



# ELECTRONICS RECYCLING 2021-22 PROGRESS REPORT



## MAKING RECYCLING MORE CONVENIENT

96% of the population live no further than a 20-minute drive from an electronics recycling depot.

## ELECTRONICS RECYCLING RESULTS

This chart displays the results of electronics recycling over the last three years. Processed volumes in 2021/22 continues to decline as the trend toward lighter devices continues over time. There were 25 Hard-to-Get Electronics Roundups held this year by non-profit organizations and community groups (with uptake in larger centres).

	TONNES	PROGRAM MATERIALS KG. PER CAPITA	RECOVERY RATE**	ePILOT MATERIALS* TONNES
2019/20 Result	10,776	2.45	41%	N/A
2020/21 Result	8,600	1.94	31%	5,538
2021/22 Target	11,034	2.50	33%	N/A
2021/22 Result	8,493	1.90	35%	4,678

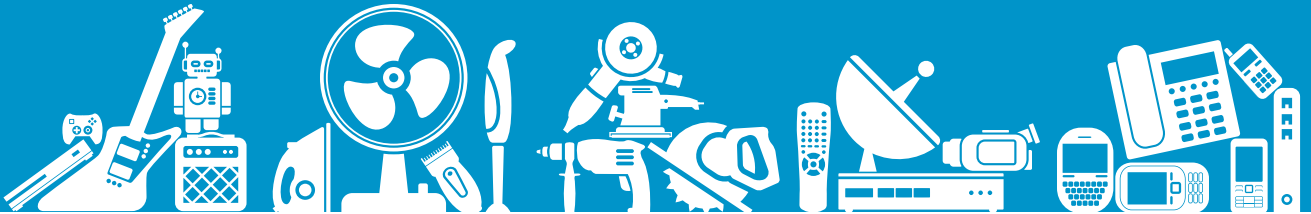
\*2020/21 ePilot tonnage represents six months of operation plus a clean-up of volumes at processor sites at the outset of the ePilot. 2021/22 ePilot tonnage represents 12 months of operation.

\*\*Recovery rates previously reported for 2019/20 and 2020/21 have been amended based on an update to the calculation methodology, utilizing more up-to-date product weight data.

# ELECTRONICS EXPANDED

The ePilot has received strong support from Albertans with over 6,400 tonnes of devices being dropped off for recycling in the categories of small appliances, audio visual, telecom, power and air tools, games, toys and music, and lawn and garden material.






The data gathered through the ePilot project—which began in September 2020—will be used to develop recommendations to be submitted to the province in 2022 to modernize the electronics recycling program for the long term.



## PROGRAM SUSTAINABILITY

ARMA conducts ongoing financial analysis and projections to determine if changes to fees or recycling expenditures are warranted to meet program goals and ensure program sustainability. Through this analysis an interim reduction on fees was supported by the Minister of Environment and Parks for 2021–22.

There are **1,435 electronics producers and suppliers** registered to remit fees Albertans pay on eligible electronics purchased that help fund the cost to collect and recycle this material. ARMA values their commitment as part of the frontline of the program.

		FEES TO SEPT. 20/21	FEES AS OF OCT. 1/21
	TVS, MONITORS, AND ALL-IN-ONE COMPUTERS LESS THAN 30 INCHES	\$4.00	\$2.50
	TVS, MONITORS, AND ALL-IN-ONE COMPUTERS 30 INCHES OR LARGER	\$10.00	\$6.00
	COMPUTERS AND SERVERS	\$4.40	\$2.00
	LAPTOP, NOTEBOOK, AND TABLET COMPUTERS	\$1.20	\$0.80
	PRINTERS, SCANNERS, PHOTOCOPIERS, AND FAX MACHINES	\$4.80	\$3.00

### FEE MANAGEMENT

#### RECYCLING EXPENDITURES



Collection and recycling of electronics

#### RECYCLING DEVELOPMENT



R&D; Program awareness

#### PROGRAM DELIVERY EXPENDITURES



Costs to deliver the program

#### CORPORATE ADMINISTRATION



Corporate costs

## RECYCLING IN ACTION

Through ARMA's Curbside Roundup pilot, Albertans were provided with an opportunity to safely and conveniently recycle their electronics, paint, tires, and used oil materials.



# PROGRAM PARTICIPATION AND ACCESS

Municipalities and Indigenous communities are key partners on the front line of the program, managing **363 electronics recycling depots** in 145 communities across the province. Each site is reviewed annually, with ARMA field staff assisting site operators to ensure they are maximizing the tools available to them through the program.

Additionally, **42 Recycling Roundups** were held this year. These are special community events that provide an additional opportunity for Albertans to recycle over and above the year-round depots.



## PROGRAM SUPPORT

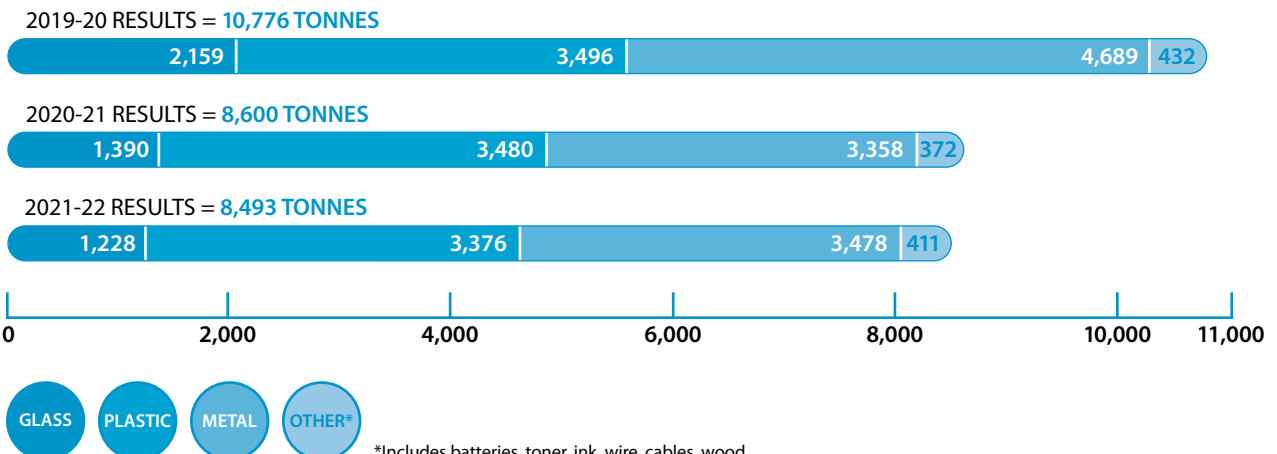
Albertans' support of the electronics recycling program remains strong, as measured in this year's survey. This response helps drive the program's success as a means to effectively divert end-of-life electronics from landfills.

YEAR	PROGRAM SUPPORT
2017/18 Result	89%
2018/19 Result	85%
2021/22 Result	87%

## HOW 11.2 MILLION ELECTRONICS ARE RECYCLED

Registered recyclers pick up TVs and computer products from businesses and institutions, and from **363 recycling depots** across the province. They transport the material back to their facilities (all located in Alberta) where they break down each item, separating the materials into metals, plastic and glass. These commodities are then

shipped back into the manufacturing supply chain. The following are results from the past three years, revealing a year-over-year decrease in glass and plastic which could be indicative of a decrease in cathode-ray-tube TVs and monitors available for recycling.



\*Includes batteries, toner, ink, wire, cables, wood.

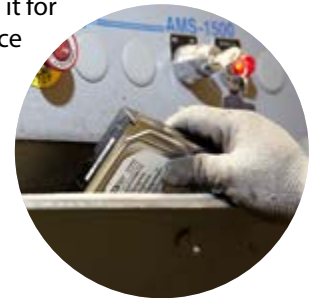
# KEEPING HAZARDOUS SUBSTANCES OUT OF THE LANDFILL

Since 2004, **15,095 tonnes** of hazardous material has been safely and properly handled during the recycling process. The following are results from the past three years showing some of the substances of concern that have been diverted from the landfill.

	MATERIAL	2019-20	2020-21	2021-22
	<b>Lead (tonnes)</b> Circuit boards, cathode ray tubes, TVs, monitors, CPUs, laptops, and printers.	285	289	270
	<b>Mercury (kg.)</b> Batteries - general; mercury lamp batteries and switches; laptops	0.31	0.34	0.36
	<b>Cadmium (kg.)</b> Circuit boards, cathode ray tubes, insulated wire, TVs, monitors, and CPUs	3.87	4.10	3.13
	<b>Beryllium (kg.)</b> Circuit boards, TVs, and monitors	12.10	12.30	11.50
	<b>Antimony (tonnes)</b> Circuit boards, CPUs, laptops, and printers	1.26	1.25	1.07

## SECURITY

Electronics recyclers registered with ARMA adhere to registered processor compliance requirements, ensuring safe and proper disposal of personal information found on devices. However, ARMA recommends wiping your device or hard drive before recycling it for your peace of mind.



## ENVIRONMENTAL COMPLIANCE

A program goal is to ensure registered recyclers operate in an environmentally and socially responsible manner. Annual environmental audits by external experts are conducted to confirm if the recyclers are following program requirements. Results are reported annually in a "Compliance Assurance Summary Report" found at [albertarecycling.ca](http://albertarecycling.ca)



PRINTED ON RECYCLED PAPER

INSPIRING A FUTURE WITHOUT WASTE

DIRECT 780.990.1111 TOLL-FREE 1.888.999.8762 EMAIL [info@albertarecycling.ca](mailto:info@albertarecycling.ca) | [albertarecycling.ca](http://albertarecycling.ca)



ARMA oversees end-of-life processing of tires, electronics, paint and used oil materials on behalf of the province. Since 1992, ARMA has worked with a broad spectrum of stakeholders to shape recycling policy, create a value-added processing system, minimize waste entering landfills and to act as collective stewards of Alberta's environment.