



	<b>REPORT No.: 2019-14</b>
<b>MEETING DATE: MARCH 21, 2019</b>	<b>DATE PREPARED: FEBRUARY 19, 2019</b>
<b>SUBJECT: GREEN ENERGY INITIATIVES ANNUAL REPORT 2018</b>	

### **RECOMMENDATION**

For information only.

### **REPORT SUMMARY**

To provide The District of Thunder Bay Social Services Administration Board (TBDSSAB or the Board) with information on green energy initiatives undertaken in 2018 in keeping with the objective of being an environmentally friendly organization that will maintain green and energy efficient buildings while lowering greenhouse gas emissions.

### **BACKGROUND**

At the January 23, 2014 Board meeting, it was requested by the Board that a report outlining the green energy initiatives and potential energy savings be presented annually. An update is provided to the Board each year outlining the activities of the previous year. This report outlines initiatives implemented in the 2018 budget year.

### **COMMENTS**

Utility costs remain as one of the largest operating expenses the TBDSSAB incurs within its property portfolio. For the 2018 budget year, \$3,960,500 was allocated for utilities (\$664,500 for natural gas, \$1,910,300 for hydro and \$1,385,700 for water and sewer). In comparison, for 2017, \$4,231,951 was expended for utilities (\$722,155 for natural gas, \$2,156,883 for electricity and \$1,352,913 for sewer and water).

The actual cost in 2018 for natural gas was \$734,035, electricity \$1,821,040 and sewer and water \$1,423,190. The total expenditure for 2018 was \$3,978,265, representing a six percent decrease from 2017, though slightly over the budgeted amount.

The *Fair Hydro Act, 2017* came into effect on June 1, 2017 in order to lower electricity bills for residential customers, hold increases to inflation rates for four years, provide additional relief for on-reserve First Nations residential customers and remove the cost of certain electricity-related relief programs from electricity bills.

Significant energy related projects were implemented through capital planning under provincially funded initiatives such as the Social Housing Apartment Retrofit Program (SHARP), the Social Housing Improvement Program (SHIP) and the Social Housing Apartment Improvement Program (SHAIP) in order to reduce energy consumption. Energy efficient products replaced high energy usage products to reduce consumption. Several of these projects were supported through energy savings incentive programs provided by Thunder Bay Hydro, Hydro One and Union Gas. The SHARP incentive concluded on March 31, 2018. The SHIP program completes on March 31, 2019. SHAIP funding is available for 2018 and 2019, with the program concluding on March 31, 2020.

In 2018, through the capital budget, SHARP funding, SHIP funding and SHAIP funding, \$2.245 million was allocated toward energy reducing projects. Attachment #1 outlines the list of projects completed in 2018 for energy consumption reduction.

One of the notable projects undertaken was the second phase of exterior wall replacements at Andras Court, removing the original windows and aluminum wall panels in each apartment and installing insulated vinyl panels with low E argon gas windows. The original panels were installed during the construction of the building over forty years ago. In total over 180 apartment walls were changed in twelve months.

In February 2018, a Demtroys heat management system was completed to reduce the electricity consumption for baseboard electric heating. Based on historical data, an average of 2,531,666 kilowatt hours (kWh) of electricity was used annually at Andras Court prior to 2018. The upgrades in 2018 yielded savings of 437,164 kWh (17%) in 2018 alone.

As a result of the energy-savings projects undertaken across the housing portfolio, TBDSSAB is expected to reduce its energy consumption by an estimated 638 MWh each year. Furthermore, there is a reduction of approximately 451 metric tonnes of CO2 emissions (according to the United States Environmental Protection Agency Impact Calculator).

From the installation of more energy efficient products through these initiatives, additional operational savings are expected over the useful life span due to lower consumption, maintenance and repair costs.

### **FINANCIAL IMPLICATIONS**



There are no financial implications related to this report.

### **CONCLUSION**

It is concluded that TBDSSAB continues to meet the organizational direction of providing green, environmentally friendly housing. The ongoing commitment to seek out efficiencies in energy consumption, while maintaining the quality of life of tenants, has resulted in the responsible provision of quality housing.

**REFERENCE MATERIALS ATTACHED**

Attachment #1: [Green Energy Initiatives Listing](#)

<b>PREPARED BY:</b>	Barry Caland, Manager, Facilities The District of Thunder Bay Social Services Administration Board
<b>APPROVED / SIGNATURE:</b>	 Ken Ranta, Director – Housing Services Division The District of Thunder Bay Social Services Administration Board
<b>SUBMITTED / SIGNATURE:</b>	 William (Bill) Bradica, Chief Administrative Officer The District of Thunder Bay Social Services Administration Board

### Green Energy Initiatives Listing

<b>Fund Code</b>	<b>Project #</b>	<b>Project Name</b>	<b>Description</b>	<b>Total</b>
B00775	PH-20	Limbrick	Furnaces	\$ 75,000
B00797	PH-33	Seppala Court	Roofing	35,000
B00800	PH-33	Seppala Court	Crawl Space Ventilation	18,000
B00801	PR-01	Ross Court	Appliances - Refrigerators	15,000
B00803	PR-01	Ross Court	Lighting	25,000
B00809	PR-03	Habitat	Heating & Cooling - Common	75,000
B00811	PR-04	Gore-Neebing	Heating System - Units	50,000
B00818	PR-07	North Vickers	Air Make-up Systems	120,000
B00830	PR-10	Picton 2	Heating System - Units	25,000
B00833	PR-12	Picton 3	Heating System - Units	25,000
SHIP10		Elizabeth Court	Boiler Replacement	60,000
SHIP11		Paterson Court	Boiler Replacement	75,000
SHARP17		Andras Court	Demtroys Heat Management System	215,000
SHARP18		Spence Court	Demtroys Heat Management System	65,000
SHARP19		Spence Court	Exterior Doors	80,000
SHARP21		Spence Court	Heat Recovery Ventilator	12,000
SHAIP		Andras Court	Insulate and Roof Replacement	425,000
SHAIP		Andras Court	Window Panels	850,000
<b>Total:</b>				<b>\$ 2,245,000</b>