

Table 10.9 Photovoltaic Cell and Module Shipments by Sector and End Use, 1989-2010

(Peak Kilowatts ¹)

Year	By Sector					By End Use				Total
	Residential	Commercial ³	Industrial ⁴	Electric Power ⁵	Other ⁶	Grid-Connected ²		Off-Grid ²		
						Centralized ⁷	Distributed ⁸	Domestic ⁹	Non-Domestic ¹⁰	
Total Shipments of Photovoltaic Cells and Modules ¹¹										
1989	1,439	R6,057	3,993	785	551	(¹²)	¹² 1,251	2,620	8,954	12,825
1990	1,701	R8,062	2,817	826	432	(¹²)	¹² 469	3,097	10,271	13,837
1991	3,624	R5,715	3,947	1,275	377	(¹²)	¹² 856	3,594	10,489	14,939
1992	4,154	R5,122	4,279	1,553	477	(¹²)	¹² 1,227	4,238	10,118	15,583
1993	5,237	R8,004	5,352	1,503	856	(¹²)	¹² 1,096	5,761	14,094	20,951
1994	6,632	R9,717	6,855	2,364	510	(¹²)	¹² 2,296	9,253	14,528	26,077
1995	6,272	R12,483	7,198	3,759	1,347	(¹²)	¹² 4,585	8,233	18,241	31,059
1996	8,475	R12,297	8,300	4,753	1,639	(¹²)	¹² 4,844	10,884	19,736	35,464
1997	10,993	R15,594	11,748	5,651	2,367	(¹²)	¹² 8,273	8,630	29,451	46,354
1998	15,936	R14,708	13,232	3,965	2,720	(¹²)	¹² 14,193	8,634	27,735	50,562
1999	19,817	R24,731	24,972	5,876	1,392	(¹²)	¹² 24,782	10,829	41,176	76,787
2000	24,814	R23,611	28,808	6,298	4,690	(¹²)	¹² 21,713	14,997	51,511	88,221
2001	33,262	R29,924	28,063	5,846	571	(¹²)	¹² 27,226	21,447	48,993	97,666
2002	29,315	R42,075	32,218	7,640	841	(¹²)	¹² 33,983	21,693	56,414	112,090
2003	23,389	R49,231	27,951	8,474	313	(¹²)	¹² 42,485	15,025	51,847	109,357
2004	53,928	R79,146	30,493	3,233	14,316	(¹²)	¹² 129,265	18,371	33,480	181,116
2005	75,040	R119,763	22,199	143	9,772	(¹²)	¹² 168,474	24,958	33,484	226,916
2006	95,815	R190,998	28,618	3,981	17,857	(¹²)	¹² 274,197	18,003	45,068	337,268
U.S. Shipments of Photovoltaic Cells and Modules ¹¹										
2007	68,417	R144,061	32,702	35,294	--	(¹²)	¹² 253,101	10,867	16,507	280,475
2008	173,989	R262,952	51,493	35,819	--	(¹²)	¹² 500,854	15,527	7,871	524,252
2009	221,245	R282,807	43,445	53,636	--	(¹²)	¹² 585,189	8,119	7,825	601,133
U.S. Shipments of Photovoltaic Modules Only ¹¹										
2010	467,165	908,224	48,208	243,947	--	243,947	1,408,462	10,941	4,193	1,667,543

¹ See "Peak Kilowatt" in Glossary.

² See "Electric Power Grid" in Glossary.

³ Includes data that were previously shown in the "Commercial," "Government," and "Transportation" sector categories.

⁴ Through 2006, data are for the industrial sector and independent power producers. Beginning in 2007, data are for the industrial sector only; independent power producers are included in "Electric Power."

⁵ Through 2006, data are for electric utilities only; independent power producers are included in "Industrial." Beginning in 2007, data are for electric utilities and independent power producers.

⁶ Through 2006, data are for specialty purposes such as research.

⁷ Photovoltaic cells/modules that are connected to the electric power grid, and whose output is fed directly into the grid.

⁸ Photovoltaic cells/modules that are connected to the electric power grid, and whose output is consumed mainly onsite.

⁹ Photovoltaic cells/modules that are not connected to the electric power grid, and that are used to provide electric power to remote households or communities. Includes data that were previously shown in the "Remote" end-use category.

¹⁰ Photovoltaic cells/modules that are not connected to the electric power grid, and that are used to provide electric power for a variety of non-domestic applications. Includes data that were previously shown

in the following end-use categories: "Communications," "Consumer Goods," "Health," "Original Equipment Manufacturers" (non-photovoltaic manufacturers that combine photovoltaic technology into existing or newly developed product lines), "Transportation," "Water Pumping," and "Other" (applications such as cooking food, desalination, and distilling).

¹¹ Through 2006, data are for domestic and export shipments of photovoltaic cells and modules, and may include imports that subsequently were shipped to domestic or foreign customers. For 2007-2009, data are for domestic shipments of photovoltaic cells and modules. For 2010, data are for domestic shipments of photovoltaic modules only.

¹² Through 2009, data for "Centralized" are included in "Distributed."

R=Revised. -- = Not applicable.

Notes: • See "Photovoltaic Cell (PVC)" and "Photovoltaic Module" in Glossary. • Totals may not equal sum of components due to independent rounding.

Web Page: For related information, see <http://www.eia.gov/fuelrenewable.html>.

Sources: • 1989-1992—U.S. Energy Information Administration (EIA), *Solar Collector Manufacturing Activity*, annual reports. • 1993-2002—EIA, *Renewable Energy Annual*, annual reports. • 2003 forward—EIA, *Solar Photovoltaic Cell/Module Shipments Report* (and predecessor reports), annual reports.