

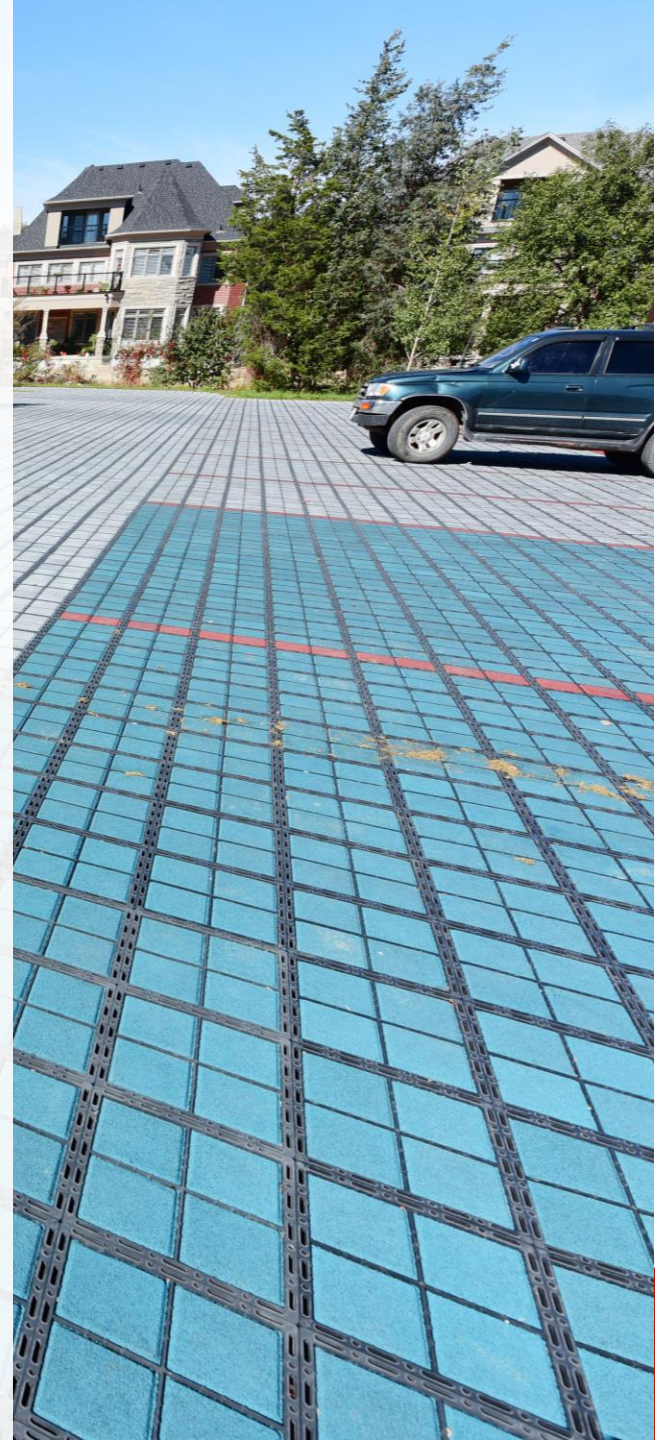


CATRA
Canadian Association of Tire Recycling Agencies

ANNUAL REPORT 2017

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INTRODUCTION

In 2017, the Canadian Association of Tire Recycling Agencies (CATRA) continued to share information, expertise and resources to enhance the impact of its members' programs in creating sustainable communities and positive value for end-of-life tires in Canada.

CATRA's goal of 100 per cent diversion seeks to keep valuable resources circulating in local economies and reducing the environmental impact of tires.

This annual report provides an overview of our role in supporting community projects, market development and a snapshot of the tire recycling industry in Canada.

Together with our members we are committed to a clean environment through stable and diversified recycling solutions for scrap tires.



MESSAGE FROM THE CHAIR

Jeff MacCallum
Chair, 2017-18

2017 began my two-year term as CATRA Chair. It was a year full of many accomplishments and member milestones, as well as several challenges.

CATRA members continued to demonstrate world-class performance as they collectively diverted 96 per cent of the available scrap tires over the past seven years. *(2016 statistics)*

While tire recycling methods and end products may change over time, CATRA's vision of the future remains a strong partnership that is committed to a clean environment by enhancing value for its members and creating a sustainable, positive value for end-of-life tires in Canada.

In 2017, the achievement of CATRA's mission to enhance the effectiveness of each member's program was further strengthened with the formalization of its operation as a Joint Venture.



Continued...

MESSAGE FROM THE CHAIR

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CATRA's core role is to:

- Share information and best practices, communicating externally through the CATRA website and internally through the intranet Forum.
 - ~ CATRA's website had approximately 2,000 visits each month in 2017, representing a variety of domestic and international sources.
- Summarize and report data on key aspects of each province's operations. This includes information on new tire sales and end-of-life tires collected and recycled to meet demands of a variety of recycled rubber manufacturers.

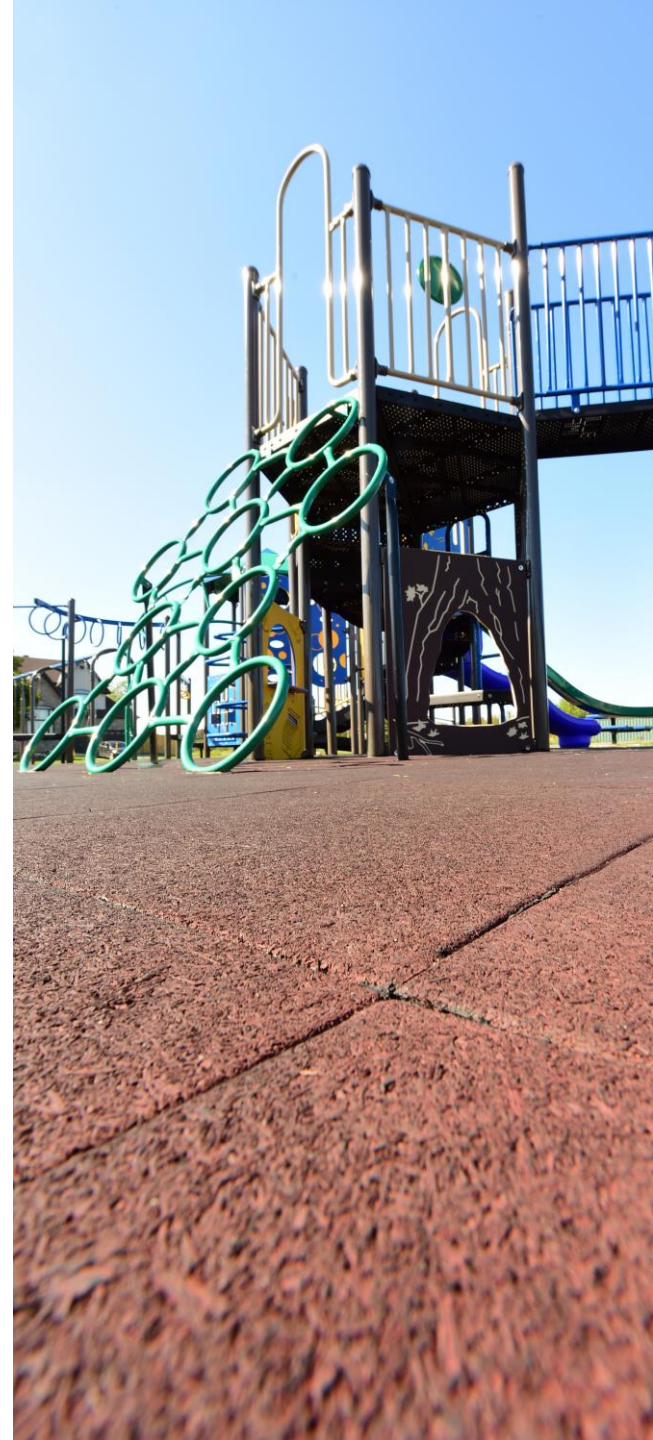
Each provincial tire stewardship organization works closely with its respective government to carry out its mandate and meet the requirements to responsibly recycle scrap tires. In 2017, CATRA and the Canadian Council of Ministers of the Environment (CCME) continued discussions on harmonizing key tire stewardship definitions across provincial jurisdictions. Much remains to be done, with the ultimate goal to make it easier for external and internal stakeholders to make comparisons and streamline operations.

Building on our 2017 successes and achievements, 2018 is set to be another year of achievement and growth for CATRA and I look forward to contributing to that progress.



DELIVERING ON OUR GOALS

Our collaborative approach to diversion and recycling leads to the creation of new products and markets across the country. CATRA members continue to introduce innovative ways to inspire responsible management of tires to improve our environment, drive the economy and support local communities.



FOCUSED ON DIVERSION

Management of scrap tires in environmentally sound and productive ways continues to be a high priority goal.

DIVERSION OF TIRES ACROSS CANADA



Each Canadian province and the Territory of Yukon has a tire recycling program to manage end-of-life tires, ensuring diversion from landfills and reducing the potential for stockpiles.

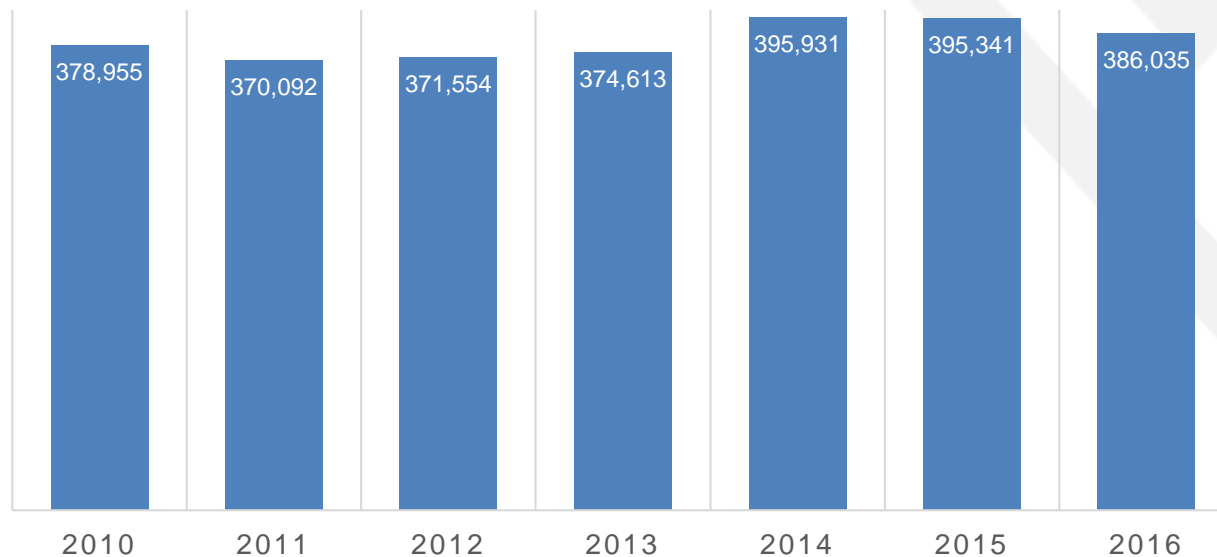
CATRA helps promote the successes of the provincial tire stewardship organizations and their programs to build a positive image for scrap tire recycling and its benefits to the environment.

In 2017, our members continued to achieve milestones in diversion rates across the country helping to make Canada a world leader in tire recycling.

TIRE COLLECTION IS STEADY EACH YEAR

Since 2010, the Canadian tire collection numbers have shown a steady increase*. This reflects members' commitments to educating the public about the benefits of recycling tires, helping to clean up tire piles and creating demand for recycled tire material as a new commodity.

ANNUAL NATIONAL COLLECTION (TONNES)



This table presents the total tonnes of scrap tires collected by all stewardship programs in Canada from 2010 to 2016, including: PLT (Passenger/Light Truck), MT (Medium Truck) and OTR (Off-the-Road) tires.

1 tonne = 2205 lbs.

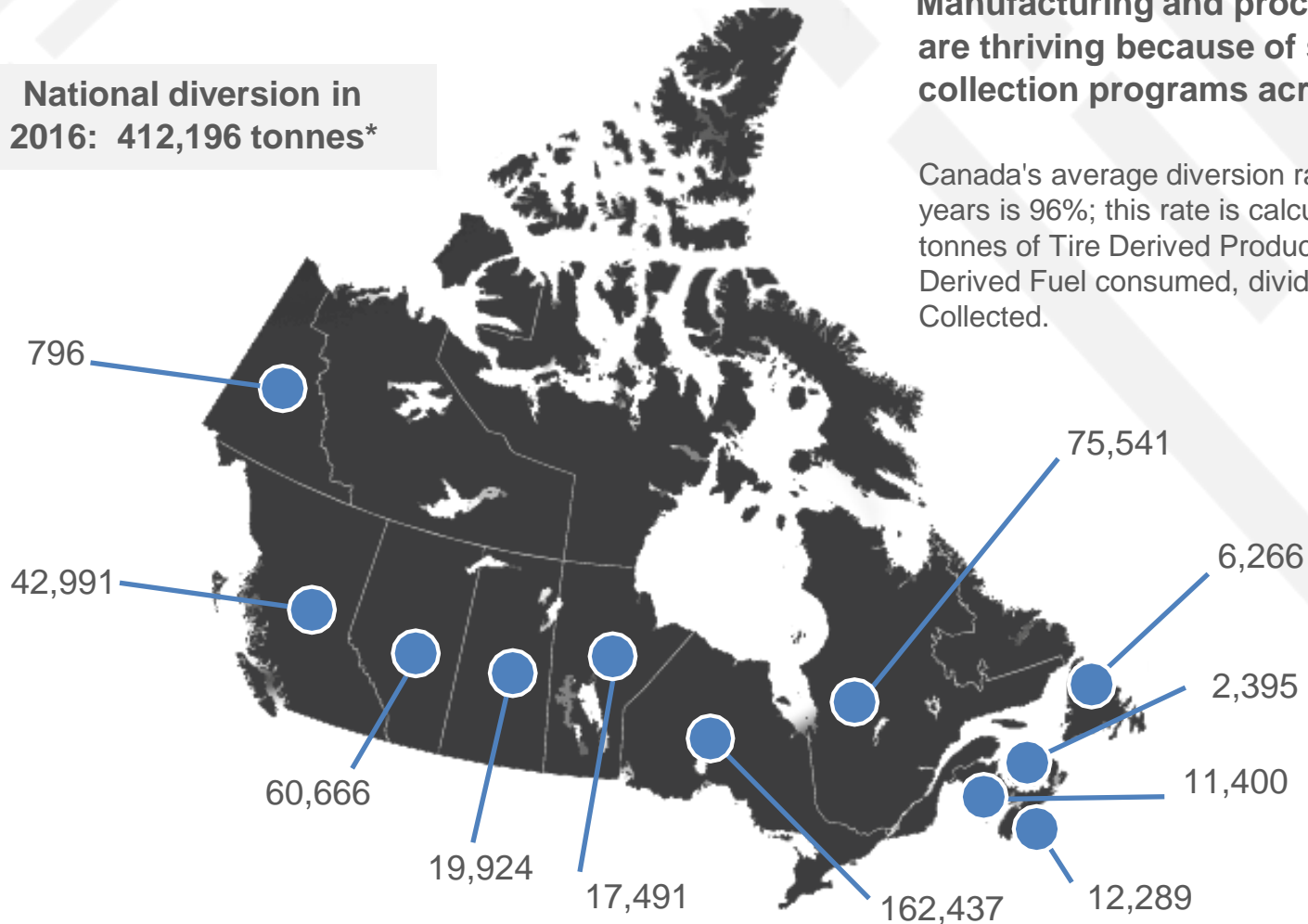
**The slight difference in tonnes between 2015 and 2016 reflects a normal change in volume from year to year.*

TIRE RECYCLING ACROSS CANADA

National diversion in 2016: 412,196 tonnes*

Manufacturing and processing facilities are thriving because of successful tire collection programs across the country.

Canada's average diversion rate over the past 7 years is 96%; this rate is calculated based on the tonnes of Tire Derived Products created + Tire Derived Fuel consumed, divided by the scrap tires Collected.



*The map shows the total tonnes of tires recycled in Canada in 2016, by jurisdiction.

DRIVING LOCAL ECONOMIES

Our members continue to provide consumer education, investment in R&D, and offer research grants to inspire students to find innovative ways to use recycled rubber.

CREATING A NEW RESOURCE

CATRA and its members have played a significant role in Canada's motivation to create a circular economy. Our organization sets an example on a global stage providing knowledge and resources to help other jurisdictions find new ways to bring old tires back to life.

CATRA members are committed to ongoing improvements in the way we collect and responsibly divert old tires for recycling. The programs have helped create markets that recognize old tires as a valuable resource in residential and commercial applications.

We are deeply committed to supporting our members by providing information, resources and sharing best practices to help the industry succeed. This is most evident in the rapid growth of recycled tire manufacturers and processors in Canada, and the breadth and depth of high-value products now being produced using recycled tire rubber.



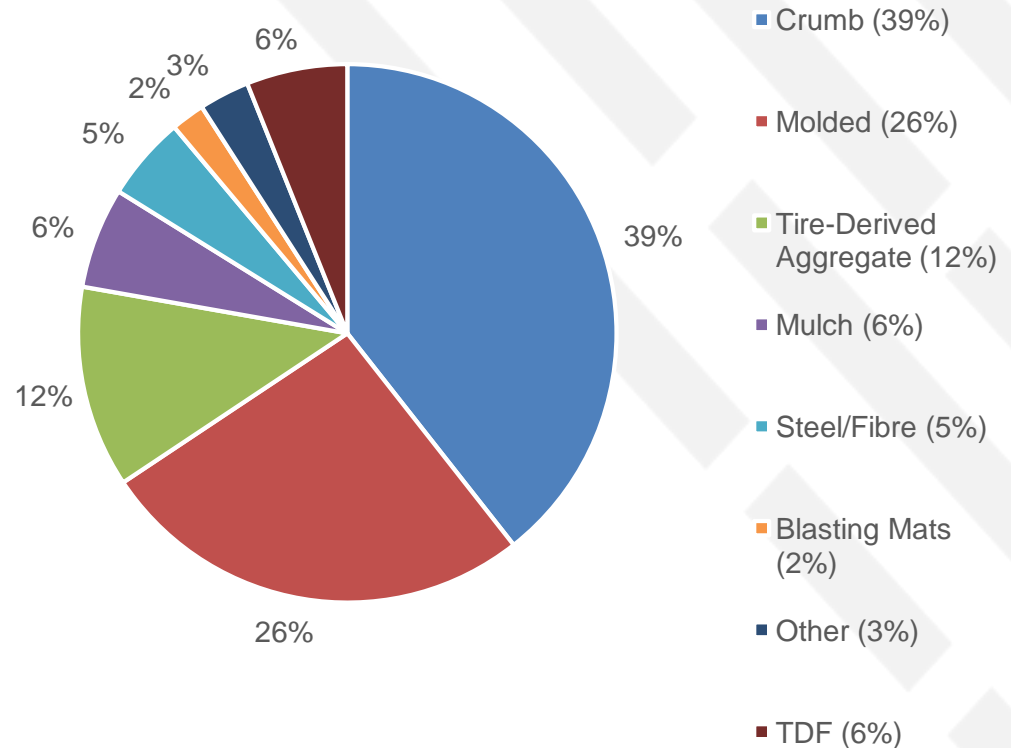
MULTI-PURPOSE USES FOR RECYCLED TIRES

CATRA members continue to demonstrate an impressive variety of uses for end-of-life tires in Canada.

Currently, over 50% of tires are recycled into high-value products, such as crumb or molded products. This leads to production of end-use products that can be leveraged in a variety of applications.

Tire Derived Fuel (TDF) continues to be a small and important end use product with a pilot project planned in one jurisdiction.

2016 National Recycling (%)



CREATING NEW PRODUCTS WITH OLD TIRES

Rubber-modified asphalt and sealants



Automotive products



Molded and extruded products



Athletic / recreational surfaces



R&D / INNOVATION PROGRAMS

Our members play an important role in supporting the local economy in their respective regions and together we are making a national impact.

We remain committed to supporting the development of new and better ways to recycle scrap tires, while streamlining processes and tracking.



New Technology Grants

Several provinces provide grants to support the development of new technologies.

Tire Stewardship BC continues to support research into the use of scrap tire fibre to replace virgin fibre in concrete for use in specific applications.

Divert NS approved a student research grant of \$17,000 to explore the feasibility of developing Tire Derived Aggregate (TDA)-silt mixtures to facilitate using in situ soils in pre-roadway/construction development. If it is proven that a TDA-silt mixture is comparable to the current adoption of TDA-sand mixtures, it could increase the marketability of TDA.

PUBLIC ENGAGEMENT & EDUCATION

Public education is a fundamental pillar to CATRA and its members. That is why we are committed to programs across the country that are designed to educate a variety of audiences on topics across the continuum of tire recycling and are tailored to jurisdictional legislation.



Competitions

Inspiring consumers and the public with the possibilities of recycled tire products takes many forms, including competitions to design re-imagined public spaces, with several of these being brought to life across Canada.

Consumer Education

Several provinces engage brand ambassadors to educate consumers about the benefits of tire recycling and promote local programming.

Research Grants

Ensuring that future generations understand the importance of responsible residual materials management is important to us. We are committed to continuing to support students by providing grants to enhance their knowledge.

REINVENTING THE WHEEL WITH RECYCLED TIRES

In 2017, Ontario Tire Stewardship unveiled The Shaw Bench, the winning Industrial Design concept from their 2016 Student Design Challenge. The creative product design included an integrated bench, planter and bike-rack with a modular design, making the bench highly adaptable, allowing for a variety of configurations further inspiring different uses for recycled tires and driving market development.

Through a 2017 applied research grant, Tire Stewardship Manitoba awarded \$15,000 to Red River College for the testing of PLT / MT Tire Derived Aggregate (TDA) as a replacement for natural material in basement backfill applications. This is in addition to \$139,000 in grants previously awarded to the college for the installation and testing of OTR TDA in an experimental house constructed on campus.

In Quebec, Recyc-Québec has recycled 1.8 million tonnes of car and truck tires since the beginning of the program in 1993 by working with recyclers in the province to turn them into unique products like blasting mats, livestock mats and carpet padding. In addition to car and truck tires, Recyc-Québec also manages scrap bicycle tires and used tires from the northern jurisdictions of Nunavik.



placing TDA in the southern half and natural material on the northern half of the ground

ECONOMIC INVESTMENT

In total, CATRA members invest approximately \$160 million annually, mainly for direct financial incentives to recycling participants and recycling development initiatives, such as education, grants and research.

This significant investment contributes to a thriving industry that reflects job creation, innovation and economic growth.



SUPPORTING COMMUNITIES

Throughout the year, CATRA members drive programs that support communities across the country. Grant programs, special collection events and charitable donations build better communities while showcasing the value of recycled rubber and educating people about making sustainable choices.

COMMUNITY GRANT PROGRAMS

Community grant programs support sustainable development and help showcase new innovation in product design. Most CATRA members offered grant programs in 2017 leading to re-designed community spaces like parks, playgrounds, community centres and schools. Demand for grant funding continues to grow in addition to the desire for environmentally friendly materials and design.

Offering grant opportunities to local communities has benefits beyond the completed projects, allowing Canadians to experience the innovative applications for recycled rubber as a building material. Of real significance are the projects where community spaces were made accessible with recycled rubber ramps and surfacing.



Sacha's Park: L'Original, ON

COMMUNITY GRANT PROGRAMS

Communities large and small have seen the benefits of tire recycling programs of CATRA members.

Since 2000, the Municipal Grant Program in Alberta has provided \$12.6 million for the completion of 630 community projects and the upgrading of tire collection areas at landfills and transfer stations.

In Saskatchewan, over 150 communities have benefited from the Community Demonstration Grant program since 2010.

In Ontario, 85 community projects have been awarded funding since the program's inception. This equates to a total investment of \$1.5 million dollars into communities across the province.

The Tire Stewardship Manitoba Community Demonstration and Innovation Grant Program provides up to \$20,000 in matching grant funding for communities and not-for-profit organizations. To date, 107 community projects have received funding totalling \$813,388.

This year alone, Tire Stewardship BC awarded \$250,000 in grants for 13 projects.



Dr. Roy Wilson Learning Centre: Medicine Hat, AB



Minor Soccer Club Gazebo: Edson, AB

COMMUNITY PROJECTS FUNDED BY MEMBER PROGRAMS...



Outdoor Playground - the Pacific Autism Family Network Project
Richmond, BC



Patio project with pour-in-place surfacing
Edmonton, AB



Newly accessible pool and fitness centre
Temiskaming Shores, ON

TIRE COLLECTION EVENTS

In addition to ongoing tire collection throughout the year by program participants, some provinces hold special collection events to raise awareness of tire recycling.

Community events and special days are hosted in order to collect old tires that may otherwise end up in a landfill. Often these are done in partnership with local community groups, corporate sponsors or charitable organizations.

For the 8th year, Ontarians raised money in support of The Sunshine Foundation of Canada through the OARA Tire Take Back event. Ontario Tire Stewardship, in partnership with Ontario Automotive Recyclers Association (OARA) and Ontario Federation of Agriculture (OFA) raised over \$54,000 and collected over 52,000 scrap tires.



TIRE COLLECTION PROGRAMS...

Tire Stewardship BC (TSBC) supported 15 collection events in 2017, once again partnering with the Artist Response Team (ART), that provide environmental education through song to elementary school students. Participating schools can host a tire collection event and are responsible for advertising the event, through school newsletters, posters, and social media. The school then receives a \$500 honorarium from TSBC and \$1 for every tire over 100 that they collect.

Since 2002, Alberta Recycling has partnered with the 4-H Foundation of Alberta to collect scrap tires from rural areas for which they receive grant funding through the tire program. Thanks to their efforts, 4-H clubs have diverted over 900,000 tires from landfills. In the first nine months of 2017, they collected 28,286 tires.



IN CLOSING

Program Manager's Remarks

PROGRAM MANAGER'S REMARKS

Bob Ferguson, CATRA
Program Manager



CATRA has a long history of helping Canadian provinces share their ideas and information in a genuine spirit of working together.

In 2017, CATRA worked diligently to document how the organization works with the goal of becoming more efficient at carrying out its mission and effectively supporting its members. The result is a new Joint Venture Agreement which helps clarify CATRA's governance and the roles and responsibilities of the various stakeholders. This will undoubtedly enhance decision-making and enable the organization to do more for its members.

A prime example of CATRA's value to its members is the Harmonized Compliance Review program. On behalf of its members, CATRA conducts a review of large new tire suppliers and retailers with a presence in multiple jurisdictions. Most retailers prefer this new approach since CATRA's single review replaces individual reviews by multiple provinces. Based on their value to members and positive feedback from most retailers, CATRA plans to expand the reviews to at least ten retailers annually.

Continued...

PROGRAM MANAGER'S REMARKS

The Canadian tire recycling landscape is changing, perhaps more so than at any time in its almost 30-year history. A new organization, Tire Stewardship of Saskatchewan, has replaced the Saskatchewan Scrap Tire Corporation and will operate under a new Product Management Plan. In Ontario, changes to waste legislation means there are new Producer Responsibility Organizations taking on the mandate formerly carried out by Ontario Tire Stewardship. CATRA's challenge now is to reach out to these new programs so that they can benefit from CATRA's role and national presence.

One of the key new metrics required by the Canada-wide Action Plan mandated by the Canadian Council of Ministers of the Environment (CCME) is to report on GHG emissions at the provincial level. Some provinces already have this requirement, while others are moving in this direction. CATRA plans to explore establishing a 'national model' to help decide what to measure and how to interpret the results.

In light of the many changes to organizations, recycled rubber products and government regulations, to name a few, it is time to refresh and update CATRA's Strategic Plan. This work will be undertaken in 2018 and involve all members with the goal of determining what we need to stop doing, what we should continue doing, and what new directions should be pursued.

2018 promises to be an exciting year, full of opportunities for CATRA to support its members as they carry out their environmental and economic responsibilities.

COMMITTEE UPDATES

There are six committees operating within CATRA, all with different goals and objectives, but all are equally committed to ensuring there is a sustainable, positive value for end-of-life tires in Canada.



Committee Highlights

CATRA committees had a busy and productive year. This included a consolidation of some 2016 committees to recognize their complementary priorities and activities.

These are just some of the key activities and achievements of CATRA's active committees in 2017.

Communications

- Published the first CATRA Annual Report
- Developed Communication and Information Security Protocols
- Continued to publish monthly E-News to update members on industry news and activities of interest
- Continued to publish news articles on the CATRA website, promoting member accomplishments / milestones, industry events and more
- Ensured the Forum (intranet) content was up-to-date and current with reports, studies and industry news, and facilitated member Q&A exchanges
- Continued to enhance awareness of the CATRA brand through participation in key external events

Data and Reporting

- Completed reporting to members on the prior year's new tire sales and the related tire recycling fees collected
- Gathered annual data from individual members on tire collection / tire product volumes and categories, and prepared summaries for each province for the website
- Distributed report on vehicle imports to Canada to help members evaluate potential leakages in tire recycling fees
- Continued to provide general industry data to both members and external parties

Continued...



Committee Highlights

Best Practices and Compliance

- Commenced the “Tire Categories & Definitions Project” to determine a basis for defining and classifying the numerous types of tires entering provincial programs
- Commenced the “Transportation Incentives Study” to develop an improved metric to calculate financial incentives to transport scrap tires for processing, for potential use by members
- Completed multiple Harmonized Compliance Reviews of major suppliers of new tires in Canada

Tire and Product Movement / Market Development

- Completed the “TDP Movements Project” to define the various tire products created and understand the volumes of / markets for each province’s processed and manufactured products

Management

- Executed the CATRA Joint Venture Agreement with members effective May 31, 2017, and began implementing the enhanced governance and roles

At its Annual General Meeting in October 2017, each of CATRA’s committees outlined many exciting new projects and activities for 2018 that will continue to support CATRA as the reference authority for scrap tire management in Canada.

CATRA 2017 COMMITTEE MEMBERS

Management Committee

Jeff MacCallum, NS – Chair
Glenn Maidment, ON
Bob Barss, AB
Don Blythe, BC

Data & Reporting Committee

Rosemary Sutton, BC – Chair
Lee Heidecker, AB
Louis Gagne, QC
James Coulter, ON
Jackie Kuntz, SK

OTR Tires Committee

Andrew Horsman, ON – Chair
Brad Schultz, AB
Stephen Gluchowski, ON
Brett Eckstein, MB
Rosemary Sutton, BC

Tire & Product Movement/Market Development Committee

Andrew Horsman, ON – Co-Chair
Brad Schultz, AB – Co-Chair
Jamie Seamans, NB
Joji Ishikawa, BC
Louis Gagne, QC
Jackie Kuntz, SK

Communications Committee

Theresa McQuoid, SK – Chair (Outgoing)
Brett Eckstein, MB – Chair (Incoming)
Claudia Hawkins, ON
Jamie Seamans, NB
Elizabeth Gray, AB

Best Practices & Compliance Committee

Mike Solkoski, MB – Chair
Louis Gagne, QC
Jamie Seamans, NB
Glenda Melvin, NL
Nick Chestnut, NS
Theresa McQuoid, SK
Don Blythe, BC
Brad Schultz, AB
Andrew Horsman, ON