	0.002	0.002	0.002	0.245	0.280	0.302	0.302	0.302
Somalia	0.020	0.020	0.063	0.095	0.095	0.095	0.096	0.096	0.096	0.096
South Africa	0.315	0.375	0.438	0.438	0.439	0.439	0.439	0.439	0.439	0.439
South Sudan	0.030	0.045	0.045	0.045	0.087	0.167	0.167	0.179	0.179	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	0.519	0.519
Tunisia				0.025	0.025	0.025	0.025	0.025	0.025	0.025
Uganda	0.122	0.167	0.212	0.257	0.512	0.529	0.570	0.629	0.629	0.629
Zimbabwe	0.002	0.002	0.002	0.002	0.014	0.022	0.022	0.022	0.022	0.022
Asia	0.545	0.703	0.844	2.055	2.190	2.494	2.604	2.679	3.729	4.997
Afghanistan	0.004	0.011	0.011	0.011	0.027	0.052	0.053	0.053	0.053	0.053
Bangladesh	0.058	0.063	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Cambodia	0.007	0.007	0.007	0.007	0.009	0.009	0.009	0.009	0.009	0.009
India				0.980	0.980	0.980	0.981	0.981	0.981	0.981
Indonesia	0.046	0.098	0.125	0.152	0.224	0.381	0.458	0.513	0.513	0.513
Korea DPR					0.004	0.004	0.004	0.004	0.004	0.004
Lao PDR	0.002	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	0.014	0.014	0.014	0.014	0.014
Myanmar	0.028	0.030	0.036	0.036	0.066	0.072	0.073	0.076	0.076	0.076
Nepal	0.227	0.302	0.377	0.461	0.461	0.519	0.519	1.569	1.569	2.837
Pakistan	0.170	0.170	0.170	0.170	0.173	0.173	0.173	0.173	0.173	0.173
Philippines				0.120	0.120	0.160	0.189	0.204	0.204	0.204
Thailand					0.007	0.016	0.018	0.018	0.018	0.018
Timor Leste		0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
C America + Carib	0.061	0.127	0.189	0.275	0.348	0.381	0.394	0.454	0.464	0.594
Costa Rica						0.007	0.007	0.008	0.009	0.012
Dominican Rep	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.027	0.027	0.027
El Salvador				0.021	0.021	0.045	0.045	0.045	0.049	0.051
Guadeloupe							0.002	0.002	0.002	0.002
Guatemala			0.001	0.001	0.013	0.013	0.016	0.043	0.043	0.153
Haiti	0.021	0.042	0.063	0.084	0.105	0.105	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	0.195	0.195
Jamaica		0.006	0.006	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Nicaragua						0.001	0.010	0.016	0.021	0.036
St Kitts Nevis			0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Middle East	0.018	0.034	0.181	0.181	0.208	0.208	0.208	0.235	0.343	0.354
Iran IR	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Iraq	0.004	0.009	0.039	0.039	0.039	0.039	0.039	0.066	0.174	0.185
Lebanon			0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091
Syrian AR		0.011	0.011	0.011	0.016	0.016	0.016	0.016	0.016	0.016
Yemen			0.026	0.026	0.048	0.048	0.048	0.048	0.048	0.048

Oceania					0.026	0.026	0.026	0.026	0.031	0.031
Australia									0.005	0.005
Tonga					0.026	0.026	0.026	0.026	0.026	0.026
S America	0.630	0.632	0.632	0.659	0.666	0.735	0.805	0.892	0.981	1.026
Argentina					0.002	0.054	0.109	0.120	0.127	0.127
Bolivia			0.000	0.018	0.021	0.032	0.032	0.063	0.063	0.079
Brazil				0.009	0.010	0.010	0.010	0.010	0.010	0.010
Chile						0.000	0.007	0.009	0.009	0.009
Colombia	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.029	0.101	0.130
Ecuador	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Peru		0.003	0.003	0.003	0.003	0.006	0.010	0.010	0.010	0.010
Uruguay					0.001	0.002	0.006	0.021	0.031	0.031
Venezuela	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628	0.628

Middle East	1.374	2.403	43.143	97.868	118.085	138.106	288.406	324.488	325.088	335.088
Iran IR										10.000
Iraq			37.600	37.600	37.600	37.600	37.900	37.900	37.900	37.900
Kuwait								8.200	8.200	8.200
Lebanon	0.002	0.029	0.122	0.129	0.238	0.258	0.258	0.258	0.258	0.258
Palestine	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.255	0.255	0.255
Saudi Arabia			0.014	0.014	0.014	0.014	0.014	0.154	0.154	0.154
Syrian AR				0.000	0.000	0.001	0.001	0.001	0.001	0.001
United Arab Em				0.120	0.228	0.228	0.228	27.720	28.320	28.320
Yemen	1.367	2.369	5.403	60.000	80.000	100.000	250.000	250.000	250.000	250.000
Oceania	0.063	0.131	0.164	1.241	2.270	2.311	4.146	4.372	4.755	4.962
Australia								0.199	0.549	0.729
Christmas Is							0.012	0.012	0.012	0.012
Cook Is	0.046	0.056	0.056	0.056	0.056	0.056	1.879	1.879	1.879	1.879
Fiji	0.014	0.024	0.028	0.728	1.728	1.769	1.769	1.796	1.796	1.824
Kiribati		0.010	0.010	0.017	0.017	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	0.010	0.010
Papua N Guin	0.003	0.011	0.040	0.305	0.334	0.334	0.334	0.334	0.344	0.344
Solomon Is		0.010	0.010	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	0.138	0.138
S America	2.511	3.147	4.674	8.507	9.185	9.334	10.758	10.764	10.844	10.928
Argentina	1.311	1.311	1.311	1.928	2.534	2.534	2.534	2.534	2.534	2.534
Bolivia	0.004	0.009	0.009	0.009	0.009	0.009	0.009	0.015	0.015	0.015
Brazil	0.680	0.680	0.680	3.880	3.880	3.880	3.880	3.880	3.880	3.880
Chile						0.133	0.136	0.136	0.216	0.216
Colombia				0.013	0.013	0.013	0.281	0.281	0.281	0.281
Ecuador	0.107	0.434	1.955	1.955	2.024	2.024	3.177	3.177	3.177	3.200
Paraguay						0.003	0.003	0.003	0.003	0.003
Peru	0.410	0.712	0.719	0.722	0.725	0.738	0.738	0.739	0.739	0.799
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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	18.445	23.446	26.921	30.788	39.995	40.207	40.807	40.807	40.807	40.807
Africa	0.141	1.456	1.476	1.476	1.476	1.476	1.476	1.476	1.476	1.476
Gabon		1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200	1.200
Ghana	0.120	0.135	0.135	0.135	0.135	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	0.010	0.010	0.010	0.010
Nigeria			0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Senegal		0.100	0.100	0.100	0.100	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	0.017	0.017	0.017
Asia	13.961	16.687	19.782	20.599	22.360	22.572	23.172	23.172	23.172	23.172
Bangladesh	4.120	4.250	4.650	4.650	4.650	4.650	4.950	4.950	4.950	4.950
Cambodia		1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
India	3.035	4.131	4.826	5.626	6.712	6.924	7.224	7.224	7.224	7.224
Myanmar	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400
Pakistan	0.406	0.406	0.406	0.424	1.099	1.099	1.099	1.099	1.099	1.099
Philippines	5.000	5.000	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	2.000	2.000	2.000	2.000
C America + Carib	3.457	4.417	4.677	4.677	6.723	6.723	6.723	6.723	6.723	6.723
Costa Rica	2.216	2.683	2.683	2.683	2.683	2.683	2.683	2.683	2.683	2.683
Dominican Rep	1.227	1.720	1.970	1.970	1.970	1.970	1.970	1.970	1.970	1.970
Honduras	0.014	0.014	0.014	0.014	0.158	0.158	0.158	0.158	0.158	0.158
Nicaragua			0.010	0.010	1.912	1.912	1.912	1.912	1.912	1.912
S America	0.886	0.886	0.986	4.036	9.436	9.436	9.436	9.436	9.436	9.436
Argentina			0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Bolivia				2.000	2.000	2.000	2.000	2.000	2.000	2.000
Colombia				1.050	1.050	1.050	1.050	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	0.016
Uruguay	0.800	0.800	0.800	0.800	6.200	6.200	6.200	6.200	6.200	6.200

Other solid biofuels (electricity)
Autres biocarburants solides (électricité)
Otros biocombustibles sólidos (electricidad)

MW	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	3499.330	3488.754	4116.406	4342.436	4458.231	3777.233	3960.892	3782.630	3834.955	3846.710
Africa	82.289	86.316	102.730	110.711	116.940	118.894	118.896	123.696	123.696	123.696
Burkina Faso		0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150
Burundi	5.691	6.868	5.822	5.803	6.632	6.586	5.788	5.788	5.788	5.788
Congo DR	0.160	0.160	0.160	0.160	0.160	0.160	2.960	2.960	2.960	2.960
Ethiopia	9.000	9.000	9.000	17.000	17.000	17.000	17.000	17.000	17.000	17.000
Ghana	6.774	6.774	8.274	8.274	8.274	8.274	8.274	8.274	8.274	8.274
Madagascar	0.164	0.164	0.164	0.164	0.164	0.164	0.164	0.164	0.164	0.164
Mali	32.000	32.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000	40.000
Nigeria	6.000	8.700	12.900	12.900	18.300	18.300	18.300	23.100	23.100	23.100
Tanzania	22.500	22.500	26.260	26.260	26.260	26.260	26.260	26.260	26.260	26.260
Asia	3201.142	3207.996	3780.515	3992.422	4097.358	3409.272	3555.307	3357.827	3399.152	3410.907
Bangladesh				0.400	0.400	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	2.000
India	642.140	695.240	874.540	927.750	1002.140	1023.020	1068.365	1050.835	1163.660	1191.915
Indonesia	1884.000	1606.000	1617.000	1617.000	1617.000	1617.000	1617.000	1617.000	1617.000	1617.000
Malaysia	504.860	732.530	1100.000	1237.800	1243.000	531.640	531.640	531.640	531.640	531.640
Myanmar	43.142	47.226	50.975	46.472	47.818	50.212	54.902	56.952	56.952	56.952
Viet Nam	125.000	125.000	136.000	161.000	185.000	185.000	281.000	99.000	27.500	11.000
C America + Carib	42.537	45.474	45.463	41.675	39.245	44.339	44.461	44.461	44.461	44.461
Costa Rica						4.500	4.500	4.500	4.500	4.500
Dominican Rep	15.037	15.174	15.163	15.175	15.245	15.339	15.461	15.461	15.461	15.461
Panama	27.500	30.300	30.300	26.500	24.000	24.500	24.500	24.500	24.500	24.500
Oceania	15.058	15.064	15.064	15.064	15.064	15.064	15.064	15.064	15.064	15.064
Fiji	0.018	0.024	0.024	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	158.304	133.904	172.634	182.564	189.624	189.664	227.164	241.582	252.582	252.582
Argentina								6.318	6.318	6.318
Bolivia	60.170	60.170	90.500	99.000	99.000	99.000	117.500	122.500	133.500	133.500
Colombia	0.059	0.059	0.059	0.059	0.059	0.099	0.099	0.099	0.099	0.099
Fr Guiana								3.100	3.100	3.100
Guyana	43.275	43.275	43.275	43.305	33.765	33.765	34.365	34.365	34.365	34.365
Peru	54.800	30.400	38.800	38.700	55.300	55.300	73.700	73.700	73.700	73.700
Suriname				1.500	1.500	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	16 816 643	16 818 656	16 482 929	15 791 875	15 808 177	15 748 093	15 677 520	15 593 902	15 485 345	15 375 668
Africa	17 128	25 396	35 735	41 645	47 463	51 090	56 167	54 997	60 004	63 597
Benin	20	26	39	36	34	33	38	33	31	42
Botswana	2	2	2	2	2	2	2	2	2	2
Burkina Faso	737	1 469	1 999	2 482	3 041	3 528	3 781	3 604	3 644	3 612
Burundi					2	2	2	2	2	2
Cameroon	68	85	126	143	139	132	127	113	102	99
Congo DR										2
Ethiopia	2 904	4 720	6 176	7 419	8 748	10 020	12 598	12 363	15 281	17 001
Gabon				610	610	610	610	610	610	610
Ghana	292	298	4 299	4 313	4 515	4 515	4 515	4 515	4 514	4 514
Kenya	4 050	7 057	8 755	9 842	10 453	10 715	11 736	11 530	13 947	16 622
Mali		6	76	113	161	161	160	149	144	144
Mozambique					15	15	15	15	15	15
Nigeria	353	353	298	298	325	325	325	215	215	215
Rwanda	4 599	5 108	6 598	7 216	8 478	8 397	8 293	8 083	7 937	7 610
Senegal	394	612	900	1 600	2 139	3 222	3 188	3 142	3 085	2 920
South Africa				73	73	73	73	73	73	73
Tanzania	1 692	2 425	2 874	3 067	3 508	3 478	3 362	3 271	3 100	2 854
Uganda	1 787	3 004	3 305	3 670	3 885	4 094	4 364	4 308	4 345	4 359
Zambia			35	70	373	617	1 825	1 820	1 814	1 766
Zimbabwe	232	232	253	691	960	1 151	1 151	1 148	1 142	1 136
Asia	16 788 454	16 774 989	16 422 878	15 538 196	15 541 482	15 476 423	15 390 249	15 307 792	15 194 130	15 080 919
Afghanistan					25	25	25	25	25	21
Bangladesh	57 991	63 591	68 881	66 889	64 820	65 119	64 348	64 915	66 689	64 171
Bhutan	168	455	774	1 376	1 944	2 726	2 847	2 797	5 435	8 494
Cambodia	11 023	11 526	12 427	16 302	16 680	16 641	16 706	16 849	17 037	17 116
China	14 349 844	14 304 143	13 962 937	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930
India	1 996 494	1 979 659	1 918 719	1 837 628	1 819 907	1 758 722	1 665 392	1 597 522	1 492 778	1 386 674
Indonesia	6 951	9 863	12 342	13 697	16 367	17 901	18 711	19 179	18 541	17 428
Lao PDR	4 045	4 021	3 937	3 809	3 639	3 390	3 342	3 175	2 919	2 578
Myanmar	1 073	1 073	1 069	1 069	1 069	1 049	1 049	1 041	1 041	1 041
Nepal	109 903	113 034	123 847	132 791	134 618	137 205	144 450	140 586	133 906	130 295
Pakistan	3 367	4 577	6 320	6 501	6 695	6 606	6 415	6 120	5 937	5 652
Philippines	8 761	8 761	8 761	8 761	8 761	8 761	8 761	8 761	8 761	8 761
Sri Lanka	4 272	4 247	4 222	4 103	3 854	3 569	3 259	2 974	2 681	2 457
Thailand				490	490	768	768	768	768	768
Viet Nam	234 564	270 039	298 641	340 848	358 682	350 011	350 245	339 151	333 682	331 533
C America + Carib	7 736	14 950	17 417	17 673	20 746	21 623	21 370	21 366	21 336	21 314
Costa Rica	505	7 468	7 468	7 774	9 965	9 965	9 965	9 965	9 965	9 965
Cuba	6 536	6 649	8 795	8 021	7 919	8 563	8 299	8 299	8 299	8 299
Dominican Rep	693	830	1 075	1 507	1 726	1 726	1 726	1 726	1 726	1 726
El Salvador					120	120	120	120	120	120
Grenada					2	21	23	23	23	23
Guatemala							8	8	8	8
Honduras			17	17	17	17	17	17	17	17
Jamaica	2	2	2	2	2	2	2	5	5	5
Nicaragua		1	61	352	738	951	951	945	914	892
Panama				0	250	250	250	250	250	250
St Lucia					8	8	8	8	8	8
St Vincent Gren							1	1	1	1
Middle East	0	0	1	1	1	1	1	1	1	1
Iraq	0	0	1	1	1	1	1	1	1	1
Oceania								37	38	42
Amer Samoa										3
Fiji								0	1	3
Tuvalu								29	29	29
Vanuatu								7	7	7

S America	3 324	3 320	6 898	194 360	198 485	198 956	209 734	209 709	209 836	209 794
Argentina	5	5	5	5	4 002	4 002	4 007	4 007	4 007	4 007
Bolivia	195	191	187	196	192	371	346	321	296	271
Brazil			1	187 435	187 437	187 437	187 437	187 437	187 437	187 437
Colombia				7	25	317	317	317	316	316
Ecuador	146	146	146	151	264	264	322	322	321	303
Peru	1 478	1 478	1 478	1 486	1 486	1 486	1 486	1 486	1 641	1 641
Uruguay			3 580	3 580	3 580	3 580	14 320	14 320	14 320	14 320
Venezuela	1 500	1 500	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	16 791 566	16 784 760	16 439 631	15 553 674	15 560 926	15 499 239	15 416 544	15 332 890	15 224 110	15 114 429
Africa	15 230	23 483	29 162	33 130	38 248	41 693	46 769	45 600	50 607	54 200
Benin	20	26	39	36	34	33	38	33	31	42
Botswana									1	1
Burkina Faso	737	1 469	1 999	2 482	3 041	3 528	3 781	3 604	3 644	3 612
Cameroon	68	85	126	143	139	132	127	113	102	99
Congo DR										2
Ethiopia	2 904	4 720	6 176	7 419	8 748	10 020	12 598	12 363	15 281	17 001
Ghana				1	2	2	2	2	2	2
Kenya	3 911	6 918	8 386	9 473	10 084	10 346	11 367	11 161	13 578	16 253
Mali		6	76	113	113	113	112	101	95	95
Nigeria	347	347	292	292	294	294	294	185	185	185
Rwanda	3 139	3 648	4 715	4 853	5 940	5 859	5 755	5 544	5 399	5 072
Senegal	394	612	900	1 235	1 774	2 857	2 823	2 777	2 720	2 555
Tanzania	1 692	2 424	2 870	3 063	3 497	3 467	3 351	3 260	3 088	2 843
Uganda	1 787	2 995	3 296	3 661	3 876	4 084	4 355	4 299	4 336	4 350
Zambia			35	70	373	617	1 825	1 820	1 814	1 766
Zimbabwe	232	232	253	288	332	340	340	337	331	324
Asia	16 775 461	16 760 292	16 407 282	15 517 817	15 519 734	15 453 754	15 366 265	15 283 783	15 170 055	15 056 845
Afghanistan					25	25	25	25	25	21
Bangladesh	57 407	62 864	68 005	65 985	63 831	64 131	63 360	63 927	65 635	63 117
Bhutan	168	455	774	1 376	1 944	2 726	2 847	2 797	5 435	8 494
Cambodia	11 023	11 526	12 427	13 382	13 760	13 721	13 786	13 929	14 117	14 196
China	14 349 844	14 304 143	13 962 937	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930	13 103 930
India	1 995 081	1 976 685	1 914 996	1 832 583	1 814 065	1 752 020	1 657 376	1 589 506	1 484 762	1 378 659
Indonesia	6 951	9 863	12 341	13 696	16 366	17 899	18 710	19 177	18 540	17 426
Lao PDR	4 045	4 021	3 937	3 809	3 639	3 390	3 342	3 175	2 919	2 578
Myanmar	152	152	148	148	148	128	128	120	120	120
Nepal	109 903	113 034	123 847	132 791	134 618	137 205	144 450	140 586	133 906	130 295
Pakistan	2 053	3 263	5 006	5 187	5 381	5 256	5 064	4 770	4 587	4 302
Sri Lanka	4 272	4 247	4 222	4 080	3 770	3 459	3 148	2 838	2 546	2 321
Thailand						277	277	277	277	277
Viet Nam	234 564	270 039	298 641	340 848	358 257	349 586	349 820	338 726	333 257	331 108
C America + Carib	696	810	3 014	2 527	2 634	3 487	3 223	3 216	3 186	3 164
Cuba	696	809	2 955	2 181	2 079	2 723	2 459	2 459	2 459	2 459
Nicaragua		1	59	346	555	764	763	757	727	705
Oceania								29	29	29
Tuvalu								29	29	29
S America	180	176	172	200	310	306	287	262	233	191
Argentina					0	0	5	5	5	5
Bolivia	180	176	172	180	177	173	148	124	98	73
Colombia				7	7	7	7	7	6	6
Ecuador				5	118	118	118	118	118	100
Peru				7	7	7	7	7	6	6

Production of biogas for off-grid electricity
Production de biogaz pour l'électricité hors réseau
Producción de biogás para electricidad aislada

1,000 m ³	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	21 768	27 107	28 787	30 133	35 206	35 206	35 272	35 272	35 272	35 272
Africa	311	730	767	767	767	767	767	767	767	767
Gabon		305	305	305	305	305	305	305	305	305
Ghana	64	69	69	69	69	69	69	69	69	69
Kenya	243	243	243	243	243	243	243	243	243	243
Mozambique			15	15	15	15	15	15	15	15
Nigeria			22	22	22	22	22	22	22	22
Senegal		110	110	110	110	110	110	110	110	110
Uganda	5	5	5	5	5	5	5	5	5	5
Asia	15 484	19 753	21 061	21 933	23 247	23 247	23 313	23 313	23 313	23 313
Bangladesh	876	903	988	988	988	988	1 054	1 054	1 054	1 054
Cambodia		2 920	2 920	2 920	2 920	2 920	2 920	2 920	2 920	2 920
India	3 723	5 045	5 843	6 701	8 015	8 015	8 015	8 015	8 015	8 015
Myanmar	921	921	921	921	921	921	921	921	921	921
Pakistan	1 205	1 205	1 205	1 217	1 217	1 217	1 217	1 217	1 217	1 217
Philippines	8 760	8 760	8 760	8 760	8 760	8 760	8 760	8 760	8 760	8 760
Viet Nam			425	425	425	425	425	425	425	425
C America + Carib	4 556	5 206	5 432	5 432	5 432	5 432	5 432	5 432	5 432	5 432
Costa Rica	3 464	3 770	3 770	3 770	3 770	3 770	3 770	3 770	3 770	3 770
Dominican Rep	1 075	1 419	1 638	1 638	1 638	1 638	1 638	1 638	1 638	1 638
Honduras	17	17	17	17	17	17	17	17	17	17
Nicaragua			8	8	8	8	8	8	8	8
S America	1 417	1 417	1 527	2 001	5 760	5 760	5 760	5 760	5 760	5 760
Argentina			110	110	110	110	110	110	110	110
Bolivia				183	183	183	183	183	183	183
Colombia				292	292	292	292	292	292	292
Ecuador	146	146	146	146	146	146	146	146	146	146
Peru	18	18	18	18	18	18	18	18	18	18
Uruguay	1 253	1 253	1 253	1 253	5 012	5 012	5 012	5 012	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	20 758	21 031	21 031	35 050	35 050	35 050	35 050	35 050	35 050	35 050
Africa	4 684	4 795	4 795	4 795	4 795	4 795	4 795	4 795	4 795	4 795
Burundi		1	1	1	1	1	1	1	1	1
Gabon	305	305	305	305	305	305	305	305	305	305
Ghana	4 119	4 228	4 228	4 228	4 228	4 228	4 228	4 228	4 228	4 228
Senegal	256	256	256	256	256	256	256	256	256	256
Uganda	5	5	5	5	5	5	5	5	5	5
C America + Carib	9 921	10 081	10 081	10 081	10 081	10 081	10 081	10 081	10 081	10 081
Costa Rica	3 993	3 993	3 993	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
Dominican Rep	88	88	88	88	88	88	88	88	88	88
Nicaragua		160	160	160	160	160	160	160	160	160
S America	3 827	3 829	3 829	10 867	10 867	10 867	10 867	10 867	10 867	10 867
Brazil		2	2	2	2	2	2	2	2	2
Ecuador				57	57	57	57	57	57	57
Uruguay	2 327	2 327	2 327	9 308	9 308	9 308	9 308	9 308	9 308	9 308
Venezuela	1 500	1 500	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1 612	1 617	2 048	3 414	6 383	6 750	6 751	6 760	6 760	6 784
Africa	1 589	1 594	2 023	2 982	3 530	3 713	3 713	3 713	3 713	3 715
Botswana	2	2	2	2	2	2	2	2	2	2
Burundi					1	1	1	1	1	1
Ghana	110	115	116	120	211	211	211	211	211	211
Kenya	11	11	11	11	11	11	11	11	11	11
Mali					49	49	49	49	49	49
Nigeria	6	6	6	6	6	6	6	6	6	6
Rwanda	1 460	1 460	1 884	2 363	2 538	2 538	2 538	2 538	2 538	2 538
South Africa				73	73	73	73	73	73	73
Tanzania	0	0	4	4	11	11	11	11	11	11
Togo										2
Zimbabwe				403	628	811	811	811	811	811
Asia	1	1	1	31	92	117	118	144	144	144
Philippines	1	1	1	1	1	1	1	1	1	1
Sri Lanka				23	84	110	111	136	136	136
Thailand				7	7	7	7	7	7	7
C America + Carib	2	2	2	7	2 201	2 202	2 203	2 205	2 205	2 205
Costa Rica					2 191	2 191	2 191	2 191	2 191	2 191
Grenada					2	2	2	2	2	2
Jamaica	2	2	2	2	2	2	2	5	5	5
Nicaragua				5	6	7	7	7	7	7
St Vincent Gren							1	1	1	1
Middle East	0	0	1	1	1	1	1	1	1	1
Iraq	0	0	1	1	1	1	1	1	1	1
Oceania								7	7	11
Vanuatu								7	7	11
S America	20	20	21	21	21	21	21	21	21	40
Argentina	5	5	5	5	5	5	5	5	5	23
Bolivia	15	15	15	15	15	15	15	15	15	15
Brazil			1	1	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	1 580	1 698	189 620	193 914	193 960	193 970	193 971	194 128	194 132	194 136
Africa		115	120	122	122	122	122	122	122	122
Ghana			4	4	4	4	4	4	4	4
Kenya		115	115	115	115	115	115	115	115	115
Nigeria				2	2	2	2	2	2	2
Asia	110	111	595	595	618	618	618	618	618	618
Indonesia		1	1	1	1	1	1	1	1	1
Pakistan	110	110	110	110	133	133	133	133	133	133
Thailand			484	484	484	484	484	484	484	484
C America + Carib	11	12	12	398	421	431	431	431	431	431
Costa Rica	11	11	11	11	11	11	11	11	11	11
Cuba										
El Salvador				120	120	120	120	120	120	120
Grenada					20	21	21	21	21	21
Guatemala						8	8	8	8	8
Nicaragua		1	1	9	13	13	13	13	13	13
Panama			0	250	250	250	250	250	250	250
St Lucia				8	8	8	8	8	8	8
Oceania							0	1	5	9
Amer Samoa									3	3
Fiji							0	1	3	7
S America	1 460	1 460	188 894	192 798	192 798	192 798	192 798	192 955	192 955	192 955
Argentina				3 887	3 887	3 887	3 887	3 887	3 887	3 887
Brazil			187 434	187 434	187 434	187 434	187 434	187 434	187 434	187 434
Colombia				18	18	18	18	18	18	18
Peru	1 460	1 460	1 460	1 460	1 460	1 460	1 460	1 616	1 616	1 616

Off-grid energy access

Accès à l'énergie hors réseau

Acceso a la energía aislada

Number of people connected to hydropower Nombre de personnes connectées à l'hydroélectricité Número de personas conectadas a la hidroelectricidad

Thousands	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	5 656	5 945	6 392	6 700	6 972	7 014	7 095	7 125	7 196	7 196
Africa	342	343	462	478	617	618	634	634	643	643
Ethiopia	12	12	12	16	16	16	16	16	16	16
Guinea	28	28	28	28	28	28	28	28	28	28
Kenya	97	97	97	97	98	98	98	98	98	98
Lesotho	1	1	1	1	1	1	1	1	1	1
Liberia	62	63	63	63	63	63	63	63	63	63
Madagascar		1	1	1	1	1	3	3	3	3
Malawi	35	35	35	39	39	40	40	40	42	42
Mali	2	2	2	2	2	2	2	2	2	2
Mozambique	1	1	11	11	11	11	11	11	11	11
Nigeria			27	27	27	27	27	27	27	27
Rwanda	30	30	30	31	31	31	32	32	32	32
Sierra Leone	4	4	4	4	142	142	142	142	142	142
South Africa	0	0	0	0	0	0	0	0	8	8
Tanzania	37	37	119	125	125	125	126	126	126	126
Uganda	4	4	4	4	4	4	4	4	4	4
Zambia	28	28	28	28	28	28	40	40	40	40
Zimbabwe	2	2	2	2	2	2	2	2	2	2
Asia	5 254	5 537	5 844	6 136	6 268	6 308	6 372	6 401	6 449	6 449
Afghanistan	676	774	871	969	1 066	1 066	1 066	1 066	1 066	1 066
Bhutan	9	9	9	9	9	9	9	9	9	9
India	1 569	1 627	1 661	1 690	1 690	1 690	1 690	1 690	1 690	1 690
Indonesia	180	204	220	227	227	230	230	230	230	230
Malaysia	1	2	2	3	3	4	4	4	4	4
Myanmar	41	46	101	101	101	101	101	101	101	101
Nepal	1 125	1 212	1 310	1 360	1 394	1 427	1 466	1 496	1 542	1 542
Pakistan	948	955	955	1 056	1 057	1 060	1 085	1 085	1 085	1 085
Philippines	192	192	192	192	192	193	193	193	193	193
Sri Lanka	28	31	35	40	40	40	40	40	40	40
Tajikistan	81	81	84	85	85	85	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	53	57	76	78	78	78	79	79	94	94
Cuba			17	17	17	17	17	17	17	17
Dominican Rep	6	9	11	13	13	13	14	14	14	14
El Salvador	1	1	1	1	1	1	1	1	1	1
Guatemala	6	6	6	6	6	6	6	6	6	6
Haiti	34	34	34	34	34	34	34	34	34	34
Honduras	2	2	2	2	2	2	2	2	2	2
Nicaragua	4	4	4	4	4	4	4	4	19	19
Oceania	6	6	7	7	7	7	7	7	7	7
Fiji	3	3	5	5	5	5	5	5	5	5
Solomon Is	3	3	3	3	3	3	3	3	3	3
S America	2	2	2	2	2	2	3	3	3	3
Argentina	2	2	2	2	2	2	2	2	2	2
Colombia					1	1	1	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	15 668	40 074	64 416	88 916	94 419	122 499	146 841	173 940	152 577	137 983
Africa	6 465	19 784	33 229	46 758	47 464	47 171	41 961	45 702	46 727	52 629
Angola					18	23	34	43	53	70
Benin				143	203	289	211	365	476	586
Botswana					1	2	3	2	1	22
Burkina Faso	89	288	508	990	982	1 609	1 298	1 340	790	898
Burundi		26	58	74	86	188	203	274	428	630
Cabo Verde					65	77	84	21	8	1
Cameroon					21	120	614	1 303	1 710	2 439
Cent Afr Rep					18	33	46	47	32	49
Chad					20	34	189	171	203	121
Comoros					37	67	67	31		
Congo DR	139	454	801	1 004	713	1 625	1 449	1 598	464	525
Congo Rep					16	56	69	75	72	140
Cote d'Ivoire				144	250	293	195	182	271	299
Eq Guinea					121	145	145	24		
Eritrea					32	59	59	34	7	25
Eswatini					2	2	2	14	14	14
Ethiopia	1 375	4 471	7 891	10 810	9 705	7 440	5 445	7 244	8 011	7 808
Gabon					18	39	55	83	88	82
Gambia					137	172	229	140	112	55
Ghana		29	32	98	249	447	460	361	265	218
Guinea					113	140	160	77	123	127
Guinea Bissau					113	135	160	59	37	61
Kenya	1 720	5 594	9 864	13 487	13 631	11 791	10 766	12 439	14 692	16 003
Lesotho					1	2	2	9	34	34
Liberia				55	148	169	141	66	144	191
Madagascar					33	190	428	563	645	760
Malawi	109	195	300	606	972	1 401	1 288	1 028	900	1 264
Mali					277	471	791	578	411	370
Mauritania					129	167	176	86	48	40
Mauritius	60	87	74	93	91	1 177	1 131	2 006	1 547	1 547
Mozambique		19	62	62	82	120	120	152	319	759
Namibia					9	34	63	75	94	143
Niger			39	39	134	128	164	117	186	182
Nigeria	117	382	674	1 450	2 060	2 280	2 313	2 345	2 652	3 516
Rwanda	245	796	1 403	1 619	1 736	1 840	1 782	1 286	881	1 272
Sao Tome Prn					65	77	77	21	9	9
Senegal		190	380	744	901	1 356	1 323	1 199	703	524
Seychelles					26	47	47	21		
Sierra Leone				100	303	441	398	270	297	336
Somalia					35	184	1 220	1 420	1 577	2 058
South Africa				200	202	330	252	283	203	188
South Sudan					39	152	218	291	263	512
Sudan			1	1	1					
Tanzania	1 357	4 413	7 783	10 249	8 315	5 025	1 953	1 748	2 170	2 893
Togo					74	92	122	118		232
Uganda	131	426	743	1 405	2 600	4 022	4 521	4 412	3 669	3 271
Zambia				693	938	1 097	708	1 086	1 256	1 914
Zimbabwe	1 123	2 415	2 616	2 417	1 547	1 263	946	596	676	442
Asia	9 031	19 841	30 366	40 270	42 977	68 387	98 250	121 020	99 852	78 990
Afghanistan		221	443	664	686	701	516	274	38	2
Bangladesh				329	360	813	1 158	1 620	1 273	641
Cambodia				46	89	167	159	119	56	48
India	8 624	18 723	28 353	37 413	40 025	65 024	94 467	117 091	96 491	76 669
Indonesia	104	338	655	665	487	208	239	199	174	112
Malaysia					38	100	151	142	113	94
Myanmar	54	175	338	421	348	197	127	192	204	208
Nepal				59	207	243	288	141	105	1
Pakistan	54	176	340	403	412	446	512	501	860	774
Philippines			80	111	152	314	516	634	452	392
Sri Lanka	196	209	129	131	118	98				
Thailand					29	76	115	107	86	48
Timor Leste			28	28	28					
C America + Carib	8	7	9	6	113	324	438	461	315	324
Dominica						1	1	1		
Dominican Rep					18	53	77	58	24	
Guatemala					31	89	148	188	150	116
Haiti	3	3	3		18	63	77	81	47	46
Honduras			2	2	25	44	54	31	37	43
Nicaragua	5	4	4	4	2	1				
Panama					20	44	50	72	57	119
Puerto Rico						31	31	31		

Middle East	104	226	398	977	2 588	5 028	4 517	5 103	4 039	4 494
Iraq					563	1 042	1 042	1 307	828	828
Jordan	104	226	398	977	855	633				
Lebanon					307	863	863	1 055	509	509
United Arab Em					373	1 114	1 177	952	891	1 077
Yemen					490	1 376	1 435	1 789	1 811	2 079
Oceania	58	187	363	836	1 137	1 317	1 324	1 223	1 277	1 067
Australia					23	48	59	52	35	30
Fiji					42	163	272	248	158	113
Nauru					54	72	72	18		
Papua N Guin	58	187	363	836	895	791	568	639	875	760
Samoa					61	93	93	31	11	11
Vanuatu					61	150	260	236	198	153
S America	2	28	51	69	139	271	351	431	367	480
Argentina					17	46	47	97	101	112
Bolivia	1	21	27	33	47	70	96	86	56	81
Colombia					20	45	70	119	114	159
Peru	1	8	25	37	55	110	137	128	96	128

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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	11 508	15 573	18 741	21 201	21 507	20 675	20 664	21 183	19 577	20 291
Africa	165	571	1 055	1 825	2 477	3 120	4 725	7 291	9 278	11 584
Angola						0	0	7	7	13
Benin					1	2	24	51	83	125
Burkina Faso					1	3	31	62	101	135
Burundi					26	31	31	35	41	17
Cabo Verde					1	2	2	2	2	1
Cameroon						1	6	14	14	21
Chad						0	1	1	14	17
Comoros					25	30	30	30	30	5
Congo DR						1	1	9	23	150
Cote d'Ivoire					1	13	76	172	214	258
Eq Guinea					1	4	4	4	4	2
Eritrea					22	26	26	26	26	4
Ethiopia			1	1	25	32	114	495	674	693
Gabon						0	0	3	3	5
Gambia					1	4	4	4	4	3
Ghana		35	35	35	36	45	29	47	69	106
Guinea					1	3	12	20	35	57
Guinea Bissau					1	3	3	3	3	25
Kenya	53	173	330	491	633	944	1 595	2 844	4 290	5 280
Liberia					1	4	10	21	47	83
Madagascar					22	32	54	72	72	82
Malawi					21	25	73	91	109	128
Mali					1	3	9	33	64	118
Mauritania					1	4	4	4	4	3
Mauritius					11	14	15	16	19	11
Mozambique					20	29	50	52	85	115
Niger					1	5	12	24	24	23
Nigeria					36	43	87	200	344	831
Rwanda	10	31	59	88	113	134	182	189	244	313
Sao Tome Prn					1	2	2	5	5	5
Senegal					1	20	43	162	230	340
Seychelles					18	21	21	21	21	9
Sierra Leone					1	14	26	57	96	151
Somalia					28	33	35	49	49	35
South Africa							9	14	23	41
South Sudan					27	32	32	42	42	28
Tanzania	42	138	262	390	449	543	615	621	646	746
Togo					0	3	9	24	29	95
Uganda	60	194	369	820	881	933	1 032	1 109	760	737
Zambia					24	33	322	557	627	693
Zimbabwe					42	48	93	95	100	83
Asia	11 284	14 857	17 507	19 180	18 762	17 318	15 671	13 360	9 719	7 914
Afghanistan		6	12	21	29	53	46	40	32	24
Bangladesh	7 440	10 291	13 288	14 155	13 932	12 431	10 551	8 099	5 679	4 762
Cambodia		55	73	115	175	176	122	104	62	3
India	2 822	3 202	2 710	3 150	2 872	2 835	3 340	3 399	2 635	1 986
Indonesia					2	4	5	6	19	32
Malaysia					2	5	5	5	18	32
Myanmar					2	55	81	128	144	161
Nepal	1 022	1 303	1 424	1 730	1 731	1 665	1 339	1 220	750	519
Pakistan					4	75	131	269	284	281
Philippines				10	12	16	40	75	82	100
Thailand					2	3	9	14	14	15
C America + Carib	21	21	34	34	51	32	32	49	49	38
Dominican Rep					2	2	2	2	2	
Guatemala			2	2	5	6	6	22	22	19
Haiti					2	2	2	2	2	0
Honduras	21	21	27	27	34	13	14	8	8	5
Panama			5	5	8	8	8	14	14	15
Middle East							12	204	204	204
Lebanon							5	25	25	25
United Arab Em								24	24	24
Yemen							7	155	155	155
Oceania					30	47	143	185	243	486
Australia					1	3	3	6	6	5
Fiji					3	4	25	32	49	66
Nauru					3	5	5	5	5	2
Papua N Guin					12	17	44	62	86	325
Samoa					4	7	7	7	7	4
Vanuatu					8	11	58	72	89	86

S America	37	124	145	162	186	159	82	94	85	65
Argentina					2	2	5	15	15	13
Bolivia		30	30	30	33	33	6	6	9	10
Chile					1	1	1	1	1	1
Colombia					2	3	3	15	18	15
Peru	37	94	115	132	150	120	67	57	43	25

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

Thousands	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	819	876	948	1 204	2 035	3 237	4 450	6 985	8 920	10 022
Africa	392	439	502	767	1 523	2 613	3 438	4 909	6 637	7 572
Angola						6	6	63	63	65
Benin					9	20	20	66	107	163
Botswana						1	1	1	1	1
Burkina Faso	3	4	8	12	25	41	49	74	100	136
Burundi					34	53	53	53	53	31
Cabo Verde					7	16	16	16	16	9
Cameroon								26	60	62
Cent Afr Rep									2	2
Comoros					33	52	52	52	52	19
Congo DR						6	6	69	254	435
Congo Rep									26	26
Cote d'Ivoire					10	46	101	210	357	430
Egypt					29	29	29	29	29	
Eq Guinea					13	30	30	30	30	17
Eritrea					29	45	45	45	45	16
Ethiopia					29	45	67	97	109	105
Gambia					14	33	33	33	33	35
Ghana					7	17	29	67	92	95
Guinea					12	28	49	103	157	182
Guinea Bissau		3	6	8	23	42	42	42	40	62
Kenya				3	28	181	286	580	1 026	1 308
Lesotho	7	7	7	7	7					
Liberia					9	21	30	56	95	104
Madagascar					29	46	46	46	69	57
Malawi					27	43	64	72	94	79
Mali		5	9	14	28	45	55	94	103	127
Mauritania					14	33	33	33	33	18
Mauritius					14	36	42	46	46	32
Morocco	357	357	357	483	483	483	483	483	483	483
Mozambique					27	43	43	51	62	52
Niger					10	24	24	27	41	31
Nigeria		26	52	79	113	277	464	634	847	1 076
Rwanda				31	58	115	161	361	451	490
Sao Tome Prn					7	16	16	16	16	9
Senegal					15	35	60	139	209	308
Seychelles					23	36	36	36	36	13
Sierra Leone					11	24	24	71	115	137
Somalia					36	56	72	72	95	71
South Africa		14	27	41	55	69	55	42	28	14
South Sudan					35	55	55	55	55	20
Tanzania			13	60	90	219	395	446	468	535
Togo						30	43	87	200	293
Tunisia	17	12	7	7	24	19	19	19	19	
Uganda	9	12	15	22	48	81	141	183	208	229
Zambia					32	50	74	99	124	119
Zimbabwe					26	66	86	86	91	74
Asia	395	399	403	407	411	510	835	1 833	2 022	2 193
Afghanistan		4	8	12	15	29	25	21	18	14
Bangladesh						20	49	293	396	480
India						22	134	285	311	311
Indonesia	13	13	13	13	13	13	13	13	13	38
Mongolia	249	249	249	249	249	249	249	249	249	249
Myanmar							31	602	610	639
Nepal						13	91	91	91	91
Pakistan						31	76	95	143	151
Philippines				0	0	0	33	50	57	87
Sri Lanka	134	134	134	134	134	134	134	134	134	134
Viet Nam	1	1								
C America + Carib			0	1	1	7	33	61	61	62
Cuba			0	1	1	7	7	36	35	35
Honduras							26	26	26	27
Oceania	16	22	27	27	27	27	64	102	119	187
Fiji	16	22	27	27	27	27	27	27	27	59
Papua N Guin							3	23	32	67
Vanuatu							34	52	60	61
S America	16	16	16	2	72	80	80	80	80	8
Argentina	16	16	16	2						
Brazil					1	8	8	8	8	7
Colombia					57	57	57	57	57	0
Peru					15	15	15	15	15	0

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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	394	574	711	821	941	1 005	1 045	1 045	1 125	1 155
Africa	172	240	303	399	486	525	565	565	645	674
Benin			3	81	81	88	90	90	90	90
Burkina Faso					7	7	7	7	7	7
Cameroon	1	1	8	15	19	19	19	19	19	19
Ghana					0	12	12	12	12	12
Kenya	67	67	79	80	80	90	90	90	90	120
Liberia					16	25	25	25	25	25
Madagascar	2	2	2	2	2	2	13	13	13	13
Mali	84	119	144	150	157	157	165	165	165	165
Mauritania		16	16	16	16	16	16	16	16	16
Mozambique	1	3	3	3	3	3	3	3	3	3
Nigeria	14	30	45	49	70	71	78	78	78	78
Sierra Leone					24	24	24	24	104	104
Tanzania	2	2	2	2	9	9	9	9	9	9
Togo							4	4	4	4
Uganda	0	0	0	0	0	0	5	5	5	5
Zambia			1	1	1	1	3	3	3	3
Asia		112	187	199	233	258	258	258	259	259
Bangladesh			25	25	25	25	25	25	25	25
India		112	152	165	197	222	223	223	223	223
Myanmar			10	10	11	11	11	11	11	11
Nepal									0	0
S America	222	222	222	222	222	222	222	222	222	222
Peru	9	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	685	782	1117	1423	1651	1972	2124	2293	2296	2299
Africa	76	98	258	548	734	992	1126	1238	1241	1241
Algeria	6	6	91	344	344	344	344	344	344	344
Benin			1	2	2	2	3	3	3	3
Burkina Faso	4	4	4	4	4	5	23	23	23	23
Cabo Verde	0	0	1	1	1	1	1	1	1	1
Cameroon					120	270	270	270	270	270
Chad			1	1	1	1	1	1	1	1
Congo DR						1	3	7	7	7
Cote d'Ivoire			4	4	4	4	4	4	4	4
Egypt			25	25	25	30	31	31	31	31
Eritrea				16	16	56	56	56	56	56
Ethiopia						1	1	10	10	10
Gabon								8	8	8
Gambia			2	2	2	2	2	2	2	2
Ghana					4	4	4	4	4	4
Guinea							20	20	20	20
Guinea Bissau				7	7	24	24	24	24	24
Kenya	2	3	3	4	4	4	14	18	18	18
Liberia					1	1	1	1	1	1
Madagascar			6	6	9	9	11	26	26	26
Mali	44	49	65	65	80	82	92	92	92	92
Mozambique	11	11	11	11	11	11	11	11	11	11
Namibia	1	3	3	3	3	3	3	3	3	3
Niger		1	1	1	2	5	5	13	13	13
Nigeria		1	17	21	54	60	74	91	91	91
Senegal						30	30	30	30	30
Seychelles								8	8	8
Sierra Leone	0	0	0	0	0	0	40	79	80	80
Tanzania		2	2	4	6	6	6	6	6	6
Togo					4	7	7	7	7	7
Uganda	9	19	22	25	25	25	38	38	41	41
Zambia					3	3	5	5	5	5
Zimbabwe				3	3	3	3	3	3	3
Asia	605	681	794	808	850	904	922	935	935	939
Afghanistan	5	14	14	20	20	20	20	20	20	20
Bangladesh	4	14	37	41	64	111	126	135	135	138
India	197	197	197	197	197	197	197	197	197	197
Indonesia	266	319	408	408	421	422	422	422	422	422
Malaysia		1	3	3	3	3	3	3	3	3
Maldives		2	2	2	2	2	2	2	2	2
Myanmar				4	10	10	10	10	10	10
Nepal	133	133	133	133	133	135	139	142	142	142
Pakistan						4	4	4	4	4
Thailand								1	1	1
C America + Carib	2	2	5	5	5	9	9	9	9	9
Haiti	2	2	5	5	5	5	5	5	5	5
Nicaragua						3	3	3	3	3
Oceania			14	14	14	14	14	14	14	14
Fiji			14	14	14	14	14	14	14	14
S America	1	1	45	48	48	53	53	97	97	97
Brazil	1	1	1	1	1	1	1	1	1	1
Colombia	0	0	0	3	3	4	4	36	36	36
Ecuador	0	0	0	0	0	4	4	4	4	4
Peru							0	12	12	12
Venezuela			44	44	44	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	9.8	44.9	50.3	66.3	89.6	89.6	89.6	89.6	89.6	89.6
Africa	0.1	0.1	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Uganda	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Mozambique			0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Asia	9.5	44.6	49.4	65.4	87.5	87.5	87.5	87.5	87.5	87.5
Cambodia		34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
India	9.5	10.3	15.1	31.1	52.8	52.8	52.8	52.8	52.8	52.8
Pakistan					0.4	0.4	0.4	0.4	0.4	0.4
C America + Carib					1.2	1.2	1.2	1.2	1.2	1.2
Nicaragua					1.2	1.2	1.2	1.2	1.2	1.2
S America	0.2	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	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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	127 855	127 322	124 746	125 186	125 238	124 955	124 549	124 096	123 482	122 872
Africa	122	193	244	285	338	383	417	406	427	434
Burkina Faso	8	16	22	27	33	39	43	41	42	42
Cameroon	1	1	1	1	1	1	1	1	1	1
Ethiopia	22	36	48	57	67	77	93	92	110	120
Kenya	30	54	65	74	78	80	86	85	91	95
Mali		0	1	2	2	2	2	2	2	2
Nigeria	3	3	2	2	2	2	2	1	1	1
Rwanda	23	27	35	36	44	43	42	41	40	37
Senegal	6	11	19	30	45	71	70	69	67	63
Tanzania	14	20	24	25	29	28	27	27	25	23
Uganda	14	23	25	28	30	31	33	33	33	32
Zambia			0	1	3	5	14	14	14	13
Zimbabwe	2	2	2	2	2	2	2	2	2	2
Asia	127 726	127 122	124 478	124 879	124 877	124 543	124 106	123 663	123 029	122 413
Bangladesh	244	269	291	283	274	276	273	277	285	274
Bhutan	1	4	6	12	16	23	24	23	40	60
Cambodia	94	98	106	114	117	117	118	120	120	120
China	114 668	113 938	111 355	111 938	111 938	111 938	111 938	111 938	111 938	111 938
India	10 713	10 615	10 283	9 841	9 741	9 408	8 900	8 534	7 970	7 401
Indonesia	30	42	53	58	70	76	79	82	81	83
Lao PDR	20	20	19	19	18	17	16	16	14	13
Myanmar	1	1	1	1	1	1	1	1	1	1
Nepal	961	988	1 083	1 161	1 177	1 200	1 248	1 215	1 151	1 112
Pakistan	18	27	43	44	46	45	43	41	39	37
Sri Lanka	18	18	18	17	16	15	13	12	11	10
Thailand						1	1	1	1	1
Viet Nam	957	1 102	1 219	1 391	1 462	1 427	1 450	1 405	1 378	1 363
C America + Carib	4	5	22	19	20	25	24	24	23	23
Cuba	4	5	21	17	16	20	18	18	18	18
Nicaragua		0	0	2	4	5	5	5	5	5
S America	3	3	3	3	3	3	3	3	2	2
Bolivia	3	3	3	3	3	3	2	2	2	1
Ecuador				0	1	1	1	1	1	1



IRENA Headquarters
Masdar City
P.O. Box 236 Abu Dhabi
United Arab Emirates
www.irena.org

