

STEWARDSHIP TIRE RECYCLING 2023 –2024 PROGRESS REPORT



TIRE SUPPLIERS' RECYCLING ROLE

When Albertans get new tires, they usually leave their old ones behind. They can because vehicle and tire dealers, and auto repair shops play a dual role—selling new tires and making sure the old scrap tires you leave behind are collected for recycling at Alberta facilities.

TIRE RECYCLING RESULTS

Tire volumes collected in 2023 – 2024 increased over the previous year, consistent with higher sales of new tires.

TIRES PROCESSED	— TONNES —		KG. PER CAPITA COLLECTED*	RECOVERY RATE FOR PLTT, MTT, AND SIO TIRES COLLECTED**	RECOVERY RATE FOR OFF-THE-ROAD-TIRES COLLECTED
	COLLECTED	PROCESSED			
2021/22 Result	73,572	66,308	16.42	95%	65%
2022/23 Result	77,581	64,940	16.69	97%	76%
2023/24 Target	74,232	71,886	17.76	95%	74%
2023/24 Result	85,262	78,864	16.24	99%	72%

*KG. Per Capita has been amended from the 2022 – 2023 Annual Report to represent collected material.
**Passenger and Light Truck Tires (PLTT), Medium Truck Tires (MTT), Specialty, Industrial and Other Tires (SIO).

PROGRAM SUSTAINABILITY

The environmental fees Albertans pay for new tires are used to help fund the collection and recycling of used material along with other program-related costs. Registered producers and suppliers remit fees on eligible products sold. ARMA values their commitment as part of the front line of the program.

In 2022 – 2023 an incentive review study was initiated and was finalized in 2023 – 2024. This review was an encompassing look at ARMA's stewardship programs to assess the overall incentive model and make recommendations on necessary adjustments to incentive program activities, incentive structure, and associated incentive rates.

The primary objective of this review was to optimize the programs with the following goals in mind:

1. Ensure materials are managed appropriately at end-of-life.
2. Maximize environmental outcomes.
3. Optimize the collection network to support high recovery rates and access of Albertans.
4. Consider the impacts of recycling by-products with volatile market prices.
5. Provide an adequate level of funding to ensure sustainable collection, transportation, and processing at a reasonable cost (environmental fees) to Albertans.
6. Encourage in-province solutions to support Alberta job creation and economic diversification.

7. Support the advancement of the circular economy in Alberta by encouraging entrepreneurship, investment, and innovation.
8. Ensure an optimal transportation model.
9. Ensure the program incentive model minimizes disruption to the operation of free markets

Periodically, sustainability reviews of processor operations are conducted by an independent third-party to assess if program funding levels are appropriate. In 2023 – 2024, two programs were identified as requiring funding adjustments, prompting sustainability reviews to be completed in early 2024 – 2025 and forming the basis for fee amendments in the Tires and Paint recycling programs in the fall of 2024.

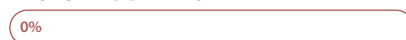
FEE MANAGEMENT

RECYCLING EXPENDITURES



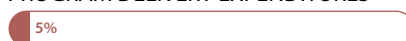
Collection and recycling of tires

RECYCLING DEVELOPMENT



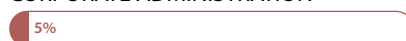
R&D; Program awareness

PROGRAM DELIVERY EXPENDITURES



Costs to deliver the program

CORPORATE ADMINISTRATION



Corporate costs





This chart breaks out the amount of tires processed by type for the past three years. Tires vary in size and weight, therefore a standardized unit is applied to present the results, using a passenger-tire-equivalent (PTE) of one PTE equaling 10 kgs. There is 100 PTEs in one tonne of tires.

YEAR	PASSENGER, LIGHT TRUCK, SPECIALTY, INDUSTRIAL & OTHER TIRES (PTE)	MEDIUM TRUCK TIRES (PTE)	OFF-THE-ROAD TIRES (PTE)
2021/2022	4,302,000	1,934,400	394,300
2022/2023	4,072,900	2,015,600	405,500
2023/2024	4,584,700	3,088,900	212,800

	CAR AND LIGHT TRUCK TIRES <i>INCL. SPARES, SPORT & CROSS-OVER UTILITY, MEDIUM TRUCK <19.5" RIM</i>	\$4.00/tire on or before Sept. 30, 2024 \$5.00/tire beginning Oct. 1, 2024
	SPECIALTY, INDUSTRIAL AND OTHER TIRES <i>INCL. TRAILER, ATV, DIRT BIKE, FORKLIFT, SMALL LOADERS, AND SKID-STEERS</i>	\$4.00/tire on or before Sept. 30, 2024 \$5.00/tire beginning Oct. 1, 2024
	MEDIUM TRUCK TIRES <i>INCL. LARGE COMMERCIAL FREIGHT TRUCKS, AND PASSENGER BUSES</i>	\$14.00/tire
	OFF-THE-ROAD TIRES <i>INCL. CONSTRUCTION, ROAD BUILDING, FORESTRY MINING, ETC.</i>	\$40.00, \$100.00, or \$200.00/tire depending on rim size

ENVIRONMENTAL COMPLIANCE

A program goal is to ensure all scrap tires are collected and processed by registered recyclers in an environmentally and socially responsible manner. Monthly inspections by ARMA and an environmental audit by external experts every three years confirm recyclers are meeting program requirements.



THE RECYCLING PROCESS FOR USED TIRES

Registered processors collect tires from businesses and 358 registered collection sites located in 134 municipalities and Indigenous communities across the province. Tires are recycled in Alberta into products such as tire-derived aggregate (TDA)—an engineered, cost-effective alternative to conventional aggregate for use in leachate drainage blankets—mulch for landscaping purposes, and crumb applied as a top dressing in sports fields and as feedstock for manufactured products.



STAGE 1

Tires are shredded into spec pieces for use as tire-derived aggregate (TDA). The steel and fibre are still embedded.

APPLICATION: TDA is a cost-effective alternative to conventional aggregate (a limited and non-renewable resource) for use in leachate drainage blankets.



STAGE 2

The shredded tires are ground to make mulch, with the steel removed.

APPLICATION: For use in landscaping.



STAGE 3

The shredded tires are processed into crumb, with the steel and fibre removed.

APPLICATION: For use in playground surfaces, various molded products, synthetic turf, and athletic tracks.