

2015-2016 *Good Energy* Program Quarterly Report

January 1 – September 1, 2015

In January 2015, the Energy Branch introduced several new residential incentives to the *Good Energy* program, a market transformation program that identifies energy efficient products and provides financial incentives for clients to realize energy and cost savings and to reduce greenhouse gas emissions. The new incentives include:

- \$10,000 for building super-insulated new homes
- 20% of cost up to \$11,000 for air sealing and adding insulation to existing homes
- \$50 per unit up to \$1,000 for the installation of EnergyStar® windows and doors
- \$500 for the installation of an efficient heat recovery ventilator (HRV)
- 20% of material costs up to \$5,000 for installing a residential renewable energy system.

These new incentives have been very popular with Yukoners. Since the launch of the program, 49 super-insulated new homes have been built and 13 solar photo-voltaic (PV) systems have been installed. A super-insulated new home built to an EnerGuide 85 rating can achieve an annual heat load of 14,000 kWh which costs on average \$300 per month to heat over the course of a heating season. Families living in super-insulated homes not only save energy and the cost of purchasing energy, but they also reduce their greenhouse gas emissions and enjoy the comforts of a cozy and draft-free home.

Not every Yukoner is able to build a super-insulated new home. Those Yukoners living in existing homes are able to improve the energy performance and comfort of their home by taking advantage of the window and door, air sealing, insulating and HRV incentives. Seventy-eight clients have received incentives totaling \$29,000 for the installation of EnergyStar® windows and doors. This amounts to 81,000 kWh saved per year, \$14,000 annual cost savings and 35 tonnes of annual greenhouse gas emissions displaced. Four clients to date have completed insulation and air sealing retrofits on their homes and more are still racing the winter weather to finish their retrofits and claim their incentives.

There has been strong interest as well in the residential renewable energy incentive. The Yukon currently has 20 installing on grid solar photovoltaic systems to date with a projected 66,000 kWh of annual generation. Off-grid Yukoners save significantly on their self-generation expenses while also reducing fossil fuel expenses, consumption and emissions from diesel and gasoline generators.

Since the launch of the new incentives in January, Yukoners have collected 269 residential incentives totalling \$593,000 in incentives paid out. This translates into 320,000 kWh of annual energy savings, \$55,000 in annual Yukon cost savings and 145 tonnes of greenhouse gas emissions displaced.

In addition to the new residential incentives added to the *Good Energy* program, in May 2015, the Energy Branch introduced the Commercial Energy Incentive Program (CEIP). CEIP has two components. The first component targets the lighting efficiency of commercial buildings by encouraging owners to upgrade to energy-efficient and long-lasting LED lighting systems. Yukon businesses can qualify for incentives of 20% of LED lamp and fixture costs up to \$10,000. Interest in this incentive has been very

strong with 8 businesses having completed lighting retrofits to date and additional businesses in the process of, or preparing for, lighting system upgrades. Thirty-eight thousand dollars have been paid in LED upgrades for commercial buildings with a projected annual energy savings of 1,200,000 kWh, \$142,000 in annual energy cost savings and 511 tonnes of greenhouse gas emissions displaced.

The second component offers up to \$100,000 for air sealing, insulation and window and door upgrades for multi-family dwellings. Participation in this component has been low.

Aside from the introduction of the CEIP and the residential additions to the *Good Energy* program, the Energy Branch has continued to offer incentives for home appliances, heating systems and water-efficient products through the *Good Energy* program. Participation in the program continues to be very strong. Yukoners have received over 11,000 incentives totalling \$1.5 million dollars since the launch of the program in 2007. The *Good Energy* program has been very successful in transforming the local market to stock and promote energy efficient refrigerators, clothes washers, fridges, freezers and heating systems ranging from wood stoves, to propane and oil furnaces and air source heat pumps.

The projected total lifetime client cost savings for the program totals 17 million dollars, 20 million lifetime kWh saved, 11 million litres of lifetime oil displaced and 36,000 tonnes of lifetime greenhouse gas emissions displaced.

Incentive Summary

Table 1. January to September, 2015 - Residential Incentives

	Count Incentives	Incentives Paid	Annual Energy Savings (kWh)	Annual Client Cost Savings (\$)	Annual GHG Emissions Savings (tonnes eCO₂)
Energy Assessments	74	\$7,700	--	--	--
New Home Incentives	49	\$490,000	220,500	\$38,036	95
Existing Home - Air Sealing	2	\$700	5,644	\$974	2
Existing Home - Insulation	4	\$11,462	64,000	\$11,040	28
Windows & Doors	78	\$29,750	80,920	\$13,959	35
HRV	49	\$24,500	--	--	--
Renewable Energy Systems	13	\$28,871	37,000	\$4,718	16
All Incentives	269	\$592,983	408,064	\$68,727	176

Table 2. January to September, 2015 - Commercial Incentives

	Location Upgrades	Incentives Paid	Energy Savings	Client Cost Savings (\$)	GHG Emissions Savings (tonnes)
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			(kWh)		eCO ₂)
LED Upgrades	8	\$37,935	1,184,695	\$142,163	511
Multi-Family Thermal Enclosure Upgrades	0				

Table 3. January to September, 2015 – *Good Energy* Incentive Summary

	Count Incentives	Incentives Paid	Lifetime Client Cost Savings (\$)	Lifetime Energy Savings (kWh)	Lifetime Oil Displaced (litres)	Lifetime GHG Emissions Savings (tonnes eCO ₂)	Lifetime Water Savings (litres)
All incentives	464	\$203,188	\$652,000				
Home appliance incentives	398	\$41,281	\$110,000	860,000	--	220	--
Heating systems	50	\$160,431	\$542,000	--	420,000	1,150	--
Water incentives	16	\$1,476					20,000,000

Table 4. 2007 to 2015 – *Good Energy* Incentive Summary

	Count Incentives	Incentives Paid	Lifetime Client Cost Savings (\$)	Lifetime Energy Savings (kWh)	Lifetime Oil Displaced (litres)	Lifetime GHG Emissions Savings (tonnes eCO ₂)	Lifetime Water Savings (litres)
All incentives	11,168	\$1,536,650					
Home appliance incentives	9,245	\$906,907	\$2,547,333	19,979,000	--	5,168	--
Heating systems	1,356	\$583,394	\$14,688,024	--	11,298,480	31,214	--
Water incentives	395	\$31,376					502,843,562
Energy assessments	176	\$15,375					

Table 5. January to September, 2015 – *Breakdown by Community*

	Carcross	Carmacks	Dawson City	Burwash/ D. Bay	Haines Junction	Mayo	Teslin	Watson Lake	Ross River	Faro	Unincor. Comm.	Whitehorse
All incentives	5	8	7	2	17	3	1	5	1	1	10	639
Residential Incentive Program	1		2	1	2	1	1		1	1	3	183
Home appliance incentives	4		5	1	11	1		4			7	393
Heating systems					3	1						46
Water incentives		8			1			1				17