

RETScreen® Financial Summary - Solar Water Heating Project

Annual Energy Balance				
Project name	61 Delano Rd DHW	Electricity required	MWh	0.02
Project location	Woolwich, ME			
Renewable energy delivered	MWh	2.01	Net GHG reduction	t _{CO2} /yr
				0.91
Heating fuel displaced	-	Propane - gal	Net GHG emission reduction - 25 yrs	t _{CO2}
				22.76

Financial Parameters				
Avoided cost of heating energy	\$/gal	1.934	Debt ratio	%
				0.0%
GHG emission reduction credit	\$/t _{CO2}	-	Income tax analysis?	yes/no
				No
Retail price of electricity	\$/kWh	-		
Energy cost escalation rate	%	5.0%		
Inflation	%	5.0%		
Discount rate	%	5.0%		
Project life	yr	25		

Project Costs and Savings				
Initial Costs			Annual Costs and Debt	
Feasibility study	0.0%	\$	-	O&M
Development	0.0%	\$	-	Electricity
Engineering	0.0%	\$	-	
Energy equipment	100.0%	\$	3,181	Annual Costs and Debt - Total
Balance of system	0.0%	\$	-	\$
Miscellaneous	0.0%	\$	-	-
Initial Costs - Total	100.0%	\$	3,181	Annual Savings or Income
				Heating energy savings/income
Incentives/Grants		\$	1,700	\$
				278
				Annual Savings - Total
				\$
				278
Periodic Costs (Credits)			Schedule yr # 10,20	
Valves and fittings		\$	250	
Pool heat pump compressor		\$	-	
		\$	-	
End of project life -		\$	-	

Financial Feasibility				
Pre-tax IRR and ROI	%	23.7%	Calculate GHG reduction cost?	yes/no
After-tax IRR and ROI	%	23.7%	GHG emission reduction cost	\$/t _{CO2}
Simple Payback	yr	5.3	Project equity	\$
Year-to-positive cash flow	yr	4.6		3,181
Net Present Value - NPV	\$	4,980		
Annual Life Cycle Savings	\$	353		
Benefit-Cost (B-C) ratio	-	2.57		

Yearly Cash Flows			
Year #	Pre-tax \$	After-tax \$	Cumulative \$
0	(1,481)	(1,481)	(1,481)
1	292	292	(1,188)
2	307	307	(881)
3	322	322	(559)
4	338	338	(221)
5	355	355	135
6	373	373	508
7	392	392	899
8	411	411	1,311
9	432	432	1,743
10	46	46	1,789
11	476	476	2,265
12	500	500	2,765
13	525	525	3,290
14	551	551	3,842
15	579	579	4,420
16	608	608	5,028
17	638	638	5,666
18	670	670	6,336
19	704	704	7,040
20	75	75	7,115
21	776	776	7,891
22	814	814	8,705
23	855	855	9,561
24	898	898	10,459
25	943	943	11,401

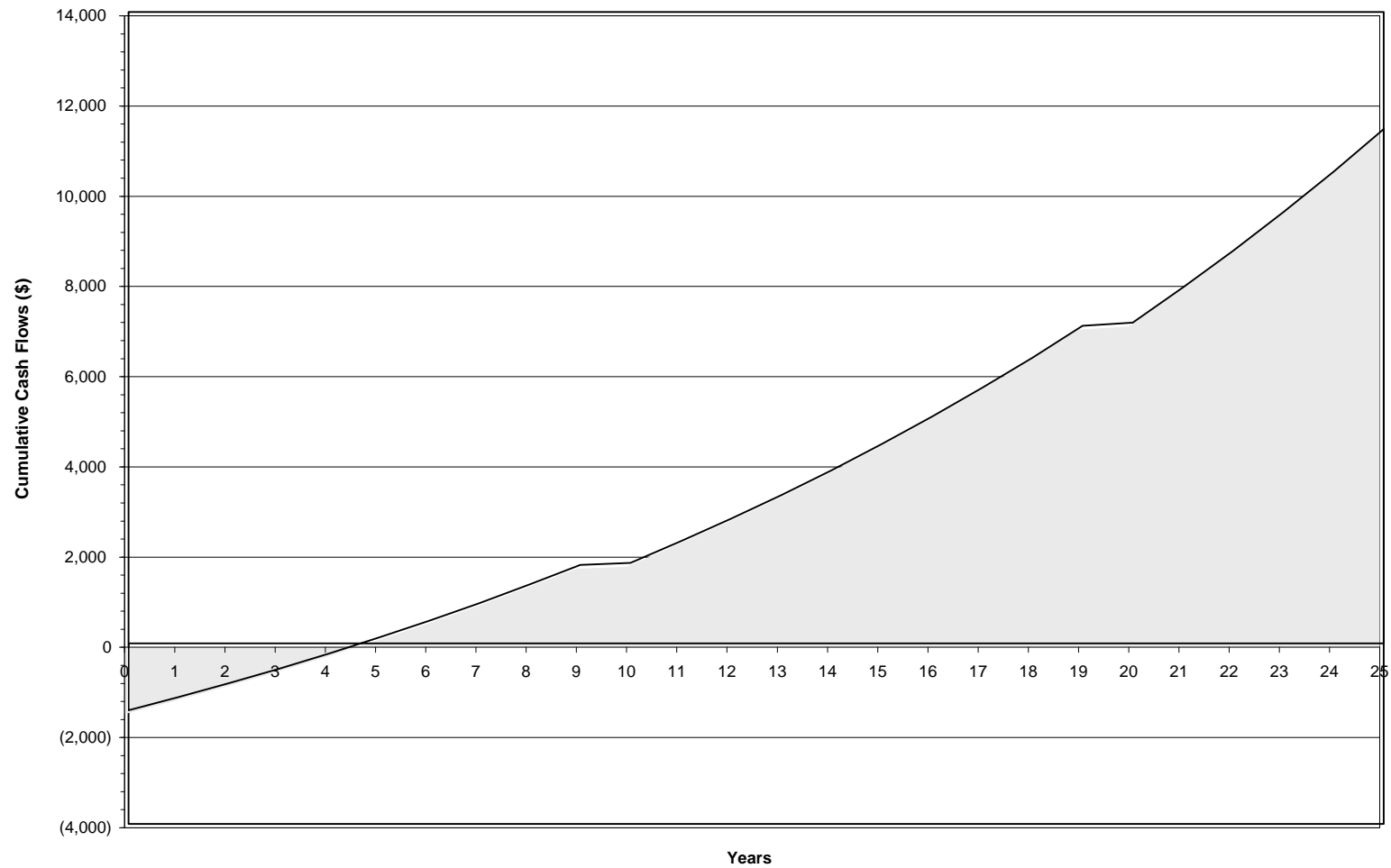
Cumulative Cash Flows Graph

SWH Project Cumulative Cash Flows 61 Delano Rd DHW, Woolwich, ME

Renewable energy delivered (MWh/yr): 2.01

Total Initial Costs: \$ 3,181

Net average GHG reduction (t_{CO2}/yr): 0.91



IRR and ROI: 23.7%

Year-to-positive cash flow: 4.6 yr

Net Present Value: \$ 4,980