



Independent Statistics & Analysis
U.S. Energy Information
Administration

Solar Photovoltaic Cell/Module Shipments Report

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Table 1. U.S. Photovoltaic Industry Status, 2013

Reporting companies, total number of:	81
Employment, full-time equivalent employees:	9,288
Involved in photovoltaic-related activities	
Module and/or cell manufacturing	33
Module or system design	23
Prototype module development	23
Prototype systems development	12
Wholesale distribution	42
Retail distribution	15
Installations	12
Other	8
Sales as a percent of total company revenue	
90-100%	53
50-89%	6
10-49%	3
Less than 10%	19
Companies expecting to introduce new photovoltaic products next year	
Crystalline silicon: single-crystal modules	15
Crystalline silicon: cast modules	9
Thin-film: amorphous silicon modules	1
Thin-film: other modules	4
Concentrators	3
Non-module components	8

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, 2013

Module value, total shipments (thousand dollars)	
Total modules	\$3,754,813
Module average value (dollars per peak watt)	
Total modules	\$0.75

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, 2003-2013 (peak kilowatts)

Year	Modules
2003	80,062
2004	143,274
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

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, 2003-2013
(dollars per peak watt)

Year	Modules
2003	\$3.17
2004	\$2.99
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

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

**Table 5. Source and disposition of photovoltaic cell shipments, 2013
(peak kilowatts)**

Cell shipments	Total
Source	
Inventory, start-of-year	328,658
Manufactured during reporting year	1,978,468
Imported during reporting year	1,528,018
Purchased from U.S. OEM*	26
Total available for shipment	3,835,170
Disposition	
Cells assembled into modules	2,179,639
Sales to U.S. OEM for resale	5,076
Export shipments	156,646
Total shipments	2,341,361
Inventory, end-of-year	1,493,809

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

* OEM is Original Equipment Manufacturer

**Table 6. Source and disposition of photovoltaic module shipments, 2013
(peak kilowatts)**

Module shipments	Total
Source	
Inventory, start-of-year	4,073,462
Manufactured during reporting year	2,528,994
Imported during reporting year	4,308,996
Purchased from U.S. OEM	23,027
Total available for shipment	10,934,479
Disposition	
U.S. shipments	4,589,057
Sales to U.S. OEM* for resale	12,571
Export shipments	383,254
Total shipments	4,985,131
Inventory, end-of-year	5,949,598

Notes: Table 7, Imports, sourced from Schedule 5B, of 4,288,027 differs from the data in Table 6, Imports, which is sourced from Schedule 4B. The difference of 20,969 is due to reporting differences between the two schedules. Likewise, Exports in Table 6 and Table 8 are slightly different due to Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.' rounding. Also, U.S. Shipments reported on Schedule 4B in Table 6 differ by 1,314 due to slight differences in reporting between Schedules 4B and 6B. Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.' Cell/Module Shipments Report.'

*OEM is Original Equipment Manufacturer

**Table 7 . Photovoltaic module import shipments by country, 2013
(peak kilowatts)**

Country	Total	Percent of U.S. total
China	1,461,074	34
Republic of Korea	172,379	4
Taiwan	688,311	16
All others	1,966,263	46
Total	4,288,027	100

Note: All Others includes Canada, Czech Republic, Federal Republic of Germany, Malaysia, Mexico, Philippines and Singapore Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.'

Table 8. Destination of photovoltaic module export shipments, 2013

(peak kilowatts)

Country/Continent	Total	Percent of U.S. total
Africa	14,279	3.7
Asia/Australia	330,200	86.2
Europe	19,771	5.1
South/Central America	7,748	2.0
Canada	5,507	1.4
Mexico	5,747	1.5
Total	383,252	100.0

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, 2013 (peak kilowatts)

State	Total	Percent of U.S. total
Alabama	1,652	0.0
Alaska	152	0.0
Arizona	912,975	19.9
Arkansas	2,724	0.1
California	2,239,983	48.8
Colorado	49,903	1.1
Connecticut	33,627	0.7
Delaware	3,080	0.1
District of Columbia	1,746	0.0
Florida	22,061	0.5
Georgia	99,713	2.2
Guam	39	0.0
Hawaii	126,595	2.8
Idaho	1,423	0.0
Illinois	8,176	0.2
Indiana	12,912	0.3
Iowa	4,480	0.1
Kansas	523	0.0
Kentucky	2,356	0.1
Louisiana	27,704	0.6
Maine	993	0.0
Maryland	30,528	0.7
Massachusetts	143,539	3.1
Michigan	3,416	0.1
Minnesota	2,221	0.0
Mississippi	803	0.0
Missouri	15,438	0.3
Montana	473	0.0
Nebraska	341	0.0
Nevada	71,889	1.6
New Hampshire	3,577	0.1
New Jersey	163,996	3.6
New Mexico	92,641	2.0
New York	88,603	1.9
North Carolina	208,564	4.5
North Dakota	12	0.0
Ohio	8,740	0.2
Oklahoma	1,151	0.0
Oregon	24,548	0.5
Pennsylvania	21,854	0.5
Puerto Rico	16,936	0.4
Rhode Island	5,162	0.1
South Carolina	1,398	0.0
South Dakota	14	0.0
Tennessee	9,228	0.2
Texas	101,422	2.2
Utah	1,905	0.0
Vermont	5,165	0.1
Virgin Islands	536	0.0
Virginia	3,155	0.1
Washington	3,828	0.1
West Virginia	507	0.0
Wisconsin	2,571	0.1
Wyoming	769	0.0
Total	4,587,743	100.0

Source: U.S. Energy Information Administration, Form EIA-63B, 'Annual Photovoltaic Cell/Module Shipments Report.' Note: Total U.S. Shipments by State does not equal U.S. Shipments in Table 6 due to numerous small data discrepancies reported by respondents.