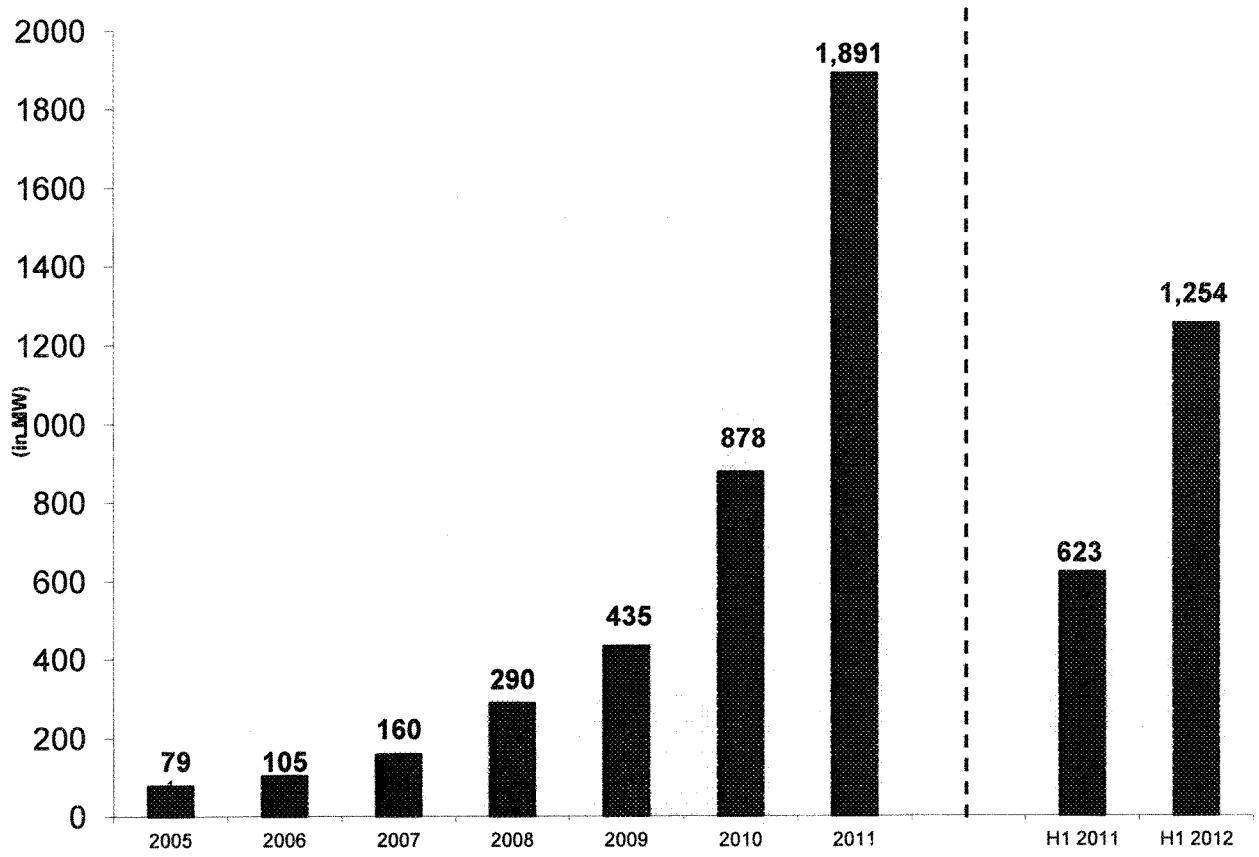
Exhibits to Testimony
on Behalf of the Joint Defense
CSPV Cells and Modules from China
Inv. Nos. 701-TA-481 and 731-TA-1190
(Final)

U.S. International Trade Commission

Hearing

October 3, 2012

New U.S. Photovoltaic Installations (in megawatts)



Source: SEIA U.S. Solar Market Insight, 2010 Year in Review, Executive Summary, p. 5; SEIA Solar Energy Facts: Q2, 2011, SEIA Solar Market Insight: Q2 2012.

Continuum of Relative Efficiency of Solar Module Types

Module Type		Efficiency (%) 2010	2011E
Crystalline Silicon	Super Monocrystalline	19.5	19.9
	Monocrystalline	14.5	15.5
	Multicrystalline	14.2	15
Thin-film	CIGS (coevap)	12.0	12.5
	CIGS (sputter)	11.0	11.5
	CdTe	11.3	11.7
	a-Si/McSi	9.0	9.5

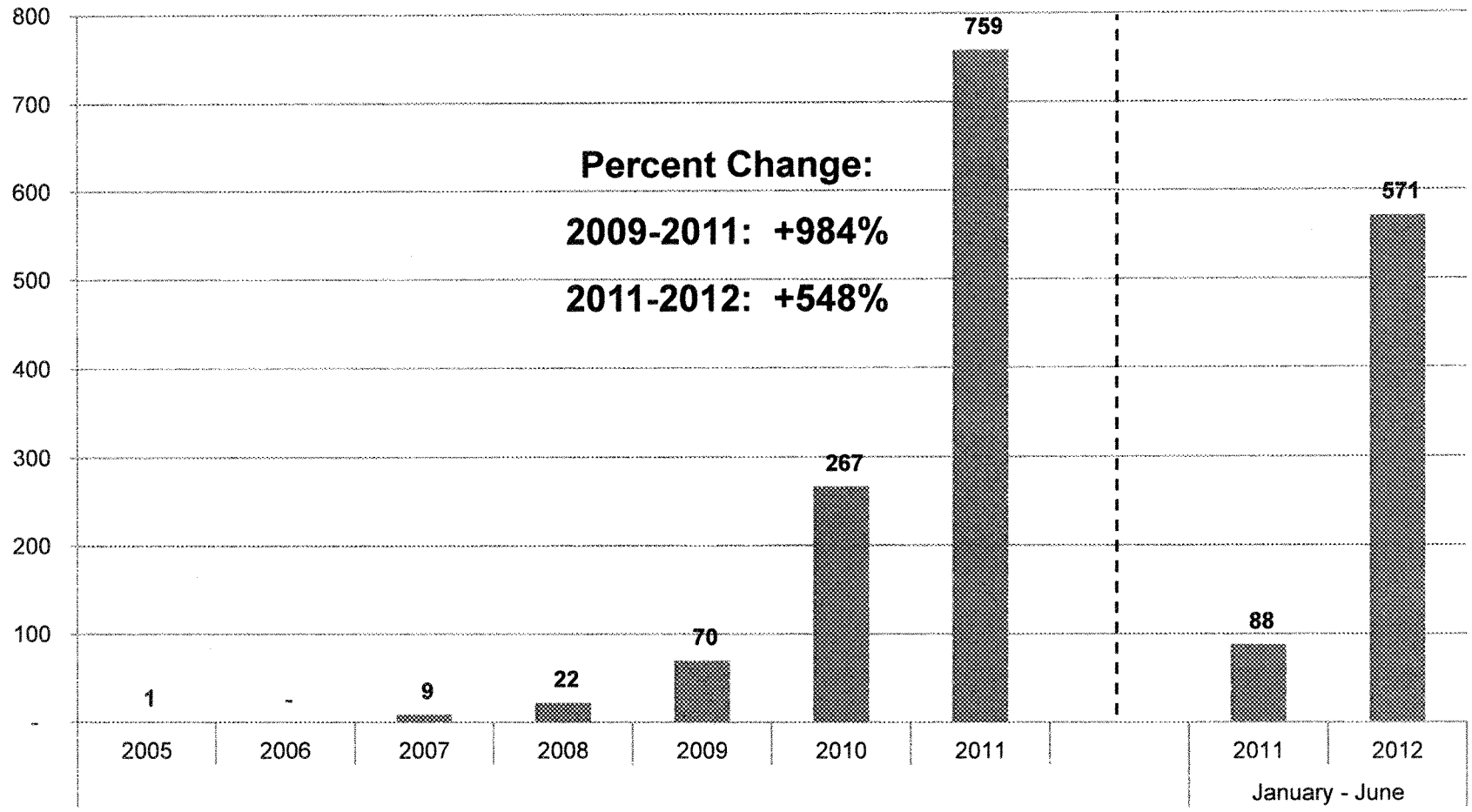
Source: GMT Research-Module Efficiency FC-11.2011.xlsx

U.S. Apparent Consumption and Shipments of Modules (in kilowatts)

	2009	2010	2011	First-Half H1 2011	First-Half H1 2012	Percent Change 2009-2011	Percent Change PY 2011-2012
U.S. Shipments:							
U.S. producers	104,499	248,175	405,895	201,318	234,603	**+288%**	**+17%**
Subject Imports	92,953	527,845	1,195,748	429,328	742,449	+1186%	+73%
Nonsubject Imports	69,810	162,236	253,422	107,396	250,931	+263%	+134%
Total imports	162,763	690,081	1,449,170	536,724	933,380	+790%	+74%
Apparent U.S. consumption	267,262	938,256	1,855,065	738,042	1,227,983	**+594%**	**+66%**

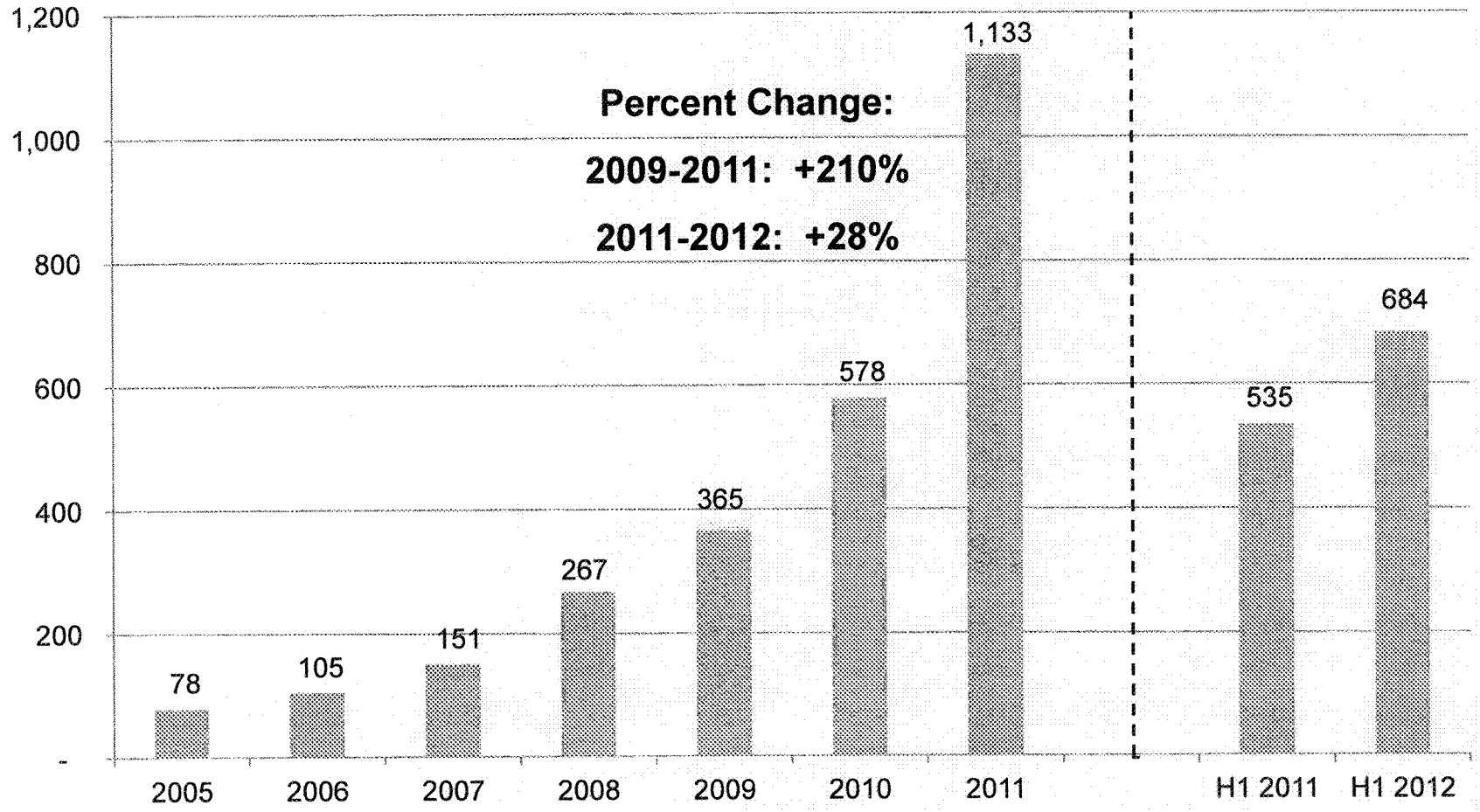
Source: Public Staff Report, Table IV-4, pg. IV-14.

New U.S. Photovoltaic Installations in the Utility Sector (in megawatts)



Source: SEIA U.S. Solar Market Insight: 2010 Solar Market in Review; SEIA U.S. Solar Market Insight: Q2 2012.

New U.S. Photovoltaic Installations in the Residential/Commercial Sector
(in megawatts)



Source: SEIA U.S. Solar Market Insight: 2010 Solar Market in Review; SEIA U.S. Solar Market Insight: Q2 2012.

Government Incentives to Expand Solar Electricity Production in the United States

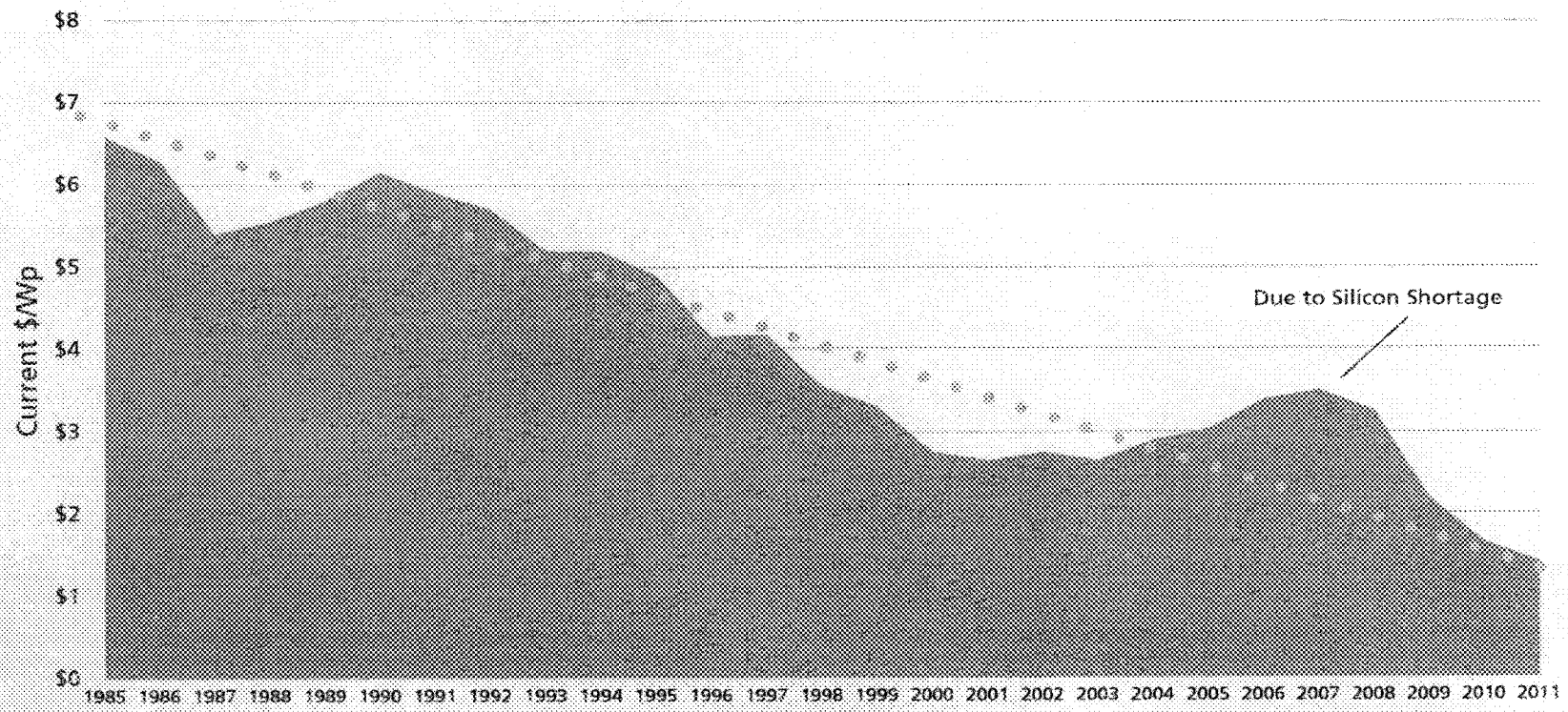
- Federal Investment Tax Credit
- Section 1603 Treasury Program: Cash Grants covering up to 30% of cost basis (under ARRA 2009)
- U.S. Department of Energy SunShot Initiative
- Renewable Portfolio Standard ("RPS") targets in 29 states and Washington, DC
- Non-binding renewable energy goals in 7 states
- Renewable Energy Credit ("REC") trading programs for solar energy in 8 states and Washington, DC
- Personal and/or corporate tax credits for renewables in 24 states
- Sales tax incentives for renewables in 28 states and Puerto Rico
- Loan programs for renewables in 36 states and U.S. Virgin Islands
- Net metering policies in 43 states, Washington, D.C., and 4 territories
- Grant programs for renewables in 16 states and 2 territories
- State programs, such as California Solar Initiative, offering cash back for solar installations

Distribution of Volume Among Questionnaire Pricing Products

	Products 1-3	Products 4-5	Total
Domestic Industry	97%	3%	100%
Subject Imports	52%	48%	100%

Source: Staff Report (Public) at V-7.

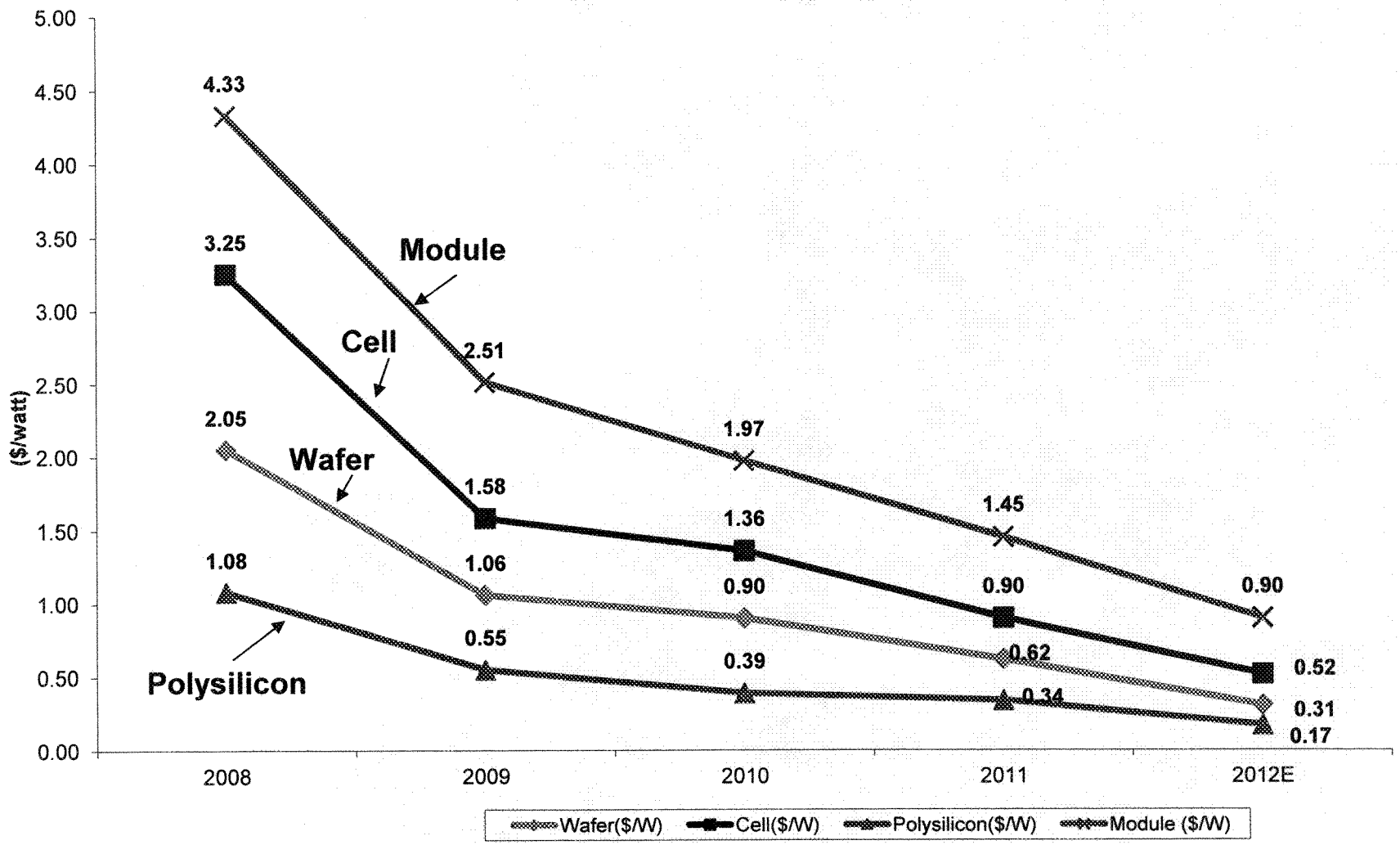
Solar Industry Growth has Produced Steadily Falling Prices



Module Pricing Trends 1985-2011

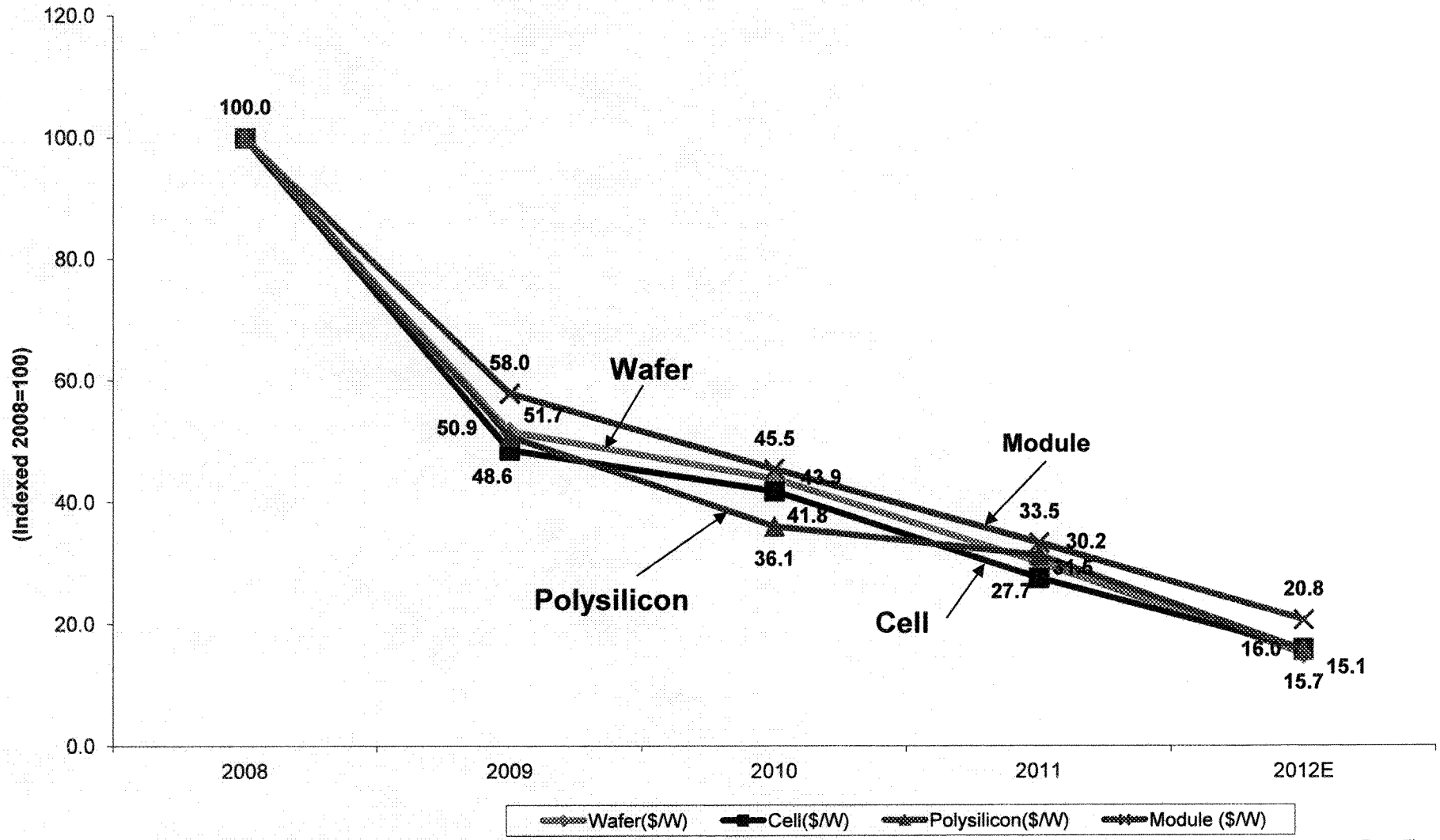
Sources: 1976 - 1985 data from IPCC, Final Plenary, Special Report Renewable Energy Sources (SRREN), May 2011; 1985-2010 data from Paula Mints, Principal Analyst, Solar Services Program, Navigant; 2011 numbers based on current market data

Price Trends for Polysilicon, c-Si Wafers, Cells, and Modules ($/watt)



Source: Photon Consulting.

Price Trend Index
for Polysilicon, c-Si Wafers, Cells and Modules (Based on $/watt)



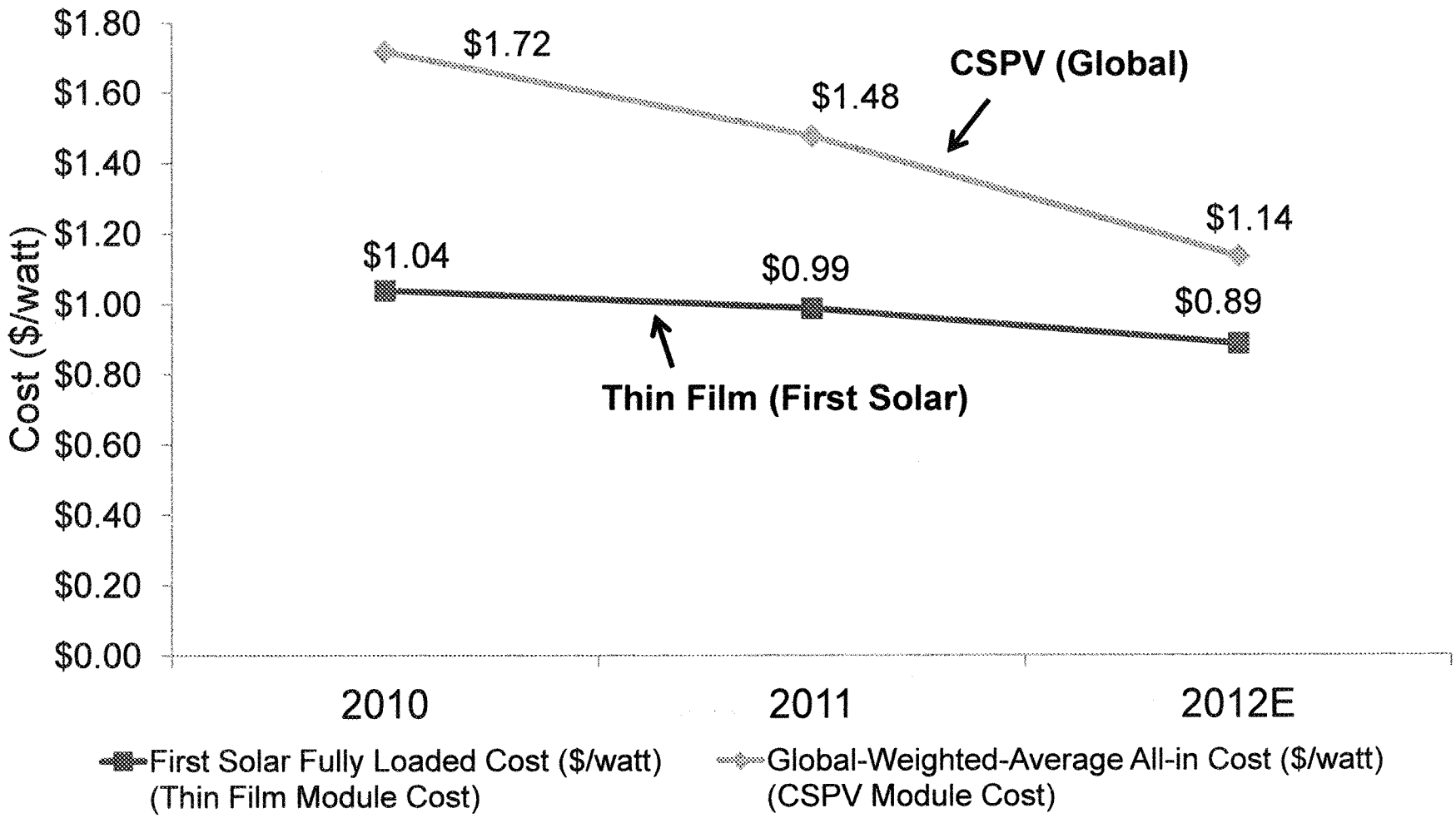
Source: Photon Consulting.

First Solar Statement

- "First, with respect to our module manufacturing costs, our advanced technology has allowed us to reduce our average module manufacturing costs to the lowest in the world for modules produced on a commercial scale, based on publicly available information. In 2011, our total average manufacturing costs were $0.75 per watt, which we believe is less than those of traditional crystalline silicon solar module manufacturers. By continuing to improve conversion efficiency, production line throughput, and lower material costs, we believe that we can further reduce our manufacturing costs per watt and maintain our cost advantage over traditional crystalline silicon solar module manufacturers."

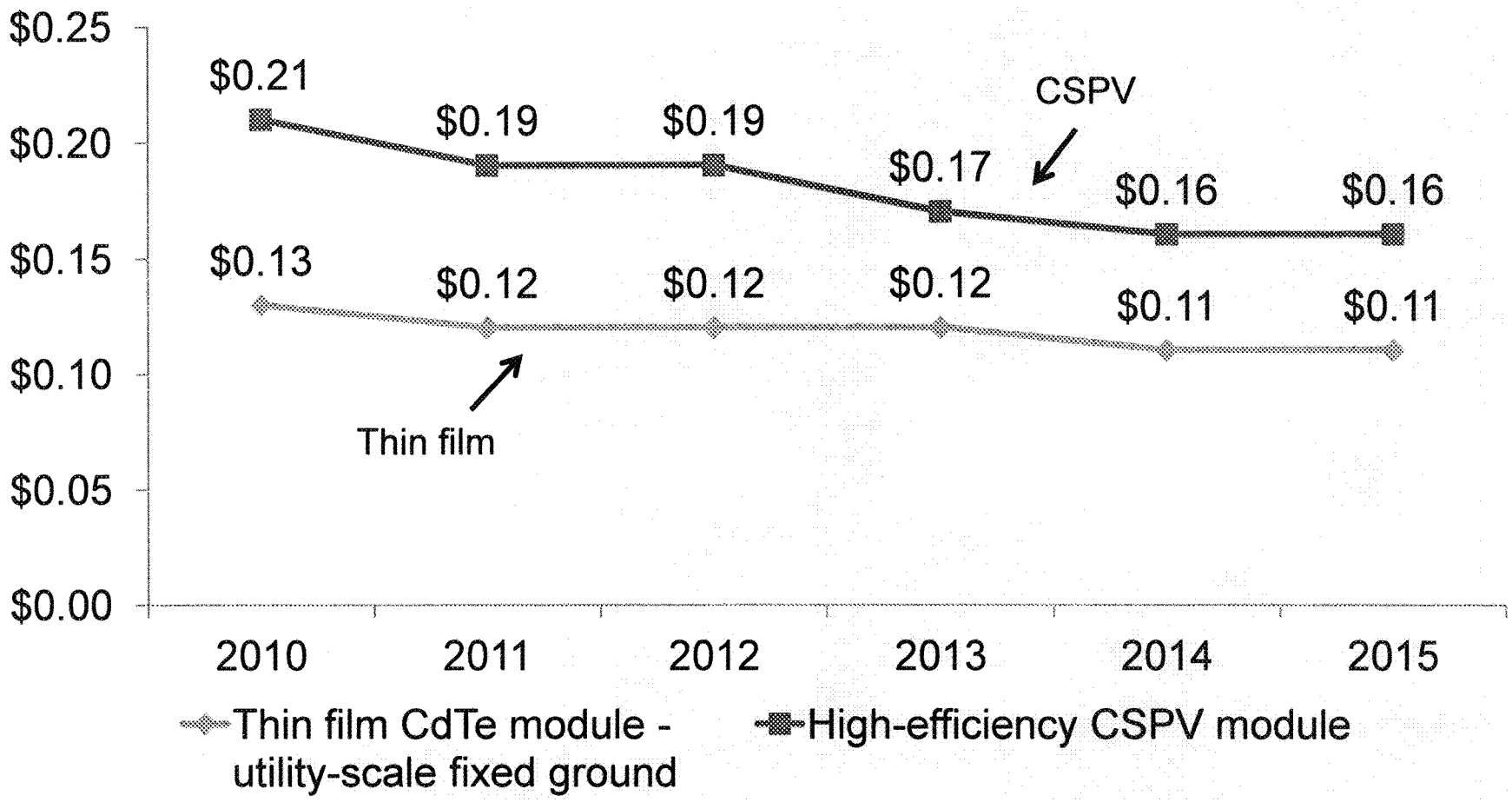
First Solar 2011 SEC Form 10-K, p. 1 (emphasis added)

Production Costs: Global CSPV vs. First Solar Thin Film Modules



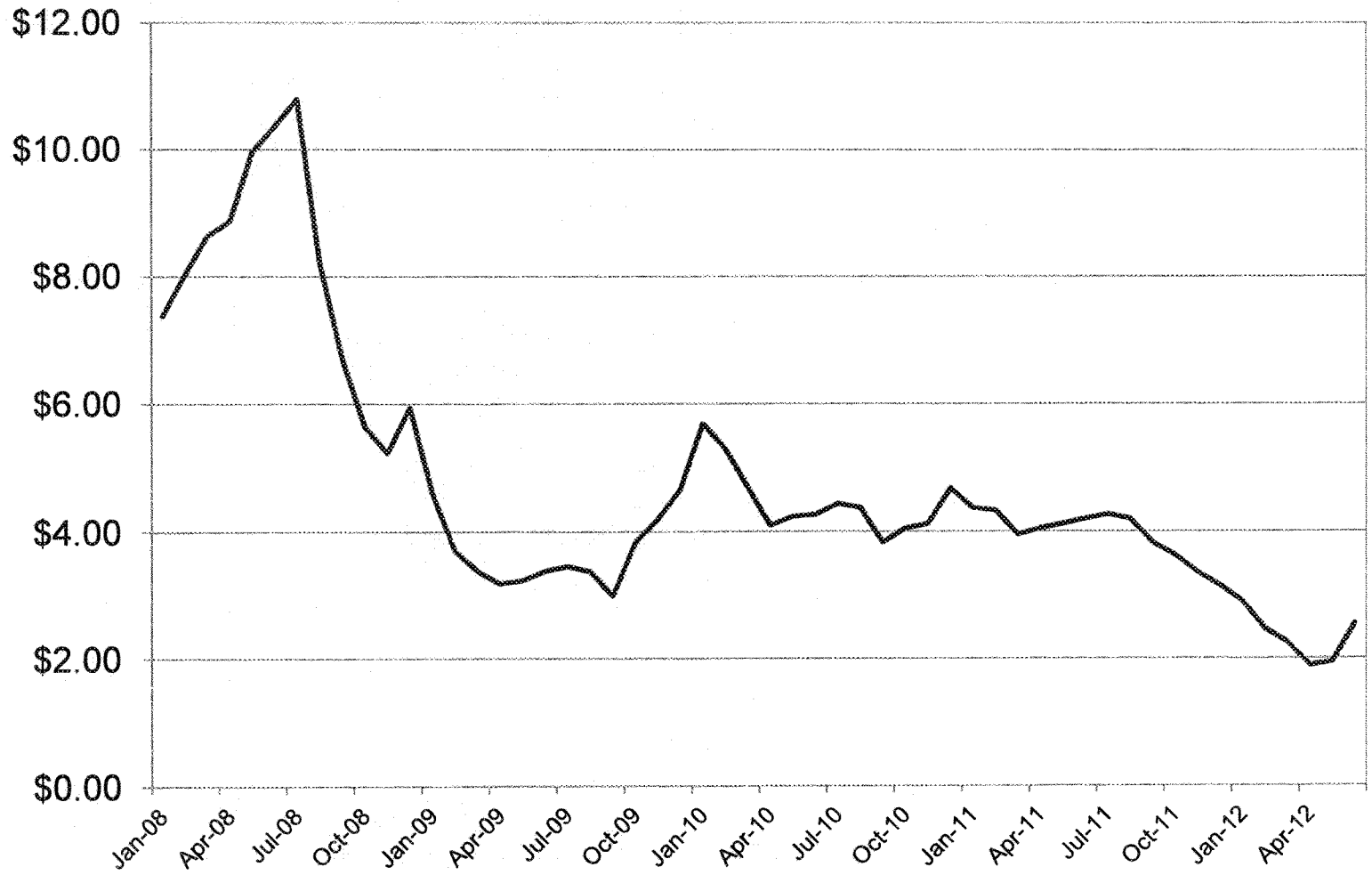
Source: Photon Consulting, "The True Cost of Solar Power: Temple of Doom," at 4

Thin Film vs. CSPV Technology, 2010-15
Levelized Cost of Electricity
($/kWh)



Source: Photon Consulting, "Solar Annual 2012: The Next Wave" at 108.

U.S. Natural Gas Wellhead Prices U.S.
(US$ per '000 cubic ft)



Source: U.S. Department of Energy, http://www.eia.gov/dnav/ng/ng_sum_lsum_dcu_nus_m.htm, Data series N9190US3.