

# FROLING ENERGY'S FUTURE COST PREDICTOR: PROJECT + FUEL

	Current Average Oil Consumption/Year	50,000	Pre-Project Avg Oil Cost (at Future Average Price)	\$150,000
<b>System Options</b>	<b>WOOD PELLET BOILER PROJECT</b>	<b>PDC DRY CHIP BOILER PROJECT</b>	<b>GREEN CHIP BOILER PROJECT</b>	<b>NEW OIL BOILER PROJECT</b>
New System Description	New Pellet Boiler installed in existing boiler room plus new exterior steel pellet silo	New Dry Chip/Pellet Boiler installed in existing boiler room plus new exterior rotary extraction silo.	New Green Chip Boiler installed in new boiler house with integrated live floor storage bin	Old Oil Boiler replaced with new higher efficiency Oil Boiler in existing boiler room.
<b>FUEL USED IN PROJECT:</b>	<b>Premium Wood Pellets</b>	<b>Precision Dry Wood Chips (PDCs)</b>	<b>Green Wood Chips</b>	<b>New Fuel Oil Boiler</b>
	7% Moisture Content	25% Moisture Content	45% Moisture Content	10% More Efficient
<b>Net Capital Cost of Project</b>	<b>\$950,000</b>	<b>\$1,100,000</b>	<b>\$1,900,000</b>	<b>\$350,000</b>
<b>Annual Heat Coverage of Biomass (X%)</b>	<b>90%</b>	<b>90%</b>	<b>80%</b>	<b>0%</b>
<b>New Annual Biomass Fuel Use in TONS</b>	<b>374</b>	<b>481</b>	<b>605</b>	None
<b>Biomass Fuel Cost/Ton</b>	<b>\$240</b>	<b>\$120</b>	<b>\$75</b>	None
<b>Annual Biomass Fuel Cost</b>	<b>\$89,664</b>	<b>\$57,680</b>	<b>\$45,400</b>	None
<b>New Fuel Oil Use-Gal/Yr</b>	5,000	5,000	10,000	45,000
<b>Future Average Oil Price/Gal</b>	<b>\$3.00</b>	<b>\$3.00</b>	<b>\$3.00</b>	<b>\$3.00</b>
<b>New Oil Cost/Yr</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$30,000</b>	<b>\$135,000</b>
<b>Total Annual Fuel Cost (No RECs)</b>	<b>\$104,664</b>	<b>\$72,680</b>	<b>\$75,400</b>	<b>\$135,000</b>
<b>Avg Thermal RECs Created Per Year</b>	1,465	1,461	1,301	None
<b>Value of Thermal RECs @\$15 net</b>	\$21,968	\$21,918	\$19,522	None
<b>Years T-RECs are available (Max 10 yrs)</b>	<b>8</b>	<b>8</b>	<b>8</b>	None
<b>Total Annual Fuel Cost w/RECs if Available</b>	<b>\$82,696</b>	<b>\$50,762</b>	<b>\$55,878</b>	<b>\$0</b>
<b>10 Year Fuel Cost w/RECs + Capital Cost of Project</b>	<b>\$1,820,897</b>	<b>\$1,651,453</b>	<b>\$2,497,821</b>	<b>\$1,700,000</b>
<b>10 Year Savings with Biomass Projects vs New Oil Boiler</b>	<b>-\$120,897</b>	<b>\$48,547</b>	<b>-\$797,821</b>	<b>\$0</b>
<b>20 Year Fuel Cost w/RECs + Capital Cost of Project</b>	<b>\$2,867,534</b>	<b>\$2,378,253</b>	<b>\$3,251,816</b>	<b>\$3,050,000</b>
<b>20 Year Savings with Biomass Projects vs New Oil Boiler</b>	<b>\$182,466</b>	<b>\$671,747</b>	<b>-\$201,816</b>	<b>\$0</b>
<b>INSTRUCTIONS: Change Factors in YELLOW HIGHLIGHTED Boxes Only!!</b>				
<small>NOTE ON REC AVAILABILITY: REC Programs are authorized in NH Thru 2025 and in MA thru 2029. Not available in Vermont or Maine.</small>				

**ACCUMULATED PROJECT + FUEL COSTS OVER 20 YEARS**

Price of Oil Per Gallon: \$3.00

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PELLET Project + Fuel Cost	\$1,032,696	\$1,115,392	\$1,198,088	\$1,280,785	\$1,363,481	\$1,446,177	\$1,528,873	\$1,611,569	\$1,694,265	\$1,776,961	\$1,859,658	\$1,942,354	\$2,025,050	\$2,107,746	\$2,190,442	\$2,273,138	\$2,355,834	\$2,438,531	\$2,521,227	\$2,603,923
PDC Project + Fuel Cost	\$1,150,762	\$1,201,523	\$1,252,285	\$1,303,046	\$1,353,808	\$1,404,570	\$1,455,331	\$1,506,093	\$1,556,854	\$1,607,616	\$1,658,377	\$1,709,139	\$1,759,901	\$1,810,662	\$1,861,424	\$1,912,185	\$1,962,947	\$2,013,709	\$2,064,470	\$2,115,232
GREEN CHIP Project + Fuel Cost	\$1,955,878	\$2,011,755	\$2,067,633	\$2,123,511	\$2,179,389	\$2,235,266	\$2,291,144	\$2,347,022	\$2,402,900	\$2,458,777	\$2,514,655	\$2,570,533	\$2,626,410	\$2,682,288	\$2,738,166	\$2,794,044	\$2,849,921	\$2,905,799	\$2,961,677	\$3,017,554
Stay with OIL + Fuel Cost	\$485,000	\$620,000	\$755,000	\$890,000	\$1,025,000	\$1,160,000	\$1,295,000	\$1,430,000	\$1,565,000	\$1,700,000	\$1,835,000	\$1,970,000	\$2,105,000	\$2,240,000	\$2,375,000	\$2,510,000	\$2,645,000	\$2,780,000	\$2,915,000	\$3,050,000

