



10/7/2020

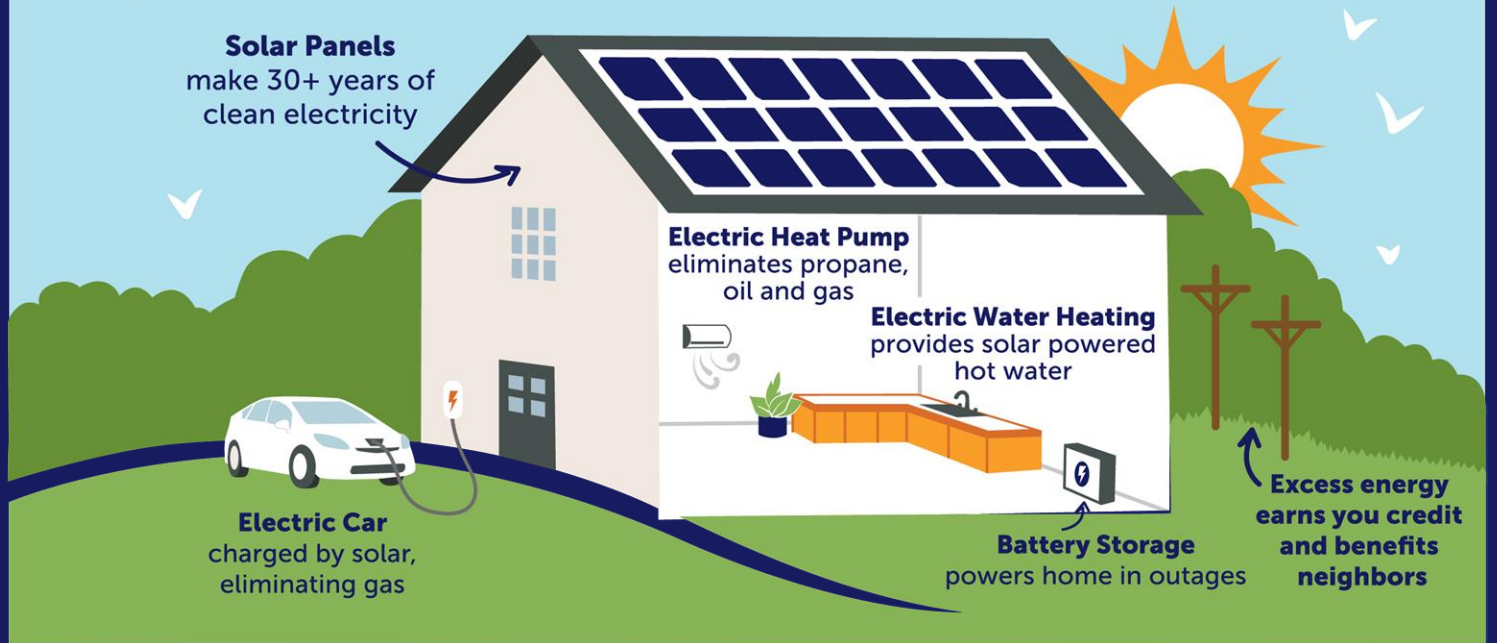
Designed for:
Jesse and Jalim Ritch
1 Goldenwood Drive
Scarborough, ME 04074

This company meets the highest standards of social and environmental impact



Combination Project Discount of \$ 500 Included

YOUR SOLAR HOUSEHOLD

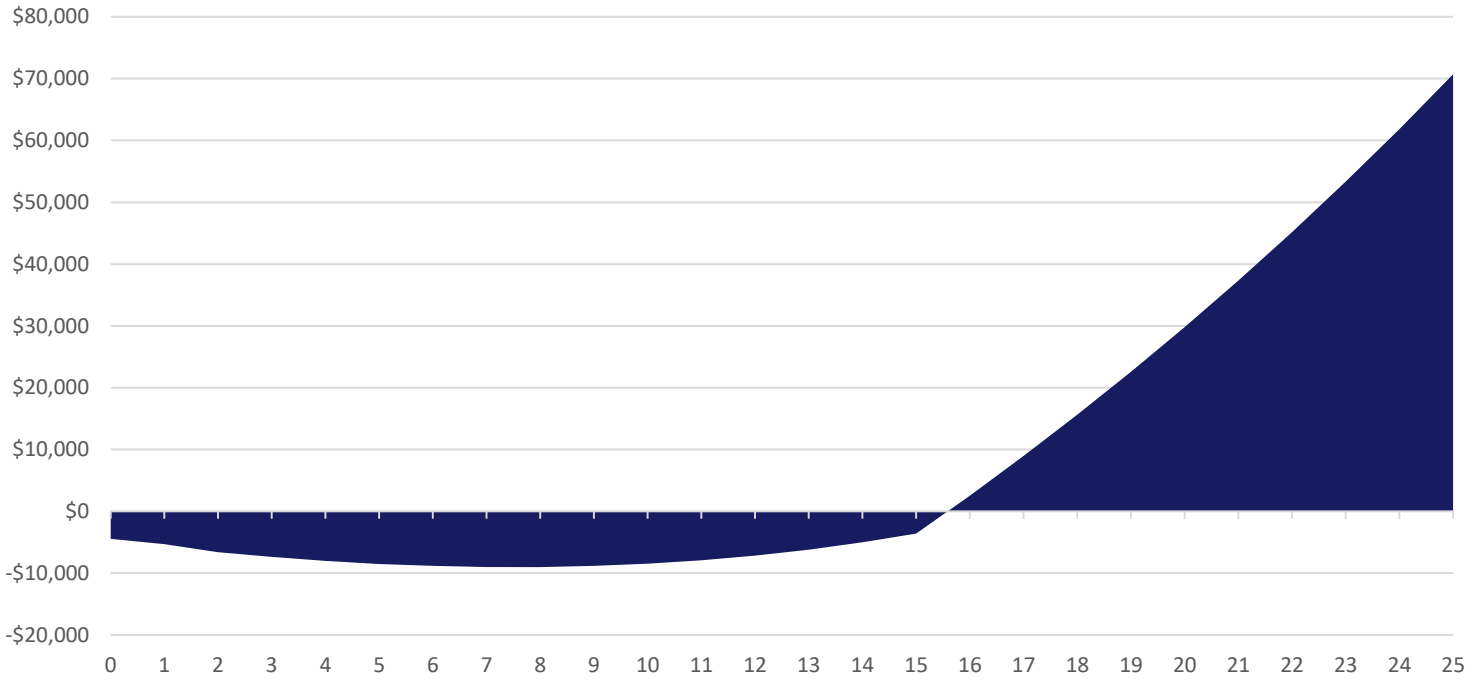


Clean Energy Technologies Included in this Proposal



		Solar Farm	Heat Pump	Water Heater	Battery	EV	Total
Project Term (years)	-	25	25	25	-	-	
Payment Method	-	Loan	Loan	Loan	-	-	
Loan Term (years)	-	15	15	15	-	-	
Net Cumulative Investment	\$ -	\$ 56,081	\$ 20,907	\$ 6,323	\$ -	\$ -	\$ 83,311
Avoided Energy Costs	\$ -	\$ 98,342	\$ 61,434	\$ 34,159	\$ -	\$ -	\$ 193,935

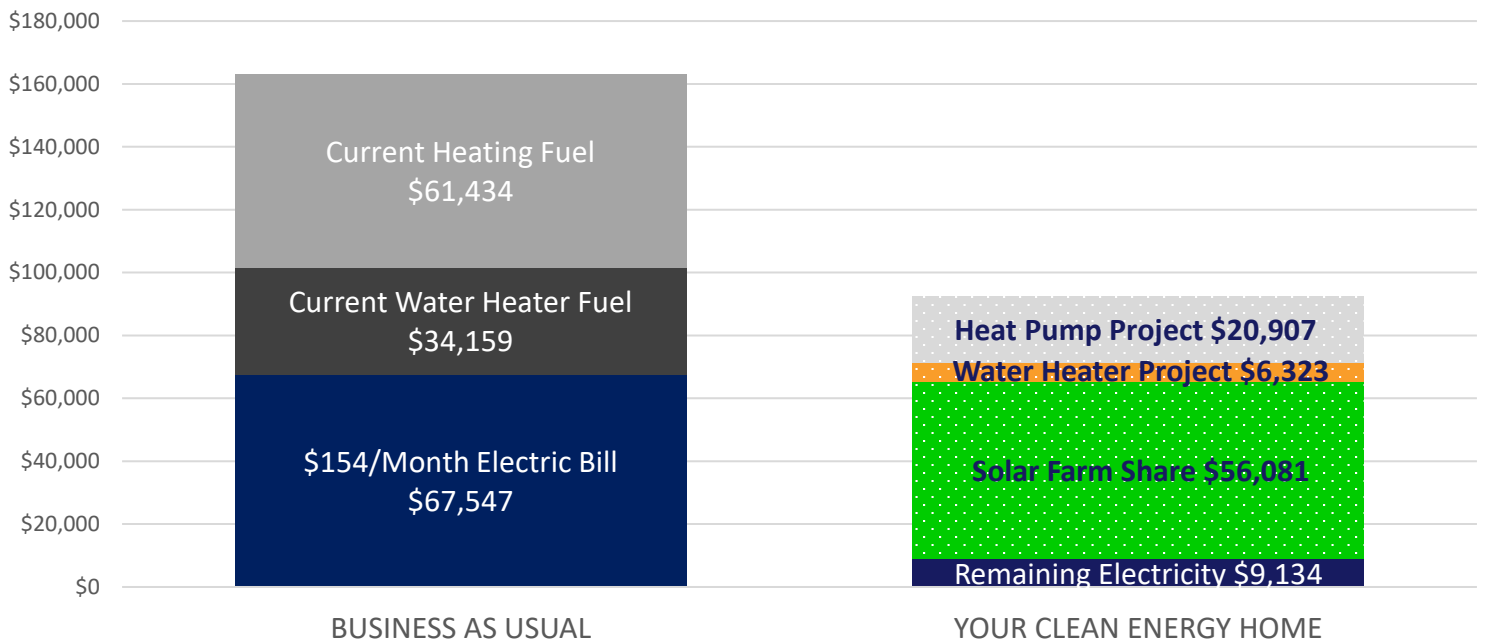
Combined Project 25 Year Cash Flow



Monthly Cash Flow									Annual
Year	Solar Loan	CSF Loan	Heat Pump Loan	H2O Heater Loan	Grid Electricity	Total Costs	Avoided Costs	Monthly Net Savings	Net Savings
1	\$ -	\$ 338	\$ 115	\$ 34	\$ 5	\$ 492	\$ 321	\$ (170)	\$ (897)
2	\$ -	\$ 255	\$ 115	\$ 34	\$ 7	\$ 411	\$ 334	\$ (76)	\$ (1,268)
3	\$ -	\$ 228	\$ 115	\$ 34	\$ 8	\$ 385	\$ 348	\$ (37)	\$ (793)
4	\$ -	\$ 228	\$ 115	\$ 34	\$ 10	\$ 386	\$ 362	\$ (24)	\$ (642)
5	\$ -	\$ 228	\$ 115	\$ 34	\$ 11	\$ 388	\$ 377	\$ (11)	\$ (485)
6	\$ -	\$ 228	\$ 115	\$ 34	\$ 13	\$ 389	\$ 392	\$ 3	\$ (330)
7	\$ -	\$ 228	\$ 115	\$ 34	\$ 15	\$ 391	\$ 408	\$ 17	\$ (168)
8	\$ -	\$ 228	\$ 115	\$ 34	\$ 17	\$ 393	\$ 425	\$ 32	\$ 1
9	\$ -	\$ 228	\$ 115	\$ 34	\$ 19	\$ 395	\$ 442	\$ 47	\$ 177
10	\$ -	\$ 228	\$ 115	\$ 34	\$ 21	\$ 397	\$ 460	\$ 63	\$ 361
11	\$ -	\$ 228	\$ 115	\$ 34	\$ 23	\$ 399	\$ 479	\$ 80	\$ 553
12	\$ -	\$ 228	\$ 115	\$ 34	\$ 25	\$ 402	\$ 499	\$ 98	\$ 753
13	\$ -	\$ 228	\$ 115	\$ 34	\$ 28	\$ 404	\$ 520	\$ 116	\$ 962
14	\$ -	\$ 228	\$ 115	\$ 34	\$ 30	\$ 406	\$ 541	\$ 135	\$ 1,181
15	\$ -	\$ 228	\$ 115	\$ 34	\$ 33	\$ 409	\$ 564	\$ 155	\$ 1,409
16	\$ -	\$ -	\$ -	\$ -	\$ 35	\$ 35	\$ 588	\$ 552	\$ 6,165
17	\$ -	\$ -	\$ -	\$ -	\$ 38	\$ 38	\$ 612	\$ 574	\$ 6,414
18	\$ -	\$ -	\$ -	\$ -	\$ 41	\$ 41	\$ 638	\$ 597	\$ 6,674
19	\$ -	\$ -	\$ -	\$ -	\$ 44	\$ 44	\$ 665	\$ 620	\$ 6,946
20	\$ -	\$ -	\$ -	\$ -	\$ 48	\$ 48	\$ 692	\$ 645	\$ 7,230
21	\$ -	\$ -	\$ -	\$ -	\$ 51	\$ 51	\$ 722	\$ 671	\$ 7,527
22	\$ -	\$ -	\$ -	\$ -	\$ 54	\$ 54	\$ 752	\$ 698	\$ 7,837
23	\$ -	\$ -	\$ -	\$ -	\$ 58	\$ 58	\$ 784	\$ 726	\$ 8,162
24	\$ -	\$ -	\$ -	\$ -	\$ 62	\$ 62	\$ 817	\$ 755	\$ 8,501
25	\$ -	\$ -	\$ -	\$ -	\$ 66	\$ 66	\$ 852	\$ 786	\$ 8,856

		Heat Pump	Water Heater	Battery	EV	Total
Project Term (years)	-	25	25	-	-	
Payment Method	-	Loan	Loan	-	-	
Upfront Project Cost	\$ -	\$ 14,470	\$ 4,960	\$ -	\$ -	\$ 61,530
Net Cumulative Investment	\$ -	\$ 20,907	\$ 6,323	\$ -	\$ -	\$ 83,311
Avoided Energy Costs	\$ -	\$ 61,434	\$ 34,159	\$ -	\$ -	\$ 193,935

Total Cost Comparison Over Project Term



Current Energy Costs			Future Energy Costs			Future Energy Costs		
Business As Usual			Business As Usual			with Clean Energy Transition		
Monthly	\$ 321	will average ->	\$ 544		\$ 30	Monthly		
			average over project term			average over project term		
Electricity	\$ 154	3%	\$ 225		\$ 30	Electricity		
Heat	\$ 107	5%	\$ 205		\$ -	Heat		
Hot Water	\$ 60	5%	\$ 114		\$ -	Hot Water		
			with estimated annual energy price escalators			with price escalators and solar degradation		

These costs reflect your current and future estimated electricity, heat, and hot water costs. **Your electric utilities monthly connection fee is not included in either scenario (it is a baseline charge).** The heating costs shown in the "Business as Usual" scenario are based on the existing primary heating system used to heat the area that will instead be conditioned by heat pump(s). These numbers are calculated based on square footage of the area to be conditioned and the assumed insulation of the building envelope. **Heating costs for other areas of your home are not shown in either the "Business as Usual" or after Your Clean Energy Transition.**

Get The Project Started

Please notify your Design Specialist know if you would like to use the Cash or Loan option for each technology. We will email you a contract based on those choices for simple e-signature. Once we receive your signed contract, deposit and/or financing confirmation you will be in our installation queue.

Your Heat Pump System

Finance

Loan Product - VSECU: 15y, 6.15% No Paydown

System Cost	\$ 14,470
State Incentives	\$ 750
Down Payment	\$ 1,000
Monthly Payment	\$ 115

Final interest rate will be based on credit score

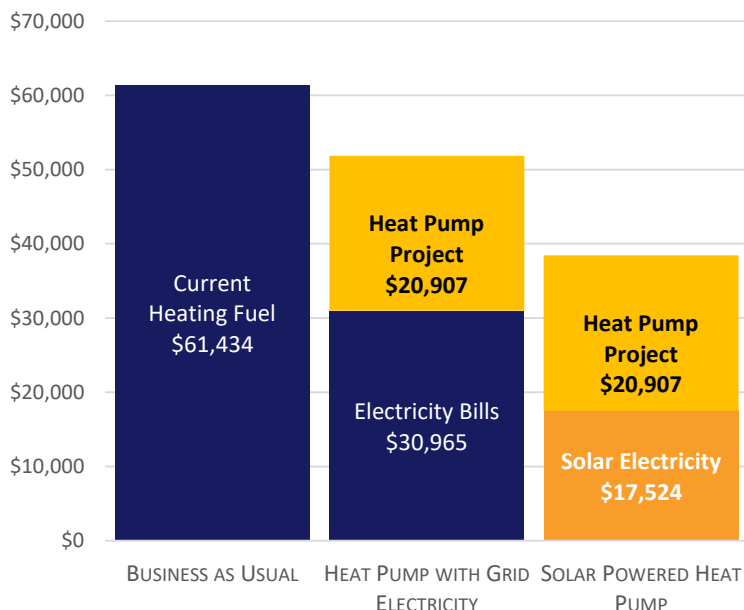
Cash

System Cost	\$ 14,470
State Incentives	\$ 750

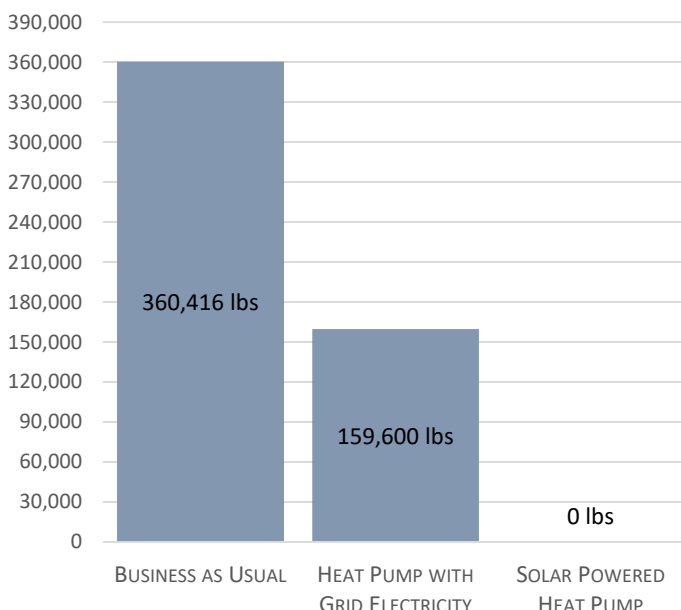
Net Cost \$ 13,720

Pricing expires 30 days from proposal date

Heat Pump Cost Comparison



Carbon Emissions over Project Term

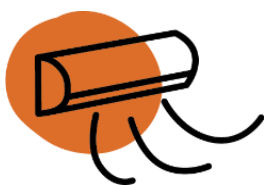


Graphs illustrate **Loan** payment method and energy comparison for area to be heated by heat pump only

Air-source heat pumps allow you to shift your current heating fuel costs to increased electricity consumption. During the summer they also provide air conditioning at twice the efficiency of the best window units on the market. Pair your heat pumps with solar for even greater savings, carbon reductions, and local economic benefits.

Major System Components

- Mitsubishi H2i Multi-Zone Outdoor Unit - 30,000 BTU/hr (MXZ-3C30NAH22)
- Mitsubishi wall-mounted ductless indoor unit - 15,000 BTU/hr (MSZ-FH15NA)
- Mitsubishi wall-mounted ductless indoor unit - 9,000 BTU/hr (MSZ-FH12NA)
- Mitsubishi wall-mounted ductless indoor unit - 9,000 BTU/hr (MSZ-FH09NA)
- (3) Kumo Cloud Smart Phone wireless adaptors
- (2) Remote temperature and humidity sensors
- (1) Electrical Subpanel



Warranties

Mitsubishi offers a 12 year parts warranty for residential installations

In addition to servicing all manufacturer's warranties for you, ReVision Energy provides:
3 year warranty for defects in labor and workmanship



Mitsubishi Electric Cooling & Heating - MXZ System Design Tool

ODUs	
ODU	MXZ_3C30NAHZ2
IDU Type	Non-Ducted
Cooling Capacity	28,400
Heating Capacity	28,600
Minimum IDUs	2
Maximum IDUs	3

<Select ODU First, Then IDUs Below>

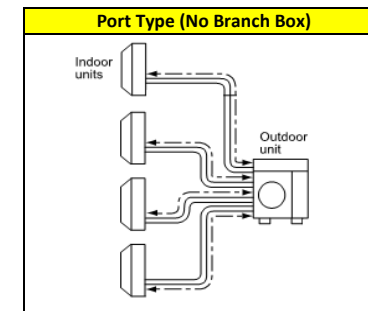
IDUs			Capacity (BTU)		Notes	Length to IDU	
Room Number / Area	Model	Rated BTUs	Rated Heat	Cooling			Heating
1 Living Room / Kitchen	MSZ-FH15	15,000	18,000	13,686	11,847	Wall Mount	20
2 3rd Floor Bedroom	MSZ-FH09	9,000	10,900	8,743	7,240	Wall Mount	35
3 Garage Bonus room	MSZ-FH09	9,000	10,900	8,613	7,217	Wall Mount	50
Total Capacity		33,000	39,800	31,041	26,303		
% of Capacity		110%	139%	109%	92%		

ALLOWABLE CONFIGURATION

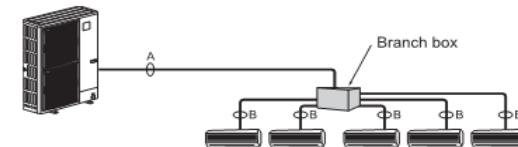
ALLOWABLE LINE LENGTH

Design Criteria		Capacity Reduction	
		Cooling	Heating
Heat Design Temp (°F)	0	-	0.97
Cool Design Temp (°F)	90	1.10	-
Equiv. Pipe Length (ft)	50	per IDU	per IDU
Defrost Correction		-	0.95
Total Derate		1.10	0.92

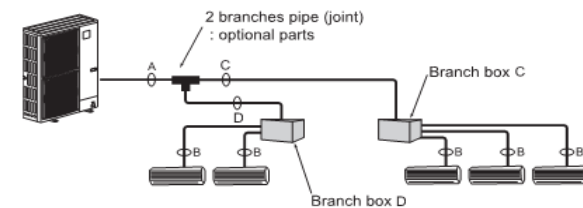
Refrigerant Charge		
Component	Lb.	Oz.
Outdoor Unit Charge	8	13
Additional Refrigerant	0	2
Piping to BB	0	0
Piping to IDU	0	2
Indoor Units	0	0
Total Charge	8	15



- If Using One Branch Box
Flare connection employed (No brazing)



- If Using Two Branch Boxes



*Please fill in light green fields with project information. SELECT THE OUTDOOR UNIT (ODU) FIRST, then select indoor units (IDUs).

** The MXZ System Design Tool is a best guess estimate of indoor unit capacity based on design temperature, line length and connected units.



Your Water Heating System

Finance

Loan Product - VSECU: 15y, 6.15% No Paydown

System Cost \$ 4,960
State Incentives \$ 750

Down Payment \$ 1,000
Monthly Payment \$ 34

Final interest rate will be based on credit score

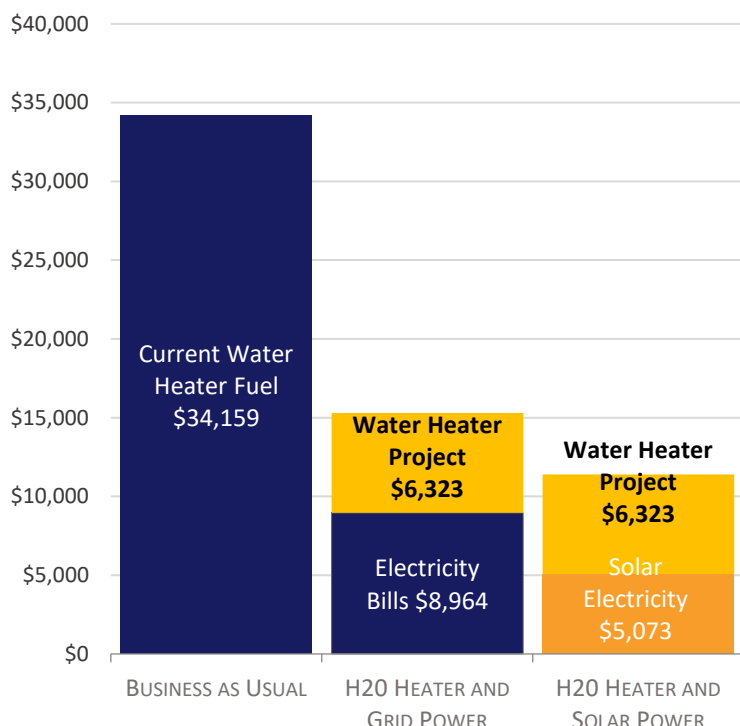
Cash

System Cost \$ 4,960
State Incentives \$ 750

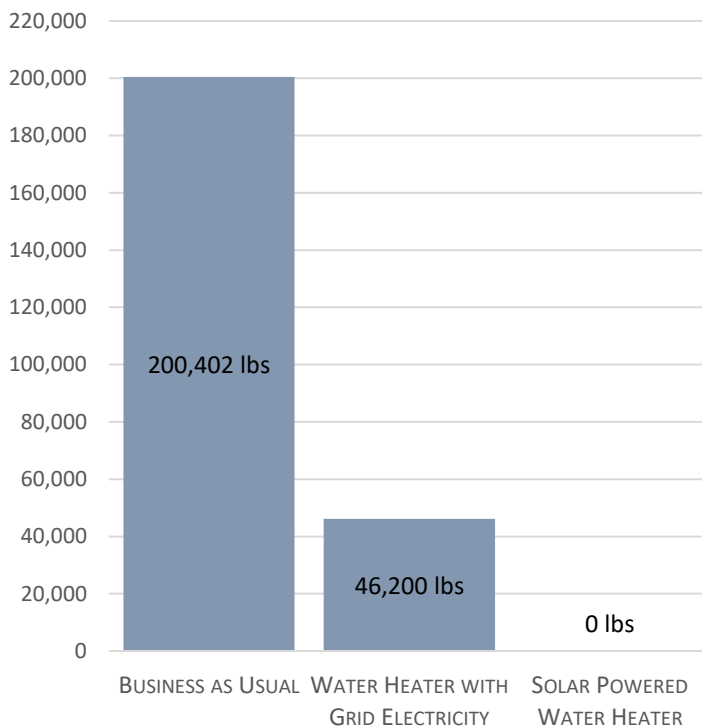
Net Cost \$ 4,210

Pricing expires 30 days from proposal date

Water Heater Cost Comparison



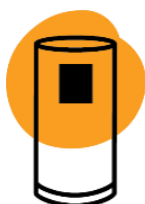
Carbon Emissions over Project Term



Graphs illustrate **Loan** payment method for water heater project

Efficient electric hot water systems by ReVision Energy will shift your hot water costs from your existing fuel to increased electricity consumption. Pair your water heater with solar for even greater savings and carbon reductions.

Major System Components



Stiebel Eltron Accelera 300E heat pump water heater
Caleffi 3/4 inch Pro-Press Mixing Valve With Temp Gauge And Check Valves
Fuelsmart Hydrostat 3250-Plus for Cold-Starting Boiler and 10% Oil Savings



Warranties

Stiebel Eltron provides a 10 year warranty on the heat pump water heater

In addition to servicing all manufacturer's warranties for you, ReVision Energy provides:
1 year warranty for defects in labor and workmanship



Your 16 kW Solar Farm Share

Will reduce your current electric bills by about \$240 per month

Finance

Loan Product - VSECU: 15y, 6.15% With Paydown

System Cost \$ 42,100

22% Federal Tax Credit \$ 9,262 (Paydown)

Down Payment \$ 2,430

Loan Payment for 15 Months \$ 338

Loan Payments after Paydown \$ 228

Final interest rate will be based on credit score

Cash

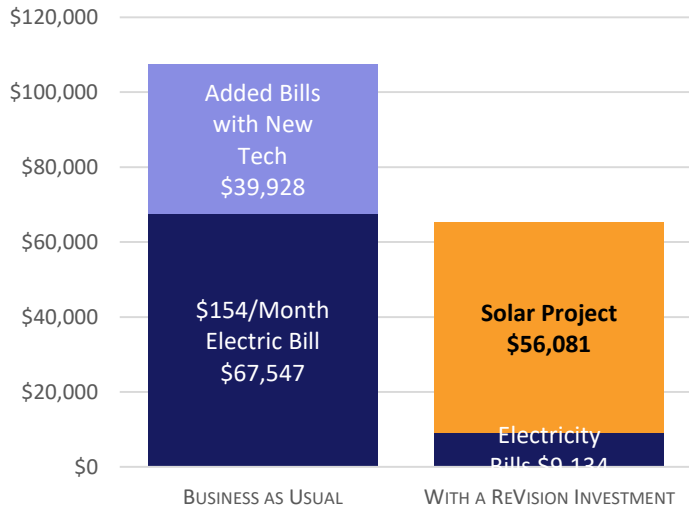
System Cost \$ 42,100

22% Federal Tax Credit \$ 9,262

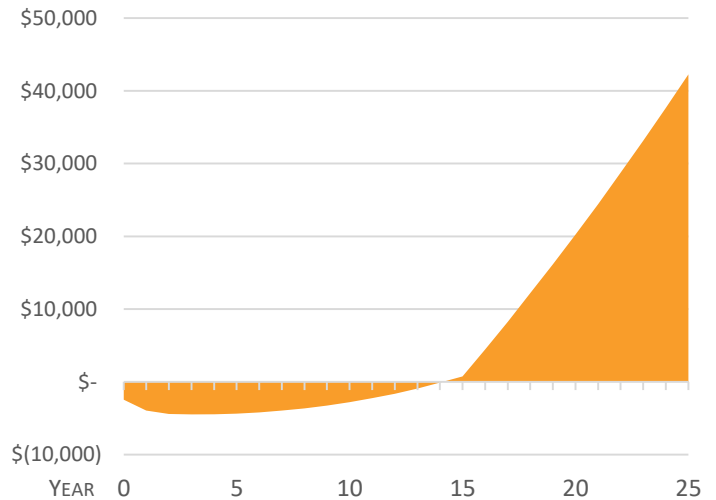
Net Cost \$ 32,838

Pricing expires 30 days from proposal date

Grid Electricity vs Solar Project



Cash Flow over 25 Years



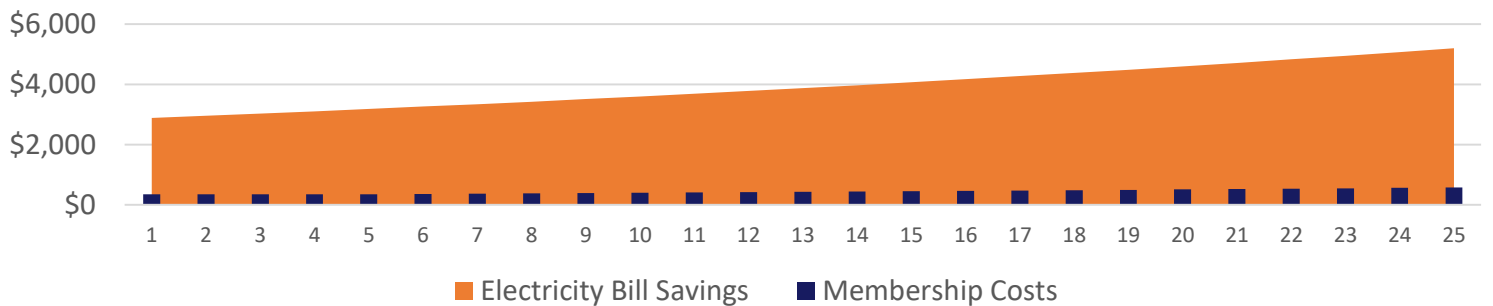
Graphs and solar electricity rates illustrating **Loan** payment method after federal tax credit including **\$10,977** in total solar farm membership costs

Electricity Rate from the Grid Today	\$ 0.149	Your 25 year Solar Electricity Rate	\$ 0.123
Electricity Rate from the Grid in 25 years	\$ 0.303	Your 35 year Solar Electricity Rate	\$ 0.101

Your solar electricity rate is the equivalent price you are paying by investing in your own clean electricity supply for the 25+ year expected life of the system, instead of continuing to rent your electricity from the utility.



Annual Solar Farm Savings and Costs



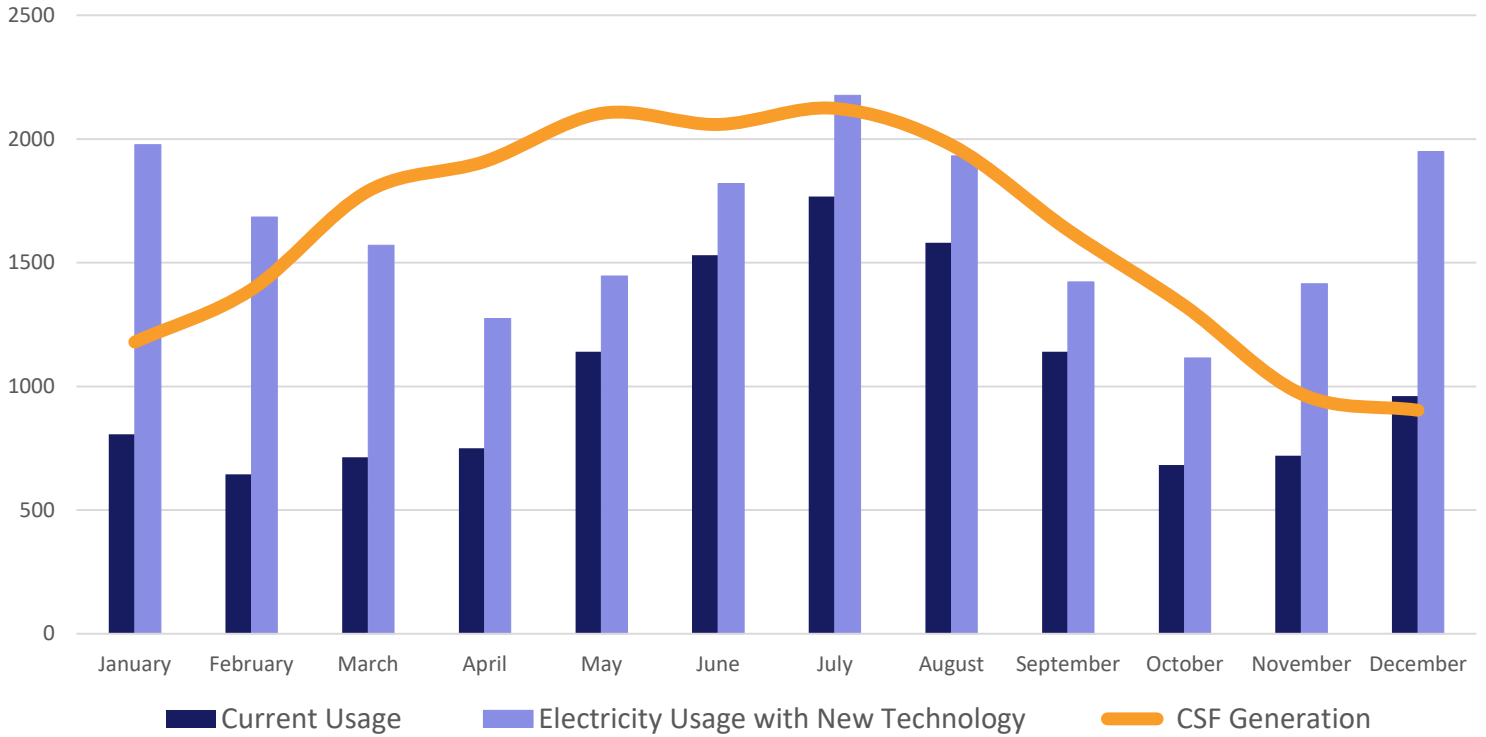
	Years 1 - 5	Years 6 - 10	Years 11 - 25	Years 25 - 35 (if members extend lease)
	<i>fixed</i>	<i>includes 2.5% escalator</i>	<i>(estimated to continue with 2.5% increase annually)</i>	
Avg. Annual Costs	\$ 352	\$ 379	\$ 488	\$ 662



Your 16 kW Solar Farm Share

Estimated to produce **19,360 kWh** of clean electricity annually

Monthly CSF Production and Electricity Consumption (kWh)



Business As Usual (The Cost of Doing Nothing)

Monthly Electricity Bill (average)	\$154	Average Annual Rate Increase	3%
Current Annual Electricity Cost	\$1,853	Total Electricity Cost over 25 Years	\$67,547

Your Community Solar Farm Share

CSF Share Size (kW)	16.0	Existing Electricity Load Covered By CSF Share	156%
Estimated Annual Production (kWh)	19,360	Electricity Load with New Tech Covered By CSF	98%
Current Electricity Usage (kWh)	12,434	Total Value of Solar Energy Over 25 Years	\$98,342

Solar Loan Option

Loan Product - VSECU: 15y, 6.15% With Paydown

Total Loan Amount	\$39,670	Monthly Loan Payment	\$338
Down Payment	\$2,430	Loan Payment after Paydown	\$228
Federal Income Tax Credit	\$9,262	15 Month Paydown Target	\$9,262
		Monthly Value of Solar over Loan (average)	\$287
		Monthly Net Cost to Go Solar (average)	-\$4

Your Solar Investment

Upfront Total Project Cost	\$42,100	Chosen CSF Payment Option	Loan
Federal Tax Credit	-\$9,262	Years Until Cashflow Positive	3.0
Total 25 Year Membership Costs	\$10,977	25 Year Return on Investment (ROI)	75%
Total Cost to Finance	\$12,267	25 Year Average Annual ROI	3.0%
Your Net Solar Investment	\$56,081	Total Net Savings After 25 Years	\$42,260

Environmental Benefits

Annual CO₂ Offset = **20,386** pounds Equivalent Miles *Not* Driven = **14,134** annually
 Making your emissions **92%** less than average New Englanders