Environment

2020 REPORT CARD

Each year, the City of St. Albert publishes an Environment Report Card to update residents on the City's progress towards achieving the goals and targets set out in the Environmental Master Plan (EMP). This report card provides a snapshot of progress and highlights key projects and initiatives.

Despite the COVID-19 pandemic, 2020 has been a consistent year for progress relating to the EMP goals and targets which were met for corporate (City) greenhouse gas (GHG) emissions, Sturgeon River watershed, land-use and municipal pesticide use. Stable trends were observed in air quality, natural area protection, river water quality and water consumption. However, challenges relating to community GHG emissions and commuter transit ridership were noted.

GOAL 1: MANAGE AIR QUALITY

CLICK HERE TO LEARN MORE
St. Albert Air Quality Monitoring

TREND: STABLE AIR QUALITY

Progress Update

The EMP sets air quality targets at Level 2 triggers, as indicated in the Capital Region Air Quality Management Framework (CRAQMF). The Framework sets four air quality levels for each contaminant, with Level 1 being the lowest and Level 4 the highest.

Service Delivery Highlights

Since St. Albert's air quality monitoring station started collecting data in 2016, nitrogen dioxide has been at Level 2 and particulate matter has been at Level 3, while ozone has moved from Level 2 to Level 3 in more recent years.

LEVEL 2	LEVEL 3	LEVEL 3
Nitrogen dioxide	Particulate matter	Ozone

GOAL 2: REDUCE ENERGY CONSUMPTION & GREENHOUSE GAS EMISSIONS

CITY TREND: DECREASED EMISSIONS **COMMUNITY TREND:** INCREASED EMISSIONS

Progress Update

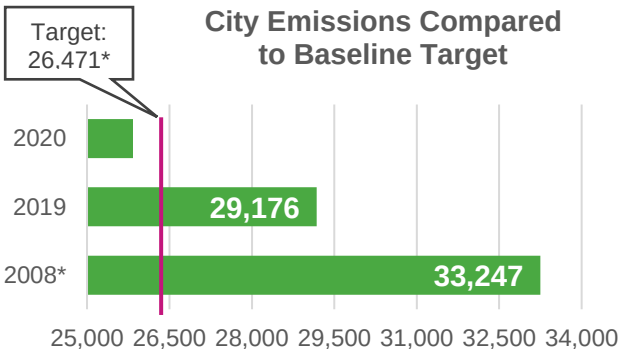
In December 2020, the City of St. Albert's newest photovoltaic (PV) array atop the Jack Kraft Facility sand storage shed became fully operational which helped offset the City's grid-sourced electricity consumption and reduce greenhouse gas (GHG) emissions.

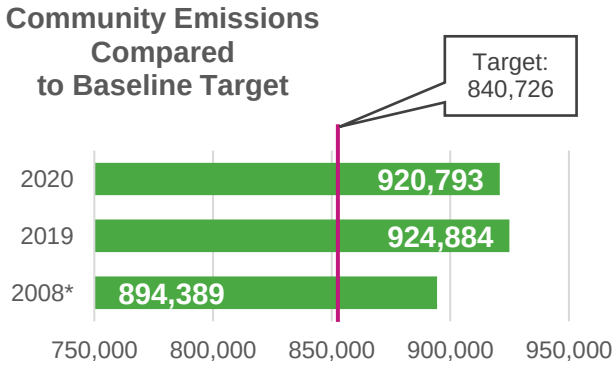
This 287-kilowatt system was partially funded by the Municipal Climate Change Action Centre's Alberta Municipal Solar Program. The system is expected to produce roughly 300,000 kilowatt hours annually, or approximately 38 per cent of the Public Works Facility's annual electricity consumption. Some of this energy will be exported to the grid, as the array generates more energy then the site needs at certain times of the year.

Compared to the 2008 baseline year and 2019 reporting year, the City's GHG emissions have declined nearly 22 per cent and 11 per cent, respectively. The target to reduce emissions to 20 per cent below 2008 levels has been met.

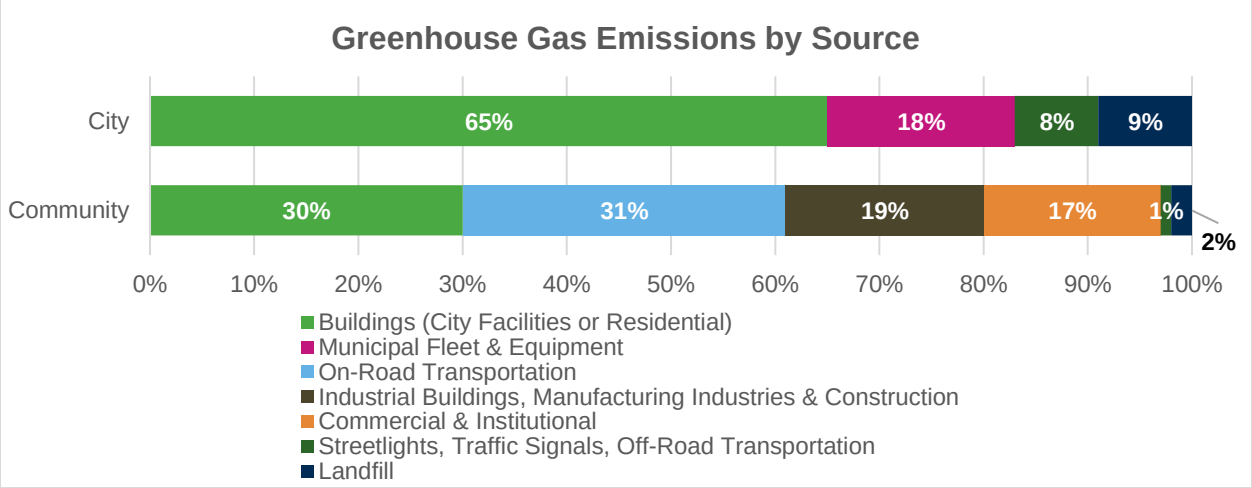
In 2020, community emissions were approximately eight per cent above 2008 levels. Compared to the 2019 reporting year, the community GHG emissions have declined nearly one per cent. The target to reduce emissions to six per cent below 2008 levels by 2020 has not been met.

Service Delivery Highlights





**Note: The baseline and target emission numbers have been updated based on emissions inventory calculations.



GOAL 3: PROMOTE NEIGHBOURHOODS & TRANSPORTATION CHOICES

LAND-USE TREND: MEETING TARGETS **TRANSIT TREND:** DECREASED RIDERSHIP

Progress Update

St. Albert's Municipal Development Plan (MDP) specifies density targets for new neighbourhoods as set out by the Edmonton Metropolitan Regional Board. In 2020, the completion of Riverside development plans met these targets.

The Nakî Transit Centre & Park and Ride opened in August 2020 to serve as the City's principal transit and operation station. The new facility provides greater capacity for passengers wishing to utilize the park and ride, and is designed to meet future demands over the next 30 years.

St. Albert made it easier to travel local transit routes by launching an On-Demand bus service in 2020. The On-Demand app improved services for riders by allowing them to book in advance, as well as multiple rides at one time.

Service Delivery Highlights

32 Dwellings per net hectare **(Target: 30 – 40 dwellings)**	**37%** Medium and/or High Density in new neighbourhoods (**Target: 30%**)	**313,694** Total St. Albert Transit passengers commuting (Target: increase = or > population growth)

GOAL 4: PRESERVE AND MANAGE TREES, PARKS & NATURAL AREAS

STATUS: ON TRACK

Progress Update

The City's Urban Forest Management Plan (UFMP) sets a target to increase the estimated land area of St. Albert's tree canopy from 13 per cent to 20 per cent by 2037.

Actions to enhance St. Albert's tree canopy, including community education initiatives, are outlined in the UFMP. Naturalization, or tree-planting events, are one-way residents can contribute to increasing St. Albert's tree canopy. In 2020, despite the COVID-19 pandemic, four tree planting events were accommodated in alignment with provincial public health measures.

DID YOU KNOW?

Tree canopy refers to the uppermost layer in a forest, formed by the crowns of the trees in an urban forest.

TO LEARN MORE, CLICK HERE
Urban Forest Management Plan

Service Delivery Highlights

84 Volunteers participated in Naturalization* activities	**2,234** Native trees and shrubs were planted in 0.359 hectares	**348** Participant hours dedicated to tree planting

*Naturalization is an alternative management technique in which landscape maintenance is reduced by planting native trees and shrubs and restricting mowing.

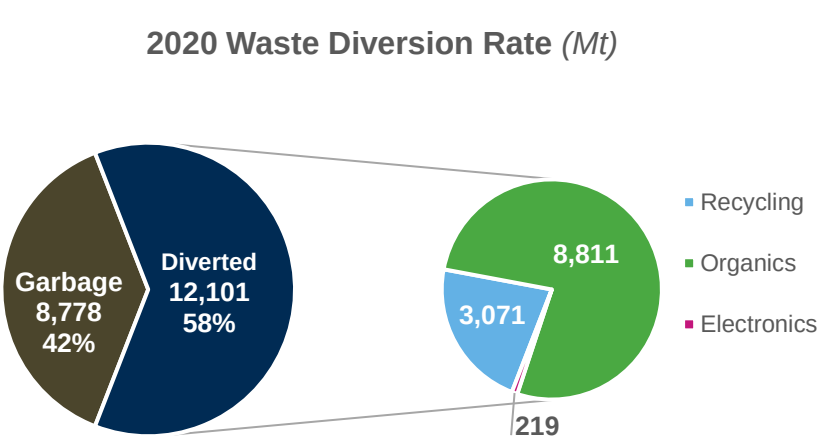
GOAL 5: REDUCE GARBAGE TO THE LANDFILL

TREND: STABLE PARTICIPATION IN WASTE AND DIVERSION PROGRAMS

Progress Update

In 2020, St. Albert residents generated 8,788 metric tonnes (Mt) of garbage – just over 133 kilograms (kg) per capita. This equates to an increase of 600 Mt City-wide compared to 2019 (8,167 Mt). Due to COVID-19, residents worked, learned, and played from home for a majority of 2020. Garbage that was previously disposed of at work or school was disposed of in the Brown Garbage Cart, which likely contributed to the increase in garbage production observed in 2020 compared to previous years.

Service Delivery Highlights



Waste diversion is calculated as the volume of waste diverted from the landfill, as a percentage of the total waste generated. Diverted waste includes organics from the Green Organics Cart, recycling from the Blue Recycling Bag, and electronics. This calculation does not include tonnage from the Compost or Mike Mitchell Recycling Depots. In 2020, waste diversion was 58 per cent. Diversion continues to be highest in the spring and summer due to residents placing large volumes of leaf and yard waste in the Green Organics Cart. Diversion was lower in 2020 compared to previous years as more residents worked from home due to COVID-19.

WASTE & DIVERSION STATS
Read the report online

GOAL 6: PROTECT AND IMPROVE THE STURGEON RIVER WATERSHED

The Sturgeon River Watershed Alliance (SRWA) was formed in 2014 to assess, advocate for and protect the long-term health of the Sturgeon River watershed by developing and implementing a management plan.

STATUS: TARGET ACHIEVED

Progress Update

Through a collaborative effort among the Sturgeon River Watershed Alliance and its stakeholders, the Sturgeon River Watershed Management Plan was completed in 2020, meeting the final target under this goal. The watershed management plan was developed to address watershed issues and guide future actions in the watershed.

For more information on the SRWA and the watershed management plan, visit **nswa.ab.ca** and search **SRWA**.

Service Delivery Highlights

6 Key outcomes form the Sturgeon River Watershed Management Plan	Plan includes strategies and actions to implement over the next **10 years**	**$200,000** Alberta Community Partnership grant to address short-term actions

GOAL 7: IMPROVE WATER QUALITY IN THE STURGEON RIVER

TREND: STABLE WATER QUALITY

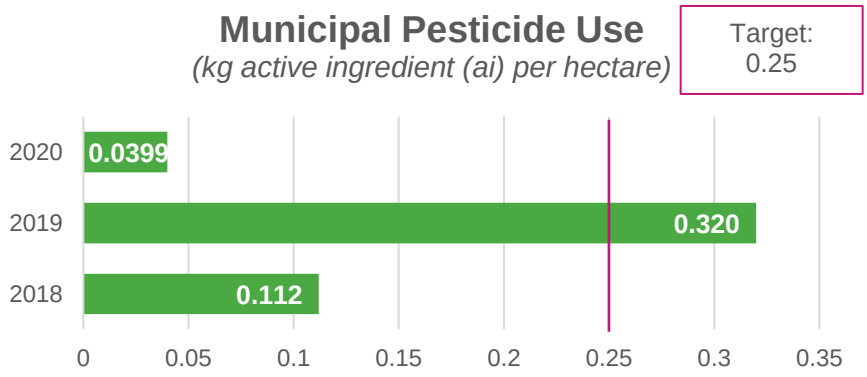
TO LEARN MORE, CLICK HERE.
River Water Quality Index (RWQI)

Progress Update

Within St. Albert's boundaries, chloride and bacteria levels are well below provincial water quality guidelines. Nutrient levels are higher than previous years, especially in the summer months, but remain consistent with historical levels. This increase may be due to increased runoff as residents spent more time in their yards completing maintenance as a result of COVID-19 provincial public health restrictions.

Total suspended solids moved from good to excellent on the *River Water Quality Index* in 2020. This change can likely be attributed to increased rain events and higher flow rates in the river during 2020, which moved the suspended solids downstream.

Service Delivery Highlights



Provincial legislation requires the City to take action on invasive weeds. When treating these weeds, the amount of pesticides used varies and is dependent on the weather, the type of species or pests and the management techniques used. In 2020, the City's COVID-19 response resulted in the reallocation of staff resources and reduction of the pest management schedule. Subsequently, the City's pesticide use significantly decreased and was well below the target in 2020. It is anticipated the pest management program will resume in 2021.

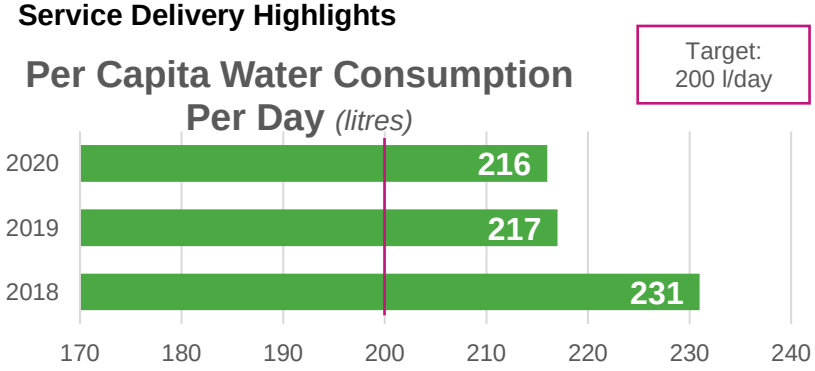
GOAL 8: REDUCE WATER CONSUMPTION

TREND: STABLE WATER CONSUMPTION

Progress Update

As residents spent more time at home due to COVID-19 provincial public health restrictions, an increase in per capita water consumption was anticipated; however, after experiencing a significant drop between 2018 and 2019, water consumption leveled off in 2020. This trend can be attributed to residents' and businesses' commitment to the City 's Water Conservation Bylaw and the short summer season resulting in less lawn and garden watering.

Service Delivery Highlights



REMINDER!

From **May 1** to **October 1** outdoor sprinkler water use is limited between **7 p.m.** and **9 a.m.** according to the City's Water Conservation Bylaw.

TO LEARN MORE, CLICK HERE
Water Conservation Bylaw

GOAL 9: FOSTER COMMUNITY ENVIRONMENTAL STEWARDSHIP

TREND: DECREASE IN PARTICIPATION

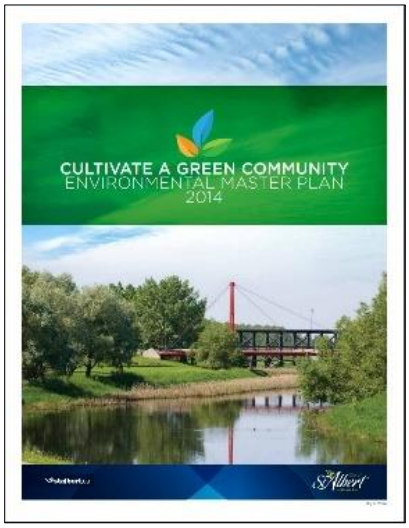
Progress Update

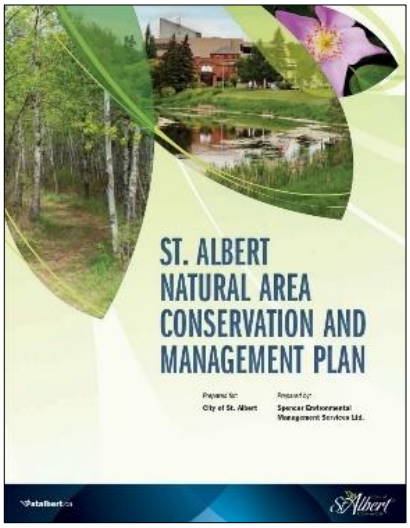
As a result of the COVID-19 pandemic and associated provincial public health restrictions throughout 2020, the majority of community environmental programs and events were cancelled, including the Environmental Initiatives Grant Program.

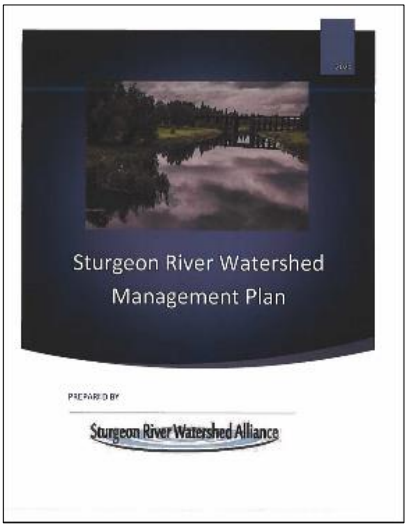
Service Delivery Highlights

Participation in environmental programs and events is captured in Goal 4 (above) under 'Service Delivery Highlights'.

Other Reports that Help Tell Our Story







TO LEARN MORE ABOUT ENVIRONMENT, CONTACT:

PHONE: 780-459-1500

EMAIL: environment@stalbert.ca