



Independent Statistics & Analysis
U.S. Energy Information
Administration

Solar Photovoltaic Cell/Module Shipments Report

September 2016



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Table 1. U.S. Photovoltaic industry status, 2015

Reporting companies, total number of:	54
Employment, full-time equivalent employees:	6,937
Involved in photovoltaic-related activities	
Module and/or cell manufacturing	32
Module or system design	19
Prototype module development	17
Prototype systems development	12
Wholesale distribution	24
Retail distribution	7
Installations	6
Other	3
Sales as a percent of total company revenue	
90-100%	43
50-89%	1
10-49%	4
Less than 10%	6
Companies expecting to introduce new photovoltaic products next year	
Crystalline silicon: single-crystal modules	11
Crystalline silicon: cast modules	5
Thin-film: amorphous silicon modules	1
Thin-film: other modules	5
Concentrators	1
Non-module components	1

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report'

Table 2. Value and average value of photovoltaic module shipments, 2015

Module value, total shipments (thousand dollars)	
Total modules	\$7,014,256
Module average value (dollars per peak watt)	
Total modules	\$0.71

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report' Note: Dollars are not adjusted for inflation.

Table 3. Annual photovoltaic module shipments, 2005-2015 (peak kilowatts)

Year	Modules
2005	204,996
2006	320,208
2007	494,148
2008	920,693
2009	1,188,879
2010	2,644,498
2011	3,772,075
2012	4,655,005
2013	4,984,881
2014	6,237,524
2015	9,942,978

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.' Note: Includes both U.S. Shipments and Exports.

Table 4. Average value of photovoltaic modules, 2005-2015
(dollars per peak watt)

Year	Modules
2005	\$3.19
2006	\$3.50
2007	\$3.37
2008	\$3.49
2009	\$2.79
2010	\$1.96
2011	\$1.59
2012	\$1.15
2013	\$0.75
2014	\$0.87
2015	\$0.71

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.'¹ Note: Dollars are not adjusted for inflation.

**Table 6. Source and disposition of photovoltaic module shipments, 2015
(peak kilowatts)**

Module shipments	Total
Source	
Inventory, start-of-year	583,194
Manufactured during reporting year	864,985
Imported during reporting year	9,755,831
Purchased from U.S. OEM	27,352
Total available for shipment	11,231,362
Disposition	
U.S. shipments and sales to U.S. OEM* for resale	9,754,959
Export shipments	188,019
Total shipments	9,942,978
Inventory, end-of-year	1,288,234

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.'

*OEM is Original Equipment Manufacturer

**Table 7 . Photovoltaic module import shipments by country, 2015
(peak kilowatts)**

Country	Total	Percent of U.S. Total
Canada	295,948	3%
Mexico	1,099,452	11%
China	3,287,571	34%
Malaysia	2,321,731	24%
South Korea	467,820	5%
Taiwan	60,155	1%
Vietnam	361,184	4%
All others	1,861,971	19%
Total	9,755,831	100%

Note: All Others includes Czech Republic, Germany, Hong Kong, India, Indonesia, Italy, Japan, Philippines, Poland, Portugal, Singapore, South Africa, Thailand and Turkey. Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.'

**Table 8. Destination of photovoltaic module export shipments, 2015
(peak kilowatts)**

Country/Continent	Total	Percent of U.S. Total
Canada	8,196	4%
Mexico	2,285	1%
South/Central America	17,753	9%
Europe	31,843	17%
Africa	3,034	2%
Asia	124,282	66%
Australia and Oceania	609	0%
Total	188,003	100%

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.'

Table 9. U.S. Photovoltaic module shipments by state/territory, 2015 (peak kilowatts)

State	Total	Percent of U.S. Total
Arizona	402,754	4.1%
California	3,671,381	37.6%
Colorado	113,999	1.2%
Connecticut	99,213	1.0%
Delaware	8,086	0.1%
Florida	56,025	0.6%
Georgia	355,174	3.6%
Hawaii	74,912	0.8%
Idaho	622	0.0%
Illinois	6,796	0.1%
Indiana	45,324	0.5%
Iowa	6,913	0.1%
Louisiana	7,806	0.1%
Maine	7,248	0.1%
Maryland	199,459	2.0%
Massachusetts	172,479	1.8%
Michigan	7,636	0.1%
Minnesota	10,467	0.1%
Missouri	14,464	0.1%
Montana	499	0.0%
Nevada	673,593	6.9%
New Hampshire	37,913	0.4%
New Jersey	704,776	7.2%
New Mexico	55,490	0.6%
New York	188,412	1.9%
North Carolina	1,370,753	14.1%
Ohio	9,942	0.1%
Oregon	66,816	0.7%
Pennsylvania	13,651	0.1%
Puerto Rico	36,979	0.4%
Rhode Island	10,050	0.1%
South Carolina	10,057	0.1%
Tennessee	8,943	0.1%
Texas	360,194	3.7%
Utah	222,505	2.3%
Vermont	34,364	0.4%
Virgin Islands	0	0.0%
Washington	2,114	0.0%
Wisconsin	4,812	0.0%
Wyoming	133	0.0%
Other	682,192	7.0%
Total	9,754,944	100.0%

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.' Notes: "Other" includes Alabama, Alaska, Arkansas, District of Columbia, Kansas, Kentucky, Nebraska, Mississippi, North Dakota, Oklahoma, South Dakota, Virginia, West Virginia, Guam and Sales to U.S. OEM* for Resale.