



EPR for Tire in Ontario

November 15th, 2022

Overview

- What is Extended Producer Responsibility in Ontario?
- What are Producer obligations and how does it work?
- What were some of the issues and outcomes?

Let's get our bearings..



Ontario

Population: 14.5M

Area: 415,598 sq mil
(1,076,395 km²)

Connecticut

Population: 3.6M

Area 5,567 sq mi
(14,357 km²)

Extended Producer Responsibility - Ontario



- Ontario Government passed the Resource Recovery and Circular Economy Act (RRCEA) and the Tire Regulation in 2018
- Producers have responsibilities in Ontario for the collection and management of end of life materials Tires were the first material to be introduced, followed by: batteries, electronics, household hazardous waste, and lastly, paper & plastics.

Extended Producer Responsibility - Ontario

- Who is a producer in Ontario? A producer is a party that was responsible for selling tires into the Ontario, which includes:
 - Original Equipment Manufacturers (OEMs) such as: Ford, GM, Nissan, Honda, Chrysler, John Deere, Volvo Construction, etc.;
 - Tire Manufacturers such as: Goodyear, Bridgestone, Pirelli, Michelin, Toyo
 - Tire Importers such as: American Tire Distributors (ATD), Groupe Touchette, and many online retailers



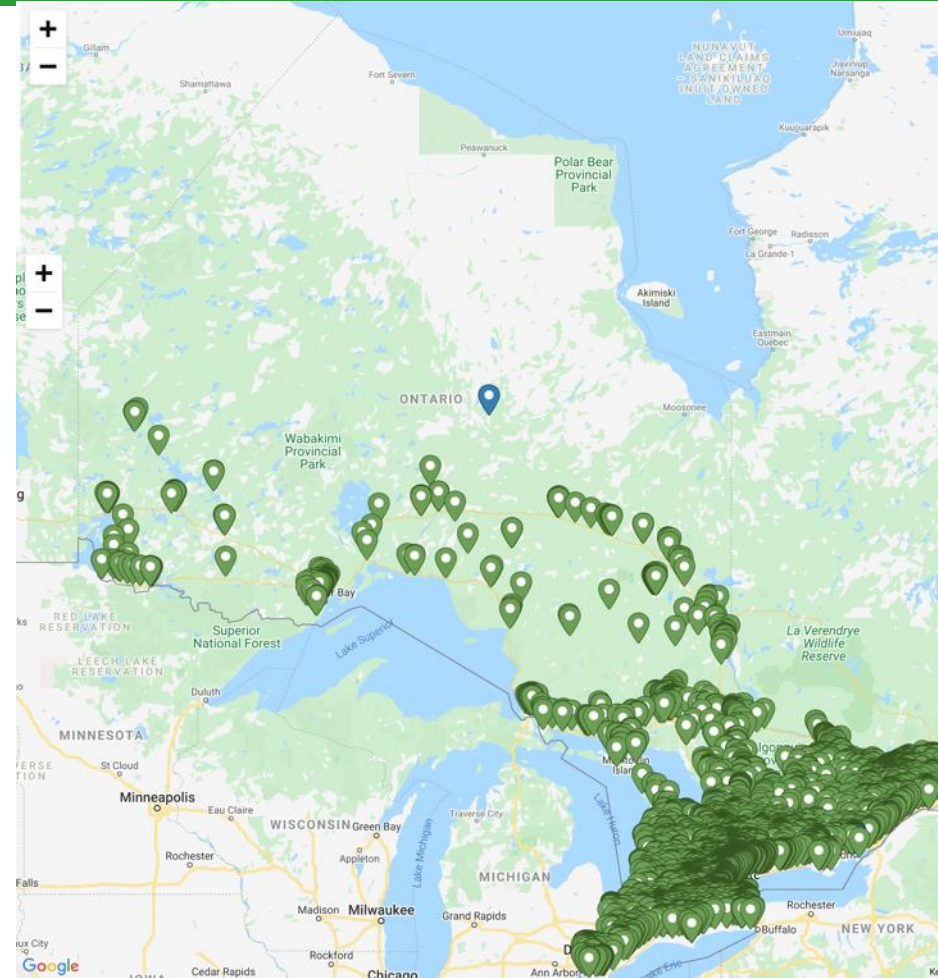
Producer Responsibilities - Ontario

- What are Producers' responsibilities?
 1. Establish and operate a Collection System for end-of-life tires
 2. Collect (pickup and transport) a certain volume of tires based on what was sold into the market 3, 4, 5 years ago
 3. Resource Recovery: ensure that 85% of the weight that was collected is used to displace new material in new packaging or products
- Under the Regulation, Producers are allowed to employ Producer Responsibility Organizations (PROs) to fulfil these obligations
- eTracks is a PRO hired by the large OEMs, tire manufacturers and importers addressing about 85% of the total Province-wide activities

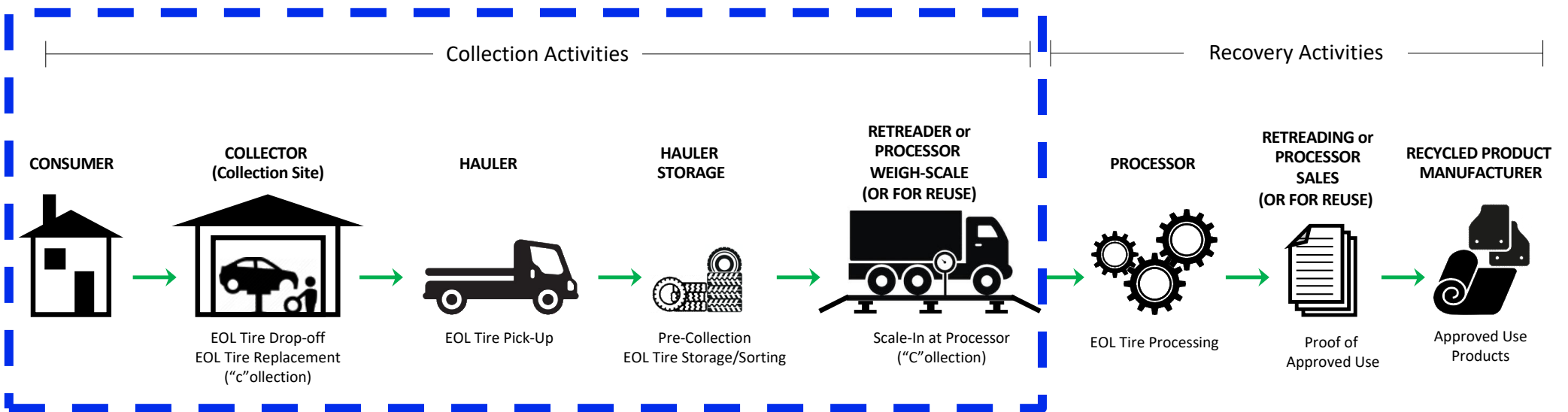
1. Producer Responsibility: Collection System

- Requirements -

- 1 collection site for every 3,000 population in a municipality/county
- Cannot charge fees for end-of-life tire drop-off
- Must take tires on rims
- eTracks has ~6,700 sites largely made up of:
 - Service centres
 - Auto dealerships
 - Municipalities (transfer stations, landfills)

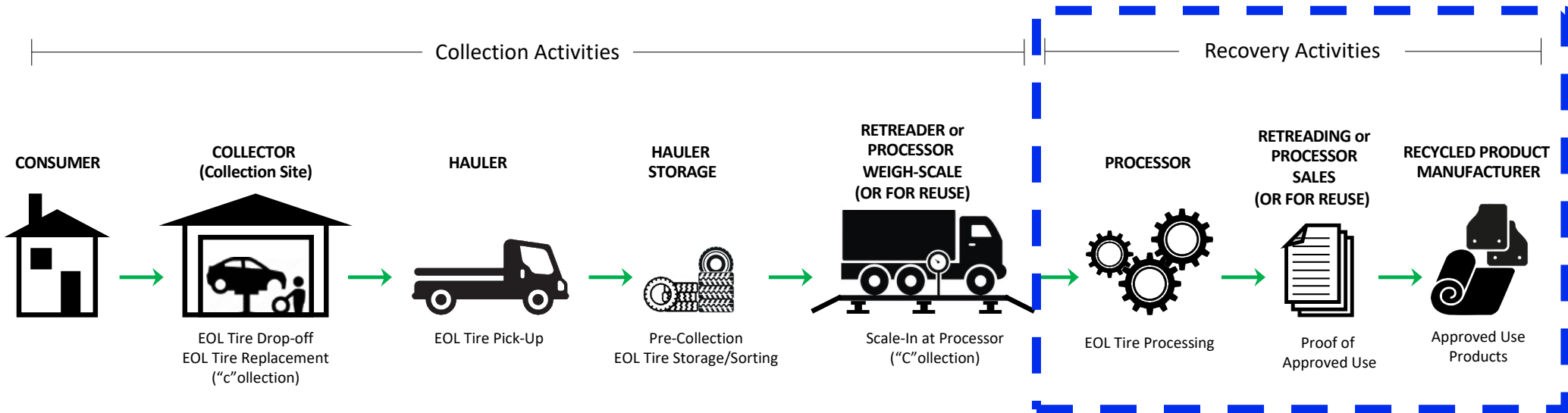


2. Producer Responsibility: Collect & Deliver EOL Tires



- ~80 Hauling companies picking up from 6,700 collection sites delivering EOL tires for Resource Recovery
- All hauling activities are arranged by PRO on behalf of Producers

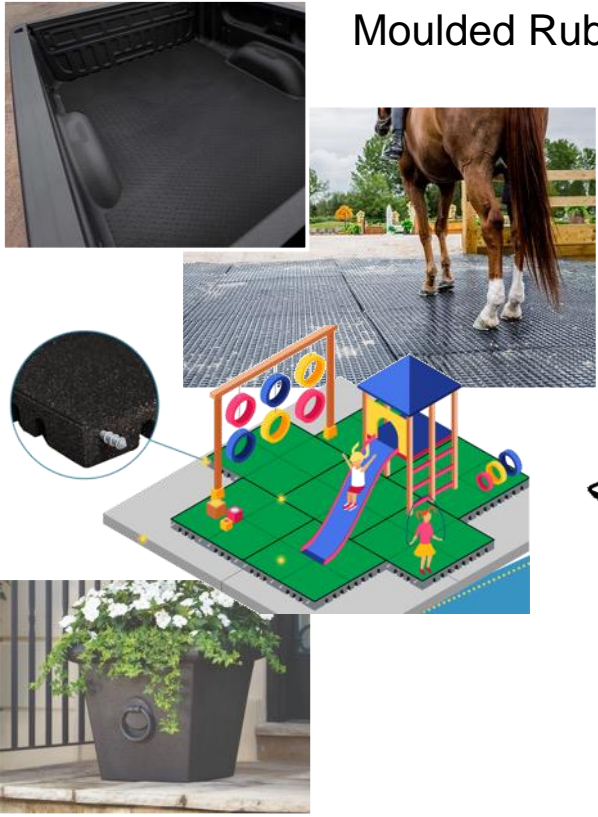
3. Producer Responsibility: Resource Recovery from EOL Tires



- Majority of tires are delivered to Crumb Rubber manufacturers
- Other Resource Recovery includes: Retreading, Used Tire Reuse (cull), Blast Mats, Tire Derived Aggregate (civil engineering/construction), garden mulch

3. Producer Responsibility: Resource Recovery from EOL Tires

Moulded Rubber Products



CRUMB RUBBER

Rubber Modified Asphalt

Issues and Results

- Old Bad Behaviours -

- Illegal dumping of tires
- Tire/automotive retail sites profiteering from consumers



- New Behaviours -

- Legacy tires being cleaned up (producers measured on collection volumes)
- Transparency to consumer and education about tire recycling: who's paying and what the money is being used for

Issues and Results

- Using Existing Infrastructure -

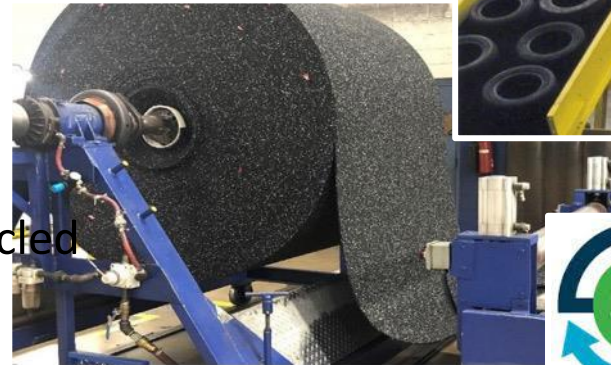
- Ontario was able to use existing landfills/transfer stations in municipalities along with tire and auto centres to form a comprehensive collection system
- Existing tire haulers continued their collection/delivery activities, but had contracts with PROs/Producers
- Initial end-markets like Waste to Energy and road construction uses were utilized while other end-markets were developed



Issues and Results

- Costs -

- eTracks cost is USD \$2.90 (2019) - \$3.23 (2022) per unit – costs in last 2 years have been driven up by inflation/energy prices
- Cost covers
 - eTracks administration, contract management, regulatory reporting
 - Government fee for oversight
 - Tire Pickup/Hauling/Delivery
 - Processing and Resource Recovery
 - Compliance technology to track all transactions from EOL tire pickup to recycled products



Market Development

- The greater the markets available, the more positive the value of end-of-life tires (the lower the cost to collect and manage tires)

- Lower hanging fruit -

- Tire Derived Fuel
- Tire Derived Aggregate
- Garden Mulch
- Bumpers, roadwork bases

- Some development Required -

- Blast mat production
- Turf infill

- Significant development Required -

- Moulded rubber products (mats, formed products, etc.)
- Rubber modified Asphalt

Requirements

Use of whole tire
Basic tire shredding
Existing markets

Rudimentary cutting and
assembling required

Requires basic
crumbing facilities

Rubber product
manufacturers needed

Modified roadwork
infrastructure required

Questions

