

Environment

2021 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, 2021 has been a consistent year for progress relating to the EMP goals and targets which were met for the Sturgeon River watershed, land-use and municipal pesticide use. Stable trends were observed in natural area protection, river water quality and community environmental stewardship. However, challenges relating to increased greenhouse gas (GHG) emissions and decreased commuter transit ridership were noted.

GOAL 1: MANAGE AIR QUALITY

TREND: STABLE AIR QUALITY

Progress Update

In 2021, St. Albert air quality was mainly in the low- to moderate-risk range. The EMP sets air quality targets at Level 2 triggers, as indicated in the Capital Region Air Quality Management Framework (CRAQMF). The CRAQMF 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.

[CLICK HERE TO LEARN MORE](#)
[St. Albert Air Quality Monitoring](#)



*Note: This is based on data from the 2020 Environment Report Card, as the most recent data is currently being updated.

GOAL 2: REDUCE ENERGY CONSUMPTION & GREENHOUSE GAS EMISSIONS

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

Progress Update

In 2021, a 1.1 megawatt solar photovoltaic (PV) system was installed at Servus Credit Union Place and is the largest solar array in St. Albert. The 2,582 solar panels cover the roof of the field houses and half of the Go Auto Arena. The solar PV system is projected to generate enough electricity annually to power approximately 148 homes for a year or meet 16 per cent of Servus Place’s annual electricity needs, which would prevent about 580 tonnes of GHG emissions a year.

Compared to the 2008 baseline year, the City’s GHG emissions in 2021 have declined 19.5 per cent. The goal to reduce GHG emissions to 20 per cent below the 2008 baseline level has nearly been met, being just over 0.5 per cent above the target level. Over the past year, GHG emissions slightly increased by four per cent.

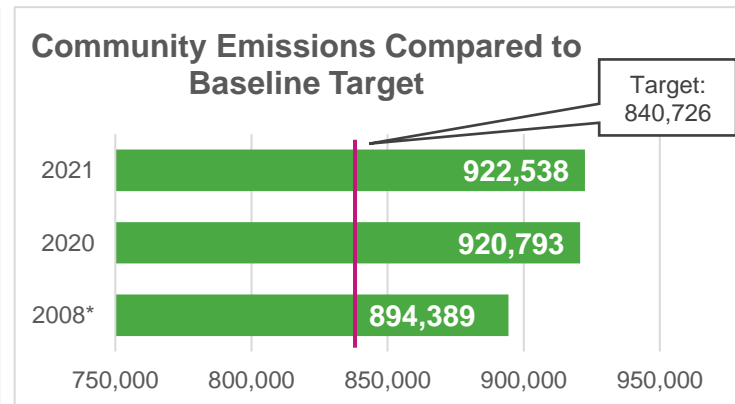
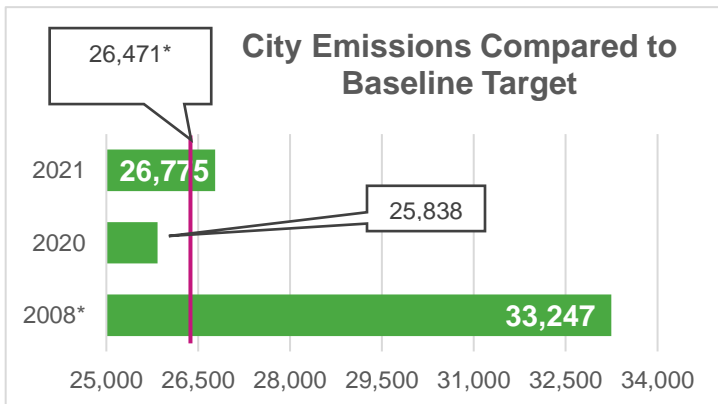
Community emissions were approximately three per cent above 2008 levels in 2021 and community GHG emissions have increased by 0.2 per cent. The target to reduce emissions to six per cent below 2008 levels has not been met.

DID YOU KNOW?

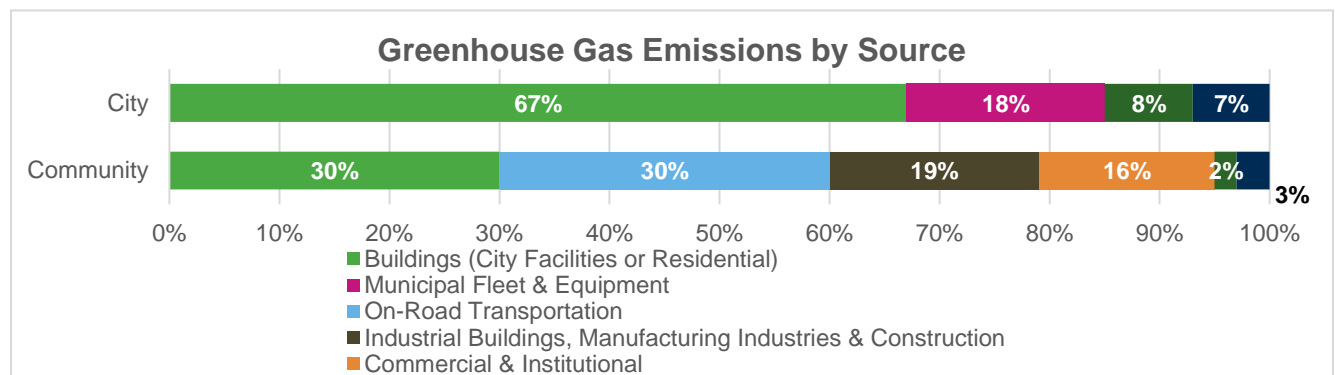
St. Albert’s electric buses travelled 162,000 kilometres, regenerating over 57,000 kwh of electricity. The energy savings is equal to supplying five homes with electricity for an entire year!

CLICK HERE TO LEARN MORE
[St. Albert Electric Buses](#)

Service Delivery Highlights



**Note: The baseline and target emission numbers have been updated in 2018 based on emissions inventory calculations.



GOAL 3: PROMOTE SUSTAINABLE NEIGHBOURHOODS & TRANSPORTATION CHOICES

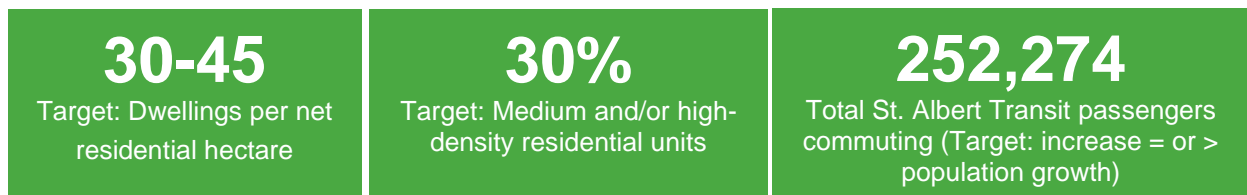
LAND-USE TREND: MEETING TARGETS **TRANSIT TREND:** DECREASED RIDERSHIP

Progress Update

On April 19, 2021, St. Albert's new [Municipal Development Plan \(MDP\)](#) was adopted by City Council. Residents, property owners, businesses, community groups and others can look to the new MDP for expected changes as the City plans for a future population of 100,000 and the addition of 13,000 new jobs over the coming decades.

The MDP specifies density targets for new neighbourhoods as set out by the Edmonton Metropolitan Regional Board. In 2021, there were no new Area Structure Plans proposed however five neighbourhood Area Structure Plans were amended that include Cherot, Erin Ridge North, Oakmont, South Riel and Riverside. The amendments all fall within the minimum dwellings per net residential hectare and medium an/or high-density residential targets highlighted below.

Service Delivery Highlights



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

STATUS: ON TRACK

Progress Update

St. Albert is one of fifteen cities across Canada that have received [Tree City of the World](#) designation for the second consecutive year. In 2021 the community met five core standards that illustrate a commitment to caring for our trees and forests. Continuously receiving this designation reflects the core values of being the Botanical Arts City.

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 ways residents can help increase St. Albert's tree canopy. Despite the COVID-19 pandemic, 12 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
[St. Albert Tree Maintenance](#)

Service Delivery Highlights

12

Naturalization* project events

1,940

Native trees and shrubs were planted in 0.1 hectares

231

Volunteers participated in naturalization activities

*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

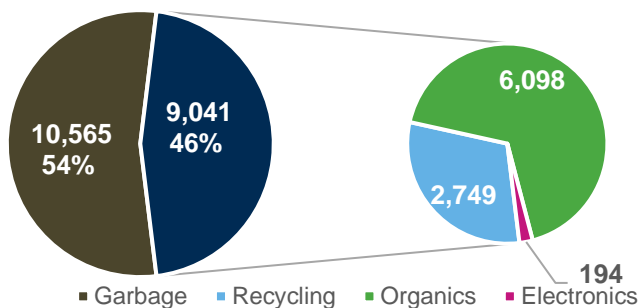
TREND: STABLE PARTICIPATION IN WASTE AND DIVERSION PROGRAMS

Progress Update

In 2021, residents generated 10,565 metric tonnes (Mt) of garbage – just over 151 kilograms (kg) per capita, or 509 kg per household. This equates to an increase of 1,777 Mt city-wide compared to 8,788 Mt in 2020. The garbage trending upwards in recent years is likely due to COVID-19. As residents worked, learned and played from home, garbage that was previously disposed of at work or school was disposed of in the Brown Garbage Cart.

Service Delivery Highlights

2021 Waste Diversion Rate (Mt)



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 2021, waste diversion was 46 per cent (9041 Mt). 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. Compared to previous years, diversion was lower in 2021 as more residents worked from home.



BE WASTE WISE
TO LEARN MORE [CLICK HERE](#)

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

In 2021, the [SRWA](#) moved on from the successful completion of the Sturgeon River Watershed Management Plan and into the implementation phase of the plan's goals. Over the next three years, the SRWA plans to complete objectives such as the Riparian Health Strategy Wetland Strategy, implement a water quality monitoring program and create communications such as educational forums, SRWA webpage and promotional materials.

Service Delivery Highlights

6
Key outcomes from 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

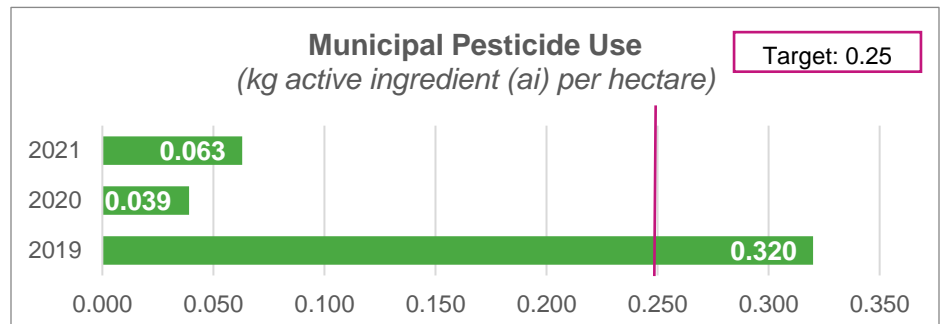
[TO LEARN MORE, CLICK HERE. River Water Quality Index \(RWQI\)](#)

Progress Update

Within St. Albert's boundaries, chloride and bacteria levels remain well below Provincial water quality guidelines, although both are slightly higher than in 2020, likely due to low water levels in the river. Nutrient levels moved from good to excellent but remain consistent with historical levels. The slight decline may be due to the low levels of precipitation and lack of runoff from the surrounding landscape, which typically carries excess nutrients into the river. Total suspended solids remained at the excellent end of the scale, perhaps due to decreased landscape runoff and slow flowing water in the river, allowing solids time to settle out of the water column.

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 2021, the pest management program resumed. Overall, the City's pesticide use increased compared to 2020 but continues to be well below the target.



GOAL 8: REDUCE WATER CONSUMPTION

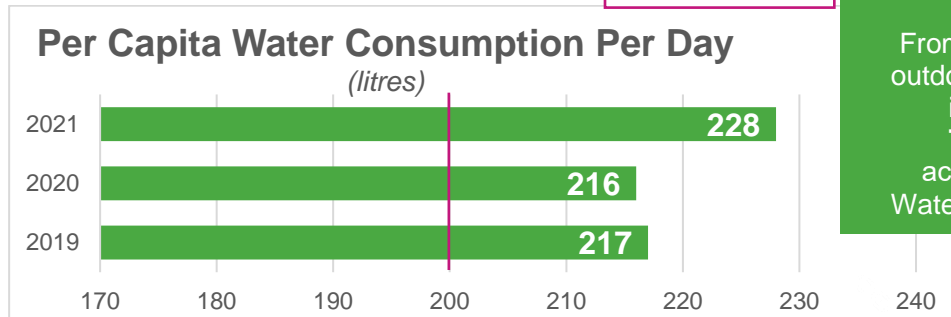
TREND: INCREASED WATER CONSUMPTION

Progress Update

Due to extremely hot weather throughout the summer, water consumption in 2021 increased to 228 litres per day. As needed, water restrictions were in place requesting that businesses and residents of St. Albert voluntarily refrain from all non-essential water use. These steps were implemented to allow reservoirs to recover and retain to normal levels to ensure the City of St. Albert could continue to meet essential needs including firefighting and drinking water.

Service Delivery Highlights

Target: 200 l/day



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.

GOAL 9: FOSTER COMMUNITY ENVIRONMENTAL STEWARDSHIP

TREND: STABLE PARTICIPATION

Progress Update

In 2021, the [Environmental Initiatives Grant Program \(EIGP\)](#) resumed after the program was temporarily suspended in 2020 due to the COVID-19 pandemic. A total of five Environmental Initiative Grant Applications were received, ranging from \$2,250 to \$5,000, these projects were approved for Spring/Summer 2022.

The [Spruce Up St. Albert](#) programming also resumed in a modified format to align with Provincial public health measures. City staff were able to modify Arbor Day programming through virtual presentations and in-class activities. All St. Albert Grade 1 and 2 classes (for the students who missed the event in 2020) were invited to participate in a celebration of trees and forests. Although fewer schools participated in the clean ups this year, the number of participants in the program was well above what was anticipated. Additionally, the annual TD Clean and Green Riverfest, traditionally held in May was held in September.

Overall, 2021 exceeded expectations for participation in environmental activities. St. Albert residents demonstrated their resilience to adapting to modified programming and their commitment to enhancing the environment.

Service Delivery Highlights

100+

participants in Riverfest

1566

Grade 1 and 2 Arbor Day tree seedlings provided

3302

School and neighbourhood clean up participants

TO LEARN MORE ABOUT ENVIRONMENT, CONTACT:

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