



## BOARD REPORT

REPORT No.: 2022-15

MEETING DATE: MARCH 17, 2022

SUBJECT: GREEN INITIATIVES UPDATE

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### RECOMMENDATION

For information only.

### REPORT SUMMARY

To provide information on initiatives undertaken in 2021, as well as future plans to enhance environmental stewardship across the organization, in keeping with the objective of being an environmentally friendly organization.

### BACKGROUND

At the January 23, 2014, meeting, the Board requested that a report outlining the green energy initiatives and potential energy savings be presented annually, which has been provided since that date.

Since that time, and with a view to expanding the scope of environmental stewardship to all areas of the organization, TBDSSAB has continued to view various operational items through that environmental stewardship lens.

### COMMENTS

#### Current and On-going Initiatives

##### Housing Portfolio Energy Management

Significant energy-related projects have been implemented through the annual TBDSSAB approved Capital Budgets, as well as through provincially 100% funded initiatives, such as the Social Housing Apartment Renovation Program (SHARP), Social Housing Improvement Program (SHIP), Social Housing Apartment Improvement Program (SHAIP), and most recently the Canada-Ontario Community Housing Initiative (COCHI), to reduce energy consumption.

In addition, energy-efficient products replaced high-energy-usage products to reduce consumption. Several of these projects were supported through energy savings incentive

programs provided by Synergy North, Hydro One, Independent Electricity System Operator (IESO) and Enbridge. TBDSSAB received rebates in 2021 for previously installed Make Up Air systems at Fisher Court and Neill Court in Geraldton, as well as for the new high efficiency boiler system at Mclvor Court.

Through the Board-approved Capital Budget and COCHI funding, \$1,007,193 was utilized for energy-reducing projects in 2021. Attachment #1 outlines the list of projects completed in 2021 for energy consumption reduction.

The most significant projects in 2021 included:

1. The installation of 172 high efficiency furnaces, with energy efficient motors at homes on John Street, Windsor Street, Trillium, Picton Avenue, Tamarack Place, Isabella Street, Ridgeway Avenue, McGregor Street and in Nipigon at Wadsworth Drive and Greenmantle Drive, to reduce heating and electricity costs for the tenants;
2. Replacing 122 windows at 21 addresses at Ruskin Crescent and Hall Place to increase the efficiency and decrease the heat loss of older windows; and,
3. The replacement of 3 water heaters with 2 high efficiency boilers and 2 storage tanks at Mclvor Court to provide more efficient and effective domestic hot water production, while reducing energy costs and lowering the carbon dioxide emissions.

As a result of the energy-saving projects undertaken across the housing portfolio, TBDSSAB is expected to reduce its energy consumption by an additional estimated 383 MWh each year. Furthermore, there is a reduction of approximately 334 metric tonnes of CO<sub>2</sub> emissions according to the United States Environmental Protection Agency Impact Calculator. That is the equivalent of 21.0 average sized homes' greenhouse gas emissions per year. The savings for those capital projects completed are included in Attachment #2.

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.

#### Paper Reduction Initiative

Significant efforts were undertaken over the past three years by Information Services, Housing Programs, Social Assistance Programs, and Child Care to reduce the amount of paper produced, printed, and distributed. In addition to previous advancements made to reduce paper, the following processes were finalized in 2021 which further aided in the achievement of the paper reduction goal:

- Digitizing applications for Housing Security Funds, Social Services Relief Fund Housing Arrears program, Reaching Home and new housing applications;
- Marketing the Ontario Works My Benefit application for two-way communication between the client and the caseworker by establishing plans to reduce the required paper intake for these programs; and
- Digitizing Child Care files.

The continued opportunity to digitize processes and increase the elimination of paper has had a significant impact on the amount of paper printed, filed and archived.

TBDSSAB paper purchases have been steadily declining since the start of these initiatives approximately 4 years ago. In 2020, TBDSSAB purchased 775,000 pieces of paper; in 2021, actual paper purchases totaled 670,500, with savings of \$1,985.

#### Information Services Equipment Consolidation

In June of 2019, Information Services began an initiative to consolidate network and server equipment. This involved using hybrid server and storage systems vs. separate devices for each function, improving server processing capacity allowing TBDSSAB to reduce the number of physical servers by 2, while maintaining the same functionality and processing power.

Another initiative was the move from Microsoft Exchange on Premise to Microsoft Exchange Online. Prior to this, TBDSSAB email was hosted onsite, using 6 virtual servers. Although virtual servers do not use as much power as physical servers, each virtual server takes processing power to run, thus using electricity. By moving TBDSSAB email to Microsoft Online, Administration was able to reduce the number of virtual servers by 5, from 7 to 2.

The benefit of these projects, which were completed between December 2019 through February 2020, continues, as energy consumption continues at the decreased levels (approximately 50% from the usage levels prior to the implementation of these initiatives).

Energy consumption savings achieved through these initiatives are included in the cumulative savings identified in Attachment #2.

#### Community Gardens

Tenant inclusion efforts involving the establishment of organic community gardens continues to help deliver the TBDSSAB goal of being an environmentally friendly organization. Involving tenants in community gardens, and producing some of their own food, instills the value of working with the earth and protecting the environment.

Throughout the TBDSSAB portfolio, eight (8) large community gardens and many flower gardens have continued to be maintained with the support of tenants and the Housing Programs team. In 2021, the larger gardens sites were equipped with compost bins to turn garden and kitchen waste into compost. Rain barrels have also been installed at various locations to support watering flower gardens.

#### Neighbourhood Cleaning and Recycling

Annual tenant community cleaning efforts have continued to take place in many TBDSSAB neighbourhoods involving tenants to help beautify and clean their homes and outdoor areas. Families and individuals are engaged in this process, encouraging the involvement of the children to have them understand the importance of 'pitching in' to keep their community green.

Additionally, recycling programs were previously established and continue to be maintained at most of the multi-unit properties, with education and supports provided to encourage involvement.

### Investment Policy

In 2021, through Report No. 2021-26 (Corporate Services Division), Investment Policy Update, the Board approved an update to its Investment Policy No. CS-02:70 to incorporate the concept of Environmental, Social, and Governance (ESG) investing

- Environmental – what kind of impact does an organization have on the environment?
- Social – how does the organization improve its social impact within the company and in the broader community?
- Governance – how does the organization's board and management drive positive change?

This policy update will align the Board's investment choices with its environmental stewardship initiatives.

### Purchasing Policy

Since 2014, the Purchasing Policy CS-03:1 has included Environmental Stewardship to allow for the expanded use of durable products, reusable products, and products (including those used in services) that contain the maximum level of post-consumer waste and/or recyclable content.

Specifications provided for various capital projects, as well as operating contracts, will continue to be enhanced to accommodate the increased focus on environmentally sustainable practices.

### Single Use Plastics

Administration had previously established internal practices to reduce the use of single use plastics including eliminating the purchase of bottled water, and plastic dishes and cutlery.

The Federal government has announced its plan to reduce single-use plastics and related plastic waste target to zero by 2030. The proposed Regulations will be finalized after the consultation period closes on March 5, 2022. The government proposes to ban 6 items including plastic checkout bags, straws, stir sticks, six-pack rings, cutlery, and food ware made from hard-to-recycle plastics.

With this direction, Administration will continue to monitor the federal government plans and incorporate those into TBDSSAB strategies to eliminate its use of single use plastics.

### Environmental Stewardship Plan

The Province of Ontario's *Preserving and Protecting our Environment for Future Generations – A Made in Ontario Environment Plan*, includes various strategies related to reducing waste that goes to landfills, protecting the air, natural spaces and species, addressing climate change, holding polluters accountable, and supporting infrastructure development while ensuring environmental protection.

In 2021, Administration developed a Cascaded Environmental Plan for TBDSSAB, using the Provincial plan as a framework, and incorporating the concepts as they apply to TBDSSAB. Similar to the Provincial plan, this is a developing project to further align TBDSSAB activities to enhance its environmental stewardship.

#### TBDSSAB Staff Newsletter

In 2021, the monthly staff newsletter included an environmental stewardship section to enhance information sharing and awareness relative to the environmental stewardship initiatives across the organization.

### **STRATEGIC PLAN IMPACT**

The Practical Vision of the 2013-2016 Strategic Plan included Green, Environmentally Friendly Housing within the Optimized Housing strategy, which has been further expanded to focus on environmental stewardship across the organization.

### **FINANCIAL IMPLICATIONS**

#### Capital Costs – Housing Portfolio Energy Management

The capital projects included within the Housing Portfolio were included in the Board approved Capital Budget which is financed from the Housing Portfolio Capital Reserve Fund. COCHI projects were 100% federally funded.

#### Operating Costs

The priority for green, environmentally sustainable practices is to reduce TBDSSAB's environmental footprint, with a secondary impact of cost avoidance on various operating expenses. For example:

- Capital projects' priority is to enhance the efficiency and effectiveness of utility usage across the housing portfolio by reducing energy waste and thereby positively impacting utility costs. Utility costs remain one of the largest operating expenses TBDSSAB incurs within its housing portfolio. Natural gas and electricity amounted to \$2,105,079 in 2021 (2020: \$2,200,460), which accounts for approximately 15% of the operating costs of the housing portfolio. Although utility costs are generally not totally controllable, it is anticipated that the green, environmentally friendly initiatives will support cost avoidance by controlling the rise of utility consumption (by reducing energy waste) as unit costs for utilities continue to rise.
- The decrease in paper purchased resulted in savings of approximately \$1,985. Further reductions in paper usage would result in related cost reductions.
- Using the energy monitor installed in TBDSSAB's server room to measure energy usage, the reduction and consolidation of Information Services networking and computer equipment resulted in an estimated reduction in electricity costs from \$985 to \$505 per month, a savings of approximately \$5,500 annually.

Operating cost impacts are and will be factored into and included in annual operating budgets.

## CONCLUSION



It is concluded that TBDSSAB continues to meet the strategic direction of providing green, environmentally friendly housing.

It is also concluded that other opportunities to engage in initiatives have been taken and will continue to be investigated and further developed relative to environmental stewardship across the organization.

## REFERENCE MATERIALS

Attachment #1 [2021 Green Energy Housing Initiatives – List of Capital Projects](#)

Attachment #2 [Green Energy Housing Initiative Savings by Year of Capital Project](#)

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The District of Thunder Bay Social Services Administration Board  
2021 Green Energy Initiatives - List of Capital Projects

Attachment #1  
Report No. 2022-15

#	Project Name	Funding Source	Description	Actual Project Cost (\$)
1	North James	2020 Capital Carry forward	<b>LED Lighting Replacement:</b> of interior common area light fixtures throughout corridors, lobby areas and stairwells - New lighting will achieve improved energy efficiency, visibility and aesthetic appeal.	13,895
2	Sjolander Court		<b>Appliances:</b> Replacement of thirty-one (31) Energy Star appliances in apartments - New appliances will achieve improved energy efficiency and reliability.	22,210
3	Neill Court		<b>Appliances:</b> Replacement of forty-four (44) Energy Star appliances in apartments - New appliances will achieve improved energy efficiency and reliability.	30,491
4	Collingwood Court		<b>Appliances:</b> Replacement of thirty-six (36) Energy Star appliances in apartments - New appliances will achieve improved energy efficiency and reliability.	25,741
5	Jasper Place		<b>LED Lighting Replacement</b> of interior common area light fixtures throughout corridors, lobby areas and stairwells - New lighting will achieve improved energy efficiency, visibility and aesthetic appeal.	37,917
6	Rupert-Ray-Hill	2021 Capital Budget	<b>Furnaces:</b> Replacement of twenty-eight (28) high efficiency gas-fired furnaces for all homes - New furnaces will achieve improved energy efficiency and building comfort.	76,931
7	Matthews Court		<b>Doors:</b> Replacement of three (3) exterior doors - New exterior door will achieve improved energy efficiency, building security, and accessibility.	29,240
8	Manion Court		<b>Appliances:</b> Replacement of one-hundred and two (102) apartment refrigerators - New refrigerators will achieve improved energy efficiency and reliability.	63,666
9	Elizabeth Court		<b>LED Lighting Replacement</b> of interior common area light fixtures throughout corridors, lobby areas and stairwells - New lighting will achieve improved energy efficiency, visibility and aesthetic appeal.	23,812
10	Mclvor Court		<b>Domestic Hot Water</b> - Replacement of two high efficiency gas-fired domestic water heaters and two domestic water storage tanks - New domestic water heating system will achieve improved energy efficiency and reliability.	26,182
11	Sjolander Court		<b>Appliances:</b> Replacement of eleven Energy Star refrigerators for units - New refrigerators will achieve improved energy efficiency and reliability.	7,220
12	Collingwood Court		<b>Appliances:</b> Replacement of twelve Energy Star refrigerators for units - New refrigerators will achieve improved energy efficiency and reliability.	11,158
13	Ruskin-Hall	COCHI*	<b>Windows:</b> One hundred and twenty two total windows at twenty-one homes - new IGU windows will achieve improved energy efficiency, building comfort and aesthetics.	170,088
14	Isabella-Ridgeway-Mcgregor		<b>Roofing replacement</b> at two (2) homes - New roofing systems will achieve improved energy efficiency and durability.	13,432
15	Isabella-Ridgeway-Mcgregor		<b>Furnaces:</b> High efficiency furnace upgrade at twenty-three (23) homes - New furnaces will achieve improved energy efficiency and building comfort.	53,512
16	Academy-Trillium		<b>Furnaces:</b> High efficiency furnace upgrade at forty-three homes - New furnaces will achieve improved energy efficiency and building comfort.	96,468
17	Nipigon Houses		<b>Furnaces:</b> High efficiency furnace upgrade at five (5) homes - New furnaces will achieve improved energy efficiency and building comfort.	12,148
18	Longlac		<b>Roofing:</b> Replacement of shingled roofing at two (2) townhouse buildings - New roofing will achieve improved energy efficiency and durability.	35,718
19	John-Clarkson-Windsor		<b>Roofing:</b> Replacement of shingled roofing at eleven (11) homes - New roofing will achieve improved energy efficiency and durability.	33,544
20	John-Clarkson-Windsor		<b>Furnaces:</b> High efficiency furnace upgrade at twenty-five (25) homes - New furnaces will achieve improved energy efficiency and building comfort.	68,688
21	Legion Houses		<b>Furnace:</b> High efficiency furnace upgrade at one (1) homes- New furnaces will achieve improved energy efficiency and building comfort.	5,887
22	Ross Court		<b>Doors and Windows:</b> Replacement of sealant on all exterior windows and doors - New sealant will achieve improved energy efficiency through heat loss and moisture protection.	13,738
23	Cumberland Court		<b>Doors:</b> Replacement of two (2) main entrance doors - New main entrance doors will achieve improved energy efficiency, building security, and accessibility.	28,391
24	Picton-Tamarack 1		<b>Furnaces:</b> Replacement of thirty-five (35) high efficiency gas-fired furnaces at all units - New furnaces will achieve improved energy efficiency and building comfort.	71,500
25	Picton 2		<b>Furnaces:</b> Replacement of fourteen (14) high efficiency gas-fired furnaces - New furnaces will achieve improved energy efficiency and building comfort.	35,616
				<b>\$ 1,007,193</b>

\*COCHI = Canada Ontario Community-Housing Initiative

