



# NASEO Energy Outlook Conference

Energy Financing Roundtable: Structuring Programs and  
Financing to Deliver Results

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**Download the Rooftop Solar PV “Green Bank” Financing Model from**

**<http://www.coalitionforgreencapital.com/the-model.html>**

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# Users Can Stipulate *Financing Cost and Revenue Source Assumptions*

Behind the Meter Solar PV:	\$/W	MW	\$M	CapInt.	Uses	Align	Sources
	3.50	20	70.0	0.6	70.6	(0.0)	70.6

  

Project Capital Structure								
	KEY FINANCING INPUTS			Align	Realized Returns (AT)	KEY OUTPUTS		Levelized Costs (\$/ kWh)
	%	Maturity	Target Returns (AT)			Total DSCR		
					Min	Avg	Nominal	2013\$
State Subsidies	0%							
Debt								
Commercial ( <i>not &lt; 0</i> )	20%	6	6.0%				0.059	0.047
Green Bank:					1.90	2.29		
Senior	0%	15	0.0%				-	-
Subordinated	20%	15	2.0%				0.041	0.033
Tax Equity	48%		12.0%	0.0%	12.0%		0.037	0.030
Developer Equity	12%		15.0%	0.0%	15.0%		0.087	0.069
<b>Total</b>	<b>100%</b>						<b>0.225</b>	<b>0.179</b>

  

Project Revenue Sources (\$/ MWh)					
	%	2013 \$/ MWh	Escalation	Levelized Costs (\$/ kWh)	
				Nominal	2013\$
Capital				0.225	0.179
Operations				0.032	0.025
Gross				0.257	0.204
Less State Incentives		225.0	N	0.103	0.082
Less RECs		30.0	N	0.025	0.020
Net PPA/ Lease		102.7	Y	0.129	0.103

# Model Shows How Low Cost Financing Can Lower Price of Electricity and By How Much

**Retail Price (\$/kWh) as a Function of Green Bank Debt\* and Installed Cost**

		% Green Bank Debt in Capital Structure				
		0%	10%	20%	30%	40%
<b>Installed Cost (\$/W)</b>	<b>4.5</b>	0.210	0.187	0.163	0.140	0.117
	<b>4.0</b>	0.174	0.154	0.133	0.112	NA
	<b>3.5</b>	0.139	0.121	0.103	0.085	NA
	<b>3.0</b>	0.103	0.088	0.072	0.057	NA

**Other Assumptions:**

Developer equity return:	15%
Tax equity return:	12%
Total leverage:	40%
Commercial debt int.:	6%
15-Year RECs:	\$0.030/ kWh
6-Year State incentives:	\$0.225/ kWh

*Cells with retail price < average 2011 CT retail price escalated to 2013 (\$0.190/ kWh) are shaded*

*\*Green bank debt at 2% interest for 15 years*

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