

2022 HIGHLIGHTS



Electronic Products
Recycling Association
of Québec

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This document is presented in compliance with Section 5, subparagraph 8.1 of the *Regulation respecting the recovery and reclamation of products by enterprises*.

The Electronic Products Recycling Association of Québec (EPRA-Québec) celebrated its 10th anniversary in 2022. On this occasion, we took the opportunity to highlight the work we have accomplished and thank the Québec population for taking part in our success.

Ten years is also a great milestone to step back and look at the road we have travelled so far. Created in 2012 in response to the entry into force of the *Regulation respecting the recovery and reclamation of products by enterprises*, EPRA-Québec was given the mandate of implementing and managing for its stewards the Québec program for the recovery and reclamation of electronic products, better known today as **Recycle My Electronics™** or **Les Serpuariens^{MD}**.

We thus provide over 1,700 electronics manufacturers, distributors, and retailers with an approved environmental compliance program that makes it possible for them to meet provincial regulations. We also offer the population a simple and efficient solution to divert old electronic devices from landfills and ensure they are recycled responsibly by certified companies in compliance with Canadian standards. Whereas our collection network started with only a few hundred locations, it now includes close to 1,000 authorized drop-off points where you can bring in more than 150 types of electronics.

As a society, our environmental awareness has, over the years, come a long way. Our ever-increasing use of technologies prompts us to make informed choices, especially when it comes to disposing of our devices.

Just in 2022, 17,187 tonnes of old electronic products were collected, of which 1,204 were designated for reuse purposes. In one decade, more than 175,000 tonnes of electronics have been diverted from landfills, and that is no small feat! This could fill a row of tractor-trailers stretching all the way from Montréal to Rimouski, a distance of almost 500 km! Here's hoping the last 10 years of great achievements are a prelude to 10 more to come!

Dominique Levesque

Executive Director



MORE THAN

150

TYPES OF
ACCEPTED
PRODUCTS



MORE THAN

1,700

STEWARDS



CLOSE TO

1,000

DROP-OFF
POINTS

PROGRAM OVERVIEW

Types of Obligated Electronic Products

More than 150 types of electronic products are obligated by Québec regulations and accepted by the program:

- Display devices
- Non-cellular phones and answering machines
- Desktop computers
- Portable computers
- Computer and video game peripherals
- Desktop printers, scanners, fax machines, copiers and multifunction devices
- Personal/portable audio/video systems
- Non-portable audio/video systems
- Home theatre in a box
- Vehicle audio/video and navigation systems
- Cellular devices and pagers

The detailed list of accepted products is available [here](#).

Stewards

EPRA-Québec has more than 1,700 stewards. The complete list of stewards is available [here](#).

Authorized Drop-Off Points

In Québec, there are close to 1,000 authorized drop-off points where old electronics can be brought. To access our locator tool, [click here](#).

Our network includes many municipal ecocentres and garages, several electronics retailers, and various organizations and private businesses.





PARTICIPATION
IN MORE THAN

100
EVENTS

MORE THAN

250
COLLECTION
DAYS

Other Collection Services

In addition to our authorized drop-off points, EPRA-Québec provides on-site collection services to industrial, commercial, and institutional businesses. Recyclers participating in the program also have the possibility to work directly with these organizations to collect their obligated electronics.

Additionally, we organize collection and special events in collaboration with municipalities and some of our partners. In 2022, EPRA-Québec took part in more than a hundred events, representing more than 250 collection days.

For example, in June 2022, we held a special collection event in our office parking lot, in partnership with Galion, to highlight our 10th anniversary. Citizens and businesses from the surrounding areas were invited to participate.

Also, in the fall we continued the tradition with our big collection event of old electronics in the parking lots of CF Carrefour Laval, CF Fairview Pointe Claire and CF Promenades St-Bruno shopping centres.



INFORMATION, AWARENESS AND EDUCATION ACTIVITIES

In 2022, EPRA-Québec, in accordance with its mandate, continued its efforts to inform, raise awareness of, and educate its various clienteles about recovering and reclaiming end-of-life electronic products. This year was a special one as it marked the organization's 10th anniversary.

Below is an overview of the main 2022 communications activities.

Creation of a Special "Celebrating 10 Years" Logo



Advertising Campaign

With the theme "Together, we can move mountains!", we thanked Quebecers for the 175,000 tonnes of old electronics recovered since the program began. Launched in French and in English in March 2022, this campaign targeting adults 35-64 years of age, was broadcast across multiple platforms, including TV, radio and web.

We also raised our visibility with roadside billboard advertisements in the five major urban centres in Québec: Montréal, Québec City, Sherbrooke, Trois-Rivières and Saguenay.



**175,000 TONNES
OF OLD ELECTRONICS
IN 10 YEARS**

Since the beginning of the program in 2012, more than 175,000 metric tonnes of old electronic products have been diverted from landfills. That could fill a row of tractor trailers stretching all the way from Montréal to Rimouski!

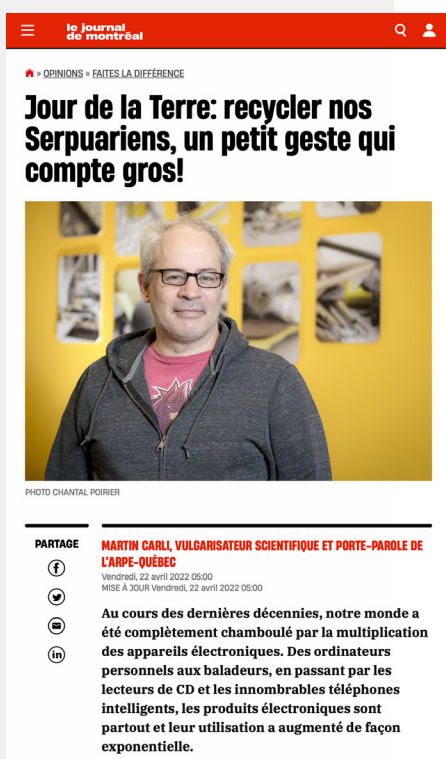




Campaign Targeting Industrial, Commercial and Institutional (ICI) Businesses

The ICI campaign, which occurred mainly in the fall of 2022, had two objectives: to inform businesses of the services available to them as part of our Program and to maximize the number of contacts.

This essentially digital campaign targeted businesses from the tertiary sector with 5 to 250 employees, located in the Montréal and Québec metropolitan areas, and more specifically SMEs. To achieve this, banners were displayed on Google as well as on La Presse's platforms, and we ran advertisements on LinkedIn, Facebook and Twitter.



Public Relations

In terms of public relations, we wanted to ensure there was some visibility throughout this anniversary year. We thus opted for a campaign in three stages to draw the media's attention and broadcast our message in a proactive and positive way.

It all started in April, on Earth Day, with the publication, in the Journal de Montréal and the Journal de Québec, of an open letter signed by our spokesperson, scientist Martin Carli. In this piece, he described the path our organization has followed over the last 10 years and thanked the Québec population for its participation in our program.

Then, we invited the media and the population to come meet Martin at our "10th Anniversary" special collection event that took place on June 5, 2022. This date was selected to coincide with World Environment Day.

Finally, to close these celebrations on a high note, we took advantage of Québec Waste Reduction Week – which unfolded between October 21 and 30 – to publish the results of our "10th Anniversary" survey that was conducted in June 2022.

These celebrations granted us unprecedented media visibility that provided an overall reach of more than 25 million impressions.



68%

**OF THE QUÉBEC
POPULATION**

believe that recycling
electronics is

**MUCH MORE
IMPORTANT**

than ten years ago.



52%

**OF QUÉBEC
HOUSEHOLDS**

still have

**BROKEN, OBSOLETE,
OUTDATED OR
UNUSED ELECTRONIC
PRODUCTS.**

Program Awareness and Impact on the Population



We surveyed the population to better understand Quebecers' knowledge and behaviour regarding electronic products recycling. More specifically, we measured program awareness and the evolution of certain parameters over the last ten years.

The results were excellent and very encouraging.

Thus, 68% of the Québec population believe that recycling electronics is much more important than ten years ago, and a large majority (84%) affirms knowing how to dispose of their old devices in an ecological and responsible way. In fact, while 78% of Quebecers say they are aware of our program, 39% mention they brought one of their old electronic products to an EPRA-Québec authorized drop-off point in the last year.

However, we notice that there are still broken, obsolete, outdated or unused electronic products in half of Québec households (52%). This represents tonnes of materials that we could reuse to make all kinds of new products instead of depleting natural resources. It is therefore crucial that we continue our efforts.

Finally, 76% of Quebecers consider that our program has, over the last ten years, greatly or reasonably increased their awareness of the importance of recycling old electronics, and the same proportion think that our program has had an impact on protecting the environment.

2022 RESULTS

Quantity of Recovered Products and Recovery Rates

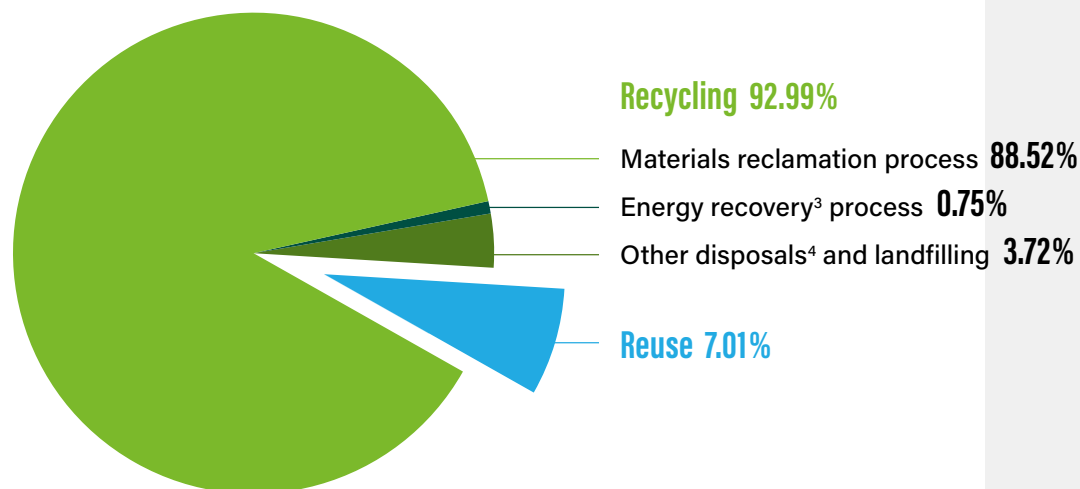
Product Category	Quantity Recovered (recycling and reuse) (units)	Achieved Recovery Rate (%)	Prescribed Recovery Rate (%)
Desktop computers, portable computers, tablets and e-book readers ¹	362,398	24.4	50
Display devices	656,732	63.2	50
Desktop printers, scanners, fax machines, copiers and multifunction devices	268,626	61.6	50
Cellular devices, non-cellular phones, pagers and answering machines ¹	150,041	4.7	35
Non-portable audio/video systems	703,962	66.7	50
Personal/portable audio/video systems ²	42,169	1.0	35
Computer and video game peripherals	174,096	n/a	n/a

1. Achieving the recovery rates prescribed for categories containing products with a residual value, and for which exists a very strong parallel network, is difficult, even impossible.
2. It is more difficult to recover small devices because people are less inclined to dispose of them quickly as they do not take up a lot of space in the home. Moreover, some individuals prefer to keep them for eventual use.

Product Processing

All products collected in 2022 were recycled or directed for reuse, and almost all materials contained in these devices were reclaimed.

These results are based on the volumes collected during the year.



3. Energy recovery consists of recovering and reclaiming energy produced by the processing of electronic waste into useable heat or electricity.
4. Other disposals are management methods for non-electronic waste (i.e., printer paper, magnetic tapes, wood containing glue, plastic wrapping paper, leather cases, etc.). Considering the minute quantities of these materials, it is difficult to distinguish between those that are indeed recycled and those that are directed to landfills.

Material Disposal

This table presents the proportion of materials and/or components recovered and processed in 2022. It describes the process each material and/or component underwent and indicates its final destination. The proportion varies according to the types of products brought to our authorized drop-off points and their composition, which evolves over the years.

Material/ Component	Process	Final Destination ⁵
Proportion (%)		
Leaded Glass 16.32	Tubes are manually and mechanically separated and either cleaned and processed into cullet for use in glass production, or smelted for reclaim of lead from the glass.	Canada USA
Plastics 18.39	Plastics are manually and/or mechanically separated. Identifiable plastics are cleaned, sorted and pelletized for reuse; and unidentifiable plastics are landfilled, used as a fuel substitute in the process of metal smelting, or managed through an energy-from-waste recovery process.	Canada USA China Malaysia
Ferrous Metals 28.31	Metals are manually and/or mechanically separated and smelted for reclaim.	Canada USA
Mixed Metals 14.26	Metals are manually and/or mechanically separated and smelted for reclaim.	Canada USA
Circuit Boards 3.01	Boards are manually and/or mechanically separated and smelted for reclaim of precious metals, while the plastics are used as a fuel substitute in the smelting process.	Canada USA Japan
Wires/Cables 3.07	Wires/Cables are manually and/or mechanically separated and smelted for metal recovery, while the plastics are either used as a fuel substitute in the smelting process, or mechanically separated and landfilled.	Canada USA
Non-Leaded Glass, Wood, Non-Ferrous Metals, Precious Metals, Batteries, Ink/Toner Cartridges, Dusts, Mercury Lamps, Ethylene Glycol, Other Materials/Components The proportion of each of these materials or components is less than 3%.	Non-leaded glass is manually separated for recovery and further use, or introduced into the smelting process as a silica flux substitute. Wood is manually separated and managed through an energy-from-waste recovery process or landfilled. Metals and dusts are manually and/or mechanically separated and smelted for reclaim. Batteries are mechanically separated for recovery of metals. Cartridges are cleaned and reconditioned for reuse or processed through an energy-from-waste recovery process. Mercury lamps are mechanically processed and separated into glass, metal and phosphor powder material streams. Phosphor powder is further distilled for mercury recovery. Metal and glass are also reclaimed for further use. The glycol is manually drained from the light tubes and refined for further use. Other materials/components are manually and/or mechanically separated and managed through an energy-from-waste recovery process or landfilled.	Canada USA

5. To ensure the safe, secure and eco-friendly processing of all products collected by its program, EPRA-Québec only works with organizations verified by the Recycler Qualification Office (RQO). As such, the entire process, from reception of materials to their final processing (i.e., from the primary recycler through to all downstream processors), is compliant with Canadian electronic recycling standards, including the international R2 Standard. All primary recyclers are located in Québec. However, to ensure proper processing of all materials and/or components from electronic products, they also work with downstream processors who are also verified by the RQO. Furthermore, it is prohibited for all processors participating in the EPRA-Québec program to export electronic products or substances of concern to non-OECD (Organization for Economic Co-operation and Development) members.

Quantity of Marketed Products

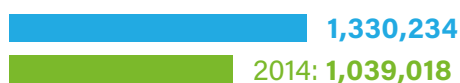
Units in 2022 / Per reference year

The reference year, which is set by the Regulation, is used to calculate recovery rates.

Desktop computers, portable computers, tablets and e-book readers



Display devices



Desktop printers, scanners, fax machines, copiers and multifunction devices



Cellular devices, non-cellular phones, pagers and answering machines



Non-portable audio/video systems



Personal/portable audio/video systems



Computer and video game peripherals



Financial Statement

as of December 31, 2022

In 2022, EPRA-Québec ran a planned deficit and drew on the contingency reserve to cover its expenses.

Revenue	
Recovery fees	\$ 17,943,386
Interest	713,963
	18,657,349
Expenses	
Direct operations	
Processing	8,836,987
Collection	1,994,939
Transportation, warehousing and storage	4,551,159
	15,383,085
Other	
Awareness and communications	3,342,454
Administration	2,731,145
Financial compensation paid to government	2,844
Costs associated with the application of the new Regulation	7,699
	6,084,142
	21,467,227
Excess of revenue over expenses	\$ (2,809,878)
Contingency Reserve ⁶	
Balance, beginning of year	38,280,982
Excess of revenue over expenses	(2,809,878)
Balance, end of year	\$ 35,471,104

6. In accordance with the Agreement with RECYC-QUÉBEC in effect in 2022, EPRA-Québec must constitute a financial reserve sufficient to maintain the program for a period of at least twelve months, without exceeding eighteen months, and to cover penalties.



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