

PV Market Size: Segmentation By Region (GW)

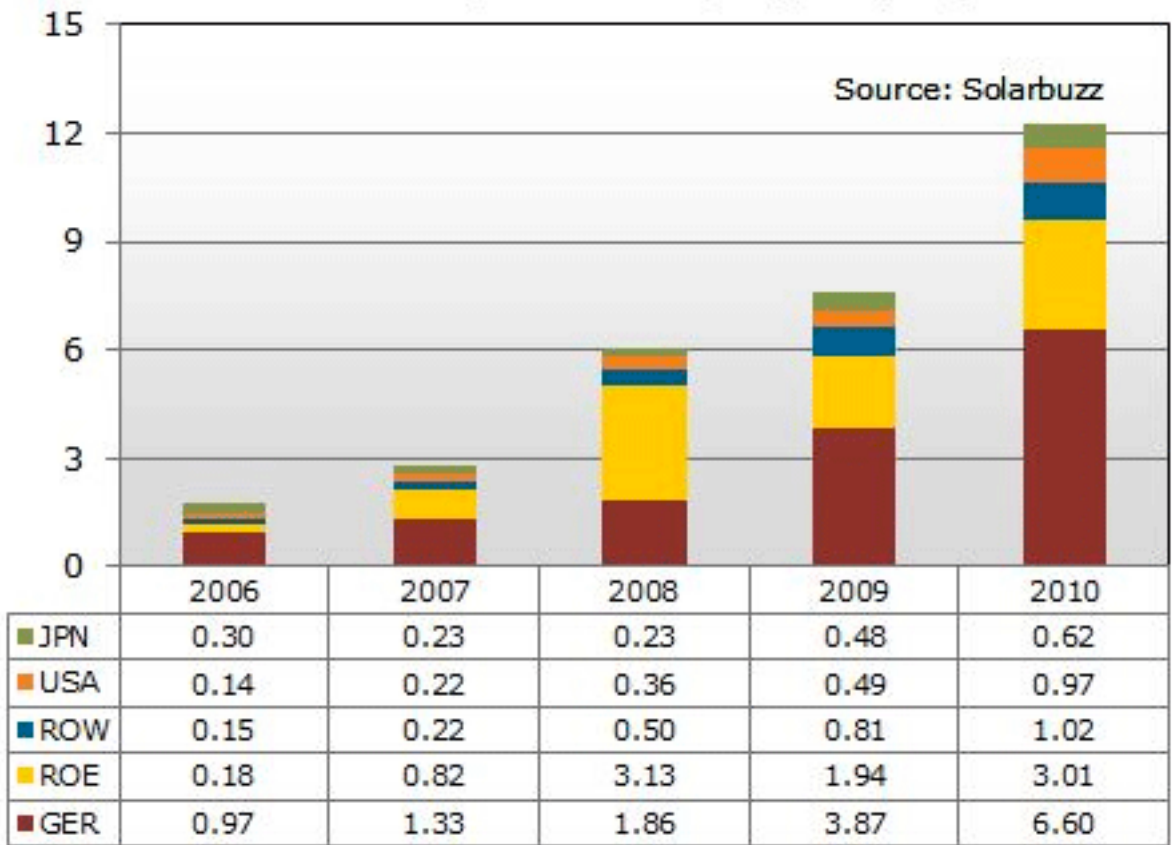
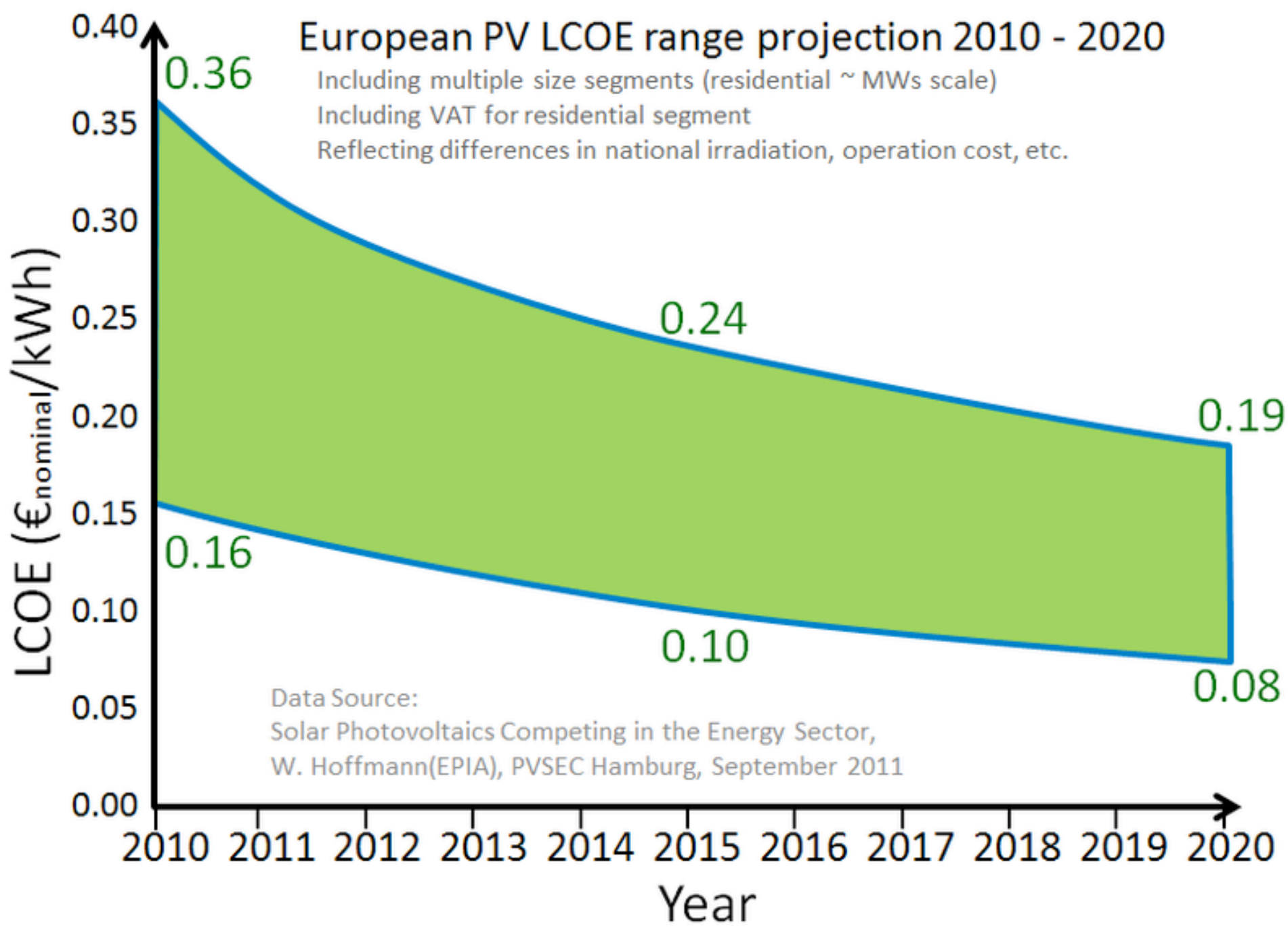


Table showing average cost in cents/kWh over 20 years for solar power panels

Cost	Insolation								
	2400 kWh/ kWp·y	2200 kWh/ kWp·y	2000 kWh/ kWp·y	1800 kWh/ kWp·y	1600 kWh/ kWp·y	1400 kWh/kWp·y	1200 kWh/kWp·y	1000 kWh/kWp·y	800 kWh/kWp·y
200 \$/kWp	0.8	0.9	1.0	1.1	1.3	1.4	1.7	2.0	2.5
600 \$/kWp	2.5	2.7	3.0	3.3	3.8	4.3	5.0	6.0	7.5
1000 \$/kWp	4.2	4.5	5.0	5.6	6.3	7.1	8.3	10.0	12.5
1400 \$/kWp	5.8	6.4	7.0	7.8	8.8	10.0	11.7	14.0	17.5
1800 \$/kWp	7.5	8.2	9.0	10.0	11.3	12.9	15.0	18.0	22.5
2200 \$/kWp	9.2	10.0	11.0	12.2	13.8	15.7	18.3	22.0	27.5
2600 \$/kWp	10.8	11.8	13.0	14.4	16.3	18.6	21.7	26.0	32.5
3000 \$/kWp	12.5	13.6	15.0	16.7	18.8	21.4	25.0	30.0	37.5
3400 \$/kWp	14.2	15.5	17.0	18.9	21.3	24.3	28.3	34.0	42.5
3800 \$/kWp	15.8	17.3	19.0	21.1	23.8	27.1	31.7	38.0	47.5
4200 \$/kWp	17.5	19.1	21.0	23.3	26.3	30.0	35.0	42.0	52.5
4600 \$/kWp	19.2	20.9	23.0	25.6	28.8	32.9	38.3	46.0	57.5
5000 \$/kWp	20.8	22.7	25.0	27.8	31.3	35.7	41.7	50.0	62.5

European PV LCOE range projection 2010 - 2020

Including multiple size segments (residential ~ MWs scale)
Including VAT for residential segment
Reflecting differences in national irradiation, operation cost, etc.

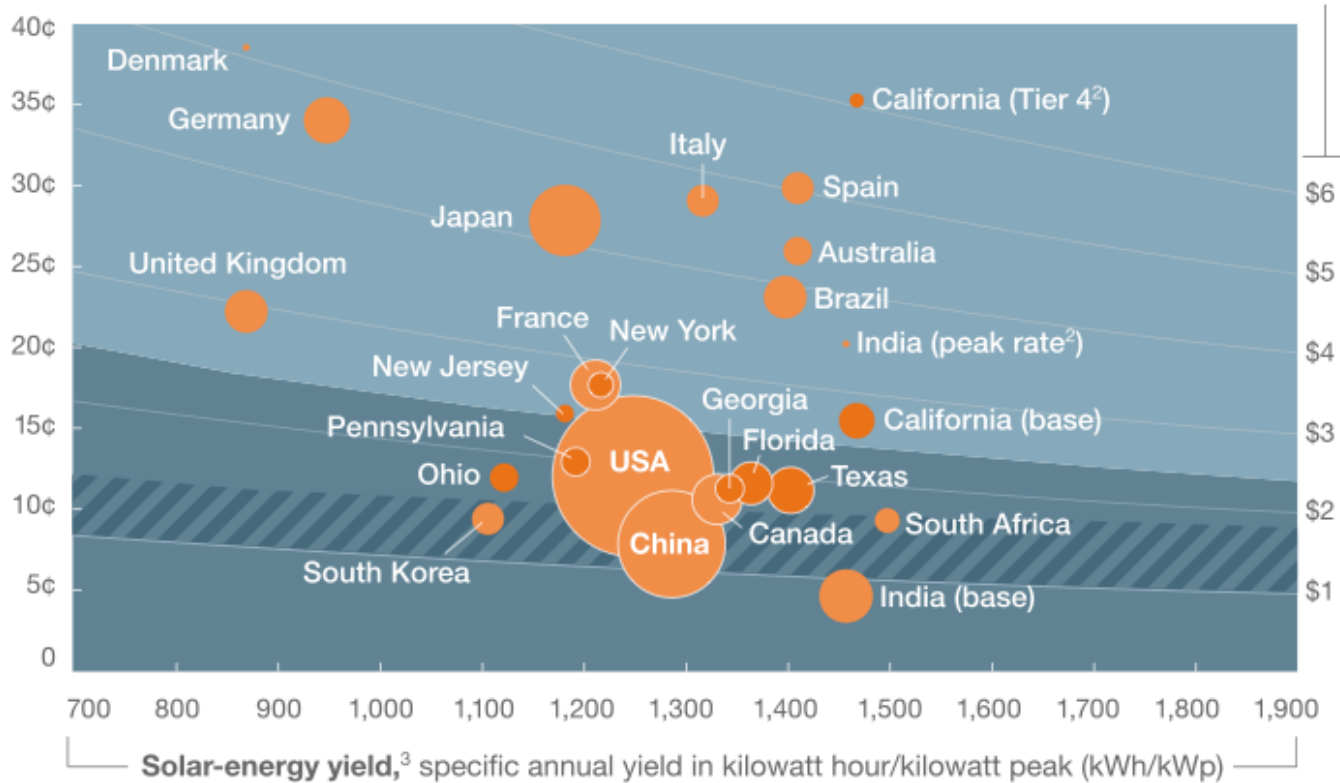


Data Source:
Solar Photovoltaics Competing in the Energy Sector,
W. Hoffmann(EPIA), PVSEC Hamburg, September 2011

Grid-parity potential of solar PV (photovoltaic) power in major markets, residential-segment example

Price: for retail power, 2012 average for households, ¢/kilowatt hour (kWh)

Cost: solar-system installation,¹ \$/watt peak



<p>Solar PV demand: 2012 residential power demand based on usage of 100 terawatt hours (TWh)/year</p> <p>● US states ● Countries</p> <p>○ 100 TWh/year ○ 1,000 TWh/year</p>	<p>■ Best-in-class solar power currently economically competitive</p> <p>▨ 2020: Estimated installation cost</p>
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¹Full cost estimated, based on residential 5-kilowatt c-Si system; levelized cost of energy accounts for solar insulation and assumes 5% weighted average cost of capital, 25-year lifetime, 0.3% annual degradation, and fixed 1% operating and maintenance costs.