

Working tirelessly to create sustainable, positive value for end-of-life tires.

2020 was a year unlike any other. But despite its many challenges, CATRA members from across the country continue to grow and strengthen Canada's tire recycling industry through waste diversion, research and development investments, community grants, collection events, and stakeholder education programs.

This report serves as an annual snapshot of the tire recycling industry in Canada, highlighting many of the important strategic initiatives by our member agencies across the country.

About CATRA

The Canadian Association of Tire Recycling Agencies (CATRA) consists of tire recycling agencies from 10 provinces as well as the Territory of Yukon. By sharing expertise, information, and resources, CATRA members are developing an industry-leading program that creates sustainable, positive value for end-of-life tires.





Brett Eckstein CATRA Chair

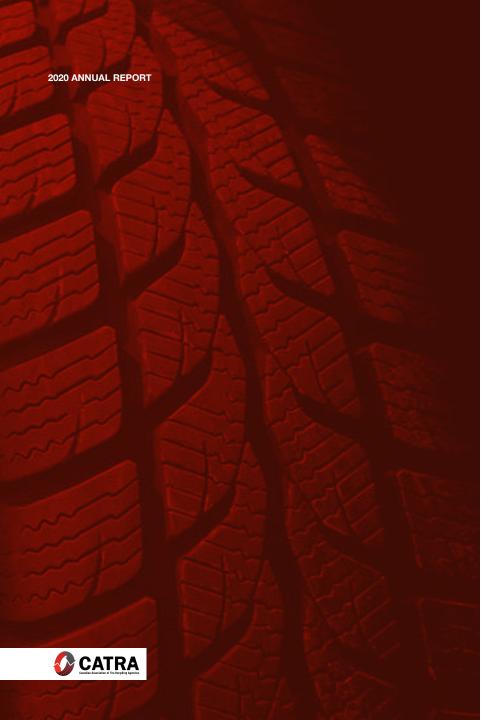
Executive Director -Tire Stewardship Manitoba

I am pleased to present CATRA's 2020 Annual Report, the organization's 21st year for advancing Canada's worldleading provincially based tire recycling programs.

The year 2020 will always be remembered for its challenges impacting Canadians' daily lives and all sectors of the economy across the country. Tire recycling was no exception, as the majority of CATRA member programs experienced reduced revenues as new tire sales declined, while staff adjusted

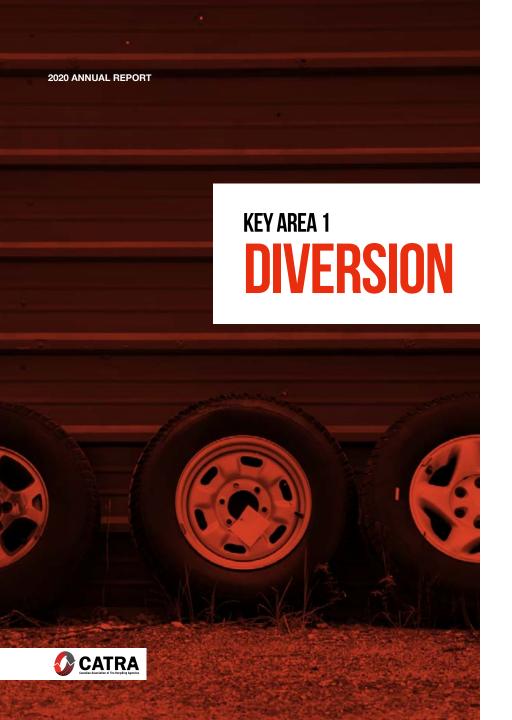
to working remotely where necessary to ensure program operations continued across their province. Canada's tire recyclers across the country also met the challenges required to maintain operations effectively and supply recycled tire products to markets. All in all, despite an exceptionally trying year, CATRA members continue to meet their obligations to environmental protection and the requirements of operating tire recycling programs with minimal disruption to end-of-life tire recycling services.

Our economy always works best when Canadians are enabled to make things and do things that generate wealth. CATRA members are committed to our economic recovery through investments that create economic development, innovation, and jobs for Canadians, while also diverting end-of-life tires from landfills so that they no longer pose a significant environmental or human health threat. In the year to come, CATRA will continue to work collaboratively to support Canada's tire recycling programs, achieving world-class results by investing in and strengthening the marketplace for recycled tire products.



A GLOBAL LEADER IN TIRE RECYCLING

Did you know that roughly *one billion* tires reach the end of their useful lives worldwide every year? For over two decades, CATRA and its members have been dedicated to developing innovative and productive ways to transform scrap tires into valuable, marketable products. As a result of their efforts, CATRA has emerged as a global leader in the tire recycling industry, positioning Canada as a nation committed to waste diversion and environmentally sound recycling practices.



Diverting waste to new uses from coast to coast

What is Waste Diversion?

In the context of scrap tires, waste diversion means keeping old tires out of our landfills. When a tire reaches the end of its life, its materials can be repurposed to create ever-increasing types of valuable and environmentally responsible products.

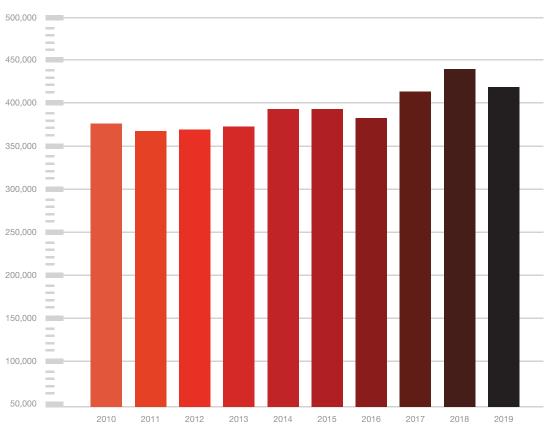
Canada has a staggeringly high diversion rate—sitting currently at almost 100%! This is because of our highly effective scrap tire recycling programs. These programs collectively work to manage end-of-life tires that include PLT (passenger and light truck), MT (medium truck) and OTR (Off-the-Road) tires, ensuring they are safely and responsibly diverted from landfills and stockpiles.

In 2020, Canada's leading-edge tire recycling programs have continued to shape industries in the areas of crumb rubber, molded products, tire-derived aggregate and tire derived fuel. One of CATRA's key strategic goals is the development of the recycling industry's circular economy i.e., investing in the research and development of new products that can be marketed both locally and globally, simultaneously helping our economy and eliminating waste.

Canada's successful provincial and territorial end-of-life tire programs always stay up to date with national changes, including annual population growth, increases in winter tire purchases, and used tire cleanups.

COLLECTION CONTINUES TO KEEP PACE WITH AVAILABLE TIRES

ANNUAL NATIONAL COLLECTION (TONNES)





TIRE RECYCLING ACROSS CANADA

What is Canada's diversion rate?

Diversion rate, as defined by CATRA, is an annual metric that is calculated by dividing the tonnes of tires recycled by the tonnes of tires collected. For 2019, CATRA's latest data year, the diversion rate was 89%, which compares to the 2018 rate of 110%. As a mature program, Canada's diversion rate, over time, balances out at close to 100%. The average rate over the past 10 years stands at 98%.



NATIONAL DIVERSION IN 2019: 376,915 TONNES*

613 (

(QC) 96,658

47,332

NB 12,459

AB 62,328

PE 2,710

SK 11,167

NS 15,098

MB 14,600

NL 6,300

ON 107,650

LEARN MORE

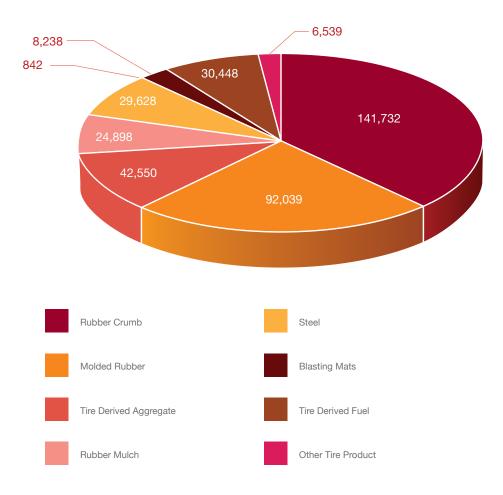
about <u>Measuring Canada's</u>
<u>Performance</u> on the CATRA website.



USES FOR RECYCLED TIRES

2019 NATIONAL RECYCLING & TDF* USES (TONNES)

In 2019, CATRA's latest data year, **376,915 tonnes** of tires were diverted from the waste stream and recycled into products offering distinct value to end-users.





2020 ANNUAL REPORT

2020 SPECIAL DIVERSION PROJECTS



Ontario

In partnership with Algoma Steel, eTracks removed and recycled 850 tonnes of end-of-life tires, turning what would have been waste into turf for synthetic grass on sports fields, playground safety pads, sports arena mats, comfort flooring for livestock, rubberized asphalt, and padding in safety helmets. The project began in September 2019 at Algoma's production facility in Sault Ste. Marie and was completed in June 2020. eTracks also cleaned up tires from a variety of other sites across Northern Ontario, with an additional weight of 318 tonnes.

Nova Scotia

Divert NS continued to support a tire recycling project in collaboration with Ballam Farms Limited for the third consecutive year. Using a portable shear technology, whole passenger and light truck tires are split and sold across Nova Scotia, Prince Edward Island, and now into New Brunswick to secure silage cover. In 2020, the project found a reuse market for approximately 2,500 Passenger and Light Truck tires and approximately 1,600 Tractor Trailer tires.

Saskatchewan

Through a collaborative effort with Indigenous Services Canada, Tire Stewardship Saskatchewan (TSS) removed approximately 39 metric tonnes of scrap tires from on-reserve landfills.



Driving the tire recycling industry forward with new ideas

Investing in innovation is essential to paving the way toward a more economically and environmentally viable future in Canada. By prioritizing research and development and consistently embracing new technologies, CATRA's member agencies and their partners have made many important breakthroughs in recycling and repurposing end-of-life tires. Together, our members have effectively turned what was once a wasted resource into a valuable economic asset.

While facing unprecedented challenges, CATRA members still managed to move ahead with a number of important research and development projects in 2020.



CATRA Consider Association of The Recording Agencies

RESEARCH & DEVELOPMENT

Alberta

Alberta Recycling Management Authority (ARMA) finalized a key resource document available to municipalities, waste commissions and engineers. Based on the results of a multi-year study commissioned by ARMA, this technical bulletin confirms tire-derived aggregate as a proven performer and cost-effective alternative to conventional aggregate for use in leachate drainage blankets

or specific road construction applications.

ARMA was also presented with Phase I of a Life-Cycle Assessment Project measuring the environmental impact of scrap tire management in Alberta. Phase II will provide a more complete picture, measuring tire program activity against the impacts of competing products.



Manitoba

Due to COVID-19 restrictions, Tire Stewardship Manitoba's (TSM) Be Tire Smart summer program pivoted to online communications and instead had TSM Environmental Students provide research papers on Tire Derived Fuel and Rubber Modified Asphalt.

Quebec

RECYC-QUEBEC granted financial assistance to both KrownCORP (an organization developing recycled black-coloured plastics) and Phoenix Innovation Technology (an organization developing a new rotomolding process for recycled thermoplastic elastomer parts, a process that could make it possible to manufacture hollow objects with recycled material).

RECYC-QUEBEC also conducted a performance study on remolded automobile tires manufactured in Quebec in collaboration with independent consumer appraiser Protégez-Vous. Results showed that remolded tires from Quebec are as efficient and safe as the other types of tires tested and were the most popular with testers.



NEW TECHNOLOGIES

Throughout 2020, many CATRA agencies advanced the use of new technologies that will improve how end-of-life tires are collected, recycled, repurposed, and ultimately sold as new materials.

British Columbia

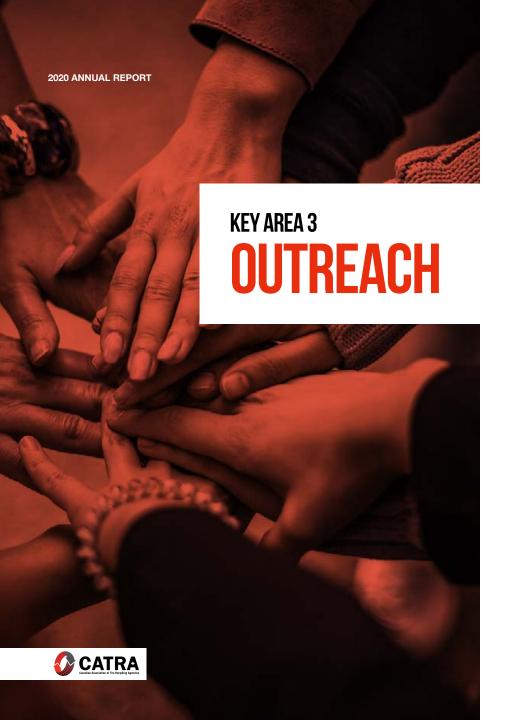
With the majority of people staying at home, Tire Stewardship BC's (TSBC) processor, North West Rubber Ltd., saw a huge increase in demand for home gym mats. As a result, North West Rubber launched an online e-commerce store on their website to sell their recycled rubber products directly to their consumers.

Quebec

RECYC-QUEBEC was thrilled to introduce Canada's very first 100% electric tire collection truck, which will be collecting over 3000 tonnes. In addition to reducing greenhouse gases, this pilot project will help determine the potential feasibility of introducing a carbon neutral mode of transportation in other collection areas.

Ontario

eTracks is in the process of developing the infrastructure for an industry-wide technology platform to facilitate new sales models for recycled tire products. The new platform will focus on secure compliant transactions, process efficiencies and automation, and data analytics.



Helping our environment and our communities thrive

Educating the public about the environmental and economic benefits of tire recycling is a crucial part of what CATRA members do. By providing clear and compelling information and resources to members of the public, including key industry stakeholders, we ensure that our mission and values are understood and embraced by Canadians.

CATRA members connect with, and give back to, their communities through a number of special initiatives, including grant programs and tire collection events.

Grant programs help reach Canadians where they live, work, and play by providing funding to revitalize community spaces using materials made from recycled tires. Products include athletic and arena flooring, playgrounds, fitness tracks, sidewalk Pavers, and more. Using these materials in community spaces gives Canadians a tangible way to see the benefits of incorporating recycled materials into their lives.

2020 COMMUNITY OUTREACH PROGRAMS

Alberta

Since 2000, Alberta's municipalities and Indigenous communities have annually benefited from ARMA's tire recycling program. In 2020, 53 community projects received \$866,977 for incorporating recycled tire products in playgrounds, pathways, and arenas. Additionally, \$114,235 was awarded for the upgrading of five tire marshalling areas at municipal landfills and transfer stations.

British Columbia

In partnership with the Western Canada Tire Dealers, TSBC was pleased to offer the Don Blythe Scholarship for its third year. The \$2000 scholarship is in memory of Don Blythe for his contribution to TSBC and to the tire industry in general.

TSBC has also continued their partnership with First Nations through a joint stewardship group and joined as a member of IZWTAG (Indigenous Zero Waste Technical Advisory Group).

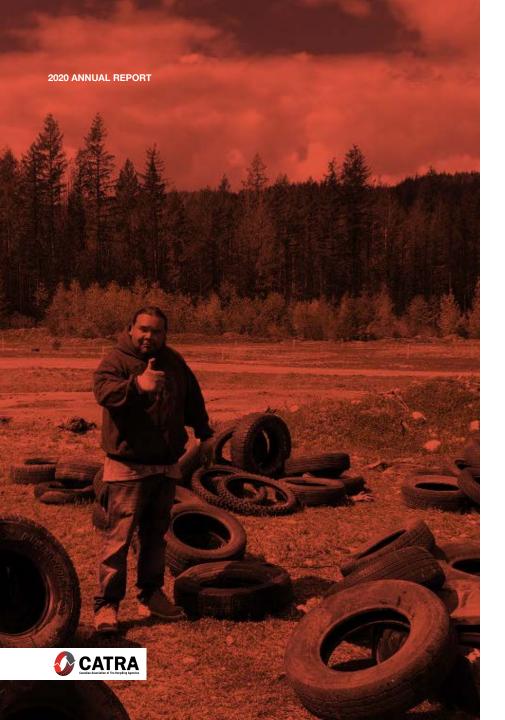
Saskatchewan

TSS worked collaboratively with the Saskatchewan Ministry of Environment to initiate and fund a project to remediate the abandoned scrap tire pile at the site of the former Assiniboia Rubber Recycling Inc. TSS is also self-financing the remediation efforts of an abandoned scrap tire pile in Eldon, Saskatchewan, with plans to complete the project by 2022.

Manitoba

The TSM Community Demonstration and Innovations Grant Program increased their budget from \$110,000 to \$150,000 to fund 15 different community and non-profit organizations using recycled tire products.





INDIGENOUS ZERO WASTE TECHNICAL ADVISORY GROUP INITIATIVE

TSBC is one of 10 stewardship agencies that came together to create the First Nations Recycling Initiative (FNRI), a program for First Nations (FN) who are interested in starting recycling programs within their communities. The program's aim is to raise awareness, offer resources to support recycling, and organize community collection events.

IZWTAG (Indigenous Zero Waste Technical Advisory Group) is an Indigenous led society dedicated to implementing environmentally responsible waste management in FN communities. FN have embraced recycling programs and green waste management practices and IZWTAG supports these initiatives with public education, technical advice and training with the goal of reducing waste and increasing the recovery of recyclable materials.

FNRI collaborates with Indigenous Services Canada (ISC) and IZWTAG on matters that share the goal of increasing recycling access to FN communities across the province. FNRI team members participated in quarterly meetings with ISC and IZWTAG in 2019 and plan to continue these meetings going forward.

2020 COMMUNITY OUTREACH EVENTS



Alberta

ARMA annually sponsors Municipal and Indigenous Community Roundup Events that includes tires and, with the onset of COVID, a pilot curbside event was held which enabled residents of a central Alberta town to safely leave their tires at the curb for recycling. Additionally, ARMA continued its partnership with 4-H Alberta for the 18th year in a row, with clubs collecting tires from rural areas throughout the province. Cumulatively these roundup initiatives diverted almost 30,000 tires.

Saskatchewan

Through a collaboration with Indigenous Services Canada, 39 metric tonnes of scrap tires were removed from on-reserve landfills.

Nova Scotia

Divert NS continued their Bicycle Tire Recycling program, collecting 1,200 bicycle tires and 1,050 tubes. The two end markets for the recycled tubes and tires are molded rubber products (manufactured by TRACC in Minto, New Brunswick) and a local craftsperson who has recycled 100 tires into belts.



In addition to ongoing scrap tire collection, province-wide tire collection events are held to encourage Canadians to recycle their end-of-life tires and to further showcase the benefits of tire recycling.



Canada's successful provincial and territorial end-of-life tire programs always stay up to date with national changes, including annual population growth, increases in winter tire purchases, and used tire cleanups.

HOW WE EDUCATED OUR STAKEHOLDERS

Alberta

ARMA conducted over 50 virtual meetings/presentations with multiple stakeholders, including the provincial government, member organizations, industry, and municipal representatives.

Newfoundland

Multi Materials Stewardship Board (MMSB) created a dedicated public education page on its rethinkwastenl.ca website. The site contains an educational video to encourage tire diversion, which was also promoted though digital platforms.

Quebec

RECYC-QUEBEC held their first virtual annual meeting involving all stakeholders in the field of end-of-life tires in Quebec.

Manitoba

TSM pivoted their annual Be Tire Smart program to online outreach, relying heavily on digital marketing as part of their communication strategy.



Ontario

eTracks commissioned a public perception survey by partnering with Ipsos to ascertain and create awareness about tire recycling, as well as hosting quarterly webinars.





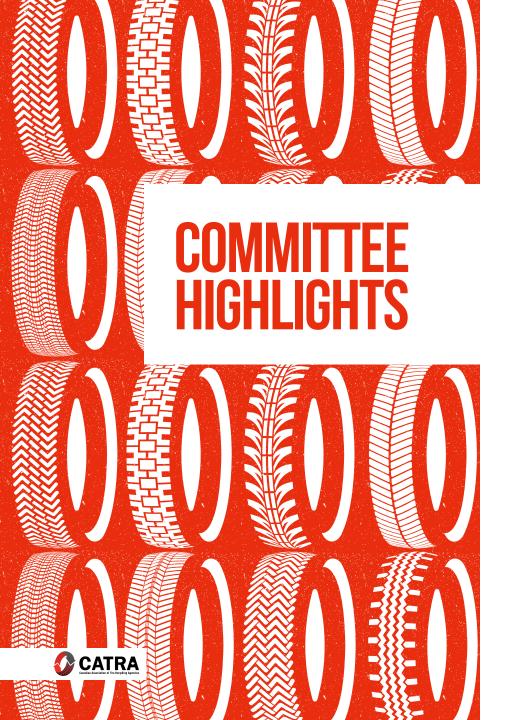


HOW WE CONNECTED WITH CANADIANS

CATRA is a comprehensive resource for the public about the process and benefits of tire recycling, as well as tire safety and maintenance. But of course, connecting was more challenging than ever in a year where in-person communication was limited. However, CATRA members were highly creative in their efforts, relying heavily on tools such as media relations, advertising, social media channels, and brand ambassador engagement to get their message out.

The tools utilized to connect with the public this year were:

- · Media relations
- Advertising campaigns (out of home, print, radio, and digital ads)
- Social Media–Facebook, Twitter, Instagram & Microsites
- Industry partnerships



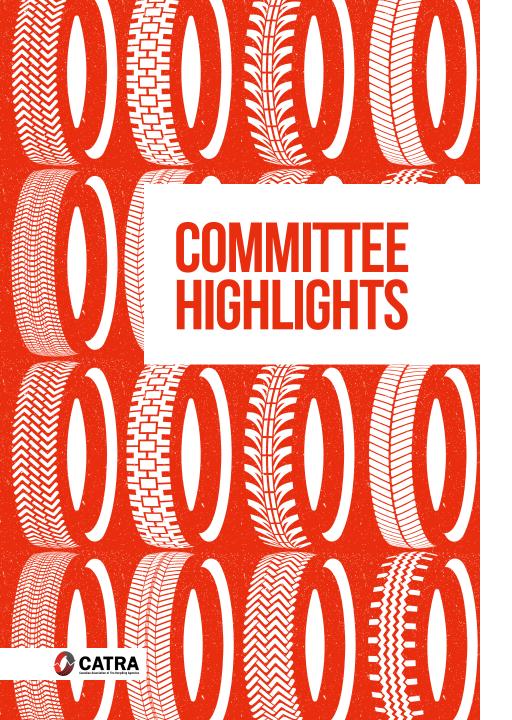
A selection of the activities and achievements of CATRA's Standing Committees in 2020

MANAGEMENT

- Successfully delivered CATRA's first virtual AGM
- Modified the CATRA Member Admission Policy to allow only not-for-profit entities
- Began Phase 2 of the Life Cycle Assessment Project to continue examining the environmental performance of management options at different levels on the waste hierarchy – and to engage a peer review for an ISO-compliant analysis
- Adjusted the CATRA Funding Policy for Member cost-sharing on certain projects
- Confirmed Manitoba as the continuing Host Province and CATRA Chair for 2021

DATA AND REPORTING

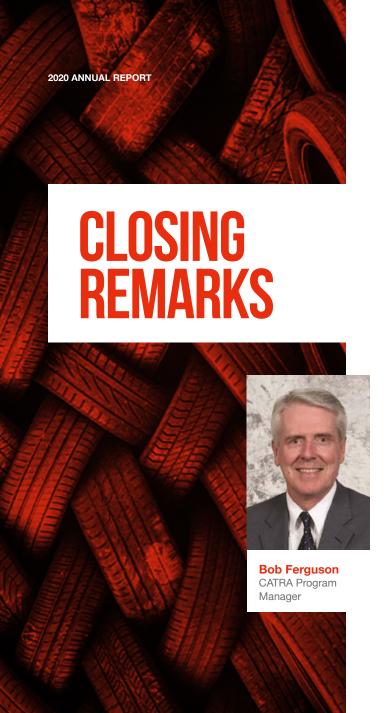
- Developed a plan, confirmed to proceed, for a data enhancement tool for members to capture Canada's recycled rubber product incentive rates
- Identified potential future initiatives including an information dashboard with key business indicators and a forecasting method for future industry trends
- Provided oversight of the Harmonized Compliance Review (HCR) Program to evaluate financial compliance of tire retailers with a presence in multiple Canadian jurisdictions
- Maintained the CATRA reporting tool to collect key 2019 Member data
- Supported data needs for the 2020 CATRA Annual Report
- · Provided industry data to members and third parties as needed
- Updated the software for CATRA's internal website for members



Committee Highlights (cont)

COMMUNICATIONS

- Published the 2019 CATRA Annual Report
- Added a successful new communication channel through CATRA's monthly cross-country member information exchanges
- Shared the 2019 member data on CATRA's public website (national and provincial tire collection / diversion)
- Updated the Communications Plan to include new options to reach key external audiences
- Continued publishing web news articles to promote member accomplishments, industry events, and more
- Continued issuing informative monthly E-News for members
- Developed a new public website page to describe Canada's products from end-of-life tires
- Continued distributing weekly media monitoring results to members
- Monitored monthly use of the public and internal websites and monthly E-News
- Grew the content on CATRA's internal website with reports, studies, industry news, and various member resources



2020 was certainly a challenging year for most industries and used tire recycling has been no exception. Deemed an essential service, the tire recycling industry and CATRA members have done well to adapt to the changing times. This resilience is a key factor behind Canada's world leadership in scrap tire recycling.

Despite the pandemic outbreak in 2020, collaboration among CATRA members continued and actually increased with the introduction of virtual cross-country meetings to regularly share information and ask questions around common issues. Discussions on how COVID-19 is impacting industry and Canadian tire recycling programs has been a central theme since lockdowns started in the Spring. Restrictions also meant that, in November, CATRA successfully held our first ever virtual Annual General Meeting. It ran smoothly with record participation by Member representatives across the country.

CATRA's successful Harmonized Compliance Review (HCR) program continues to be a highly efficient means for accomplishing reviews of retailers that operate in multiple provinces and territories. This program provides significant benefits, reducing time and expense, for both retailers and CATRA Members. Normally conducted on site, this year's reviews were successfully completed remotely. We plan to continue this approach in 2021.

Our Life Cycle Assessment Project entered Phase 2 in the latter part of 2020 to further examine the environmental footprint of products derived from Canada's end-of-life tires. In 2021, we look forward to having an important peer review of this project to confirm the integrity of the results that members can then share with citizens of their respective jurisdictions.

This year CATRA began looking at the possibility of enhancing available industry data to help members better predict trends and evaluate aspects of their individual programs against other members. We recognize that notable influencing factors (provincial regulations and government priorities, population levels, economic environments, and geographical features) will need to be understood and accounted for.

Our Ontario Member, eTracks, successfully completed its first full year of operations as that province's industry settles into its new Individual Producer Responsibility (IPR) regulatory framework. We are pleased that our Manitoba Member is continuing through 2021 as the Host Province with Brett Eckstein as CATRA Chair.

In 2021, we look forward to proceeding with plans to collaborate on matters of common interest with the Tire and Rubber Association of Canada (TRAC) Endof-Life Tire Committee. Communicating Canada's leadership in scrap tire recycling will continue in 2021 with new opportunities being pursued to reach new audiences. Later in 2021, we will commence a review of CATRA's current Strategic Plan to ensure CATRA continues to strategically focus on priorities that deliver greatest value to its members.

I'm excited by the opportunities that lie ahead for CATRA to grow the value and awareness of what can be accomplished through responsible and innovative tire recycling programs that protect our environment and bolster our economy.



COMMITTEE MEMBERS

MANAGEMENT COMMITTEE

Brett Eckstein, MB - Chair Jeff MacCallum, NS Caroline McAuley, AB Stéphane Devernal, QC

DATA & REPORTING COMMITTEE

Rosemary Sutton, BC - Chair Lee Heidecker, AB Mike Solkoski, MB Brad Colin, SK

COMMUNICATIONS COMMITTEE

Brett Eckstein, MB - Chair Jamie Seamans, NB Elizabeth Gray, AB Jayme Galloway, MB Shri Parthasarathy, ON