10 year snap shot of wood versus solar

		Year	1	2	3	4	5	6	7	8	9	10	Total 10 years
Opportunity Cost	3%	per year											
Wood Boiler Installed Cost	$ 15,000												
Yearly Opportunity Cost	$ 450												
Wood Stove Installed Cost	$ 3,000												
Yearly Opportunity Cost	$ 90												
Cost per cord green hardwood	$ 225												
BTU value Red maple/Birch	20	MMbtu/cord											
Boiler efficiency	70%												
Number of cords per year	4	cord/yr											
Usable heat output per year	56	Mmbtu/yr											
Wood Cost	$ 900												
Opportunity Cost for one year dry time	27												
Yearly Maintenance wood boiler	100												
Yearly Maintenance cost wood stove	100												
Total Yearly Cost for wood boiler	$ 1,477		$ 1,477	$ 1,477	$ 1,477	$ 1,477	$ 1,477	$ 1,477	$ 1,477	$ 1,477	$ 1,477	$ 1,477	**$ 14,770**
				$ 2,954	$ 4,431	$ 5,908	$ 7,385	$ 8,862	$ 10,339	$ 11,816	$ 13,293	$ 14,770	
Total Yearly Cost for wood stove	$ 1,117		$ 1,117	$ 1,117	$ 1,117	$ 1,117	$ 1,117	$ 1,117	$ 1,117	$ 1,117	$ 1,117	$ 1,117	**$ 11,170**
				$ 2,234	$ 3,351	$ 4,468	$ 5,585	$ 6,702	$ 7,819	$ 8,936	$ 10,053	$ 11,170	
Scrounge cost at 50% of wood cost boiler	$ 1,027		$ 1,027	$ 1,027	$ 1,027	$ 1,027	$ 1,027	$ 1,027	$ 1,027	$ 1,027	$ 1,027	$ 1,027	**$ 10,270**
				$ 2,054	$ 3,081	$ 4,108	$ 5,135	$ 6,162	$ 7,189	$ 8,216	$ 9,243	$ 10,270	
Scrounge cost at 50% of wood cost boiler	$ 667		$ 667	$ 667	$ 667	$ 667	$ 667	$ 667	$ 667	$ 667	$ 667	$ 667	**$ 6,670**
				$ 1,334	$ 2,001	$ 2,668	$ 3,335	$ 4,002	$ 4,669	$ 5,336	$ 6,003	$ 6,670	
Solar													
Installed cost 1960 watts of panels at 35 degree tilt	$ 5,880												
Fed Rebate 30%	$ 1,764												
Final Cost	$ 4,116												
Split Unit hyper heat	$ 3,000												
Yearly opportunity cost	$ 213												
PV watts Calculation for NH	4952	kw/yr											
Convert KW to Btus /yr	16.8952576	Mmbtu/yr											
COP for Heat Pump at 17 degrees F (Mitsubishi Hyper heat)	3												
Total heat available	50.6857728	Mmbtu/yr											
Adjust Opportunity cost to match PV output to yearly wood use	1.10484653												
Yearly opportunity cost solar to match wood output	$ 235.86		$ 235.86	$ 235.86	$ 235.86	$ 235.86	$ 235.86	$ 235.86	$ 235.86	$ 235.86	$ 235.86	$ 235.86	**$ 2,359**