

# What is the Value of Distributed Solar?

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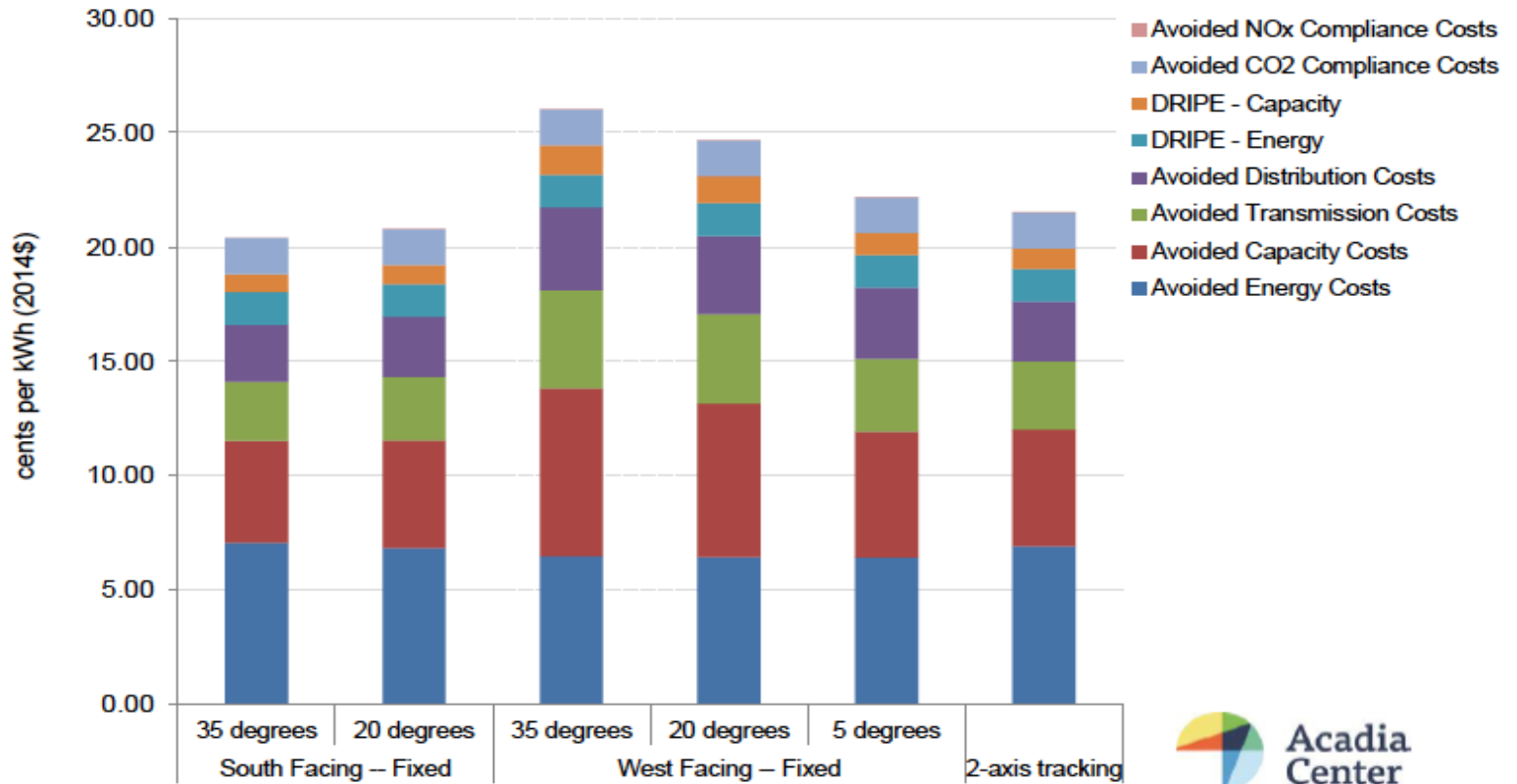
and

Co-Director, Northeast Solar Energy Market Coalition, a US DOE SunShot Project

Figure ES- 2. CMP Distributed Value – 25 Year Levelized (\$ per kWh)

			Gross Value	Load Match	Loss Savings	Distr. PV	
			A	× B	× (1+C)	= D	
25 Year Levelized			(\$/kWh)	(%)	(%)	(\$/kWh)	
Energy Supply		Avoided Energy Cost	\$0.076		6.2%	\$0.081	} AVOIDED MARKET COSTS
		Avoided Gen. Capacity Cost	\$0.068	54.4%	9.3%	\$0.040	
		Avoided Res. Gen. Capacity Cost	\$0.009	54.4%	9.3%	\$0.005	
		Avoided NG Pipeline Cost					
		Solar Integration Cost	(\$0.005)		6.2%	(\$0.005)	
Transmission Delivery Service		Avoided Trans. Capacity Cost	\$0.063	23.9%	9.3%	\$0.016	} \$0.138
Distribution Delivery Service		Avoided Dist. Capacity Cost					
		Voltage Regulation					
Environmental		Net Social Cost of Carbon	\$0.020		6.2%	\$0.021	} SOCIETAL BENEFITS
		Net Social Cost of SO <sub>2</sub>	\$0.058		6.2%	\$0.062	
		Net Social Cost of NO <sub>x</sub>	\$0.012		6.2%	\$0.013	
Other		Market Price Response	\$0.062		6.2%	\$0.066	} \$0.199
		Avoided Fuel Price Uncertainty	\$0.035		6.2%	\$0.037	
						\$0.337	

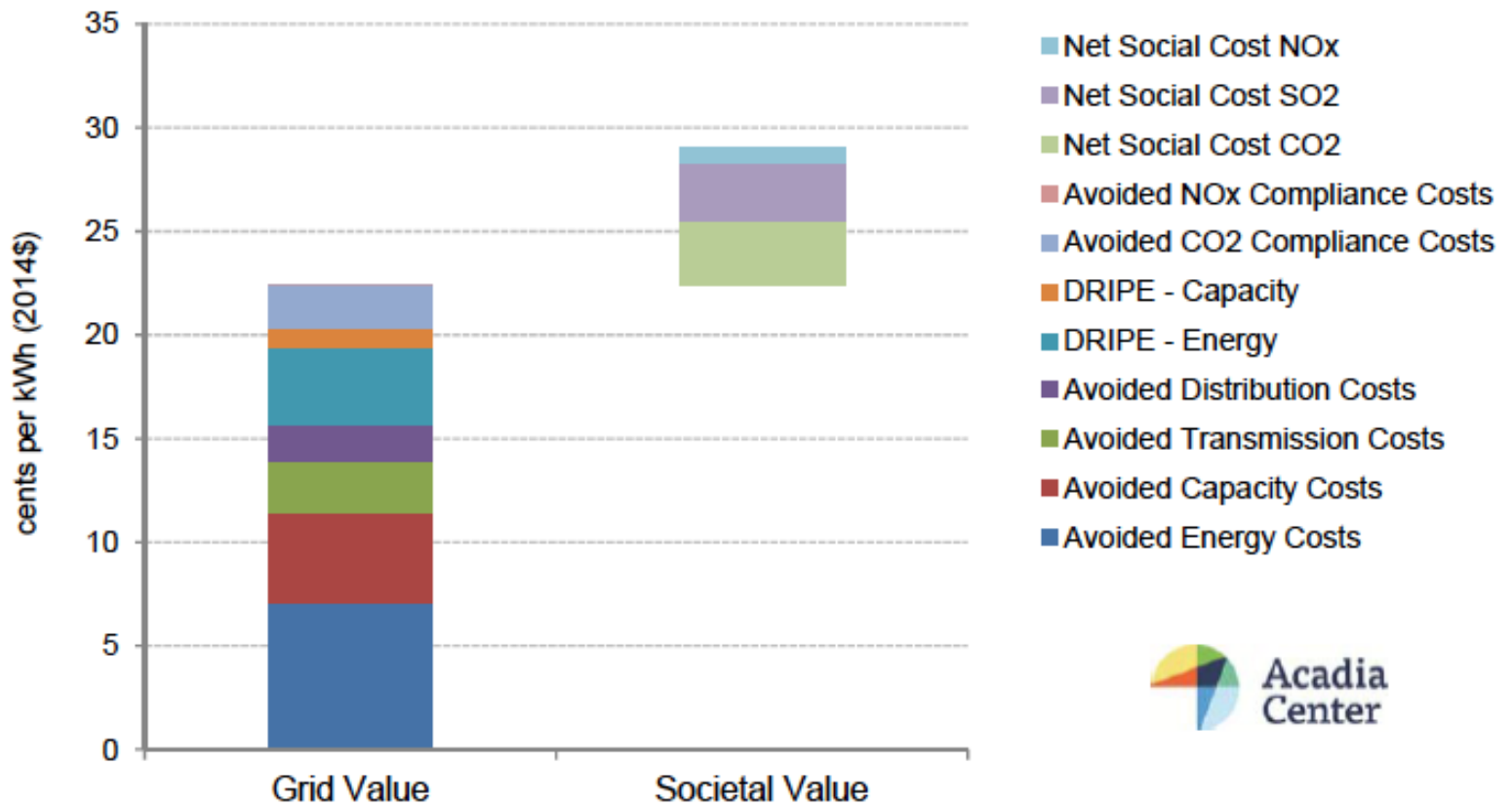
Grid Value of Solar PV in Connecticut – 25-year Levelized Cost (2014\$)



Note: Where appropriate, avoided reserve capacity costs, transmission and distribution losses, and a wholesale risk premium or price hedge are included in the calculations.



Figure 1: Grid and Societal Value of Solar PV in Massachusetts – 25-year Levelized Cost (2014\$)



# Thank you!

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