

# MEDIA RELEASE

## Backgrounder:

An analysis was performed on the “conventional” currently built home versus one that would meet energy targets of EnerGuide 80. The example below uses a typical 1,640 sq. ft. two-storey home with a full un-insulated basement. The results are shown below:

<b>House Characteristic</b>	<b>Cost (additional)</b>	<b>Conventional (current requirement)</b>	<b>EnerGuide (upgrade)</b>
Ceiling Insulation	\$300	R-32	R-40
Truss-Increase Heel	\$350	8"	10"
Walls (Main)	\$0	R-20	R-20 (no change)
Walls (Basement)	\$2,750	R-0	R-16*
Windows	\$475	Double Glazed	Low E/argon filled*
Ventilation	\$250	Standard HRV	Medium efficiency HRV
Heating	\$250	Regular Thermostats	Electronic*
Electrical	\$250	Standard poly wrapped	Air sealed boxes
Electrical	\$500	None	Basic wiring
Air Leakage	\$250	4.5 ACH @ 50pa	2.5 ACH @ 50pa
Testing/Fees	\$400	None	Optional
Annual Energy Costs		\$3800.69	\$2813.00
Annual Greenhouse Gas Emissions		28463 kg	19688 kg
EnerGuide Rating		70	80

Total Costs \$5,775 (Costs will vary based on home owner choices)

\* May qualify for a rebate from takeCHARGE. For eligibility requirements, please visit [takechargenl.ca](http://takechargenl.ca)

# ST. JOHN'S

**Summary - Conventional to EnerGuide**

Additional Costs: \$ 5,775

Annual Energy savings: \$987.69

Simple Payback: 5.85 years

Return on investment: 17.1%

Monthly Energy Savings: \$82.31 Minus (-) Increased monthly payment (\$5,775 at 4.18% mortgage rate amortized over 25 years) \$30.95 = \$51.36 Positive Monthly Cash Flow

**ENVIRONMENT**

There has been an average of 600 new homes built in St. John's each year for the past 10 years or 6,000 homes over this period.

Greenhouse gas emission savings are estimated to be between 4 and 8.7 tonnes per year per home (based on marginal values) with the upgrade to EnerGuide 80 standards.

- 600 homes/year x 8.7 tonnes emissions per year per home = 5,200 tonnes
- 600 homes/year x 4 tonnes emissions per year per home = 2,400 tonnes
- 6,000 homes x 8.7 tonnes = 52,200 tonnes of emissions per year
- 6,000 homes x 4 tonnes = 24,000 tonnes of emissions per year
- 10 year accumulation (at 8.7 tonnes - high end of range) = 287,000 tonnes of emissions
- 10 year accumulation (at 4 tonnes - low end of range) = 132,000 tonnes of emissions
- A reduction of 287,000 tonnes of emissions is the equivalent of taking 51,000 cars off the road annually.

**FINANCIAL**

Based on Average five-year closed interest rate 4.18% (Based on average of five-year closed interest rates from five major lenders on June 15, 2011)

Cost-breakdown for Energy Efficiency Improvements are shown for low, mid and high-improvements, as home owners choices can greatly affect price.

Costs of Energy Efficient Improvements	5-year closed mortgage - 20-year amortization	5-year closed mortgage - 25-year amortization	Monthly Energy Savings	Positive Net Cash Flow - 20-year amortization
\$3,000	\$18.41	\$16.07	\$82.31	+\$62.90
\$5,500	\$33.75	\$29.47	\$82.31	+\$48.56
\$8,000	\$49.09	\$42.87	\$82.31	+\$23.22

Comparison of example conventional mortgage rates and new eco-mortgage rates:

Mortgage Amount	Mortgage Rate	Monthly payment 5-year term 20-year amortization	Monthly payment 5-year term 25-year amortization
\$250,000	4.18% (standard)	\$1,534.00	\$1,339.56
\$250,000	3.79% (eco-mortgage)	\$1,483.58	\$1,286.75
Savings		\$52.81	\$51.42