

2023



# TreeCycle Canada

IMPACT REPORT

[treecycle.eco](https://treecycle.eco)

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# Message from Treecycle CEO, Ben Patton

Have you ever considered what happens to all the wood waste when trees die, or get cut down during demolitions? We pondered the same question, and that's how Treecycle Canada came to be. The idea was born while working with wood in the heart of North Vancouver's old growth forests. Having witnessed firsthand the immense amount of wood waste generated by removals and demolition projects, we decided to take action. Treecycle collects and recycles wood waste, believing that every piece of wood holds value and deserves a chance for reuse in our communities. Since launch, we have recycled over 50 tonnes of wood waste, and repurposed 35 tonnes in projects across BC, Canada. Through our efforts, we reduce carbon emissions by producing wood products from recycled waste, contributing to the built environment. We are also committed to the UN Global Sustainable Development Goals (SDGs) by promoting change and development.

We are proud to present our inaugural Impact Report for 2023, a significant milestone for our company. This report symbolizes our dedication to all the stakeholders who contribute to our success, including our devoted team of employees, our customers, and the communities we serve. It also showcases how we are evolving as a company and industry, propelling ourselves forward through both major and minor actions. We are committed to creating environmental solutions through circular economy principles, disrupting conventional domestic channels of wood waste, and striving to make the world a better place.

We encourage you to join us on our journey to an ever-brighter future for our organization and those we serve.

Ben Patton  
President/Founder, TreeCycle Canada



**Ben Patton**  
Treecycle Canada,  
Founder/President

# Mission, Vision & Values

We aim to revolutionize the recycling of wood waste, thereby transforming our perception of resources and how society engages with them.

Our values serve as a compass, influencing our behaviours, shaping our business approach, and ultimately guiding our decision-making process.



## VISION

Our vision is to lead the way in transforming wood waste and creating a world where every piece of wood is valued and nothing goes to waste.



## MISSION

Through our innovative recycling and repurposing processes, circular economy principles, and commitment to conserve natural resources, we strive to build a more sustainable planet for generations to come.

## OUR VALUES

- **Innovation** - We explore new solutions that enhance wood waste recycling efficiency, optimize material utilization, and minimize environmental impact. We seek approaches to drive the circular economy forward.
- **Collaboration** - We actively collaborate with industry partners, customers, and communities to promote the adoption of sustainable practices and raise awareness about the benefits of wood waste recycling.
- **Environmental Sustainability** – By implementing sustainable practices, reducing carbon footprint, and advocating for responsible waste management, we strive to create positive change in our sector.
- **Integrity** – We act with integrity and strive to do the right thing, putting people and the planet first. We maintain the highest ethical standards and transparency in all our dealings with all stakeholders.



# The Wood Waste Problem

Wood waste is the single largest material in Canadian landfills by volume. Most of it can be repurposed.



## Material Waste

More than 90% of urban trees removed during construction are disposed in landfills or burned [1].



## Recycling Opportunity

Approximately 75% of materials from conventional demolition can be recycled [2].



## Recycling Failure

Only 0.3% of recycled wood waste in Vancouver is actually reused [3].

Burning or landfilling wood is highly wasteful and environmentally damaging. Wood burning produces more pollution than alternative heating methods, emitting 2.5 times more carbon than natural gas and 30% more carbon than coal. The assumption that burning wood is carbon-neutral is flawed, as it takes managed forests 40-100 years to store the same amount of carbon as natural forests. Tree plantations, often harvested within 20 years, cannot sequester as much carbon. Wood waste also contributes significantly to Canadian landfills, resulting in lost potential revenue in the millions.

[1] Ben Patton, 2023

[2] Corrine Fulton in [Maple Ridge-Pitt Meadows News](#)

[3] Adam Corneil in [Vancouver Economic](#)

# TreeCycle Solutions

Our solutions actively contribute to the circular economy by reducing waste, promoting resource efficiency, and embracing sustainable practices throughout our operations. The following services play an integral role in mitigating the wood waste problem:



## Wood Waste Audits

Our popular Wood Waste Audits service optimizes wood usage, minimizes waste, and supports Zero Waste goals. We evaluate the entire material life cycle, considering energy usage, materials, and waste generation. Collaborating with arborists, contractors, and construction companies, we coordinate TreeCycling to divert wood waste to the circular bioeconomy. Our industry partnerships meet recycling needs for trees, vegetation, and construction wood waste, ensuring timely and budget-friendly completion by certified professionals.

## Recycled Wood Products

We offer Primary Wood Products, including dimensional lumber sourced from wood waste in various sectors. Our range includes custom raw wood materials for interior and exterior design purposes, such as timbers, logs, and live edge slabs. Our naturally treated wood meets industry standards and certification for building codes, providing an alternative to ground contact or pressure treated wood. By reducing the use of treated products, we contribute to a zero waste future, preventing contamination of waterways and ecosystem.

## Tree Relocation Services

In circular design, we prioritize reducing tree cutting through tree transplanting. This process involves health assessment, planning, pruning, digging, lifting, replanting, and post-transplant care. By preserving mature trees during construction or development, we maintain their higher carbon storage capacity compared to younger trees. Mature trees can store hundreds to thousands of kilograms of carbon, aiding carbon sequestration and climate change mitigation. Relocated trees offer immediate greening, shade, improved air quality, wildlife habitat, and contribute to biodiversity and environmental sustainability.

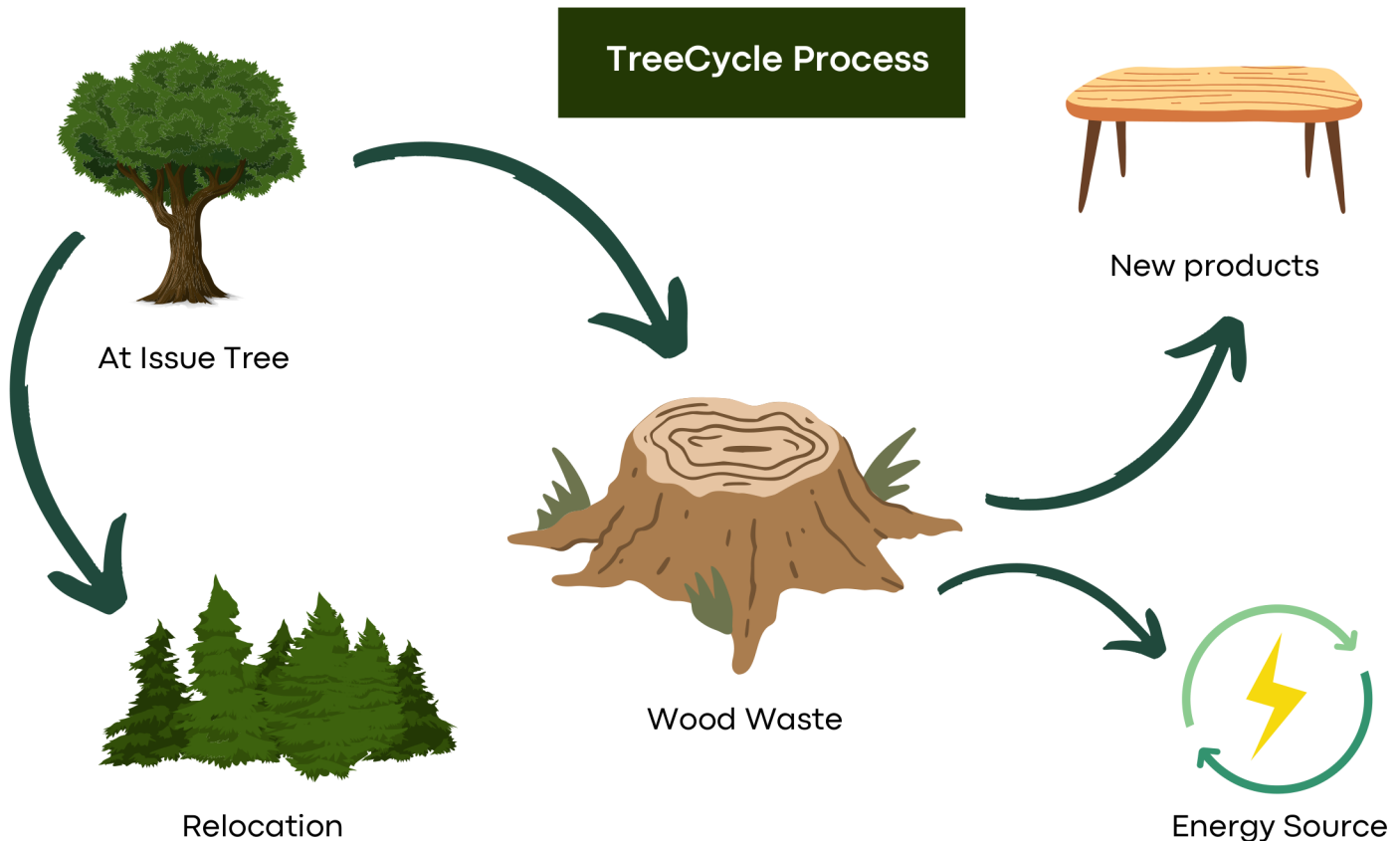
# Making Wood Waste Circular

Urban tree waste can be put into a sustainable and circular model that optimizes urban resource management and environmental impact mitigation. Sending wood waste to the landfill should be avoided at all costs as it generates green house gas emissions that contribute to climate change. In addition, leaked nutrients cause eutrophication that is toxic to environments.

In the US, more than 45 million dry tonnes of urban tree waste is generated every year[1]. In Canada, a 2013 report estimated that 1.75 million metric tons of unrecovered wood is wasted annually [2].

## Our Products

- 1 Lumber
- 2 Compost
- 3 Chips
- 4 Live Edge Wood
- 5 Biochar



[1] OneEarth

[2] The Canadian Wood Recycling Industry.



# Impact at a glance

As tree recyclers, we strive to achieve a positive environmental impact by minimizing wood waste and carbon emissions through recycling and reuse practices. Our tree recycling efforts make a big impact on our local communities. The following numbers demonstrate the impact we've made in diverting wood waste from landfills in just 1 year.

72

Trees salvaged

122.5

Raw Log Cubic Meters

51,912.5

Board Feet Processed

13

Logs to Commercial Market

8

Logs to Hobby Market

51

Logs Processed In-House

8

Trees Relocated



# Contribution to the Sustainable Development Goals

The UN Sustainable Development Goals ('SDGs') are an integral part of our approach to business. We are focused on four SDGs, including SDG 13, given the importance of addressing climate change and the impact tree salvage can have on the environment.



## SDG #9: Industry, Innovation and Infrastructure

**Target: 9.1 - Develop quality, reliable, sustainable and resilient infrastructure.** By integrating sustainable practices and adopting a circular business system, TreeCycle ensures both environmental and economic sustainability.



## SDG #11: Sustainable Cities and Communities

**Target: 11.6 - Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management.** Embracing tree recycling and salvage techniques actively contributes to the development of sustainable cities and communities, fostering environmental stewardship and resource efficiency.



## SDG #12: Responsible Consumption and Production

**Target: 12.5 - Substantially reduce waste generation through prevention, reduction, recycling, and reuse.** Tree recycling and salvage practices play a crucial role in promoting responsible consumption and production, minimizing waste and maximizing the utilization of valuable resources



## SDG #13: Climate Action

**Target: 13.3 - Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.** By implementing tree recycling and salvage methods, we can harness their positive impact on mitigating climate change, through carbon sequestration and reducing greenhouse gas emissions.

# Our Clients, Partners and Community

We are passionate about promoting circularity and nature conservation in our communities. Treecycle engages with local municipalities to promote wood recycling and advocates for regulations to improve municipal waste management protocols. Stronger laws to ensure circularity will reduce landfill volume and taxpayer costs as well as overall greenhouse gas emissions. Our stakeholders are entities we work with, our team, clients and communities in which we operate. Take a look below to see what impact we have on each stakeholder group.



Real Estate  
Developers

We help preserve the nature to the extent possible, advise on best practices and assist with urban wood removal.



Municipalities

We assist municipalities in removing tree debris and advocate for better wood waste management practices.



Private  
Landowners

We help home owners find the best solution that preserves their landscape and local wildlife that relies on trees. Our tree removal solutions give a peace of mind that trees won't be sent to the landfill, but instead will be upcycled into valuable products. Some of our clients buy back their trees in the form of lumber or live edge wood.



Sawmills

TreeCycle provides low grade tree material to sawmills for pellet and chips production. This work keeps sawmills and jobs in operation.



Industry  
Partners

We collaborate with trades, First Nations, demolition, and construction teams to provide support across all phases of tree management. Our partnerships with First Nations provide additional revenue streams for those communities.



Wildlife

Trees provide a home to many species. Treecycle conducts bird nesting surveys and works to protect wildlife habitats located on and around trees.

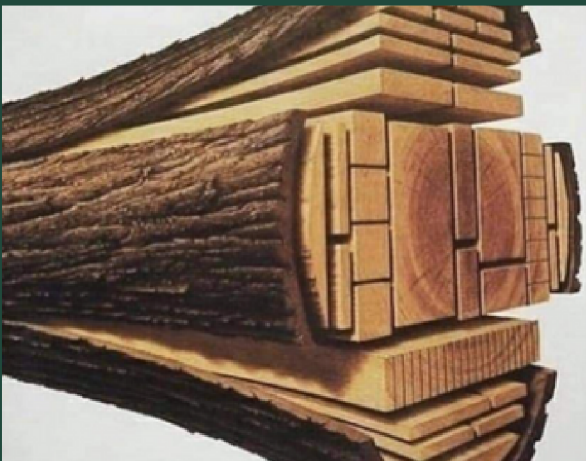
# Project Spotlight

## Burnaby General Hospital Pilot Program

TreeCycle was retained to assist with site preparation for development expansion. The area had been clear cut and 5 bins were filled with logged Fig and Maple tree waste. We were able to recover 1 of the bins representing:

**20% of tree debris**

The logs were cut and made into boards and live edge artisinal material.



# Project Spotlight

## AJIA Canadian Buildings Systems

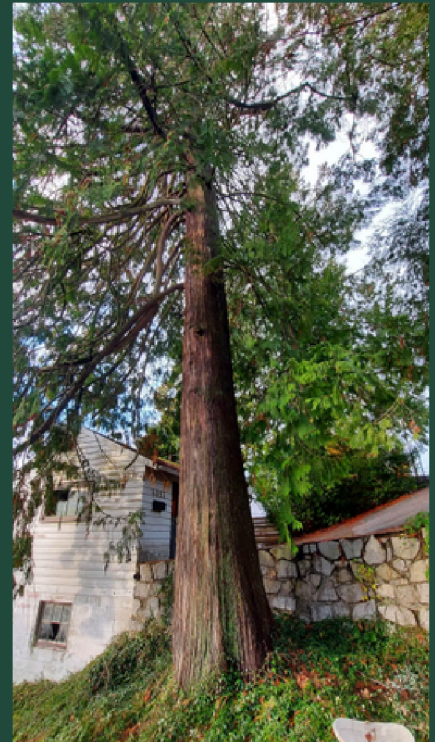
TreeCycle collaborated with our First Nations partners to provide project management, consultation and services for three hazardous cedar trees. Together, we successfully salvaged and recovered:

**2500 board feet of Cedar**  
approx. value of \$1,600.00 [1]

Several large logs and stumps were also reclaimed and provided to a local craftsman.

TreeCycle also delivered:

- Arborist Report
- Nesting Bird Survey
- Tree Risk Assessment



[1] market value of \$344 USD per thousand board feet as at June 16, 2023 converted to CAD at the rate of 1.32

# Project Spotlight

## Lynn Valley Bike Lane Expansion

TreeCycle assisted the District of North Vancouver in its bike lane expansion project. Most of the recovered logs were used in residential construction.

### 11 Douglas Fir logs

retrieved from the logged site representing:

### 8,000 board feet

approx. value of \$5,115 [1]



[1] market value of \$344 USD per thousand board feet as at June 16, 2023 converted to CAD at the rate of 1.32

# TreeCycle Supports Canadian Committments

In line with its commitments under the **Paris Agreement**, Canada aims to achieve a 40-50% reduction in carbon emissions by 2030 (compared to 2005 levels). To ensure accountability, the **Canadian Net-Zero Emissions Accountability Act** encourages participation from all sectors in meeting this collective objective. TreeCycle actively supports these initiatives by providing solutions that help reduce carbon emissions. Treecycle also supports the vital role nature plays in addressing climate change, as recognized in the federal **Nature Climate Solutions Fund**, which focuses on conserving and restoring natural habitats.

British Columbia's **Clean BC Roadmap** sets ambitious provincial goals for achieving net-zero emissions by 2030. To accomplish this, it has been recognized that achieving net-zero requires offsetting greenhouse gas (GHG) emissions through equivalent reductions from the atmosphere. Trees serve as nature's most effective and cost-free mechanism to do this.

The economic potential of **mass timber** has been identified as a key driver for British Columbia, as it can generate up to seven times the economic value compared to milling logs while significantly reducing GHG emissions in construction. TreeCycle is well-positioned to partner with the province by supplying mass timber derived from salvaged wood.

The **Indigenous Forest Bioeconomy Program** recognizes the importance of upcycling wood waste into valuable new products. TreeCycle extends the same business model to the urban environment.

Although the **Forests for Tomorrow** program successfully plants millions of seedlings annually in designated areas for forest restoration, research conducted in the Rocky Mountains reveals the challenges faced by seedlings in fire-scorched regions. Preserving thriving trees becomes crucial for meeting Vancouver's **Greenest City** aspirations and helping to mitigate plantation difficulties elsewhere.

## FEDERAL

[Canadian Net-Zero Emissions Accountability Act](#)

[Paris Agreement 2015](#)

[2 Billion Trees](#)

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## PROVINCIAL

[CleanBC Roadmap to 2030](#)

[BC Mass Timber Action Plan](#)

[Indigenous Forest Bioeconomy Program](#)

[Vancouver Greenest City Action Plan](#)

# Looking Ahead

We have numerous projects in development that work together in our circular business model.

1

## Eco-Heating

TreeCycle is currently in the research and development phase of designing an eco-heater specifically for homes. Our aim is to create a cost-effective heating system for Canadian families by harnessing the power of low grade wood debris, which would otherwise be discarded in landfills.

2

## Naturally Treated Wood

TreeCycle is developing a special type of lumber for outdoor construction and interior design.

3

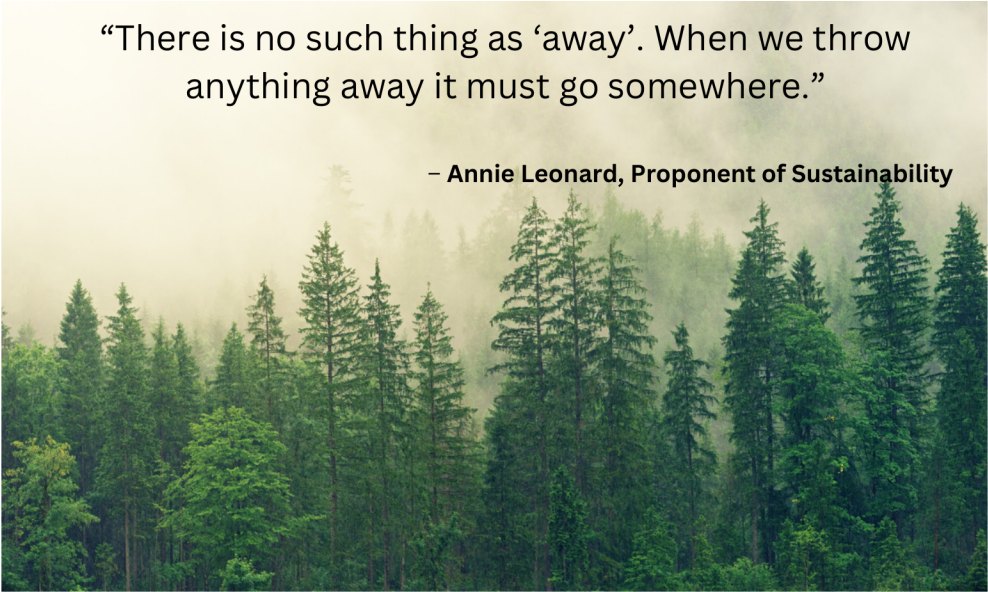
## Advocacy

We are actively pushing for the implementation of City by-laws that require upcycling of tree waste. Any materials that can be repurposed should never be thrown in landfills. Our goal is to ensure that our governing laws support a circular economy.

4

## Expansion

TreeCycle currently serves the Vancouver Lower Mainland. We plan to expand our services nationwide in the near future.



“There is no such thing as ‘away’. When we throw anything away it must go somewhere.”


– Annie Leonard, Proponent of Sustainability

For inquiries,  
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