

## RENEWABLES 2020 GLOBAL STATUS REPORT

TABLE R18. Solar Water Heating Collectors and Total Capacity End-2018 and Newly Installed Capacity 2019, Top 20 Countries

	Total End-2018 GWth			Gross Additions 2019 MWth		
Country	Glazed	Unglazed	Total	Glazed	Unglazed	Total
China	337.6	-	337.6	22,750	-	22,750
Turkey	17.6	-	17.6	1,320	-	1,320
India	9.5	-	9.5	1,270	-	1,270
Brazil	7.1	4.2	11.3	461	464	925
United States	2.2	15.7	17.9	112	487	600
Australia	2.6	3.9	6.5	122	266	388
Germany	13.5	0.4	13.9	358	-	358
Mexico	2.0	1.0	3.0	203	83	286
Greece	3.3	-	3.3	253	-	253
Israel	3.3	-	3.4	252	-	252
Poland	1.8	-	1.8	184	-	184
Spain	2.9	0.1	3.0	143	2	145
Denmark	1.2	-	1.2	137	-	137
South Africa	0.7	0.9	1.5	70	42	112
Italy	3.3	-	3.3	106	-	106
Austria	3.3	0.2	3.6	63	-	64
Cyprus	0.6	1.5	2.1	49	-	49
Tunisia	0.7	_	0.7	44	-	44
Palestine, State of	1.3	-	1.3	32	-	32
Switzerland	1.1	0.1	1.2	28	3	32
Total Top 20 Countries	415.4	28.1	443.5	27,957	1,348	29,305
World Total	452	30	482	29,840	1,455	31,295

**Note:** Countries are ranked according to newly installed glazed collector capacity in 2019. Data are for glazed and unglazed water collectors excluding air collectors, which added at least 1.1 GW<sub>th</sub> to the year-end world total for 2018, and excluding concentrating collectors, which achieved 364 MW<sub>th</sub> at the end of 2018. End-2018 data for individual countries and Total 20 Top Countries are rounded to the nearest 0.1 GW<sub>th</sub>; end-2018 World Total data are rounded to the nearest GW<sub>th</sub>; additions for individual countries and Total 20 Top Countries are rounded to the nearest 1 MW<sub>th</sub>. Where totals do not add up, the difference is due to rounding. By accepted convention, 1 million m<sup>2</sup> = 0.7 GW<sub>th</sub>. The year 2018 is the most recent

one for which firm global data on total capacity in operation were available. However, 479  $GW_{th}$  of solar thermal capacity (water and non-concentrating collectors only) was estimated to be in operation worldwide by end-2019. For details and source information on 2019 additions, see Solar Thermal section in Market and Industry chapter and related endnotes.

Source: Table R18 attached bases on the latest market data available for glazed and unglazed water collectors (without concentrating collectors) at the time of publication for countries that together represent 94% of the world total. Data from original country sources include gross national additions and were provided to REN21 as follows: David Ferrari, Sustainability Victoria, Melbourne, Australia; Werner Weiss, AEE INTEC, Vienna, Austria; Danielle Johann, Brazilian Solar Thermal Energy Association (ABRASOL), São Paulo, Brazil; Hongzhi Cheng, Shandong SunVision Management Consulting, Dezhou, China; Panayiotis Kastanias, Cyprus Union of Solar Thermal Industrialists (EBHEK), Nicosia, Cyprus; Daniel Trier and Jan Erik Nielson, PlanEnergi, Skørping, Denmark; Andrea Liesen, BSW Solar, Berlin, Germany; Costas Travasaros, Greek Solar Industry Association (EBHE), Piraeus, Greece; Jaideep Malaviya, Solar Thermal Federation of India (STFI), Pune, India; Eli Shilton, Elsol, Kohar-yair, Israel; Federico Musazzi, ANIMA, the Federation of Italian Associations in the Mechanical and Engineering Industries, Milan, Italy; Daniel Garcia, Solar Thermal Manufacturers Organisation (FAMERAC), Mexico City, Mexico; Janusz Staroscik, Association of Manufacturers and Importers of Heating Appliances (SPIUG), Warsaw, Poland; Karin Kritzinger, Centre for Renewable and Sustainable Energy Studies, University of Stellenbosch, Stellenbosch, South Africa; Pascual Polo, Spanish Solar Thermal Association (ASIT), Madrid, Spain; Abdullah Azzam, Palestinian Central Bureau of Statistics, Ramallah, State of Palestine; David Stickelberger, Swissolar, Zurich, Switzerland; Abdelkader Baccouche, ANME, Tunis, Tunisia; Kutay Ülke, Bural Heating, Kayseri, Turkey; Les Nelson, Solar Heating & Cooling Programs at the International Association of Plumbing and Mechanical Officials (IAPMO), Ontario, California, United States, all personal communications with REN21, February-April 2020. Data for China and World Total assume that systems have a 10-year operational lifetime in China; national data for all other countries reflect a 25-year lifetime, with the exceptions of Turkey (14 years prior to 2018 and 15 years starting with 2018) and Germany (20 years).