

Municipal Solar Systems ROI

Assumptions	Public			
	Recreation Dept Garage	Safety Building	PSB \$88k Roof	PSB \$108k Roof
Solar System Cost (25 year warranty)	50,000	127,800	127,800	127,800
Lifetime (years)	30	30	30	30
Rye Building Permits	1,000	2,554	2,554	2,554
NH DOE Grant	(47,720)	(82,457)	(82,457)	(82,457)
Federal Direct Pay Rebate (30%)	-	(38,304)	(38,304)	(38,304)
NH State Rebate (\$.20/WAC)	(2,280)	(6,920)	(6,920)	(6,920)
Net System Cost	1,000	2,673	2,673	2,673
Electric Rate Inflation (2.5%) + Solar Production Decrease (-.5%)	2%	2%	2%	2%
First Year Electric Savings *	3,649	10,727	10,727	10,727
Annual Renewable Energy Credit Sales (10 Years)	435	1,100	1,100	1,100
Annual Operations & Maintenance Contract (Annual 3% Inflation) **	300	600	600	600
Roof Replacement	-	-	88,000	108,000
Total First Year Cost	1,300	3,273	91,273	111,273
Total Cost	13,170	27,014	115,014	135,014
Total Savings	152,383	446,174	446,174	446,174
Net Savings	139,212	419,160	331,160	311,160
Simple Payback (Years)	0.3	0.2	6.1	7.5
Compound Annual Growth Rate	8.5%	9.8%	4.6%	4.1%
Return On Investment	1057%	1552%	288%	230%

* Additional savings from reduced demand charges not included

** O & M contract is optional