The Great Transition: Shifting from Fossil Fuels to Solar and Wind Energy
Supporting Data - Solar Energy

World Solar Photovoltaics Installations, 1996-2013, with Projection to 2015
GRAPH: World Cumulative Solar Photovoltaics Installations, 2000-2013, with Projection to 2015

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A full listing of data for the entire book is on-line at:
http://www.earth-policy.org/books/tgt/tgt_data

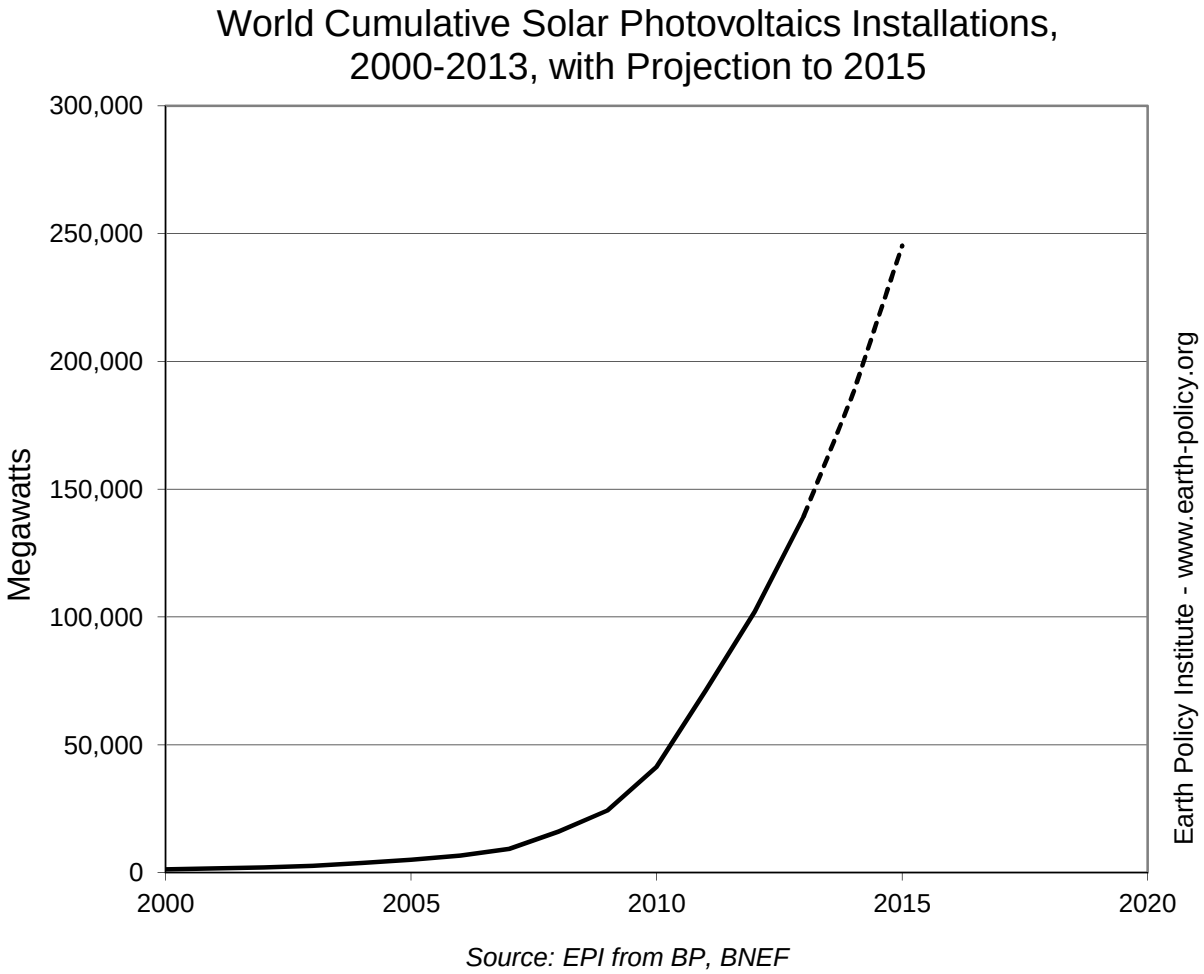
This is part of a supporting dataset for **The Great Transition: Shifting from Fossil Fuels to Solar and Wind Energy**, by Lester R. Brown, with Janet Larsen, J. Matthew Roney, and Emily E. Adams (New York: W.W. Norton & Company, 2015).

For more information, see Earth Policy Institute on-line at www.earth-policy.org.

World Solar Photovoltaics Installations, 1996-2013, with Projection to 2015

Year	Cumulative Installations	Annual Addition
	Megawatts	
1996	309	
1997	422	113
1998	566	144
1999	807	241
2000	1,250	443
2001	1,569	320
2002	2,012	443
2003	2,575	563
2004	3,698	1,123
2005	5,048	1,350
2006	6,619	1,570
2007	9,291	2,672
2008	16,063	6,772
2009	24,265	8,202
2010	41,330	17,065
2011	71,218	29,888
2012	102,076	30,858
2013	139,637	37,561
2014	187,237	47,600
2015	245,337	58,100

Source: Compiled by Earth Policy Institute with 1996-2013 from BP, *Statistical Review of World Energy June 2014* (London: 2014); and with 2014 and 2015 from Bloomberg New Energy Finance, "Chinese PV Shipments Surge in Q4 2014 According to BNEF Shipment Survey," press release (London: 3 February 2015).



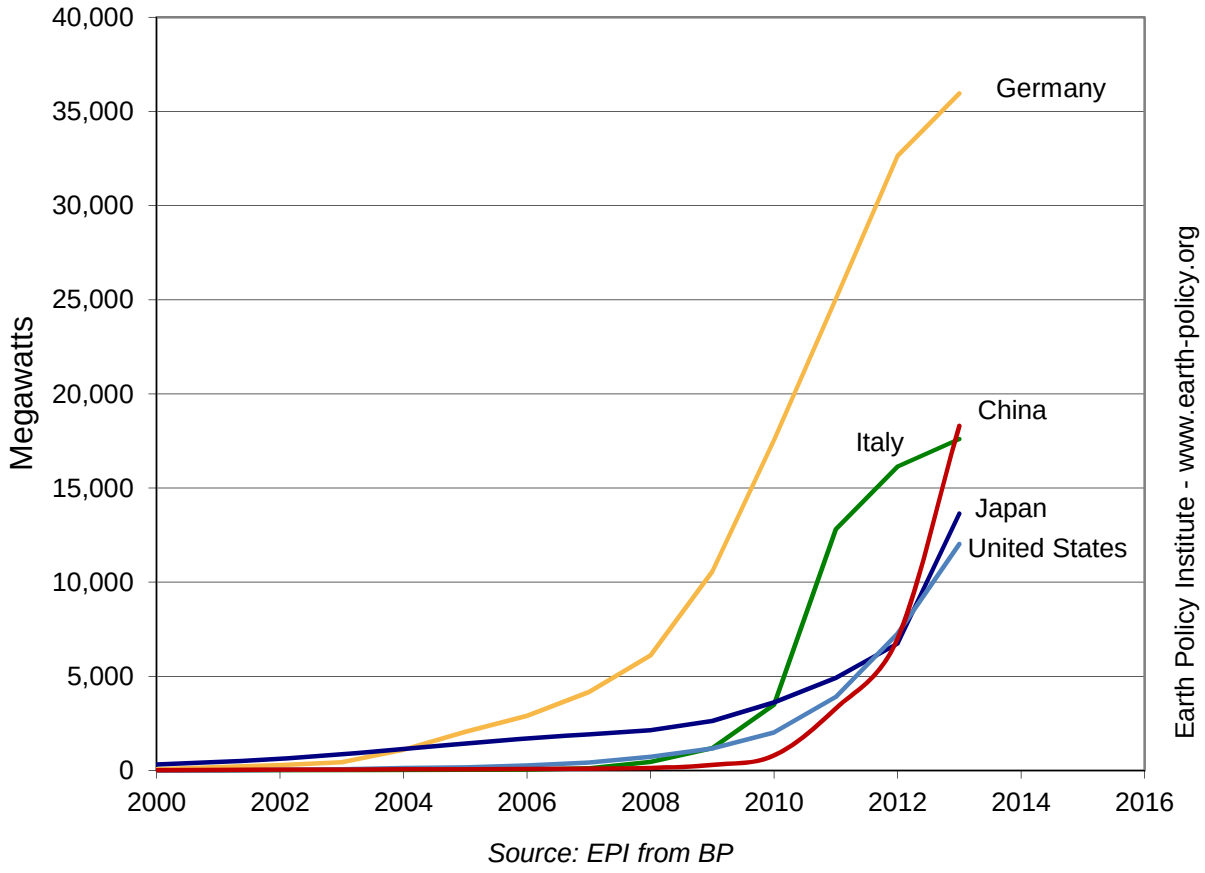
Source: EPI from BP, BNEF

Cumulative Installed Solar Photovoltaics Capacity in Leading Countries and the World, 2000-2013

Year	Germany	China	Italy	Japan	United States	Spain	France	Australia	Others	World
					Megawatts					
2000	76	19	19	330	0	0	0	29	776	1,250
2001	186	30	20	453	0	0	0	34	847	1,569
2002	296	45	22	637	28	0	0	39	945	2,012
2003	435	55	26	860	73	12	0	46	1,070	2,575
2004	1,105	64	31	1,132	131	24	26	52	1,133	3,698
2005	2,056	68	38	1,422	172	50	33	61	1,149	5,048
2006	2,899	80	50	1,709	275	154	44	70	1,338	6,619
2007	4,170	100	120	1,919	427	739	82	83	1,652	9,291
2008	6,120	140	458	2,144	738	3,635	186	105	2,537	16,063
2009	10,566	300	1,181	2,627	1,172	3,698	377	188	4,156	24,265
2010	17,554	800	3,502	3,618	2,022	4,110	1,194	571	7,959	41,330
2011	25,039	3,300	12,803	4,914	3,910	4,472	2,953	1,377	12,450	71,218
2012	32,643	7,000	16,139	6,743	7,271	4,685	4,019	2,407	21,169	102,076
2013	35,948	18,300	17,600	13,643	12,022	4,828	4,632	3,255	29,409	139,637

Source: Figures are as published in BP, *Statistical Review of World Energy June 2014* (London: 2014). Note that previous datasets from other groups have reported higher numbers for the United States and other key countries for the earlier years of the time series.

Cumulative Installed Solar Photovoltaics Capacity in Leading Countries, 2000-2013

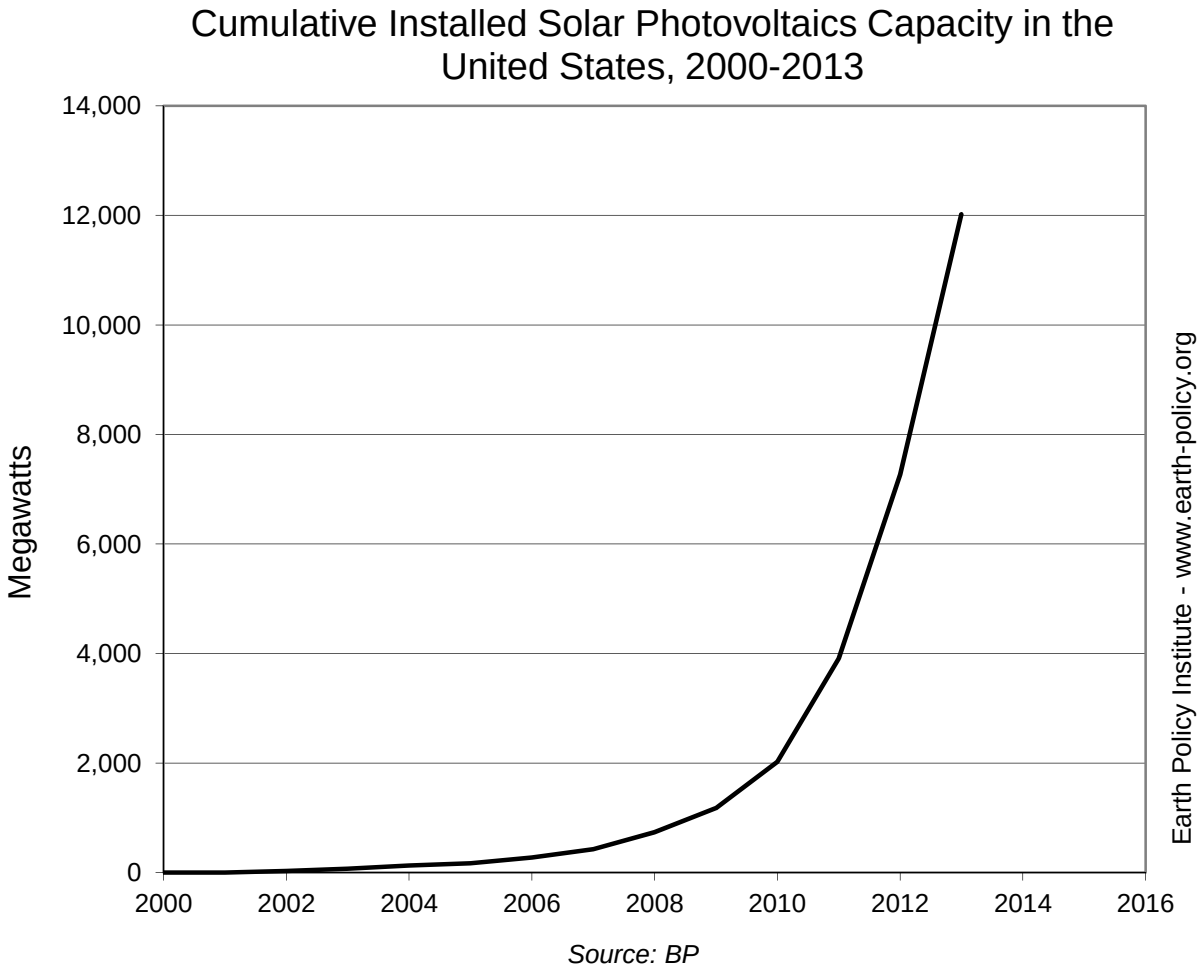


Source: EPI from BP

Cumulative Installed Solar Photovoltaics Capacity in the United States, 2000-2013

Year	Cumulative Installations
	Megawatts
2000	0
2001	0
2002	28
2003	73
2004	131
2005	172
2006	275
2007	427
2008	738
2009	1,172
2010	2,022
2011	3,910
2012	7,271
2013	12,022

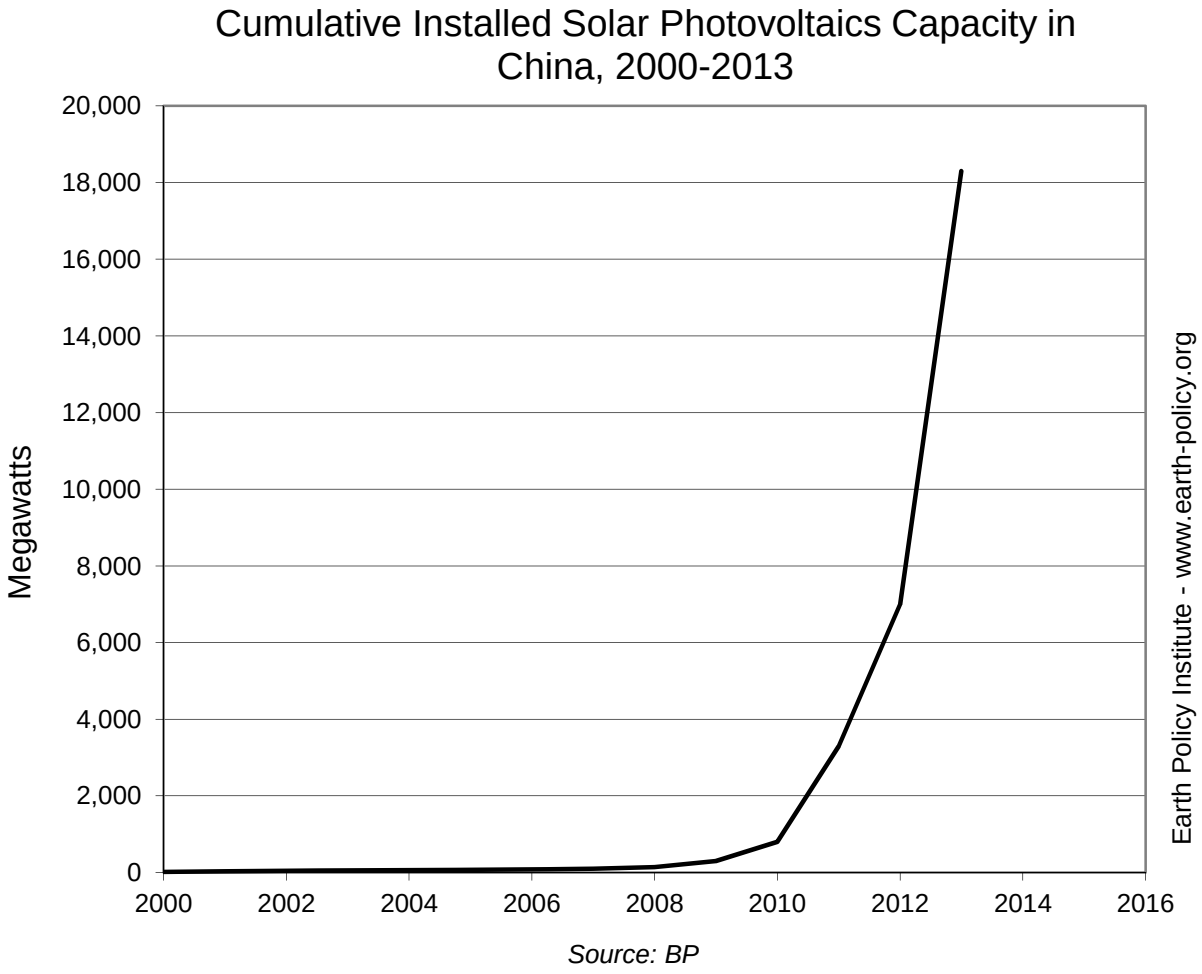
Source: Figures are as published in BP, *Statistical Review of World Energy June 2014* (London: 2014). Note that previous datasets from other groups have reported higher numbers for the United States for the earlier years of the time series.


Cumulative Installed Solar Photovoltaics Capacity in the United States, 2000-2013
Megawatts
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2000
2002
2004
2006
2008
2010
2012
2014
2016
Source: BP
Earth Policy Institute - www.earth-policy.org

Cumulative Installed Solar Photovoltaics Capacity in China, 2000-2013

Year	Cumulative Installations
	Megawatts
2000	19
2001	30
2002	45
2003	55
2004	64
2005	68
2006	80
2007	100
2008	140
2009	300
2010	800
2011	3,300
2012	7,000
2013	18,300

Source: BP, *Statistical Review of World Energy June 2014* (London: 2014).

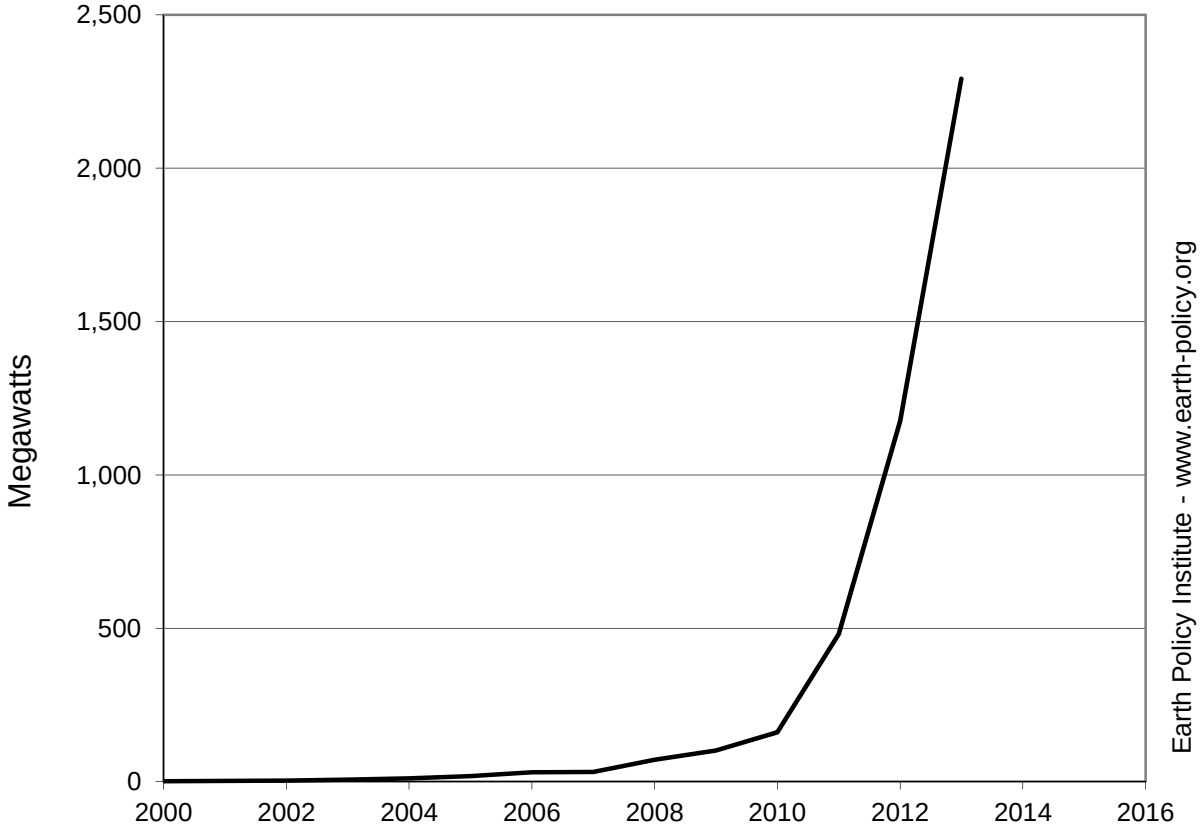

Cumulative Installed Solar Photovoltaics Capacity in China, 2000-2013
Megawatts
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2000
2002
2004
2006
2008
2010
2012
2014
2016
Source: BP
Earth Policy Institute - www.earth-policy.org

Cumulative Installed Solar Photovoltaics Capacity in India, 2000-2013

Year	Cumulative Installations
	Megawatts
2000	1
2001	2
2002	4
2003	6
2004	10
2005	18
2006	30
2007	31
2008	71
2009	101
2010	161
2011	481
2012	1,176
2013	2,291

Source: Figure for 2010 from European Photovoltaic Industry Association, *Global Market Outlook for Photovoltaics Until 2016* (Brussels: May 2012), p. 50; all other data from BP, *Statistical Review of World Energy June 2014* (London: 2014).

Cumulative Installed Solar Photovoltaics Capacity in India, 2000-2013

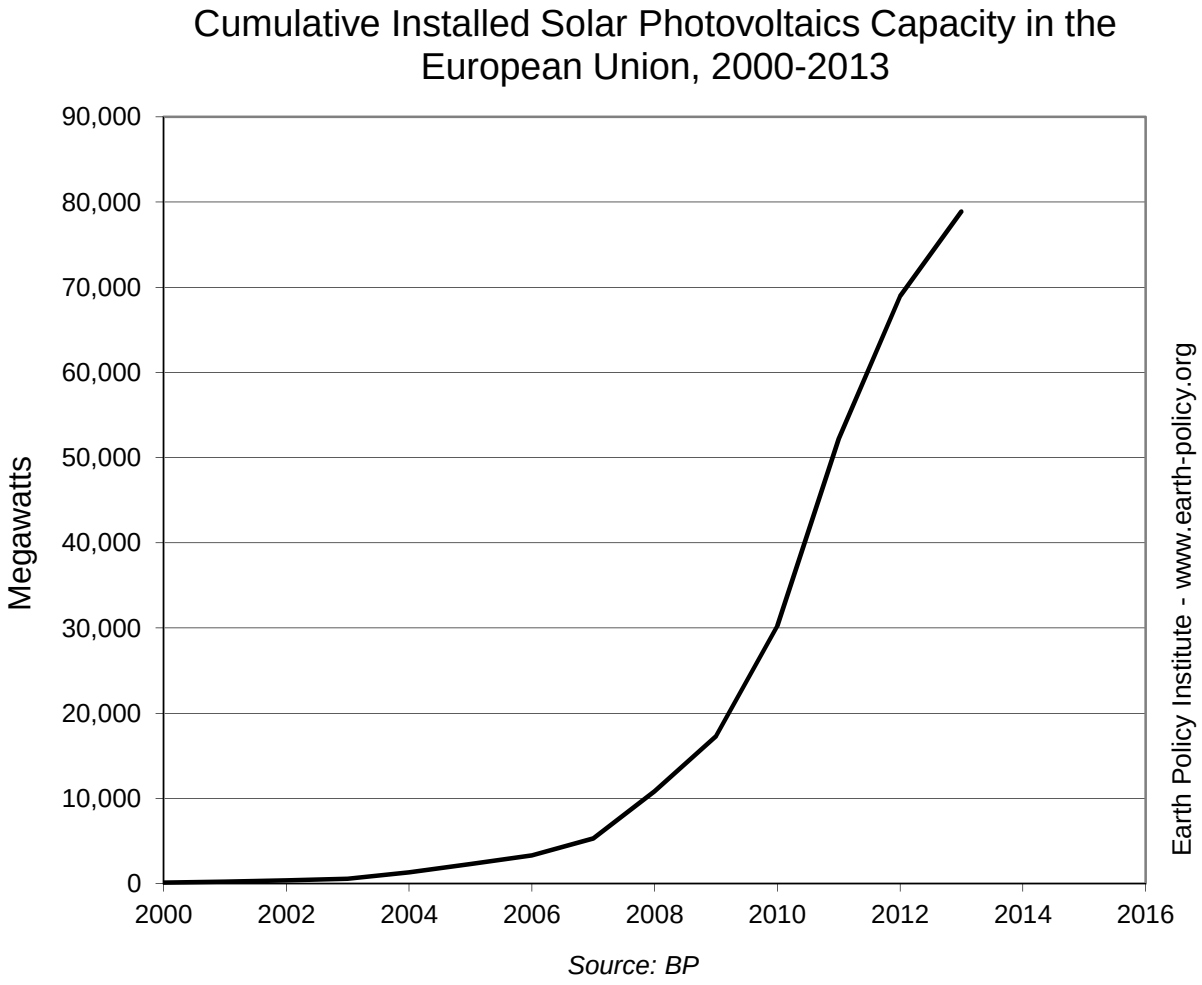


Source: BP

Cumulative Installed Solar Photovoltaics Capacity in the European Union, 2000-2013

Year	Cumulative Installations
	Megawatts
2000	122
2001	244
2002	370
2003	567
2004	1,304
2005	2,308
2006	3,291
2007	5,308
2008	10,812
2009	17,298
2010	30,251
2011	52,229
2012	68,962
2013	78,896

Source: BP, *Statistical Review of World Energy June 2014* (London: 2014).


Cumulative Installed Solar Photovoltaics Capacity in the European Union, 2000-2013
Megawatts
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
2000
2002
2004
2006
2008
2010
2012
2014
2016
Source: BP
Earth Policy Institute - www.earth-policy.org

Cumulative and Newly-Installed Solar Photovoltaics Capacity in Ten Leading Countries and the World, 2013

Country	Cumulative Installed Capacity	Country	Newly-Installed Capacity
	Megawatts		Megawatts
Germany	35,948	China	11,300
China	18,300	Japan	6,900
Italy	17,600	United States	4,751
Japan	13,643	Germany	3,305
United States	12,022	Italy	1,461
Spain	4,828	India	1,115
France	4,632	Romania	1,100
Australia	3,255	Greece	1,043
Belgium	2,983	United Kingdom	992
United Kingdom	2,892	Australia	848
World Total	139,637	World Total	37,561

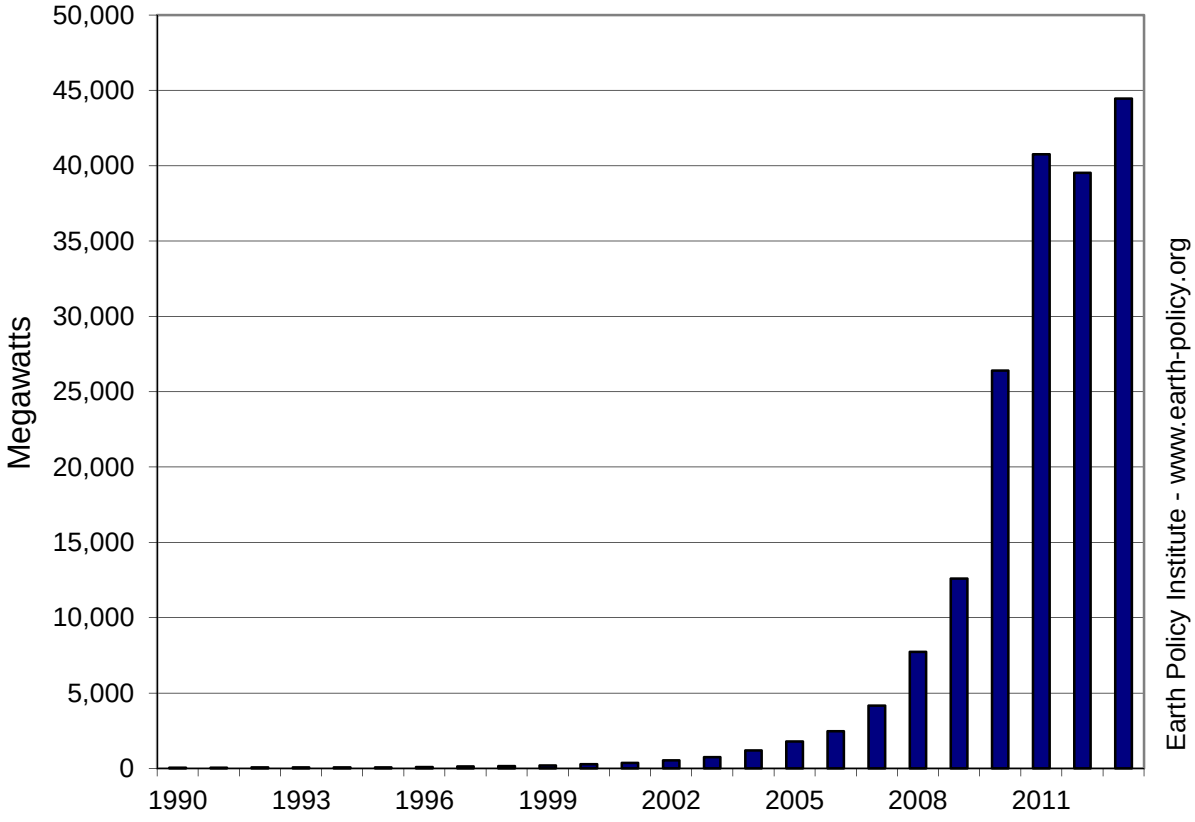
Source: Compiled by Earth Policy Institute from BP, *Statistical Review of World Energy June 2014* (London: 2014).

World Solar Photovoltaics Cell Production, 1975-2013, with Projection to 2017

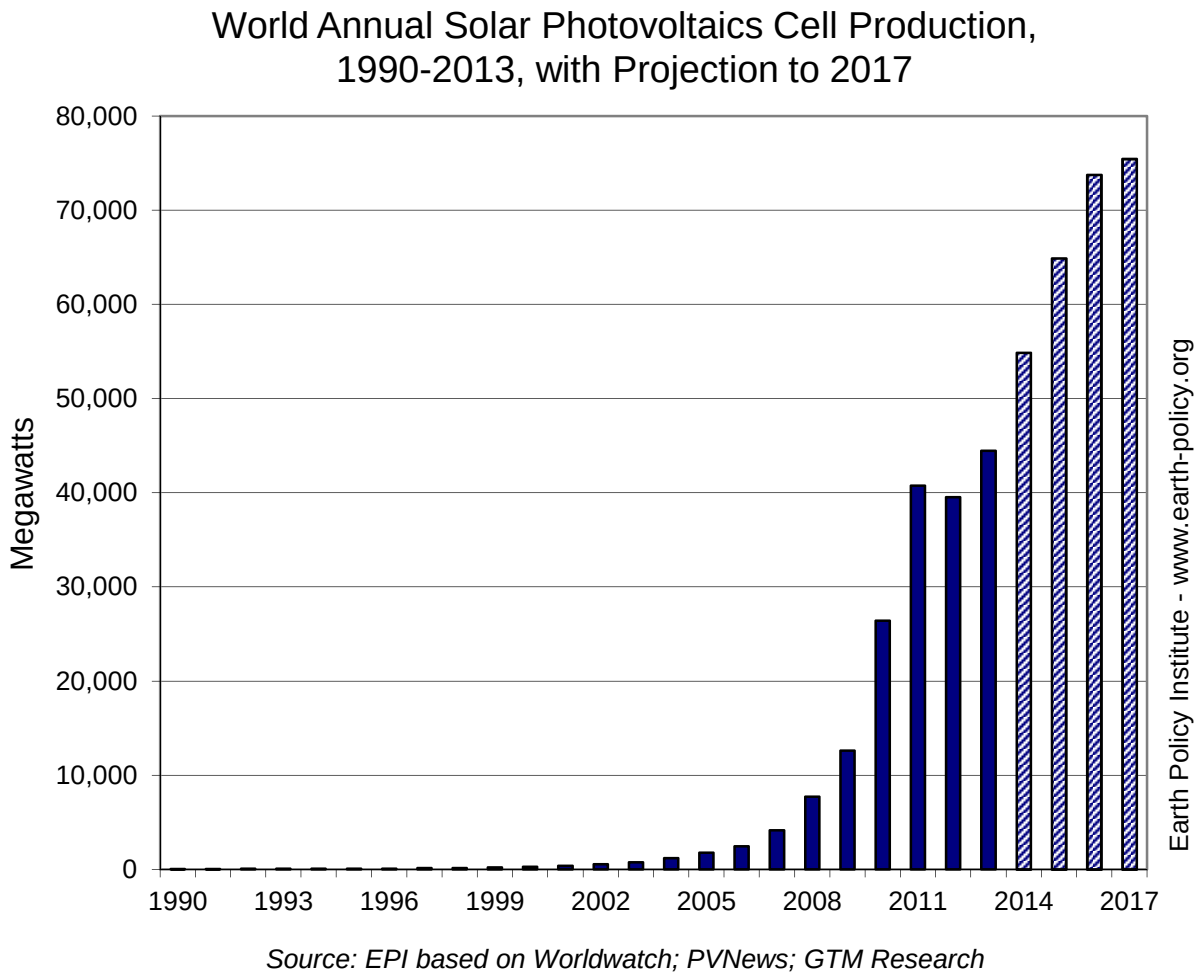
Year	Annual Production	Cumulative Production
	Megawatts	
1975	2	2
1976	2	4
1977	2	6
1978	3	9
1979	4	13
1980	7	20
1981	8	28
1982	9	37
1983	17	54
1984	22	76
1985	23	99
1986	26	125
1987	29	154
1988	34	188
1989	40	228
1990	47	275
1991	55	330
1992	58	388
1993	60	448
1994	69	517
1995	78	594
1996	89	683
1997	126	809
1998	155	964
1999	201	1,165
2000	277	1,442
2001	371	1,813
2002	542	2,355
2003	749	3,104
2004	1,199	4,303
2005	1,782	6,086
2006	2,459	8,544
2007	4,164	12,708
2008	7,733	20,441
2009	12,596	33,037
2010	26,400	59,436
2011	40,762	100,198
2012	39,524	139,722
2013	44,464	184,186
2014	54,858	239,044
2015	64,892	303,936
2016	73,765	377,701
2017	75,447	453,148

Source: Compiled by Earth Policy Institute (EPI) with 1975-1979 data from Worldwatch Institute, *Signposts 2004*, CD-ROM (Washington, DC: 2004); 1980-2000 from Worldwatch Institute, *Vital Signs 2007-2008* (Washington DC: 2008), p. 39; 2001-2006 from Prometheus Institute and Greentech Media, "25th Annual Data Collection Results: PV Production Explodes in 2008," *PVNews*, vol. 28, no. 4 (April 2009), pp. 15-18; 2007-2017 compiled by Earth Policy Institute from GTM Research, *PV Cell Module Production Data*, electronic database, updated June 2014.

World Annual Solar Photovoltaics Cell Production, 1990-2013

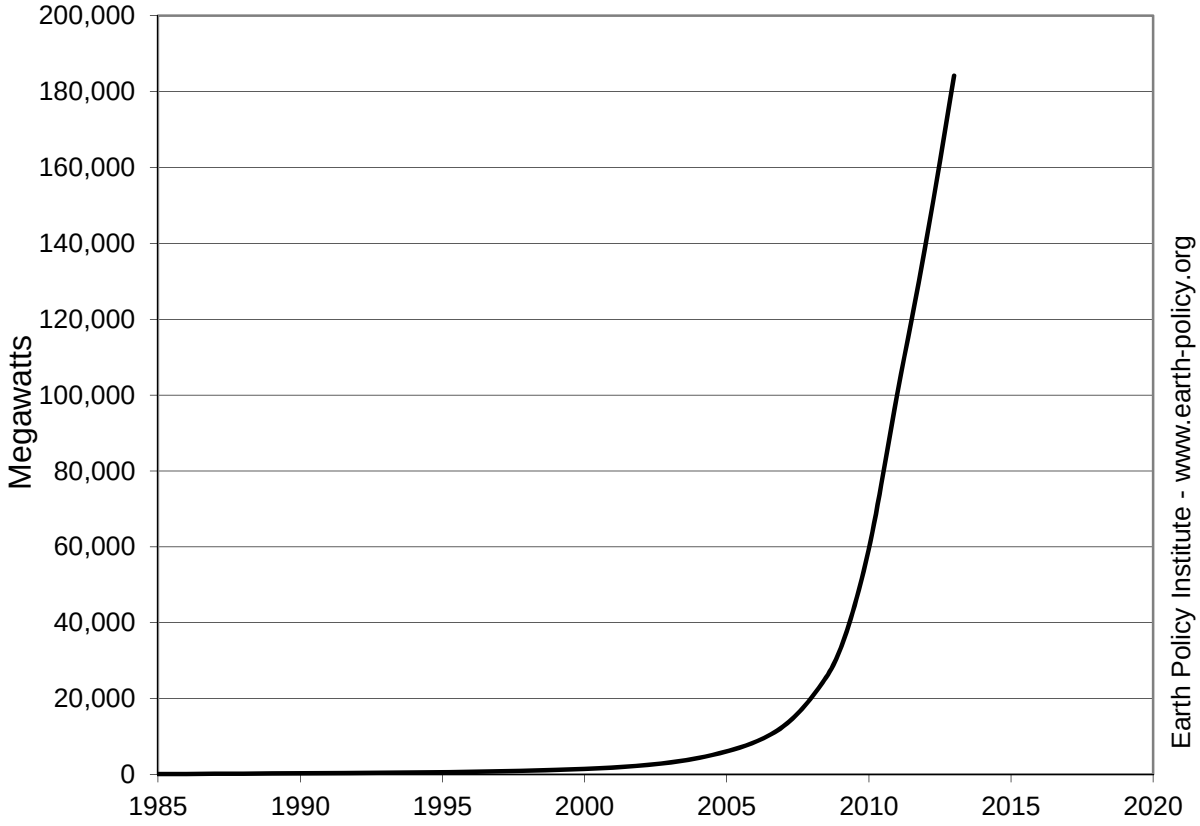


Source: EPI based on Worldwatch; PVNews; GTM Research



Source: EPI based on Worldwatch; PVNews; GTM Research

World Cumulative Solar Photovoltaics Cell Production, 1985-2013



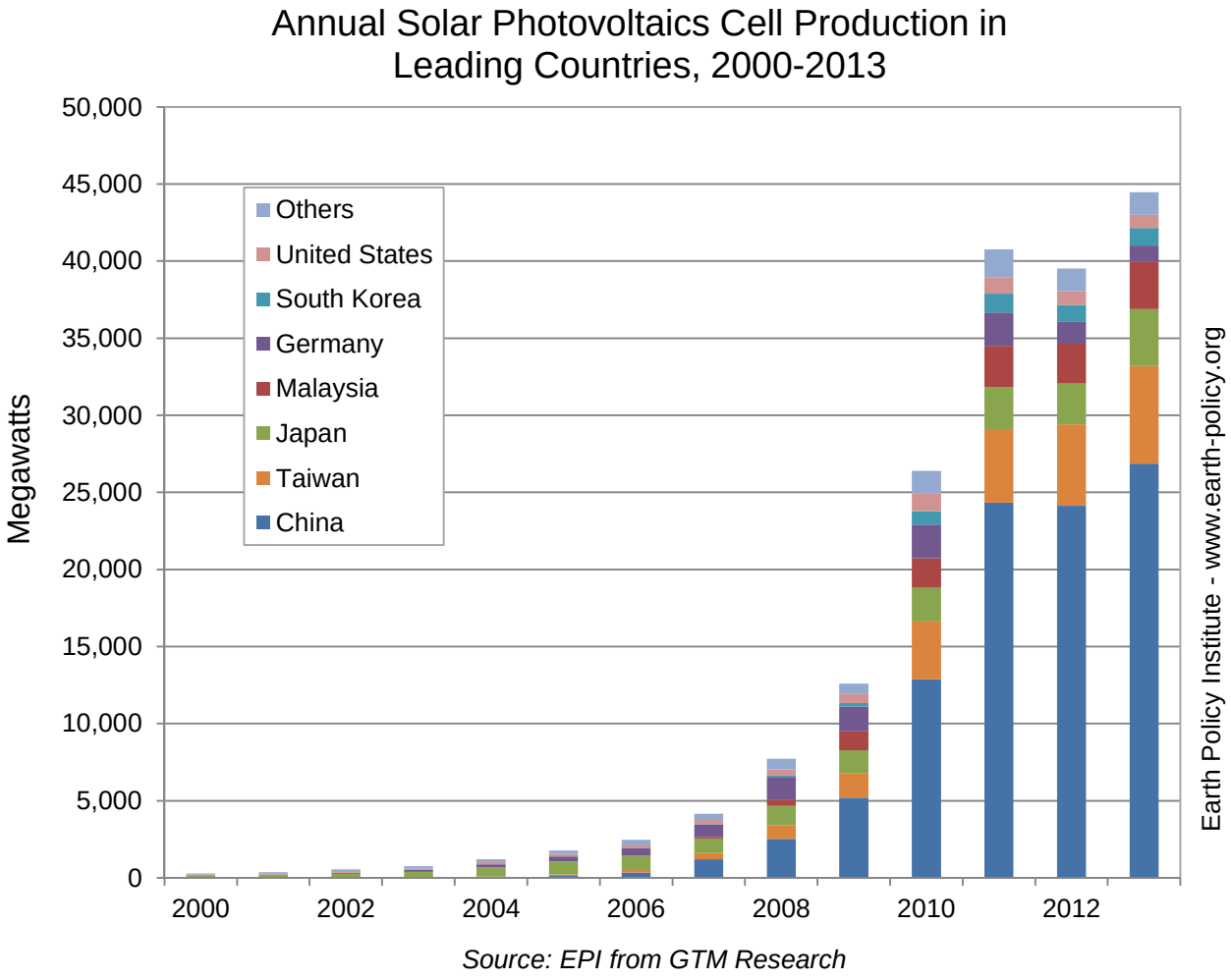
Source: EPI based on Worldwatch; PVNews; GTM Research

Annual Solar Photovoltaics Cell Production by Country, 1995-2013

Year	China	Taiwan	Japan	Malaysia	Germany	South Korea	United States	Others	World
					Megawatts				
1995	n.a.	n.a.	16	n.a.	n.a.	n.a.	35	n.a.	78
1996	n.a.	n.a.	21	n.a.	n.a.	n.a.	39	n.a.	89
1997	n.a.	n.a.	35	n.a.	n.a.	n.a.	51	n.a.	126
1998	n.a.	n.a.	49	n.a.	n.a.	n.a.	54	n.a.	155
1999	n.a.	n.a.	80	n.a.	n.a.	n.a.	61	n.a.	201
2000	3	n.a.	129	n.a.	23	n.a.	75	48	277
2001	3	4	171	0	24	0	100	70	371
2002	10	8	251	0	55	0	121	97	542
2003	13	17	364	0	122	0	103	131	749
2004	40	39	602	0	193	0	139	186	1,199
2005	128	88	833	0	339	5	153	236	1,782
2006	342	170	926	0	469	13	178	361	2,459
2007	1,193	413	938	100	815	32	262	411	4,164
2008	2,536	871	1,268	398	1,477	71	403	709	7,733
2009	5,193	1,573	1,503	1,228	1,606	234	595	664	12,596
2010	12,882	3,756	2,169	1,919	2,181	886	1,163	1,443	26,400
2011	24,339	4,773	2,707	2,685	2,153	1,227	1,044	1,834	40,762
2012	24,139	5,270	2,642	2,597	1,407	1,107	886	1,475	39,524
2013	26,871	6,339	3,679	3,073	1,055	1,127	868	1,453	44,464

Note: n.a. = data not available.

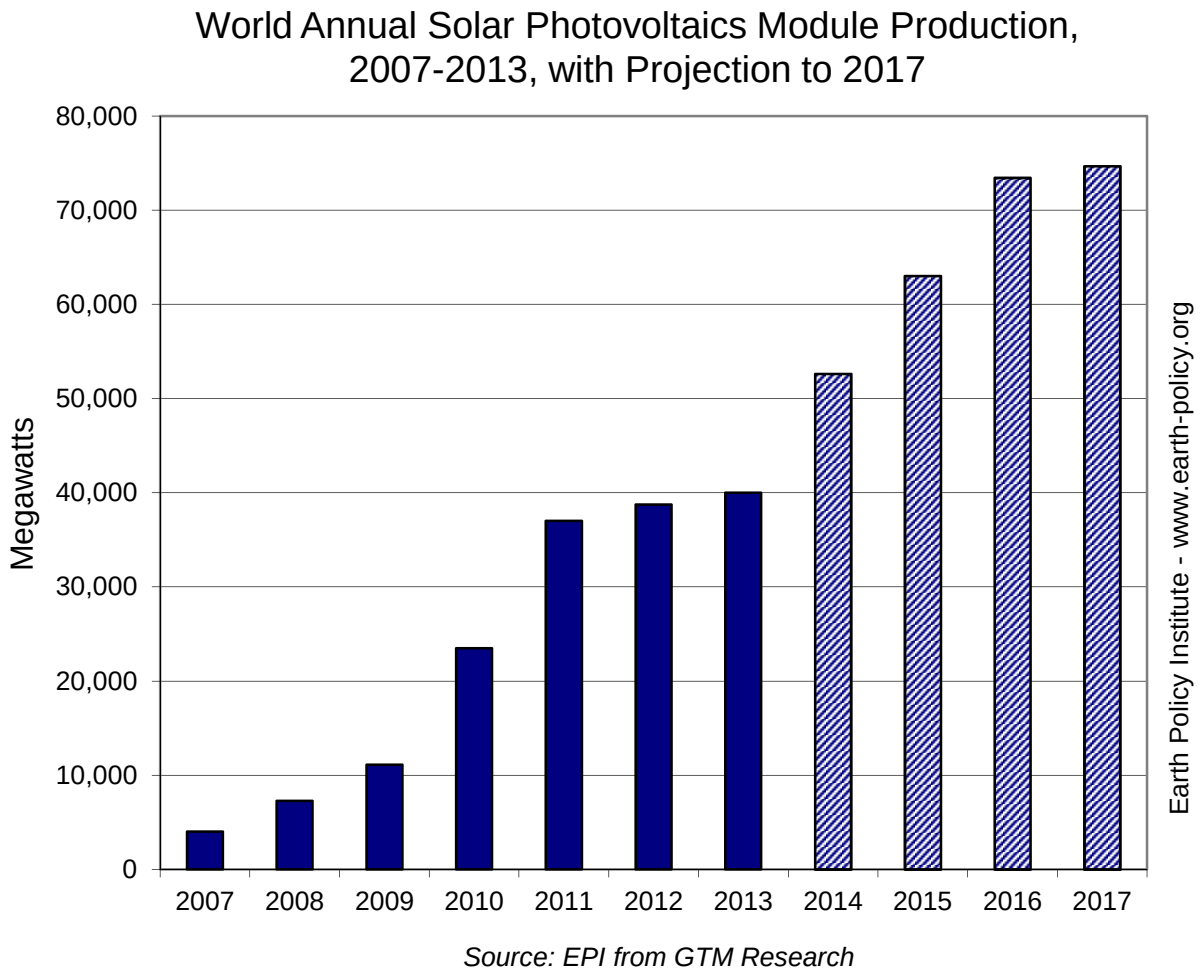
Source: Compiled by Earth Policy Institute (EPI) with 1995-1999 data from Worldwatch Institute, *Signposts 2004*, CD-ROM (Washington, DC: 2005); 2000 data from Prometheus Institute, "23rd Annual Data Collection - Final," *PVNews*, vol. 26, no. 4 (April 2007), pp. 8-9; 2001-2006 from Prometheus Institute and Greentech Media, "25th Annual Data Collection Results: PV Production Explodes in 2008," *PVNews*, vol. 28, no. 4 (April 2009), pp. 15-18; 2007-2013 compiled by Earth Policy Institute from GTM Research, *PV Cell Module Production Data*, electronic database, updated June 2014.


Annual Solar Photovoltaics Cell Production in Leading Countries, 2000-2013
Megawatts
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
2000
2002
2004
2006
2008
2010
2012
Others
United States
South Korea
Germany
Malaysia
Japan
Taiwan
China
Earth Policy Institute - www.earth-policy.org
Source: EPI from GTM Research

World Annual Solar Photovoltaics Module Production, 2007-2013, with Projection to 2017

Year	Annual Production
	Megawatts
2007	4,028
2008	7,267
2009	11,103
2010	23,481
2011	36,996
2012	38,750
2013	39,987
2014	52,633
2015	63,026
2016	73,433
2017	74,674

Source: Compiled by Earth Policy Institute from GTM Research, *PV Cell Module Production Data*, electronic database, updated June 2014.

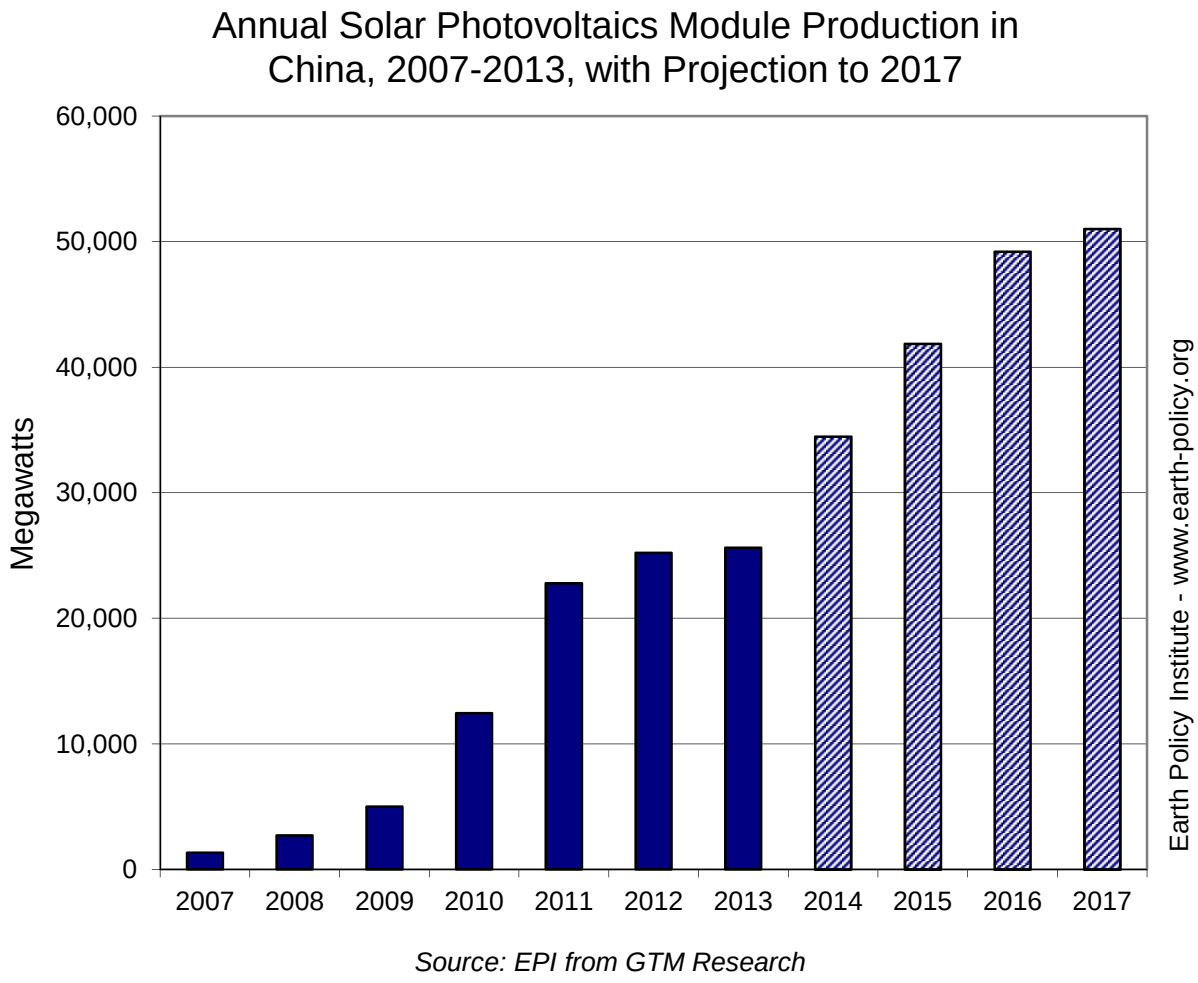


Source: EPI from GTM Research

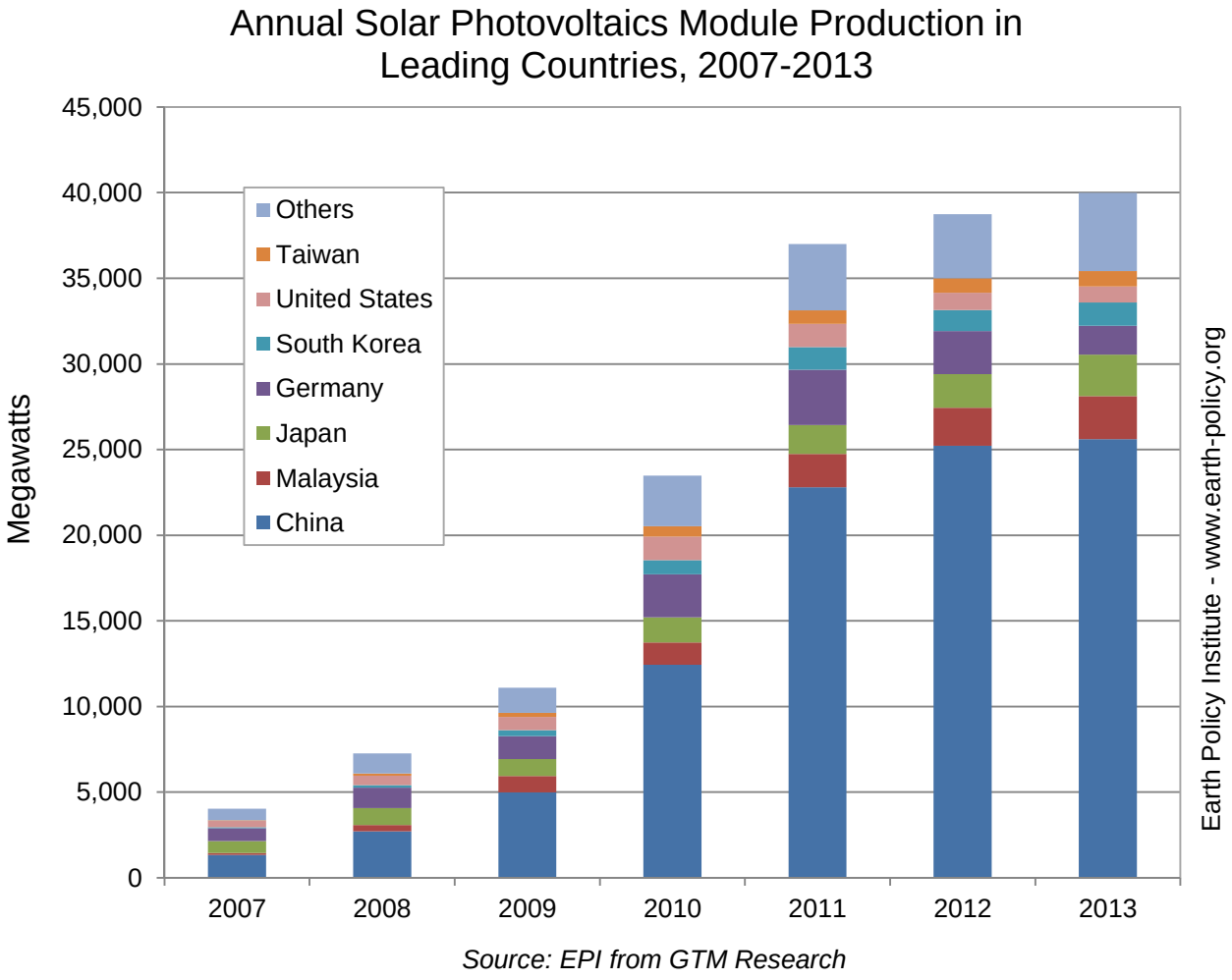
Annual Solar Photovoltaics Module Production by Country, 2007-2013, with Projection to 2017

Year	China	Malaysia	Japan	Germany	South Korea	United States	Taiwan	Others	World
					Megawatts				
2007	1,340	100	713	747	58	353	48	670	4,028
2008	2,714	361	989	1,193	147	554	131	1,179	7,267
2009	4,990	955	979	1,348	350	766	249	1,465	11,103
2010	12,437	1,299	1,463	2,515	836	1,371	601	2,958	23,481
2011	22,798	1,943	1,691	3,221	1,333	1,361	778	3,870	36,996
2012	25,214	2,222	1,964	2,517	1,236	1,003	849	3,745	38,750
2013	25,610	2,509	2,426	1,678	1,360	943	889	4,572	39,987
2014	34,478	3,250	2,783	2,016	1,813	1,115	1,782	5,397	52,633
2015	41,865	4,054	3,209	1,921	2,082	1,099	2,992	5,804	63,026
2016	49,212	5,161	3,814	1,723	2,037	1,064	3,945	6,478	73,433
2017	51,011	5,810	3,804	1,329	1,719	927	3,975	6,098	74,674

Source: Compiled by Earth Policy Institute from GTM Research, *PV Cell Module Production Data*, electronic database, updated June 2014.



Source: EPI from GTM Research


Annual Solar Photovoltaics Module Production in Leading Countries, 2007-2013
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Megawatts
Others
Taiwan
United States
South Korea
Germany
Japan
Malaysia
China
2007
2008
2009
2010
2011
2012
2013
Earth Policy Institute - www.earth-policy.org
Source: EPI from GTM Research

Solar Photovoltaics Module Production by Top 10 Companies in 2013

Rank	Company	Production
		Megawatts
1	Yingli Green Energy	2,622
2	Trina Solar	2,560
3	Canadian Solar	2,020
4	First Solar	1,628
5	JA Solar	1,252
6	Jinko Solar	1,215
7	Kyocera	1,200
8	Flextronics	1,058
9	Hanwha-SolarOne	1,050
10	Solar Frontier	995
	World Total	39,987

Source: Compiled by Earth Policy Institute from GTM Research, *PV Cell Module Production Data*, electronic database, updated June 2014.

Cumulative Number and Generating Capacity of Operational Concentrating Solar Power Plants Worldwide as of May 2014

Country	Number of Projects	Capacity
		Megawatts
Spain	50	2,305
United States	22	1,493
India	5	59
Australia	4	16
China	3	4
France	2	2
Italy	2	7
Algeria	1	25
Chile	1	10
Egypt	1	20
Germany	1	2
Israel	1	6
Morocco	1	20
Oman	1	7
Thailand	1	5
Turkey	1	5
United Arab Emirates	1	100
World	98	4,086

Source: CSP Today, *CSP Today Global Tracker* , electronic database, at http://social.csptoday.com/tracker/projects, viewed 19 May 2014.

Operational Concentrating Solar Power Plants Around the World as of May 201

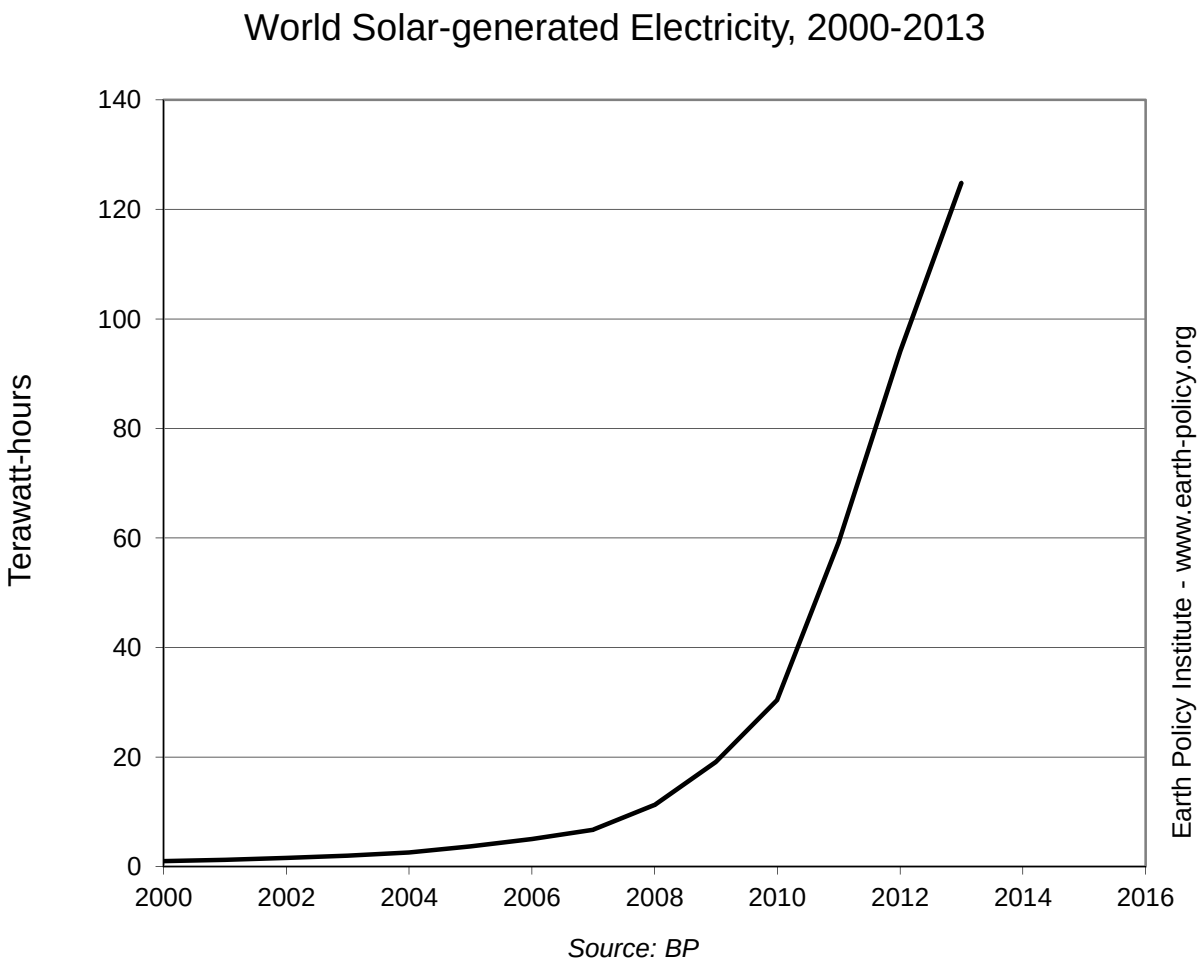
Name	Country	Capacity	Technology
		Megawatts	
Hassi-R'mel	Algeria	25	Parabolic Trough
Lake Cargelligo	Australia	3	Tower
Liddell	Australia	1	Fresnel
Liddell Phase 2	Australia	3	Fresnel
NovatecSolar Liddell Solar Expansion	Australia	9	Fresnel
Minera el Tesoro	Chile	10	Parabolic Trough
Dahan Power Plant	China	1	Tower
Hainan Nanshan Sanya Pilot	China	1	Dish
Hainan Sanya Pilot	China	2	Fresnel
Kuraymat ISCC	Egypt	20	Parabolic Trough
PÉGASE	France	1	Tower
Augustin Fresnel 1	France	1	Fresnel
Jülich	Germany	2	Tower
Godawari	India	50	Parabolic Trough
Indian Institute of Technology CSP Project	India	3	Parabolic Trough
Acme Rajasthan Solar Power 1	India	3	Tower
LFR Solar Thermal Desalination plant	India	1	Fresnel
IIT /SEC plant	India	2	Fresnel
BrightSource SEDC	Israel	6	Tower
Archimede	Italy	5	Parabolic Trough
ASE Demo Plant	Italy	2	Parabolic Trough
Ain-Beni-Mathar ISCC	Morocco	20	Parabolic Trough
Petroleum Development Oman CSP EOR Project	Oman	7	Parabolic Trough
Andasol 1	Spain	50	Parabolic Trough
Andasol 2	Spain	50	Parabolic Trough
Andasol 3	Spain	50	Parabolic Trough
Arenales PS	Spain	50	Parabolic Trough
La Africana	Spain	50	Parabolic Trough
ASTE - 1A	Spain	50	Parabolic Trough
ASTE - 1B	Spain	50	Parabolic Trough
Astexol-2	Spain	50	Parabolic Trough
Enerstar Villena	Spain	50	Parabolic Trough
Casablanca	Spain	50	Parabolic Trough
La Dehesa	Spain	50	Parabolic Trough
La Florida	Spain	50	Parabolic Trough
Extresol 1	Spain	50	Parabolic Trough
Extresol 2	Spain	50	Parabolic Trough
Extresol 3	Spain	50	Parabolic Trough
Gemasolar	Spain	20	Tower
HelioEnergy 1	Spain	50	Parabolic Trough
HelioEnergy 2	Spain	50	Parabolic Trough
Helios 1	Spain	50	Parabolic Trough
Helios 2	Spain	50	Parabolic Trough
La Risca	Spain	50	Parabolic Trough
Lebrija 1	Spain	50	Parabolic Trough
Manchasol 1	Spain	50	Parabolic Trough
Manchasol 2	Spain	50	Parabolic Trough
Consol Orellana	Spain	50	Parabolic Trough
Palma del Rio I	Spain	50	Parabolic Trough
Palma del Rio II	Spain	50	Parabolic Trough
Morón	Spain	50	Parabolic Trough
Olivenza I	Spain	50	Parabolic Trough
PS10	Spain	11	Tower
PS20	Spain	20	Tower
Puerto Errado 2	Spain	30	Fresnel
Puerto Errado 1	Spain	1	Fresnel
Puertollano Ibersol	Spain	50	Parabolic Trough
Solaben 6	Spain	50	Parabolic Trough
Solaben I	Spain	50	Parabolic Trough
Solaben II	Spain	50	Parabolic Trough
Solaben III	Spain	50	Parabolic Trough
Solacor 1	Spain	50	Parabolic Trough
Solacor 2	Spain	50	Parabolic Trough
Solnova 1	Spain	50	Parabolic Trough
Solnova 3	Spain	50	Parabolic Trough
Solnova 4	Spain	50	Parabolic Trough
Soluz Guzman	Spain	50	Parabolic Trough
Majadas	Spain	50	Parabolic Trough
Termosol 1	Spain	50	Parabolic Trough
Termosol 2	Spain	50	Parabolic Trough
Borges	Spain	23	Parabolic Trough
Valle 1	Spain	50	Parabolic Trough
Valle 2	Spain	50	Parabolic Trough
Kanchanaburi	Thailand	5	Parabolic Trough
Greenway CSP Tower	Turkey	5	Tower
Shams 1	United Arab Emirates	100	Parabolic Trough
Genesis Solar 1	United States	125	Parabolic Trough
Genesis Solar 2	United States	125	Parabolic Trough
Holaniku at Keyhole Point	United States	2	Parabolic Trough
Ivanpah Solar Electric Generating Station I	United States	126	Tower
Ivanpah Solar Electric Generating Station II	United States	133	Tower
Ivanpah Solar Electric Generating Station III	United States	133	Tower
Kimberlina	United States	5	Fresnel
Martin Next Generation Solar Energy Center	United States	75	Parabolic Trough
Nevada Solar One	United States	64	Parabolic Trough
Saguaro Power Plant	United States	1	Parabolic Trough
SEGS I	United States	14	Parabolic Trough
SEGS II	United States	33	Parabolic Trough
SEGS III	United States	33	Parabolic Trough
SEGS IV	United States	33	Parabolic Trough
SEGS V	United States	33	Parabolic Trough
SEGS VI	United States	33	Parabolic Trough
SEGS VII	United States	33	Parabolic Trough
SEGS VIII	United States	89	Parabolic Trough
SEGS IX	United States	89	Parabolic Trough
SierraSunTower	United States	5	Tower
Solana	United States	280	Parabolic Trough
Chevron/ BrightSource Coalinga	United States	29	Tower

Source: CSP Today, *CSP Today Global Tracker*, electronic database, at http://social.csptoday.com/tracker/projects, viewed 19 May 2014.

World Solar-generated Electricity, 1990-2013

Year	Solar-Generated Electricity
	Terawatt-hours
1990	0.4
1991	0.5
1992	0.5
1993	0.6
1994	0.6
1995	0.6
1996	0.7
1997	0.7
1998	0.8
1999	0.9
2000	1.0
2001	1.3
2002	1.6
2003	2.0
2004	2.6
2005	3.7
2006	5.0
2007	6.7
2008	11.2
2009	19.1
2010	30.5
2011	59.2
2012	94.1
2013	124.8

Source: BP, *Statistical Review of World Energy June 2014* (London: 2014).

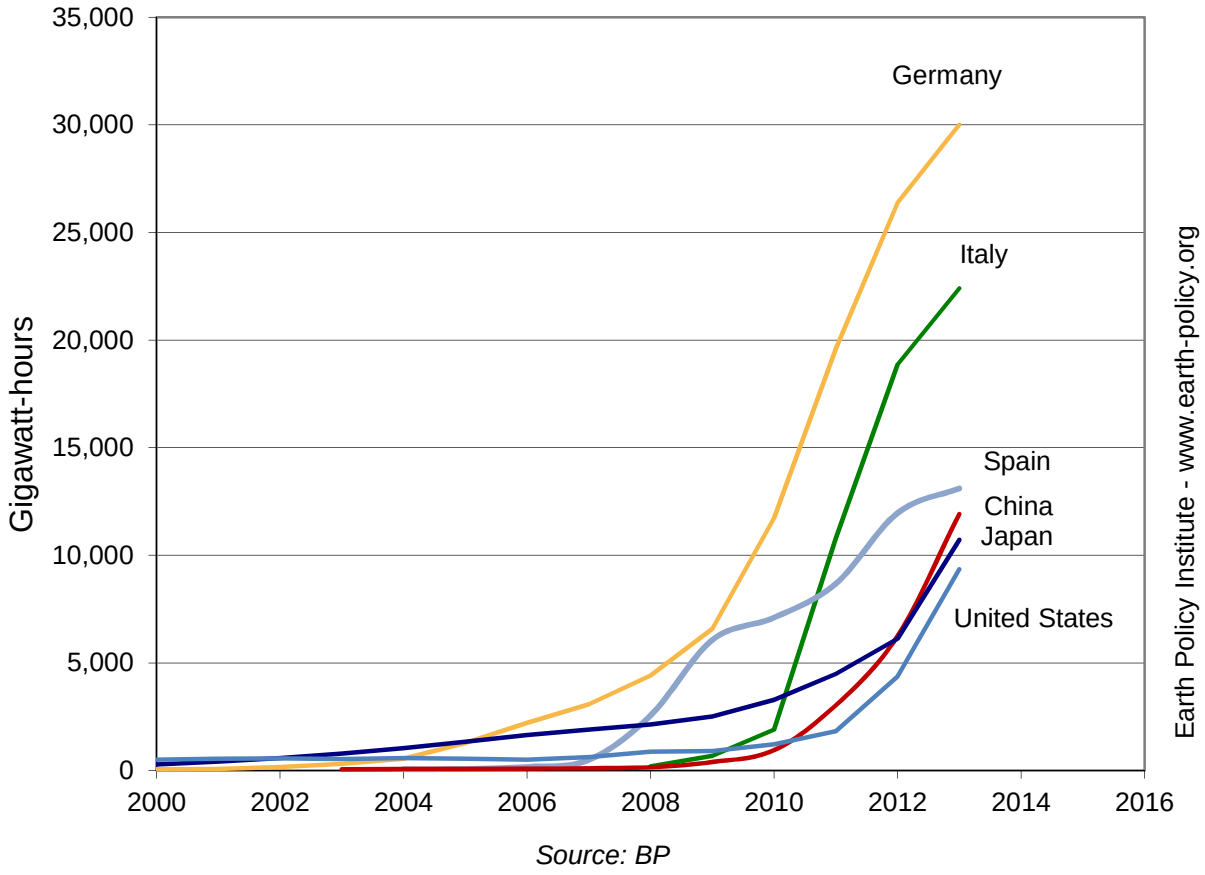

World Solar-generated Electricity, 2000-2013
Terawatt-hours
140
120
100
80
60
40
20
0
2000
2002
2004
2006
2008
2010
2012
2014
2016
Source: BP
Earth Policy Institute - www.earth-policy.org

Solar-generated Electricity in Leading Countries and the World, 2000-2013

Year	Germany	Italy	Spain	China	Japan	United States	France	Australia	Others	World
				---------- Gigawatt-hours ----------						
2000	64	--	--	--	283	498	--	--	175	1,021
2001	76	--	--	--	412	548	--	54	161	1,251
2002	162	--	--	--	573	560	--	58	229	1,582
2003	313	--	--	64	787	539	--	63	233	1,999
2004	556	--	56	69	1,047	581	--	73	217	2,599
2005	1,282	--	78	75	1,342	556	--	84	256	3,673
2006	2,220	--	169	85	1,645	513	--	98	282	5,012
2007	3,075	--	497	106	1,907	618	--	114	416	6,732
2008	4,420	193	2,557	154	2,136	873	--	139	724	11,195
2009	6,583	677	6,067	396	2,508	900	164	218	1,580	19,092
2010	11,729	1,906	7,104	948	3,283	1,224	500	565	3,206	30,465
2011	19,599	10,796	8,680	3,030	4,484	1,836	1,900	1,170	7,716	59,211
2012	26,380	18,862	11,966	6,246	6,127	4,370	4,000	2,412	13,740	94,102
2013	30,000	22,408	13,111	11,915	10,715	9,346	4,648	3,610	19,058	124,810

Source: BP, *Statistical Review of World Energy June 2014* (London: 2014).

Solar-generated Electricity in Leading Countries, 2000-2013



Source: BP

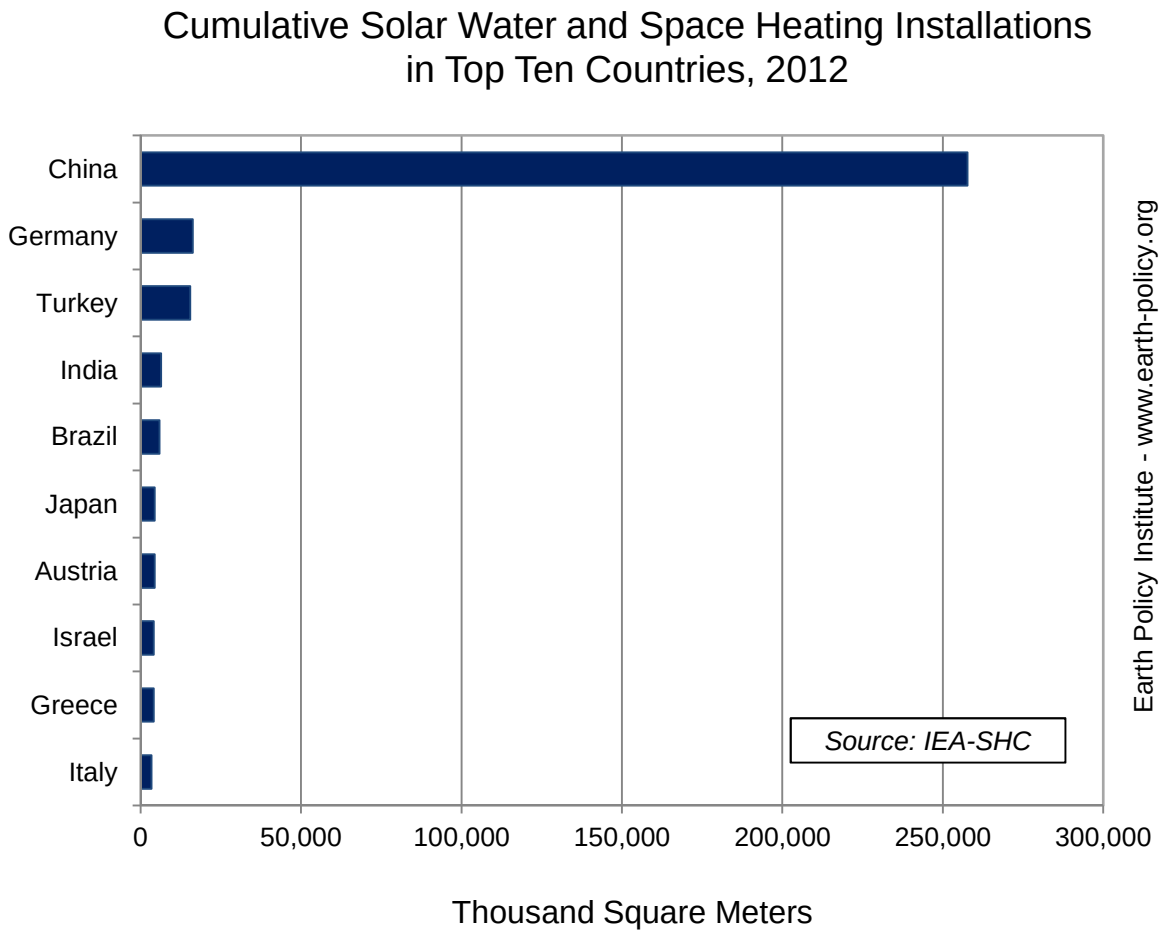
Cumulative Solar Water and Space Heating Installations in Leading Countries and the World, 2012

Country	Cumulative Installed Capacity*
	Thousand Square Meters**
China	257,700
Germany	16,254
Turkey	15,498
India	6,451
Brazil	5,947
Japan	4,462
Austria	4,369
Israel	4,145
Greece	4,122
Italy	3,403
Australia	2,976
Spain	2,829
United States	2,765
France	2,361
World Total	**350,063**

* Data include glazed flat-plate and evacuated-tube solar collectors used for residential water and space heating. Unglazed flat-plate collectors, typically used for heating swimming pools, are not included. For more information on these technologies, see the U.S. Department of Energy's "Solar Water Heaters" Web page, at http://energy.gov/energysaver/articles/solar-water-heaters.

** The solar heating industry assumes an installed capacity of 0.7 thermal kilowatts per square meter of installed solar collectors.

Source: Compiled by Earth Policy Institute from Werner Weiss and Franz Mauthner, *Solar Heat Worldwide: Markets and Contribution to the Energy Supply 2012* (Gleisdorf, Austria: International Energy Agency, Solar Heating & Cooling Programme, June 2014), p. 10.


Cumulative Solar Water and Space Heating Installations in Top Ten Countries, 2012
China
Germany
Turkey
India
Brazil
Japan
Austria
Israel
Greece
Italy
0
50,000
100,000
150,000
200,000
250,000
300,000
Thousand Square Meters
Source: IEA-SHC
Earth Policy Institute - www.earth-policy.org

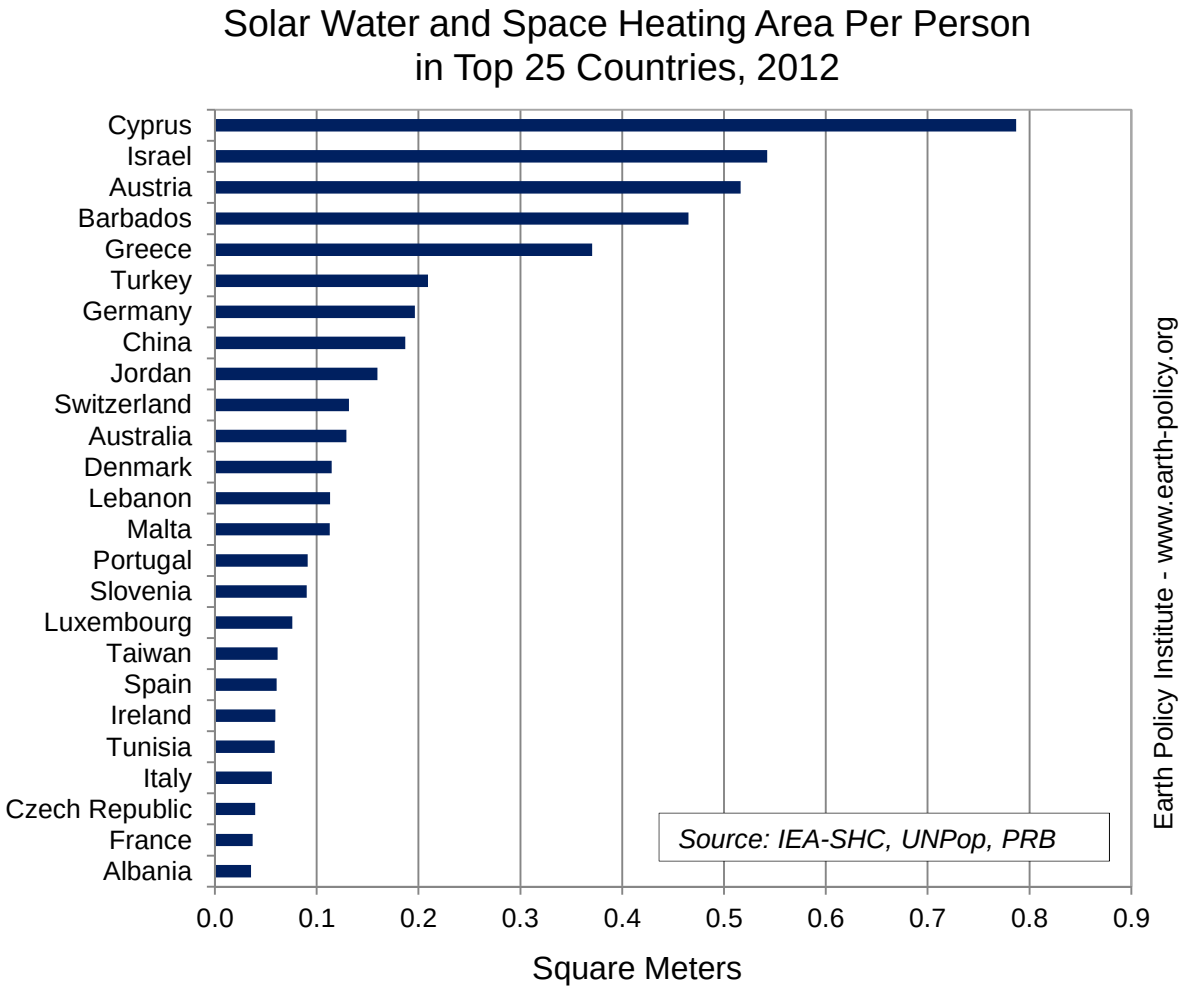
Solar Water and Space Heating Area in Selected Countries and the World, Total and Per Person, 2012

Country	Total Area*	Population	Area Per Person
	Thousand Square Meters**	Thousands	Square Meters
Cyprus	888	1,129	0.79
Israel	4,145	7,644	0.54
Austria	4,369	8,464	0.52
Barbados	132	283	0.46
Greece	4,122	11,125	0.37
Turkey	15,498	73,997	0.21
Germany	16,254	82,800	0.20
China	257,700	1,377,065	0.19
Jordan	1,118	7,009	0.16
Switzerland	1,054	7,997	0.13
Australia	2,976	23,050	0.13
Denmark	643	5,598	0.11
Lebanon	526	4,647	0.11
Malta	48	428	0.11
Portugal	968	10,604	0.09
Slovenia	187	2,068	0.09
Luxembourg	40	524	0.08
Taiwan	1,432	23,300	0.06
Spain	2,829	46,755	0.06
Ireland	272	4,576	0.06
Tunisia	639	10,875	0.06
Italy	3,403	60,885	0.06
Czech Republic	424	10,660	0.04
France	2,361	63,937	0.04
Albania	112	3,162	0.04
Japan	4,462	127,250	0.04
Belgium	385	11,060	0.03
South Korea	1,685	49,003	0.03
New Zealand	153	4,460	0.03
Sweden	320	9,511	0.03
Poland	1,212	38,211	0.03
Brazil	5,947	198,656	0.03
Croatia	120	4,307	0.03
Slovakia	147	5,446	0.03
Netherlands	446	16,714	0.03
Hungary	220	9,976	0.02
Bulgaria	122	7,278	0.02
Morocco	491	32,521	0.02
Macedonia	26	2,106	0.01
United Kingdom	710	62,783	0.01
Mexico	1,198	120,847	0.01
Namibia	22	2,259	0.01
South Africa	497	52,386	0.01
United States	2,765	317,505	0.01
Norway	34	4,994	0.01
Finland	37	5,408	0.01
India	6,451	1,236,687	0.01
Romania	111	21,755	0.01
Estonia	7	1,291	0.01
Chile	80	17,465	0.00
Uruguay	13	3,395	0.00
Canada	97	34,838	0.00
Lithuania	6	3,028	0.00
Latvia	4	2,060	0.00
Thailand	120	66,785	0.00
Zimbabwe	20	13,724	0.00
Russia	19	143,170	0.00
Mozambique	0	25,203	0.00
World	**350,063**	**7,080,072**	**0.05**

* Data include glazed flat-plate and evacuated-tube solar collectors used for residential water and space heating. Unglazed flat-plate collectors, typically used for heating swimming pools, are not included. For more information on these technologies, see the U.S. Department of Energy's "Solar Water Heaters" Web page, at http://energy.gov/energysaver/articles/solar-water-heaters.

** The solar heating industry assumes an installed capacity of 0.7 thermal kilowatts per square meter of installed solar collectors.

Source: Compiled by Earth Policy Institute with country data from Werner Weiss and Franz Mauthner, *Solar Heat*


Solar Water and Space Heating Area Per Person
in Top 25 Countries, 2012
Cyprus
Israel
Austria
Barbados
Greece
Turkey
Germany
China
Jordan
Switzerland
Australia
Denmark
Lebanon
Malta
Portugal
Slovenia
Luxembourg
Taiwan
Spain
Ireland
Tunisia
Italy
Czech Republic
France
Albania
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
Square Meters
Source: IEA-SHC, UNPop, PRB
Earth Policy Institute - www.earth-policy.org