



Homes that save money  
...and the planet.

# EcoPlusHome Energy Savings Forecast

Compare 10 years of power costs & green house gas emissions for same home built to 3 different energy-efficient construction levels

**HOME SIZE:** Custom-build house with basement, 2742 ft<sup>2</sup> (incl basement)

**LOCATION:** 113 Lake Crest Drive, Dartmouth, Nova Scotia

**HOME BUILDER:** Patterson Sales

**CLIENT:** Duncan Cann

**PACKAGE:** 20 photovoltaic and 2 solar thermal panels

**FORECAST DATE:** August 15, 2011



**Final Construction Rating: 94 / 100**



Energy-efficient construction levels for comparison	EnerGuide rating	Annual power use (kWhr)	Projected annual energy costs by construction type										TOTALS
			year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	
1. Minimum efficiency: built to code	73	33,624.0	\$4,776	\$4,916	\$5,061	\$5,209	\$5,362	\$5,520	\$5,682	\$5,849	\$6,022	\$6,199	\$54,597
2. Conventional efficiency	80	24,957.0	\$3,573	\$3,677	\$3,784	\$3,894	\$4,008	\$4,125	\$4,245	\$4,369	\$4,497	\$4,629	\$40,801
3. EcoPlusHome standard efficiency	94	7,851.0	\$1,198	\$1,230	\$1,264	\$1,299	\$1,334	\$1,371	\$1,409	\$1,448	\$1,488	\$1,530	\$13,572

Reduction in annual energy costs for this EcoPlusHome v. built-to-code: **75%**  
and v. standard efficiency: **67%**

*Building an EcoPlusHome can save you a lot of money*

Projected annual EcoPlusHome energy cost savings compared to other construction types											TOTALS
year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10		
\$3,579	\$3,686	\$3,797	\$3,910	\$4,028	\$4,149	\$4,273	\$4,401	\$4,533	\$4,669	\$41,025	
\$2,375	\$2,446	\$2,520	\$2,595	\$2,673	\$2,753	\$2,836	\$2,921	\$3,009	\$3,099	\$27,229	

EcoPlusHome v. built to code-minimum efficiency  
EcoPlusHome v. conventional efficiency

## Annual green house gas (GHG) emissions by construction type

Construction levels	Tonnes GHG	% GHG reduction compared to built-to-code construction
1. Minimum efficiency: built to code	17.9	0%
2. Conventional efficiency	12.8	28%
3. EcoPlusHome standard efficiency	2.4	87%

*Building an EcoPlusHome can greatly reduce your green house gas emissions*

### Notes:

This is not a final cost-recovery/payback plan.

Energy consumption, cost & GHG emission data calculated using Natural Resources Canada statistics for average family of four (2 adults, 2 children)

Annual energy consumption, cost and GHG emission data assume home uses compact fluorescent lighting and EnergyStar rated appliances.

EnerGuide ratings are pre-construction. Homeowner must contract a certified energy efficiency evaluator for final EnerGuide rating.

Energy-efficiency and GHG modelling software: Natural Resources Canada HOT2000

### Cost variables for this project forecast

Provincial tax	15%	
Cost per kilowatt hour of power	\$0.1207	w tax: \$0.1389
Projected annual cost increase	3.00%	
Hot water tank rental	\$7.79	w tax: \$8.96