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New Homes & Cottages Additions & Renovations

Comparison Report for the Bradley Home.

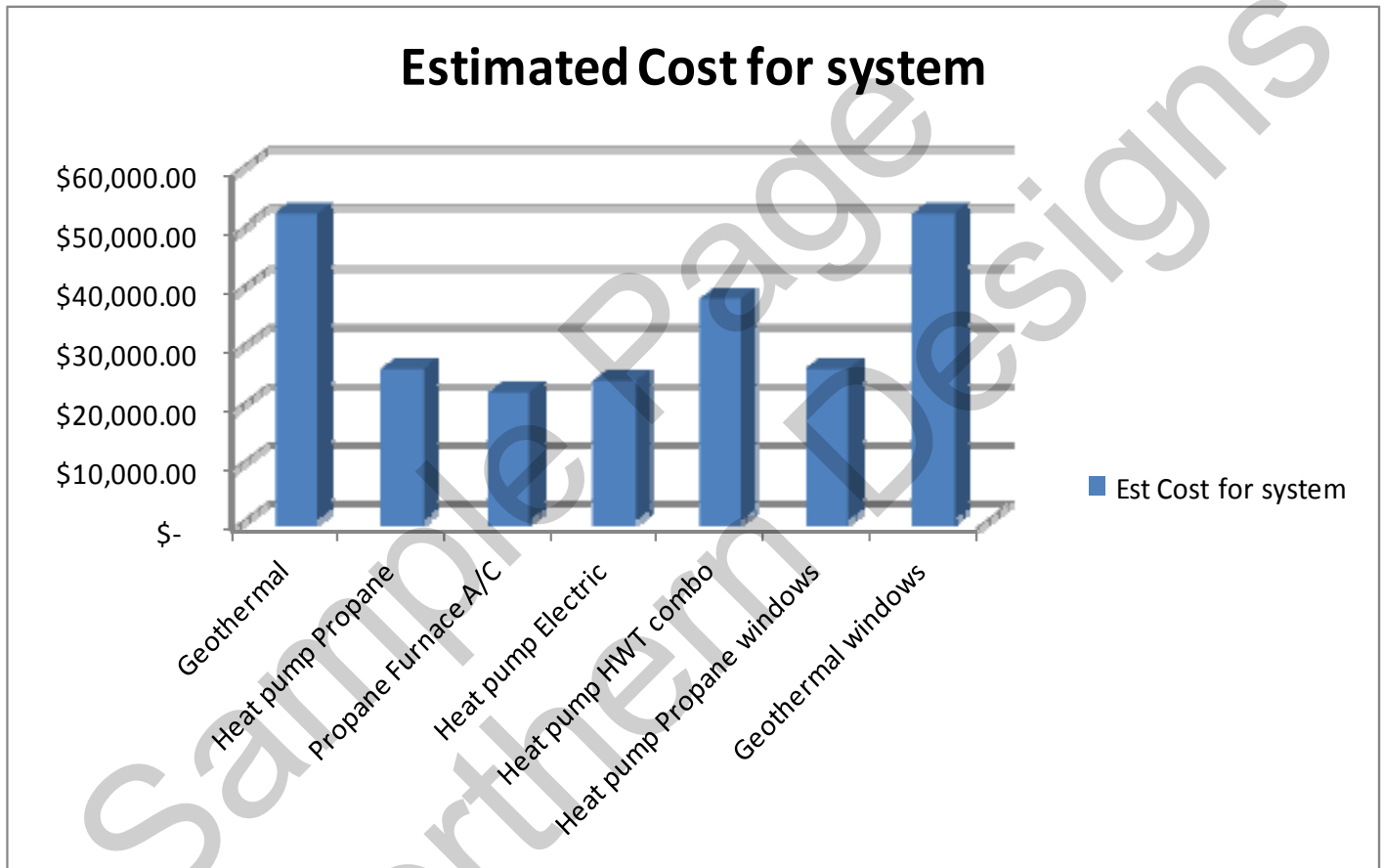
HEATING AND COOLING SYSTEMS

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The results presented may be influenced by a number of considerations. Savings and energy consumption can change depending on many factors such as occupants and day to day habits and lifestyles. The rating considers the house's estimated annual energy consumption based on an in-depth evaluation of its characteristics such as location, size, mechanical equipment and systems, insulation levels and air tightness. In addition, standardized operating conditions are used when calculating the rating in order to compare the efficiency of one house to another. These conditions include: a complete indoor air change approximately every three hours; four occupants; a fixed thermostat setting of 21°C on main floors and 19°C in the basement; average hot water consumption of 225 litres per day; average national electricity consumption of 24 kWh per day; and regional weather data averaged over the last 30 years.

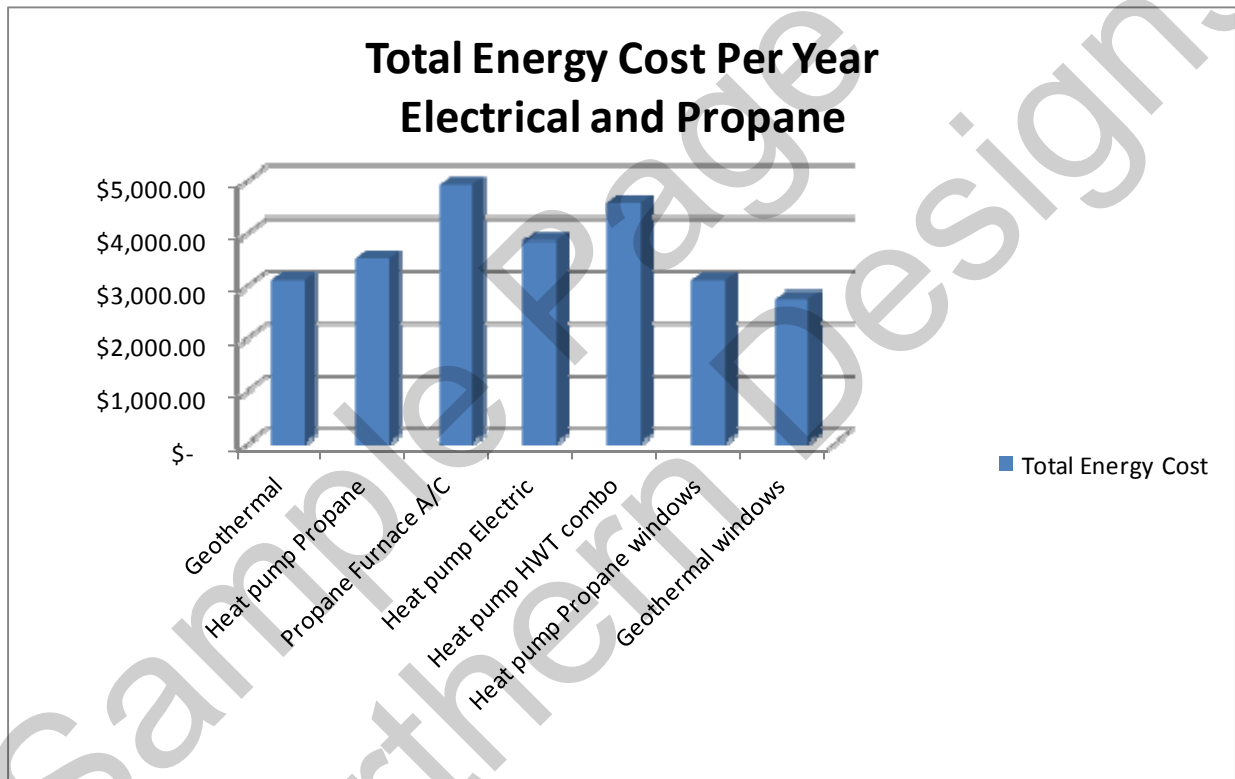
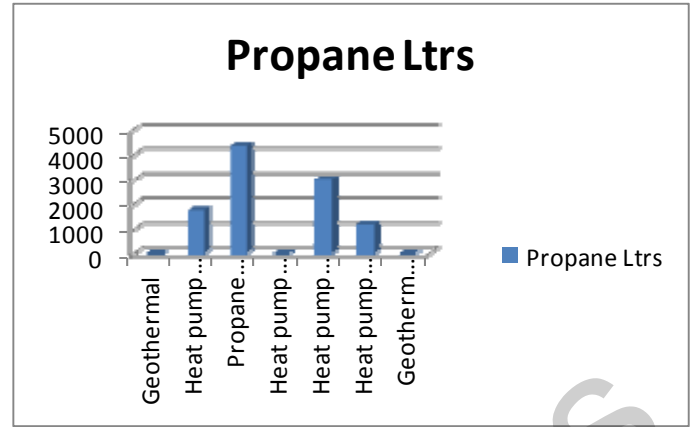
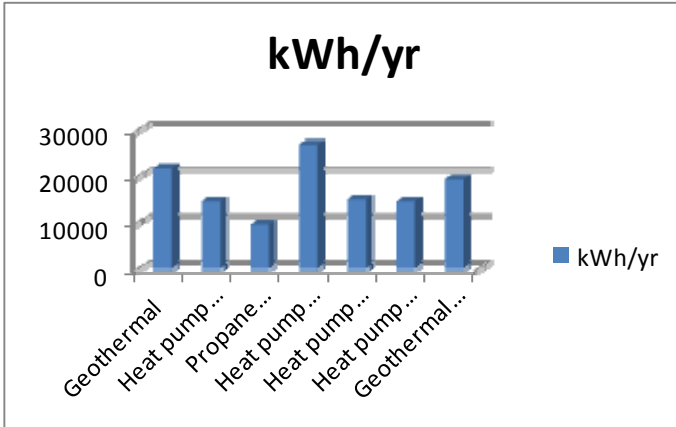
7 Options Compared:

1. Geothermal Unit: Closed Loop system, 3.19COP, 15.2 SEER unit, Electrical backup.
2. Air Source Heat Pump: Propane Based Air Source heat pump. 98% AFUE 18 SEER A/C .
3. Standard Propane Furnace: Propane 92%AFUE 14 SEER A/C 2 stage ECM fan.
4. Air Source Heat Pump: Electric Based heat pump, 15 SEER A/C.
5. Heat Pump HWT Combo: Propane based HWT and air source heat pump 15 SEER A/C.
(6 and 7 are same as above but with 1.2U-Value added windows.)
6. Geothermal Unit: Closed Loop system, 3.19COP, 15.2 SEER unit, Electrical backup.
7. Air Source Heat Pump: Propane Based Air Source heat pump. 98% AFUE 18 SEER A/C .

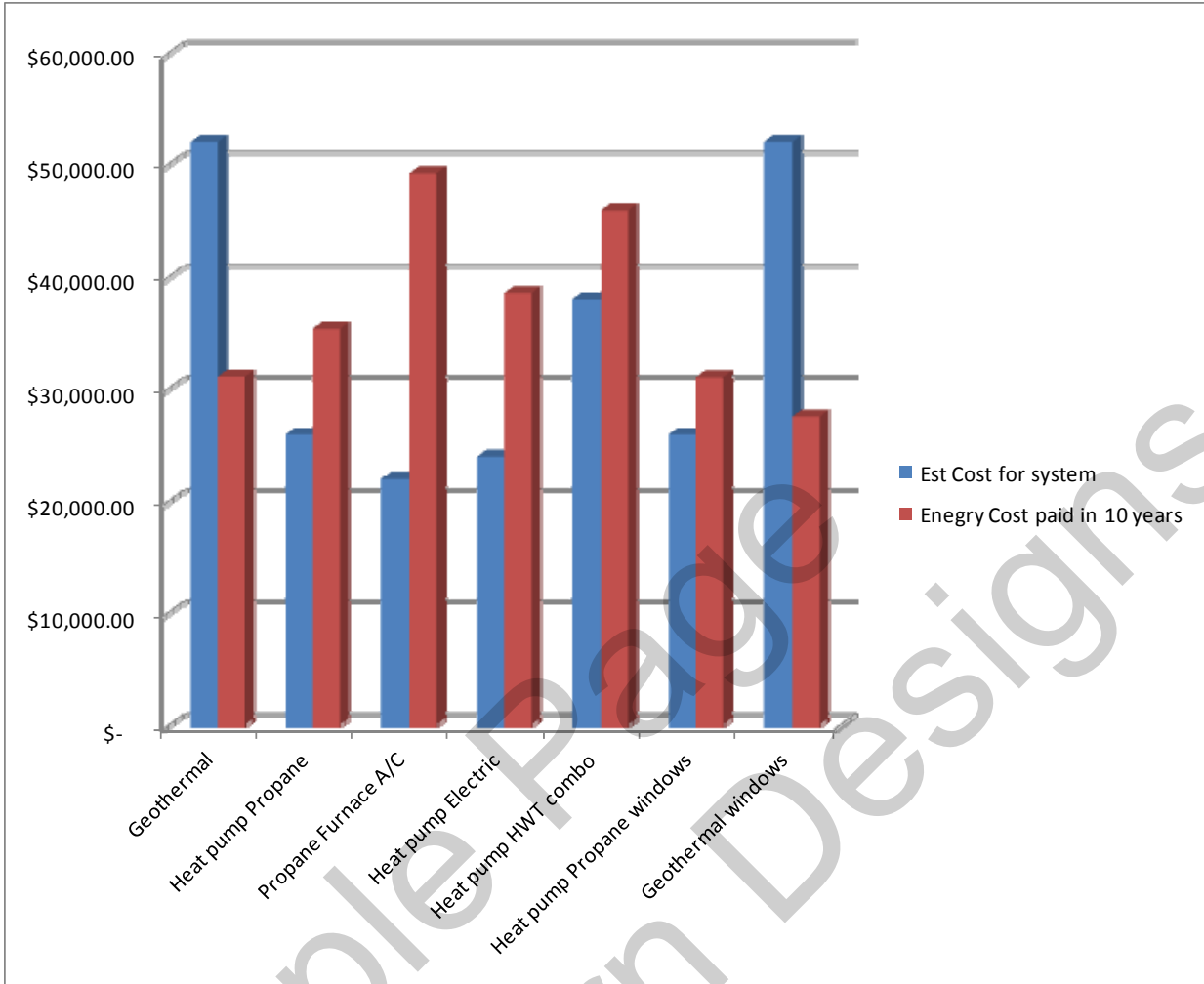


	<u>Unit Modeled</u>	<u>Cost for system</u>
1	Geothermal	\$52,000.00
2	Heat pump Propane	\$26,000.00
3	Propane Furnace A/C	\$22,000.00
4	Heat pump Electric	\$24,000.00
5	Heat pump HWT combo	\$38,000.00
6	Heat pump Propane windows	\$26,000.00
7	Geothermal windows	\$52,000.00

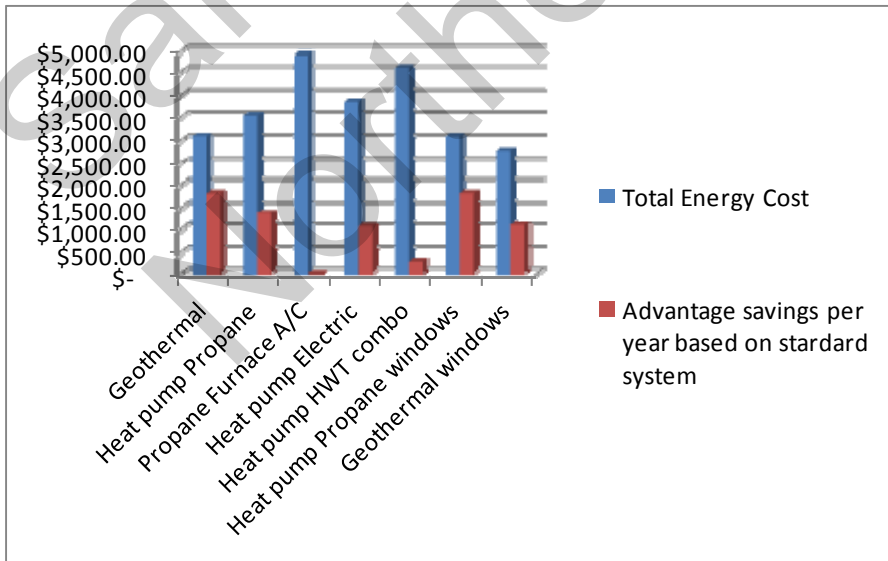
**Energy Costs based on one year operation.
(Propane based at .81/ltr and electricity at Peak hour costing OEB)**



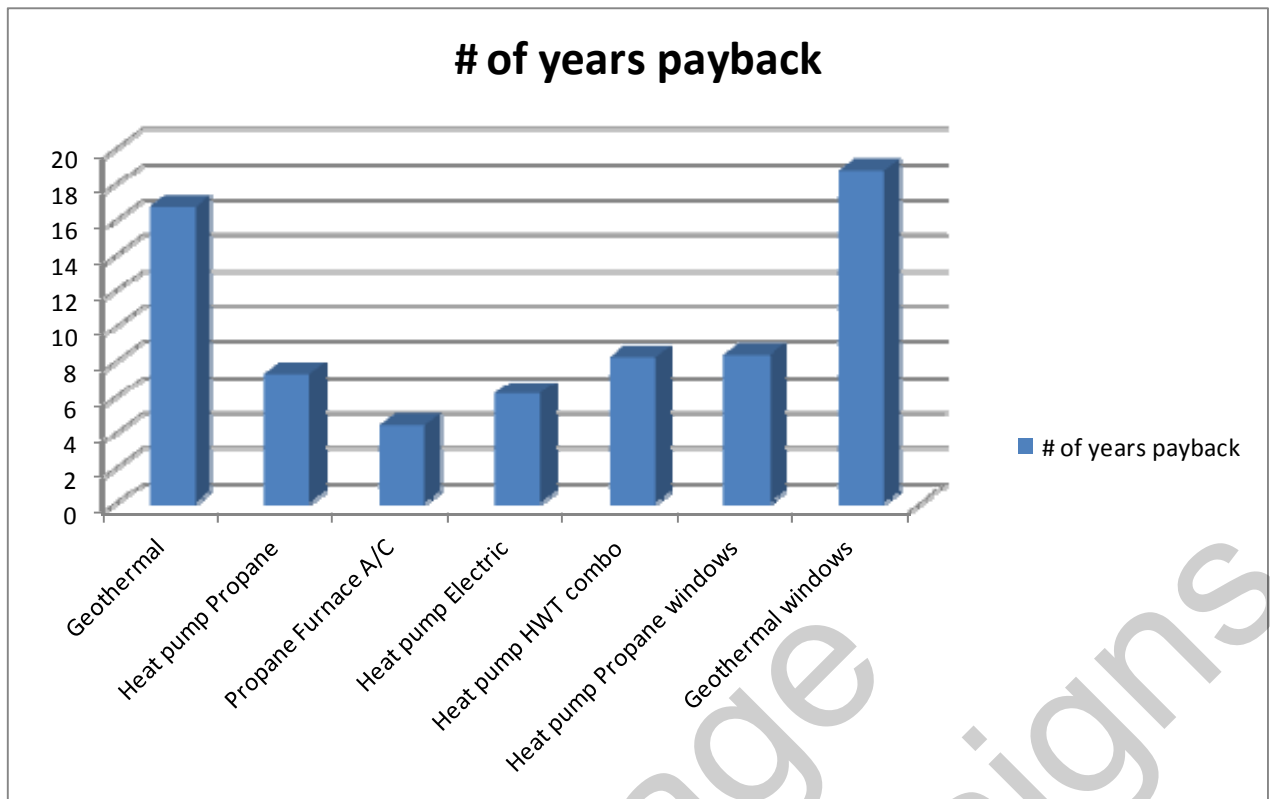
	<u>Unit Modeled</u>	<u>kWh/yr</u>	<u>Propane (Ltrs)</u>	<u>kWh cst</u>	<u>Propane cst</u>	<u>Total Energy Cost (year)</u>
1	Geothermal	21772	0	\$3,103.01	\$0.00	\$3,103.01
2	Heat pump Propane	14869	1746	\$2,119.17	\$1,414.26	\$3,533.43
3	Propane Furnace A/C	9549	4390	\$1,360.95	\$3,555.90	\$4,916.85
4	Heat pump Electric	27050	0	\$3,855.24	\$0.00	\$3,855.24
5	Heat pump HWT combo	15294	2985	\$2,179.75	\$2,417.85	\$4,597.60
6	Heat pump Propane windows	14785	1223	\$2,107.20	\$990.63	\$3,097.83
7	Geothermal windows	19365	0	\$2,759.96	\$0.00	\$2,759.96



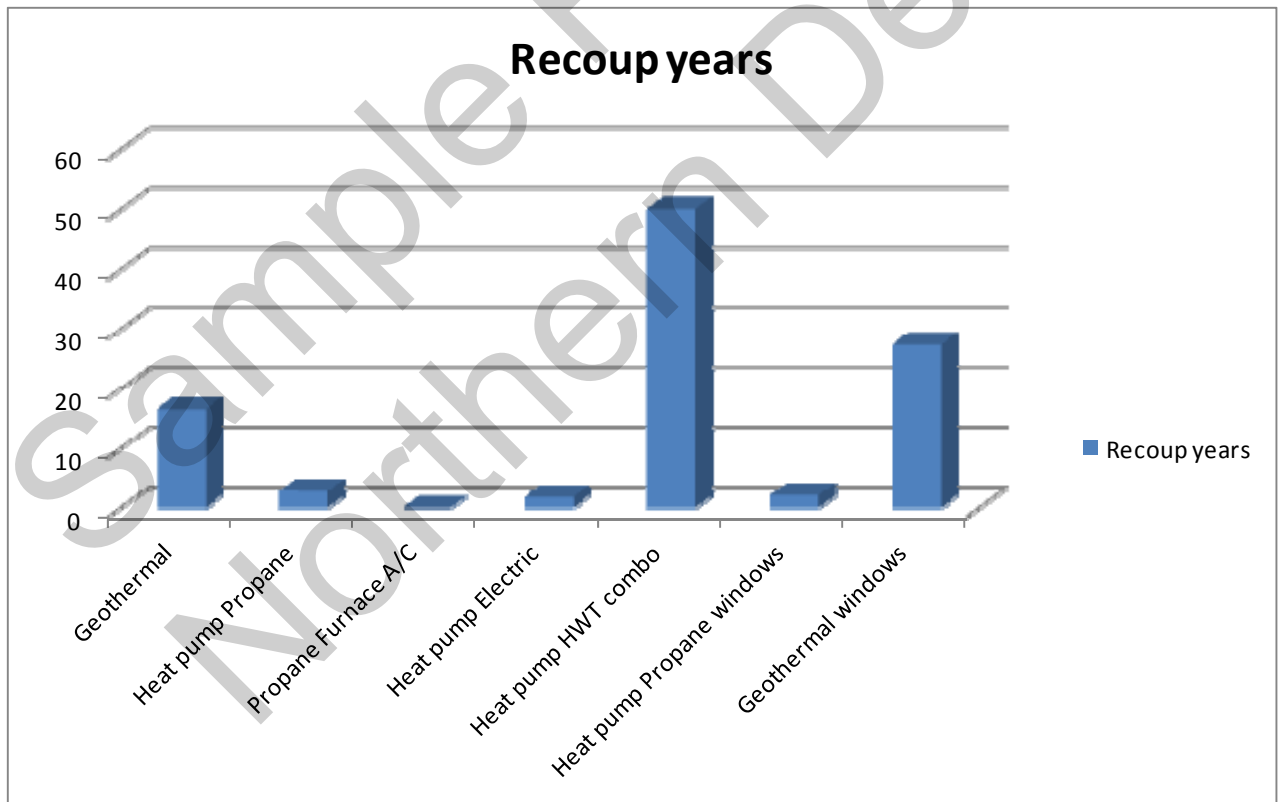
Estimated 10 years approx. time customer stays at home before moving. So above chart shows what is spent in 10 years on energy costs VS the actual cost of the system.



This chart shows the savings difference VS a standard propane furnace as compared to the yearly costs.



Payback chart, total system cost / yearly energy cost.



Recoup costs: savings achieved from standard system recoup cost savings in years.