toronto zoo

2025 Sustainability Report

Advancing the TZNet0 Environmental Sustainability Plan

Protecting Wildlife. Reducing Our Footprint. Leading by Example.

Executive Summary

Adam Huston, Director of Guest Operations, showcasing the reusable cup from the Zoo's Friendlier program, launched in 2025 in partnership with Friendlier and Coca-Cola to support circular waste reduction under the TZNet0 Environmental Sustainability Plan.

In 2025, Toronto Zoo advanced the implementation of the TZNet0 Environmental Sustainability Plan, strengthening the systems, infrastructure, and partnerships required to achieve its long-term environmental targets. The year represents a transition from early-stage pilots and planning toward a more integrated, operational sustainability framework that connects climate action, resource stewardship, biodiversity protection, and community engagement across the organization.

This report presents progress across both on-site operational sustainability initiatives and broader conservation, community, and partnership-driven impacts delivered locally, regionally, and globally. Together, these efforts reflect the Zoo's role as both a sustainable campus and a conservation leader beyond its physical boundaries.

The Zoo continues to work toward its core environmental commitments: achieving net-zero Scope 1 and Scope 2 greenhouse gas emissions, net-zero potable water consumption, and net-zero waste to landfill by 2030, while restoring 200 acres of habitat and expanding community participation in conservation action.

Several key milestones in 2025 reflect progress toward these objectives.

The Zoo initiated its first Scope 3 greenhouse gas emissions inventory, establishing 2024 as the baseline year for indirect emissions across its value chain. This work strengthens the Zoo's climate strategy and supports alignment with Canada's Net-Zero Challenge by improving visibility into emissions associated with procurement, supply chains, and operational partnerships.

Progress also continued across operational sustainability initiatives. The Zoo advanced its Net-Zero Transition Plan through capital planning and procurement processes for major decarbonization infrastructure. Electric vehicle charging infrastructure was installed to support fleet electrification, while energy retrofit work progressed in key facilities, including the Africa and Indo-Malaya Pavilions.

Waste and circularity efforts delivered measurable outcomes. Landfill diversion reached approximately 87%, supported by expanded reuse systems and material recovery programs. The Friendlier reusable packaging initiative, implemented in partnership with Friendlier, Coca-Cola, and Levy Restaurants, enabled more than 28,000 food service containers to be reused, reducing reliance on single-use materials.

Water stewardship initiatives also showed meaningful progress. Floating wetlands expanded to approximately 5% coverage of targeted waterways, supporting measurable improvements in water quality and aquatic habitat. Net potable water use declined by approximately 24%, reflecting the combined impact of conservation measures and water recovery initiatives.

Community engagement remained a central component of the Zoo's sustainability approach. Volunteers, corporate partners, and community members contributed thousands of hours to conservation and climate resilience activities, while youth engagement and applied learning programs continued to support the development of future environmental leaders.

In 2025, Toronto Zoo was also recognized as one of Canada's Greenest Employers for the sixth consecutive year, reflecting continued leadership in environmental performance, employee engagement, and sustainability integration across operations.

Collectively, these initiatives demonstrate how Toronto Zoo is strengthening its role as both a conservation institution and a leader in environmental sustainability. As foundational systems continue to mature, the Zoo is increasingly positioned to translate strategic planning into measurable environmental outcomes.

2025 Year in Review

As we reflect on 2025, we are proud of our achievements. We have worked hard to reduce our environmental footprint, drive improvements throughout our operations, and to engage our local community towards a climate resilient community.

28K+

Containers re-used through the expansion of the Friendlier reusable packaging program with partners Coca-Cola and Levy Restaurants, reducing single-use food service packaging.

Recognized as one of Canada's Greenest Employers for the sixth consecutive year, reflecting continued leadership in environmental performance, employee engagement, and sustainability integration across operations.

Delivered community sustainability programs and events, including participation in Toronto Climate Week and local Earth Day celebrations.

Implemented centralized sustainability dashboards and digital reporting tools to improve transparency and decision-making.

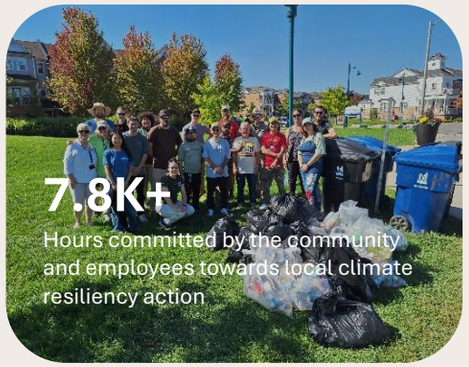
Continued youth engagement and applied learning programs supporting future environmental leadership.

5%

Waterway surface coverage achieved through floating wetland improving water quality

Expanded digital monitoring of energy and water systems to support real-time performance tracking, operational optimization, and reporting.

Installed electric vehicle charging infrastructure, enabling future electrification of the Zoo's operational fleet.



7.8K+

Hours committed by the community and employees towards local climate resiliency action

21%

Decrease in greenhouse gas emission since 2022.

Launched the Zoo's first Scope 3 greenhouse gas inventory study, establishing 2024 as the baseline year for indirect emissions accounting across the Zoo's value chain

345K+

Single-use water bottles avoided in 2025.

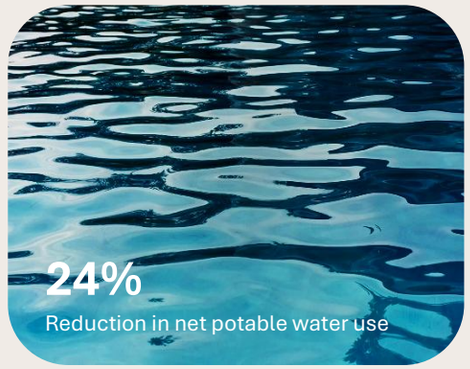
4.7K+

Acres of land protected or restored through on-site and global biodiversity initiatives

87%

Landfill diversion rate, up from 79% in 2024 and 58% in 2022.

Advanced the Net-Zero Transition Plan, including capital funding approvals and procurement planning for major decarbonization infrastructure.



24%

Reduction in net potable water use

Goals Summary

Achieved | Making Progress | Did Not Meet

Goal	2022 Progress	2023 Progress	2024 Progress	2025 Progress	Status
Carbon and Energy					
Reach net-zero Scope 1 and 2 carbon emissions across operations by 2030	Initiated a Net Zero Transition Feasibility Study	Concluded the Net Zero Transition Feasibility Study	Joined Canada's Net-Zero Challenge	Secured Capital Funding Initiated RFP Process	
Establish a robust Scope 3 emissions baseline				Initiated Scope 3 Emissions Inventory, established 2024 as base year.	
Waste and Circularity					
Reach net-zero waste to landfill across operations by 2030	279.8 MT diverted from landfill 58.8% diversion rate	116.8 MT diverted from landfill 35.1% diversion rate	677.9 MT diverted from landfill 79.5% diversion rate	745.3 MT diverted from landfill 70.5% diversion rate	
Reduce waste generation at the source	Friendlier Pilot Program Opening of the Plastics Pathway in partnership with Pollution Probe and GreenMantra	Expanded Friendlier Program across operations		Expanded Friendlier in collaboration with Coca Cola	
Integrate circular economy principles into operations		Conducted a Circular Economy Audit	Achieved Circular Economy Certification	Initiated development of the 10-year Circular Economy Road Map	
Water					
Reach net-zero potable water consumption by 2030 Water Use Intensity (Litres) per Visitor	Baseline: 175.6 L/Visitor	166.8 L/Visitor	158.7 L/Visitor	160.8 L/Visitor	
Water Use Intensity (m^3) per m^2 Building Area	Baseline: 5.1 m^3/m^2	5.4 m^3/m^2	5.2 m^3/m^2	4.87 m^3/m^2	
Improve stormwater management using green infrastructure and habitat-based approaches	2% floating wetland coverage on stormwater ponds	3% coverage	4% coverage	5% coverage	

Goal	2022 Progress	2023 Progress	2024 Progress	2025 Progress	Status
Biodiversity					
Restore 200 acres of land by 2030	Goal set in 2022	11% progress towards meetings its restoration target	12% progress towards target	12% progress towards target	
Community Impact					
Engage staff, volunteers, youth, and the community in sustainability and conservation action	500+ volunteer hours committed to conservation action 49 CALL Program participants	550+ volunteer hours committed to conservation action 6 CALL Interns 40 CALL participants	1,816+ volunteer hours committed to conservation action 10 CALL Interns	1,950+ volunteer hours committed to conservation action	
Leverage partnerships to extend the Zoo's environmental impact	Canada's first Mini-Forest (RCGS & Dougan & Assoc.) Plastics Pathway (Pollution Probe & GreenMantra)	Joined the Green Will Initiative SARIT Micromobility Research Partnership (York Uni. & Elvy Inc.) AI Bin Sensor Pilot Project (TELUS) Friendlier Reuse Program (Levy)	Celebrated a carbon-neutral 50th year (Bullfrog Power) Circular Economy Certification (Coca Cola) Coca Cola Sustainability Zone and Dasani Rest Zone	Expansion of Friendlier Program (Friendlier, Coca Cola, & Levy) Rain Barrel Art Auction (Coca Cola, local high schools) Fleet EV Charging Stations (City of Toronto) Smart Commute Program	
Support community climate resiliency programs	Trap the Trash Art Challenge	Scarborough Store Front Community Garden		Hosted events for Toronto Climate Week Downsview Earth Day Port Union Earth Day Spring Bird Festival Biidaasige Park Grand Opening Malvern Community Garden	

How Sustainability Works at the Toronto Zoo

Integrating Conservation, Operations, and Community

Toronto Zoo integrates conservation, education, research, and visitor experience within a living campus dedicated to protecting wildlife and advancing environmental sustainability.

Through the TZNet0 Environmental Sustainability Plan, the Zoo is embedding sustainability across all aspects of its operations, supporting climate action, biodiversity protection, circular resource management, and community engagement.

Sustainability Performance Areas

Toronto Zoo reports progress across interconnected sustainability themes aligned with the TZNet0 Environmental Sustainability Plan and the Guardians of Wild Strategic Plan.

- 🌍 Carbon & Energy
- ♻️ Waste & Circularity
- 💧 Water
- 🌱 Biodiversity & Habitat Stewardship
- 📦 Sustainable Procurement
- 👥 Staff Engagement & Leadership
- 🛡️ Responsible Governance & Reporting
- 🐾 Visitor Sustainability Education
- 🤝 Community Impact & Partnerships

Carbon and Energy

Our Framework

Toronto Zoo is advancing a systems-based approach to decarbonization that integrates climate action into infrastructure planning, operational decision-making, and environmental governance across the organization. Through the TZNet0 Environmental Sustainability Plan, the Zoo has established a clear pathway to achieve net-zero Scope 1 and Scope 2 greenhouse gas emissions by 2030, while building the capacity to address indirect emissions over time.

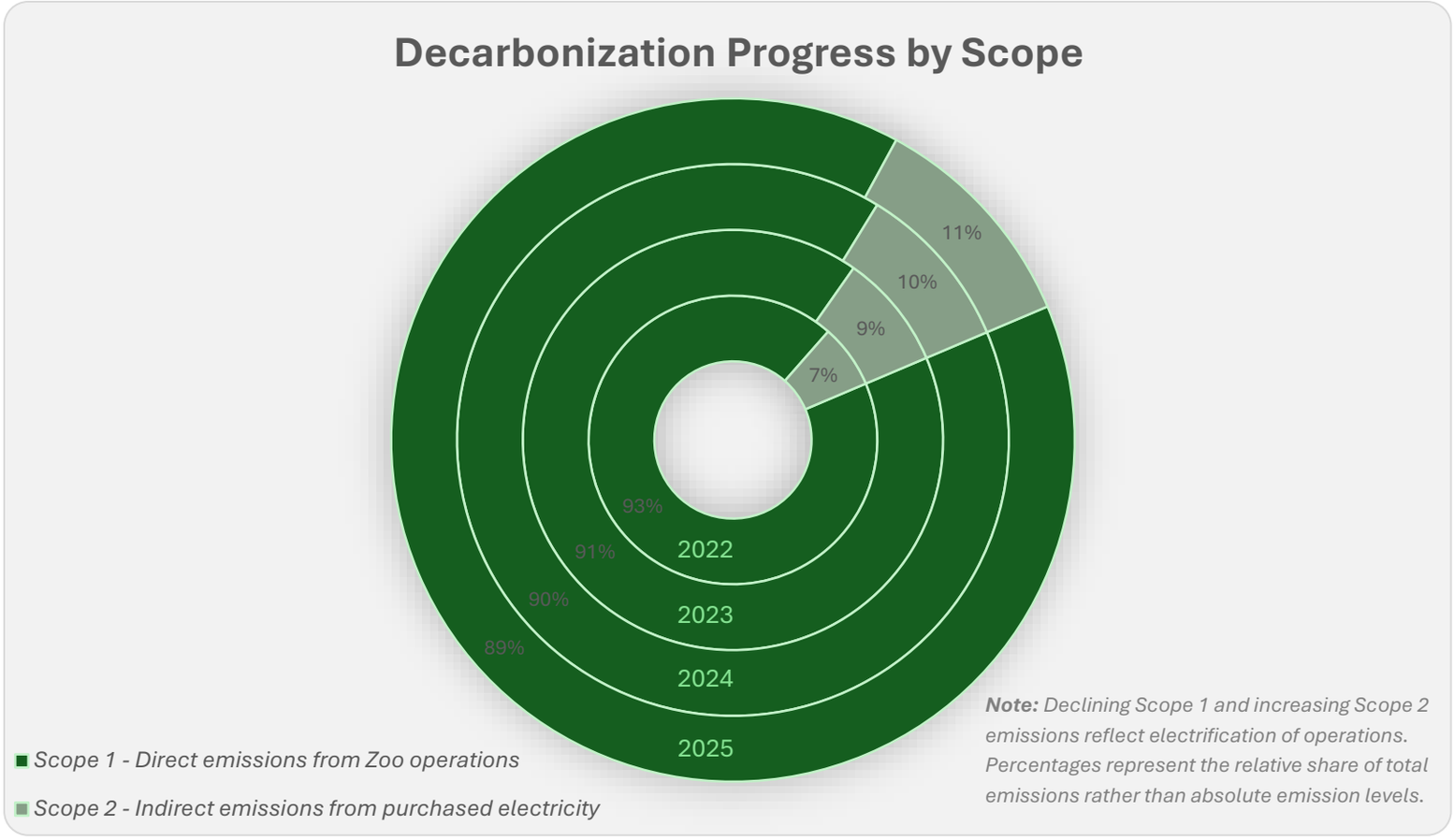
As a complex zoological campus with energy-intensive facilities, specialized animal care systems, and evolving operational demands, decarbonization requires coordinated planning across multiple systems. Progress depends not only on individual projects, but on aligning infrastructure investment, data systems, operational practices, and governance frameworks.

The Zoo recognizes that implementation will occur over multiple years and may not follow a linear trajectory. Infrastructure constraints, capital planning cycles, regulatory requirements, and the need to maintain high standards of animal care all influence the pace of change. Within this context, the focus remains on establishing the conditions necessary to support sustained emissions reductions.

2025 Progress

In 2025, carbon and energy efforts focused on advancing the infrastructure, data systems, and planning frameworks required to support long-term decarbonization.

Energy use and emissions increased in 2025 across electricity, natural gas, and fleet fuel categories. This reflects short-term operational variability driven primarily by extreme seasonal temperature conditions, which increased heating and cooling demands across the campus. This variability is also reflected in energy use intensity metrics, which increased in 2025 as a result of both climatic conditions and transitional changes in energy systems.



While this represents a temporary deviation from prior trends, it does not reflect a structural shift in performance. The Zoo remains on a long-term decarbonization pathway, with investments in electrification, infrastructure modernization, and energy efficiency expected to drive sustained reductions in emissions and energy intensity over time.

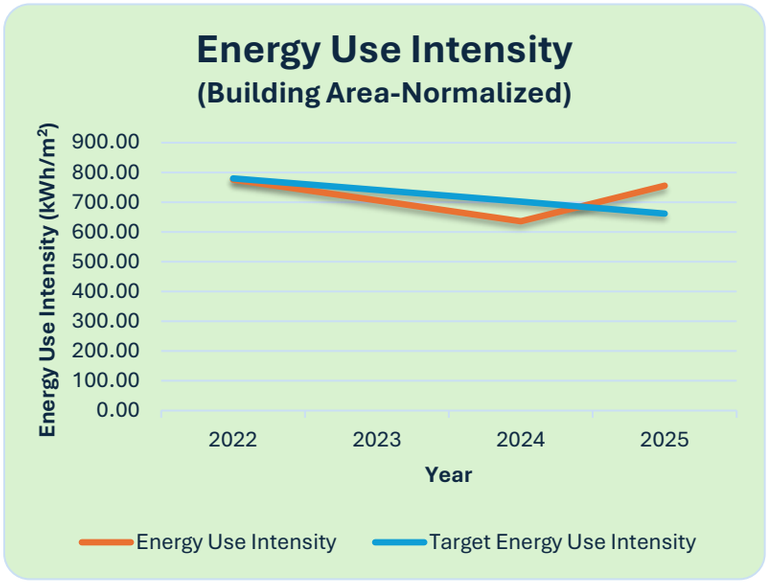
The increase in energy use intensity should be interpreted within the context of the Zoo's decarbonization transition. As systems shift from fossil fuel-based heating toward electrified alternatives, overall energy consumption, particularly electricity, can increase in the short term due to commissioning, system optimization, and differences in energy conversion. This is an expected characteristic of electrification, where higher energy use does not necessarily correspond to higher emissions. This transition is reflected in the Zoo's emissions profile, where reductions in Scope 1 emissions are expected to coincide with increases in Scope 2 electricity use as part of the long-term decarbonization pathway. As electrified systems are optimized and integrated with improved monitoring and controls, energy intensity is expected to stabilize and improve over time.

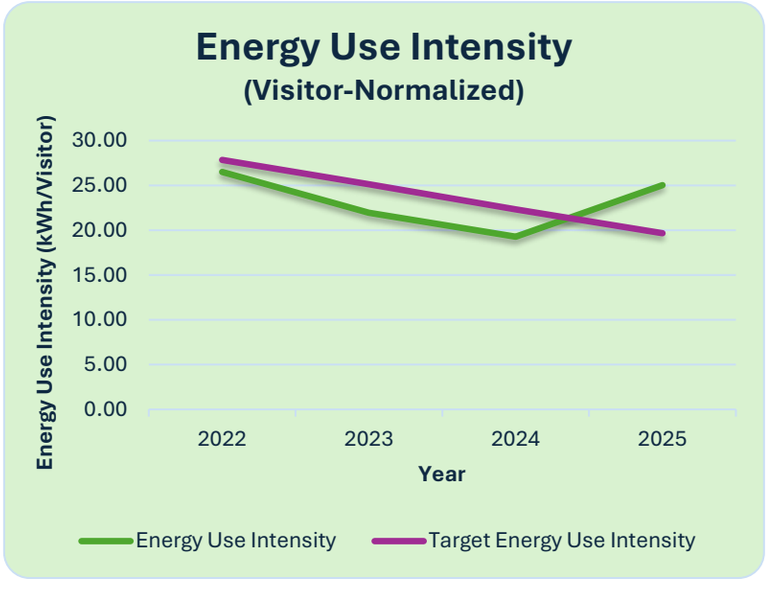
Key initiatives included:

- advancing the Net-Zero Transition Plan and associated capital planning
- installing electric vehicle charging infrastructure to support fleet electrification

- progressing the Energy Retrofit Project in major facilities
- expanding digital energy monitoring systems
- initiating the Zoo's first Scope 3 emissions inventory

These actions reflect a shift toward implementation readiness, enabling future emissions reductions at scale.





Fleet Electrification

A key milestone during the year was progress on fleet electrification. The Zoo advanced the installation of electric vehicle charging infrastructure to support the future conversion of operational vehicles from internal combustion engines to electric alternatives. This work was undertaken through collaborative planning and implementation between Toronto Zoo and the City of Toronto Fleet Services division, ensuring that infrastructure design, installation standards, and long-term fleet requirements were aligned with broader municipal fleet electrification practices.

Transportation contributes to the Zoo's direct emissions profile, but fleet electrification also requires long lead-time infrastructure planning, electrical capacity upgrades, and integration with broader facility systems. By investing in charging infrastructure and the early procurement of electric vehicles, the Zoo is establishing the operational platform required to reduce Scope 1 emissions associated with on-site transportation over time. These actions also align with broader City of Toronto decarbonization priorities and reinforce the Zoo's role as a municipally connected institution contributing to citywide climate goals.

Energy Infrastructure Modernization

An important component of the Zoo's decarbonization framework is the continued implementation of the Energy Retrofit Project, which targets major building systems for efficiency improvements and emissions reductions across the campus.

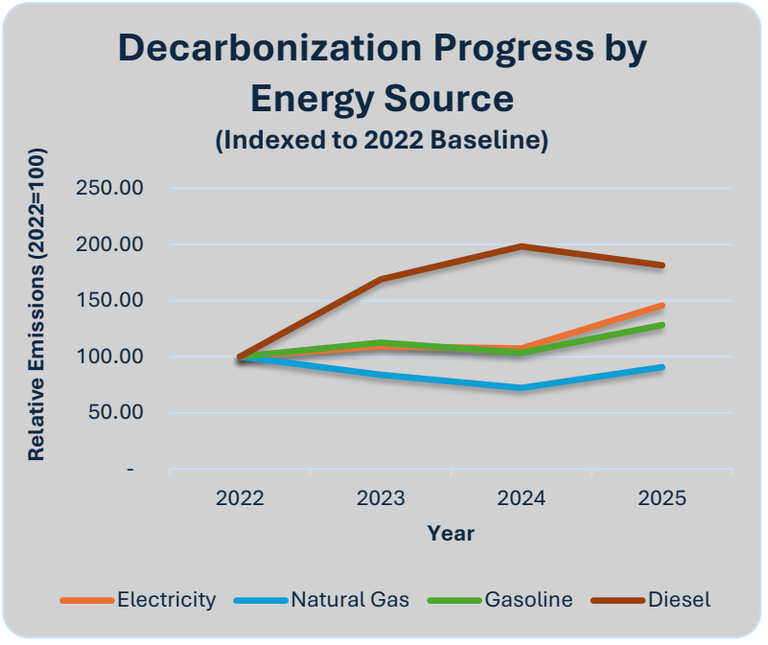
During 2025, progress continued on heating system replacements within the Africa and Indo-Malaya Pavilions, two of the Zoo's largest and most energy-intensive indoor facilities. These upgrades are designed to improve system efficiency, strengthen reliability for critical animal care environments, and position these buildings for future integration with lower-carbon energy sources.

Modernizing legacy heating infrastructure in these complex pavilions represents an important step in addressing one of the Zoo's most significant sources of operational energy demand while strengthening the long-term resilience of key conservation facilities.

Embedding Sustainability in Capital Projects

As the Zoo advances major capital projects, sustainability considerations are increasingly integrated into design, procurement, and construction processes. This includes prioritizing electrification-ready systems, high-efficiency mechanical designs, improved building envelopes, and alignment with applicable standards such as the Toronto Green Standard.

Major projects, including upcoming campus developments, are being evaluated not only for operational performance but also for long-term emissions impacts, resilience, and compatibility with the Zoo's net-zero objectives. This approach ensures that capital investments made today support long-term environmental performance and avoid future retrofit requirements.



Developing the Scope 3 Baseline

A major advancement in 2025 was the initiation of the Zoo's Scope 3 greenhouse gas emissions inventory, with 2024 established as the baseline year for indirect emissions accounting. This work represents an important step in maturing the Zoo's climate strategy and advancing its commitment to Canada's Net-Zero Challenge, which calls on organizations to measure, manage, and reduce emissions across their full value chain.

While Scope 1 and Scope 2 emissions relate to the Zoo's direct fuel use and purchased energy, Scope 3 emissions capture the broader value-chain impacts associated with the organization's activities. These may include purchased goods and services, capital projects, waste management, transportation and distribution, food service supply chains, commuting, and other upstream and downstream activities.

The Zoo's Scope 3 work is currently in the baseline development phase. This stage involves gathering activity data, identifying the most material emissions categories, building internal data structures, and establishing methodologies needed for repeatable annual reporting.

By establishing a robust baseline now, the Zoo is creating the evidence base required to identify priority emissions sources and design practical reduction strategies in future years.

Over time, the Scope 3 baseline will support several important next steps:

- identifying the Zoo's most material indirect emissions sources
- informing reduction priorities across procurement and operations
- supporting more transparent and complete climate reporting
- strengthening alignment with recognized greenhouse gas accounting practices and national initiatives such as the Net-Zero Challenge
- providing the foundation for future target setting beyond Scope 1 and Scope 2

This work reflects a broader shift in how the Zoo approaches climate leadership. Decarbonization is no longer framed solely as a facility or utilities issue; it is increasingly treated as an organization-wide transformation challenge that touches infrastructure, purchasing, logistics, partnerships, and institutional culture.

Strategic Direction

The Zoo's decarbonization approach is guided by four priorities:

- improving operational efficiency through monitoring and optimization
- deploying low-carbon technologies across fleet and infrastructure
- strengthening governance and accountability mechanisms
- building systems required for long-term implementation

Many actions undertaken in 2025 are enabling measures that will support more significant emissions reductions in future years.

Community Conservation Centre
Building for Net Zero and Conservation Excellence

The Community Conservation Centre represents a key investment in the Toronto Zoo's transition to net-zero operations and campus revitalization. Designed as a net-zero building, it integrates high-efficiency systems, low-carbon design, and advanced digital monitoring to support optimized environmental performance, aligned with the TZNet0 Plan.

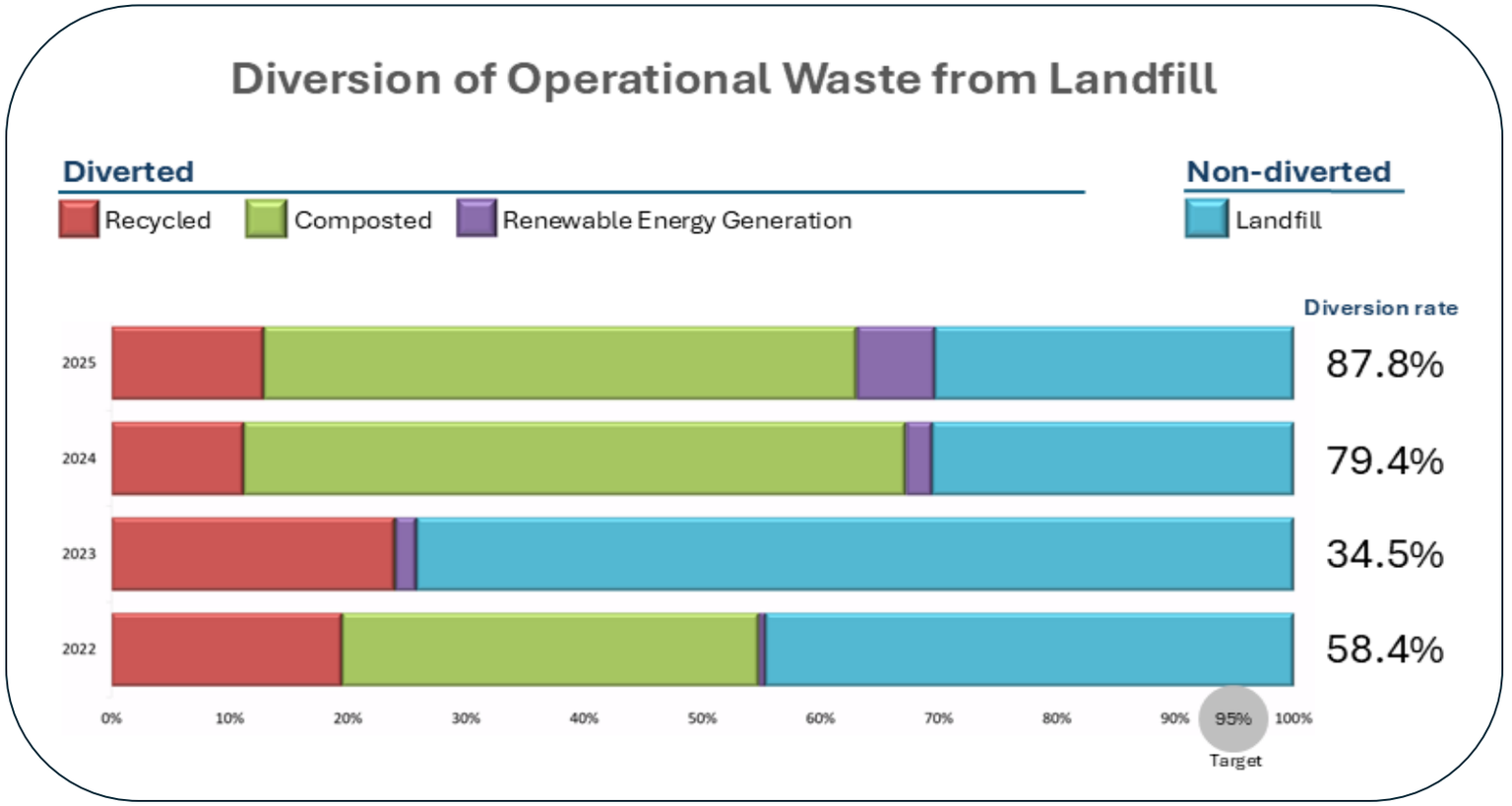
Beyond its sustainability features, the Centre serves as a collaborative hub for conservation science, education, and community engagement. By strengthening partnerships with academic and conservation organizations, it supports the Zoo's vision of becoming a centre of excellence while demonstrating how capital projects can advance climate goals and expand conservation impact.

Waste and Circular Economy

Our Framework

Toronto Zoo is transitioning toward a circular economy approach that prioritizes waste prevention, material reuse, and resource recovery. Through the TZNet0 Environmental Sustainability Plan, the Zoo has committed to achieving net-zero waste to landfill by 2030 while aligning with broader circular economy principles.

This approach recognizes that waste is not solely an operational outcome, but a function of how materials are designed, procured, used, and managed. As a result, the Zoo is shifting focus upstream—reducing material consumption, avoiding single-use products, and implementing systems that keep materials in circulation for longer.



2025 Progress

In 2025, waste management efforts at the Zoo increasingly reflected this transition from diversion toward circularity. Rather than focusing solely on downstream waste management, the organization continued to develop the operational systems, partnerships, and educational tools needed to support a more circular model across the campus.

Key initiatives included:

- expansion of reusable packaging systems through the Friendlier program
- continued development of organic waste processing initiatives
- reduction of plastic and paper through digitization and material avoidance
- strengthening electronic waste and phone collection programs
- integrating circular economy thinking into sustainability planning and operational decisions

These actions reflect a move from managing waste to redesigning systems that reduce waste generation.

Diversion Performance and Operational Progress

The Zoo made strong progress on landfill diversion in 2025. Diversion rate is calculated as the proportion of total waste directed to recycling and composting streams, as well as to energy recovery facilities such as the Durham York Energy Centre. More than 745 tonnes of material were diverted from landfill, corresponding to a diversion rate of 87.8% according to the current dashboard presentation. This represents the highest diversion performance shown in the current reporting period and reflects meaningful improvement over prior years.

The accompanying waste chart demonstrates a particularly significant increase in the composted share of the waste stream, suggesting that organics management is becoming a more important component of overall diversion performance. This is a positive development because organic waste diversion not only reduces landfill burden but also helps address methane-generating waste streams that are particularly relevant from a greenhouse gas perspective.

At the same time, the Zoo recognizes that diversion rate alone does not fully capture circular performance. High diversion is important, but it remains only one part of a broader transition. A circular waste system must also reduce the total amount of material entering the system, increase reuse, improve source separation, and reduce contamination. For this reason, 2025 should be understood as both a strong diversion year and a year of continued systems development.

Preventing Waste at the Source

A central part of the Zoo's circularity strategy is reducing waste generation before materials enter the waste stream at all.

In 2025, one of the clearest examples of this approach was the transition toward digital systems that eliminate physical materials, including the move to digital membership cards as

the default option. Approximately 85% of members (~31,000 households) have converted to digital cards, significantly reducing reliance on plastic card production and preventing an estimated 131.75 kg of plastic waste. This initiative reflects both an internal operational improvement and a broader behaviour shift among members toward lower-waste practices.

Staff-led digitization efforts also supported source reduction through:

- 100% digital evaluations
- digital files and electronic documentation
- 100% QR-based event processes
- electronic forms and workflows, including file sharing for team project development
- reduced printing requirements

While individually modest, these initiatives collectively represent an operational shift from recurring material use to lower-waste digital systems, reducing both waste generation and associated upstream emissions over time.

The Zoo is also increasingly treating waste prevention as a design and procurement issue, focusing on sourcing, reducing single-use materials, and adopting durable or reusable alternatives.

Reuse and Circular Systems

A major circular economy milestone in 2025 was the continued expansion of the Friendlier reusable packaging program, delivered in partnership with Friendlier, Coca-Cola, and Levy Restaurants.

This initiative replaces single-use food service packaging with reusable containers and cups that are collected, washed, and returned to circulation, creating a closed-loop service model within Zoo operations.

The program is significant for several reasons:

- it reduces reliance on disposable packaging in a high-traffic visitor environment
- it demonstrates that reuse systems can function within public-facing operations
- it provides a visible example of circularity in practice for visitors

Beyond operational benefits, the program also helps shift organizational thinking, from managing waste after it is created to designing systems that reduce the need for disposables altogether.

Other circular initiatives in 2025 included the Lomi on-site organic waste processing pilot, which enabled organic materials from staff lunchrooms to be processed on-site and converted into soil amendments for horticultural use. This pilot demonstrated how waste streams can be reconceived as valuable resources within campus operations.

Managing End-of-Life Materials More Responsibly

Where waste cannot be prevented or reused, the Zoo continues to strengthen end-of-life management through improved diversion and recovery systems. In 2025, the PhoneApes Program remained a key example of linking waste diversion with conservation outcomes by supporting responsible recycling of mobile phones and raising awareness of the impacts of mineral extraction on great ape habitats.

In total, 1,677 phones were collected, along with approximately 1.9 tonnes of electronic waste, diverting hard-to-manage materials from landfill while supporting resource recovery.

These initiatives provide both operational and educational value, demonstrating how responsible disposal and material stewardship are directly connected to the Zoo's conservation mission and helping to influence behaviour among visitors and staff.

Circular Economy Planning

In 2025, the Zoo used internal audits, assessments, and strategic discussions to begin shaping a longer-term circular waste strategy. This work is important because circularity requires an overarching framework that connects waste operations, procurement, visitor systems, food service, education, and facilities management.

The development of a longer-term circular economy approach allows the Zoo to move from a collection of strong individual initiatives toward a more coherent campus-wide strategy. Over time, this strategy can help guide decisions such as:

- where reusable systems can be expanded
- how procurement practices can support lower-waste outcomes
- which waste streams should be prioritized for redesign or reduction
- how visitor-facing sustainability infrastructure can be made more visible
- how progress should be measured beyond basic diversion metrics.

Education and Public Awareness

The Zoo's waste and circularity initiatives also serve an important educational and behavioural role. Programs such as the Plastics Pathway, delivered in partnership with Pollution Probe and GreenMantra, bring sustainability issues into the visitor experience, translating concepts like plastic waste, circularity, and responsible consumption into tangible learning opportunities.

In a zoo environment, sustainability communication connects directly to wildlife protection, habitat conservation, and consumer behaviour. Waste education is therefore not only about operational stewardship but also part of the Zoo's broader conservation mission.

By making waste systems more visible, the Zoo reinforces a key principle of circularity: materials do not disappear after use, and institutions share responsibility for managing them in ways that reduce harm and preserve value.

Water Management

Our Framework

Toronto Zoo is working to strengthen water stewardship across its campus by improving water efficiency, expanding nature-based recovery systems, and building the infrastructure needed to achieve its TZNet0 target of net-zero potable water consumption by 2030. As a large zoological campus with specialized animal care systems, public facilities, landscaped grounds, and water-dependent habitats, the Zoo recognizes that responsible water management must balance conservation performance with operational reliability, animal welfare, visitor needs, and climate resilience.

Water management at the Zoo is increasingly guided by three complementary strategies:

- Reduce potable water demand through monitoring, operational efficiency, and targeted conservation measures
- Recover and offset water impacts through green infrastructure, habitat-based systems, and alternative supply approaches
- Strengthen resilience by improving visibility into consumption trends and building systems that can perform under changing climatic conditions

In 2025, water performance reflected both short-term operational variability and continued progress in structural conservation measures While total water use fluctuated due to operational and climatic factors, the overall trend remains positive. Net potable water use declined as a result of increased contributions from water recovery, replenishment, and nature-based infrastructure systems, indicating that the Zoo's water strategy is beginning to deliver measurable results as these initiatives scale.

This distinction is important: while overall water demand may vary year to year, the Zoo's growing ability to offset potable water use through recovery systems represents meaningful progress toward its net-zero water objective.

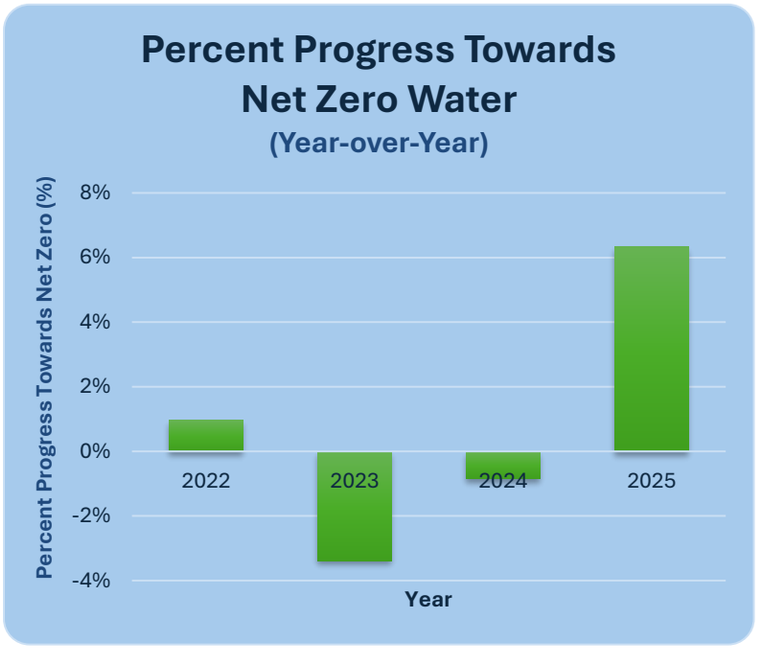
2025 Progress

In 2025, the Zoo continued shifting from a water management model focused on consumption tracking toward a more integrated approach combining monitoring, conservation, recovery, and ecological infrastructure.

Key actions during the year included:

- expanding digital utilities monitoring systems to improve visibility into water use patterns
- strengthening normalized performance tracking relative to attendance and building area
- increasing the contribution of water recovery and replenishment initiatives to the Zoo's water balance
- scaling the floating wetlands program as a form of nature-based water treatment and habitat enhancement
- integrating water stewardship more directly into broader climate resilience and sustainability planning

Together, these efforts indicate that the Zoo's water strategy is evolving from monitoring and pilot efforts toward a more measurable and strategic management framework.



Reducing Potable Water Demand

A core focus is reducing reliance on municipal potable water through improved visibility and operational control. Expanded digital monitoring enables more precise tracking across facilities, supporting forecasting, anomaly detection, and faster identification of inefficiencies.

This is particularly important in a complex campus environment where water use varies with weather, attendance, and operations. Integrating monitoring into sustainability tracking supports more proactive management and informed decision-making.

The Zoo uses normalized performance metrics to assess efficiency over time. In 2025:

- visitor-normalized water use measured approximately 187 litres per visitor

- building area-normalized water intensity measured approximately 5.67 m^3 per m^2

These indicators help distinguish efficiency from changes in activity levels. While visitor-normalized intensity increased slightly, this reflects short-term variability rather than a decline in overall performance.

Recovery, Replenishment, and Nature-Based Water Management

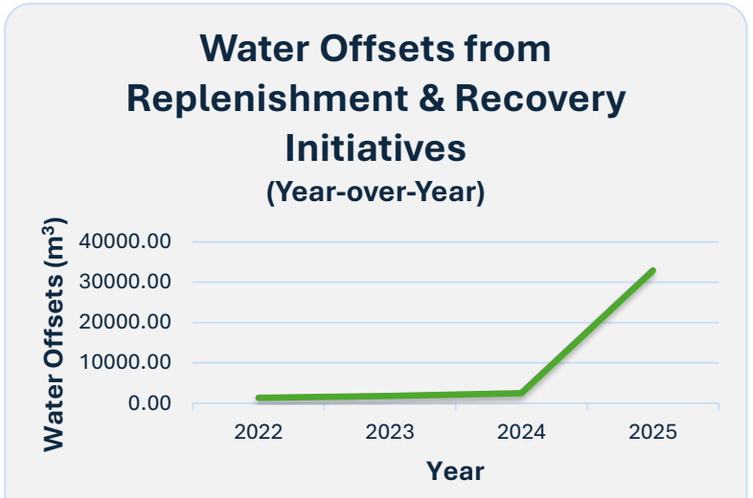
One of the most important developments in 2025 was the growing contribution of water recovery and replenishment initiatives to the Zoo's overall water balance. The dashboard shows a substantial increase in water offsets from replenishment and recovery initiatives in 2025. This contributed directly to the decline in net potable water use, which fell to its lowest point in the current reporting period.

This is a significant shift. It suggests that the Zoo is moving beyond a water strategy focused only on reducing withdrawals and toward one that also includes recovering value through ecological and infrastructure-based systems. In other words, the Zoo is not only working to use less water, but also to improve how water is retained, treated, and returned through site-based interventions.

A central part of this strategy is the Zoo's floating wetlands program. By 2025, floating wetland coverage had expanded to approximately 5% of targeted waterways, up substantially from earlier years. These wetlands function as nature-based water treatment systems that support water quality improvement through root filtration, microbial activity, and nutrient uptake. They also contribute to aquatic habitat enhancement, shoreline stabilization, and improved ecosystem resilience.

The importance of these systems goes beyond water treatment alone. Floating wetlands represent a form of green infrastructure that helps the Zoo manage stormwater, improve water quality, and support biodiversity simultaneously. They embody the integrated approach that underpins the TZNet0 Plan: using nature-based solutions to address climate, water, and ecological objectives together.

The dashboard's cumulative conservation impact graphic reinforces this story. The sharp increase in cumulative impact by 2025 suggests that earlier investments in green infrastructure and site-based recovery systems are beginning to generate more visible and scalable outcomes. This is particularly encouraging from a long-term planning perspective, because it shows that water stewardship efforts are evolving from incremental measures into a more strategic and measurable program.



Performance Relative to the Net-Zero Water Target

Performance is best understood in relation to the 2030 net-zero potable water target. In 2025:

- net potable water use declined
- water recovery and replenishment offsets increased significantly
- cumulative conservation impact accelerated, and
- the trendline for net potable water use moved downward.

This suggests that the Zoo's water management program is maturing. Short-term variability remains, but the structural direction is increasingly positive. This is an important distinction for Board and public reporting: the Zoo is not simply reacting to annual changes in water demand but is building the systems required to influence long-term outcomes.

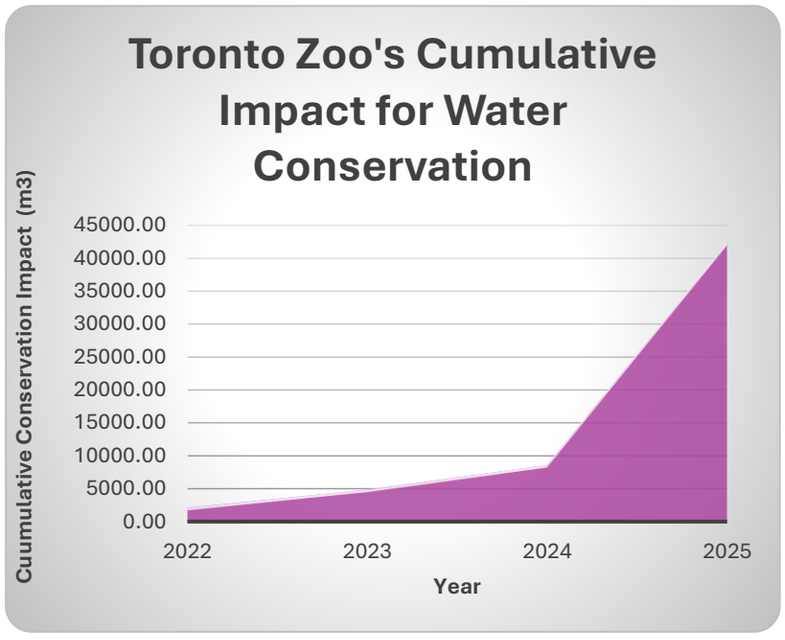
The building area-normalized chart also suggests that overall facility-related water performance remains relatively stable, even as total annual withdrawals fluctuate. This stability is useful because it indicates that shifts in performance are more likely linked to operations, climate, and recovery dynamics than to expansion of the physical campus footprint.

Climate Variability and Resilience

The Zoo's water strategy is designed to respond to climate variability. Changing precipitation patterns affect both water demand and system performance, requiring a flexible approach.

Green infrastructure and monitoring systems support this adaptability. In wetter conditions, systems manage stormwater and protect water quality; in drier conditions, efficiency and recovery become more critical.

By combining monitoring, normalized metrics, recovery initiatives, and ecological infrastructure, the Zoo is building a resilient water management framework capable of responding to both current needs and future climate uncertainty.



Sustainable Procurement

Our Framework

Responsible supply chain management is a critical next step in the Toronto Zoo's journey toward net-zero operations. As the Zoo advances from managing direct operational impacts toward addressing emissions and sustainability performance across its broader value chain, supply chain visibility, supplier engagement, and procurement alignment are becoming increasingly important components of the TZNet0 Environmental Sustainability Plan.

The Zoo's operations depend on a diverse network of suppliers, contractors, service providers, and partners that support animal care, food services, facility operations, capital projects, waste management, transportation, landscaping, and visitor services. As a result, a significant share of the Zoo's environmental footprint sits beyond direct on-site fuel and electricity use and is embedded in the goods, services, materials, and logistical systems that support daily operations. This is why responsible supply chain management is not simply a procurement issue, it is an environmental, operational, and strategic issue central to long-term sustainability performance.

In 2025, responsible supply chain is being evaluated as part of the Zoo's ongoing Scope 3 greenhouse gas inventory exercise, which is establishing 2024 as the baseline year for indirect emissions accounting. This work represents an important milestone in the evolution of the Zoo's sustainability strategy. It signals a transition from focusing primarily on direct emissions and on-site performance toward understanding the full lifecycle impacts associated with the Zoo's activities and purchasing decisions.

Building the Scope 3 Foundation

The current Scope 3 inventory exercise is the first step in building a more structured and data-informed understanding of the Zoo's value chain emissions. Scope 3 emissions are typically more complex to assess than direct emissions because they arise from activities that are often outside the organization's immediate control, including the production and transport of purchased goods, contracted services, waste processing, business travel, food systems, and capital works.

For the Zoo, this means that responsible supply chain work is currently focused on:

- identifying the categories of goods and services that are likely to represent the most material indirect emissions sources
- gathering and organizing purchasing and activity data to support emissions estimation
- improving visibility into supplier-related impacts
- establishing the methodologies and internal processes needed for repeatable future reporting

This baseline development phase is an essential precursor to more advanced supply chain action. Before the Zoo can set priorities for supplier engagement, sustainable procurement criteria, or value chain reduction strategies, it must first understand where the most significant environmental impacts lie. The Scope 3 inventory therefore provides the evidence base needed to shift supply chain sustainability from a broad principle into a targeted operational program.

Why Responsible Supply Chain Matters

The importance of responsible supply chain management extends well beyond carbon accounting. Supply chain choices influence:

- greenhouse gas emissions
- waste generation and material circularity
- water impacts
- biodiversity pressures
- embodied carbon in construction and infrastructure
- packaging use
- and the ability of the Zoo to scale lower-impact alternatives over time

For example, the emissions and material impacts associated with purchased food, building materials, packaging, waste services, and operational equipment can be substantial, even if they do not appear directly in the Zoo's on-site utility bills. Similarly, the environmental benefits of many future initiatives, such as reuse systems, electrification projects, lower-waste food service models, or circular procurement, will depend on supplier collaboration and availability of lower-impact goods and services.

In this context, responsible supply chain management should be understood as a practical tool for extending the Zoo's environmental influence beyond its immediate campus footprint. It creates a pathway for aligning purchasing and partnership decisions with long-term sustainability goals and for encouraging more sustainable practices across the systems that support Zoo operations.

Sustainable Procurement and Supplier Standards

In addition to the development of the Scope 3 baseline, the Zoo is already incorporating elements of responsible sourcing into specific areas of procurement where environmental impacts are well understood and recognized standards exist. These initiatives demonstrate how procurement decisions can support both conservation outcomes and broader sustainability objectives.

One example is the Zoo's continued participation in the Ocean Wise seafood program, which helps ensure that aquatic products purchased and served on site are sourced from fisheries and aquaculture operations that meet recognized sustainability criteria. By continuing to procure Ocean Wise–approved seafood products, the Zoo supports responsible fisheries management, protects marine ecosystems, and reinforces the connection between sustainable food systems and wildlife conservation.

The Zoo also maintains its commitment to responsible sourcing for commodities such as palm oil, which has been

widely associated with deforestation and habitat loss in tropical regions. The Zoo continues to operate as a Sustainable Palm Oil facility, maintaining procurement practices that prioritize products aligned with recognized sustainable palm oil standards. This commitment helps reduce the risk of supply chains linked to deforestation while supporting global efforts to protect critical wildlife habitats.

Reducing plastic waste through procurement and operational decisions is another important focus area. The Zoo continues to implement its plastics reduction commitment, which emphasizes reducing reliance on single-use plastics, identifying reusable alternatives where feasible, and maximizing recycling of plastics that remain in circulation. As part of this commitment, the Zoo continues to complete annual plastics audits, helping ensure that progress is measured and that reduction opportunities are identified across operations and supplier relationships.

While these initiatives currently apply to specific procurement categories, they demonstrate how sustainability considerations can already be integrated into purchasing decisions in ways that support both environmental protection and the Zoo's conservation mission. Over time, the Zoo expects to expand this approach by identifying additional product categories where responsible sourcing standards can be applied and by strengthening expectations for suppliers operating across the Zoo's value chain.

Current Direction

Although responsible supply chain remains in the development stage, the Zoo is already laying the groundwork for future action. The Scope 3 inventory process is helping identify where the Zoo has the greatest opportunity to influence indirect emissions and broader environmental performance through procurement and supplier relationships.

This work is likely to inform future priorities such as:

- integrating sustainability considerations into purchasing and tender processes
- improving data requests and reporting expectations for major vendors
- identifying higher-impact suppliers or categories for targeted engagement
- incorporating circular economy principles into product and service selection
- and aligning procurement practices with lower-carbon and lower-waste alternatives where feasible

As this work evolves, the Zoo will be better positioned to connect responsible supply chain management with its broader goals on climate, waste, water, and biodiversity. This is particularly relevant in areas such as food service, capital projects, packaging, organics processing, logistics, and operational materials, where supplier decisions can materially affect outcomes.

Relationship to Circular Economy and Net-Zero Planning

Responsible supply chain is also closely linked to the Zoo's developing circular economy approach. Waste prevention, reusable systems, lower-packaging procurement, sustainable materials selection, and recovery-focused service models all depend on how products and services are sourced. In this sense, responsible supply chain serves as a bridge between the Zoo's Scope 3 carbon work and its circular waste economy road map.

Similarly, as the Zoo advances its Net-Zero Transition Plan, responsible supply chain will become increasingly important in identifying lower-carbon materials, services, and technologies that support infrastructure decarbonization. This includes the potential to incorporate environmental criteria into major projects and to strengthen supplier expectations over time.

Biodiversity and Habitat Stewardship

Our Framework

Protecting wildlife and supporting biodiversity are core elements of the Toronto Zoo's mission. The Zoo's environmental sustainability work recognizes the strong interconnection between climate action, ecosystem health, and conservation outcomes. Through the TZNet0 Environmental Sustainability Plan, biodiversity protection is integrated into broader sustainability initiatives, ensuring that climate mitigation, water stewardship, and land management efforts contribute to ecological resilience.

As a large zoological campus with naturalized areas, waterways, and conservation lands, the Zoo functions not only as a place of animal care and education, but also as an active site of ecological restoration and habitat enhancement. Biodiversity initiatives therefore focus on improving ecosystem health through restoration, invasive species management, native planting, and the integration of nature-based infrastructure.

These efforts align with regional conservation priorities and support broader objectives related to climate adaptation, water quality, and urban biodiversity.

2025 Progress

In 2025, biodiversity initiatives continued to expand across the Zoo campus through habitat restoration, ecological infrastructure, and community-supported conservation activities.

Key actions during the year included:

- expansion of floating wetland habitat systems to support water quality and aquatic habitat
- continued invasive species removal and restoration through volunteer and community programs
- native tree and plant installations through mini forest and landscape restoration initiatives
- integration of nature-based infrastructure into water management systems
- strengthening partnerships with conservation organizations and community volunteers

Together, these initiatives contributed to improved ecological conditions across the Zoo's natural systems while reinforcing connections between environmental management and conservation outcomes.

Habitat Restoration and Nature-Based Infrastructure

Building on the Zoo's broader water management strategy, floating wetlands continue to play an important role in supporting both water quality and aquatic habitat. By 2025, these systems achieved approximately 5% surface coverage of targeted waterways, reaching the threshold identified to support measurable ecological benefits.

In addition to their role in water treatment, these systems contribute to:

- aquatic habitat creation
- shoreline stabilization
- nutrient removal and filtration
- increased ecological complexity within managed systems

Beyond floating wetlands, habitat restoration efforts included ongoing invasive species management and the re-establishment of native vegetation across priority areas of the campus. These actions support long-term ecosystem health while enhancing biodiversity within the Zoo's landscape.

Community-Supported Restoration

Biodiversity initiatives at the Zoo are strengthened through collaboration with volunteers and partner organizations. Through programs such as the Conservation Action Team, community members contributed to invasive species removal, habitat restoration, and shoreline clean-up activities.

These efforts provide both ecological and social value, supporting restoration outcomes while building public awareness and participation in biodiversity stewardship.

Education and Public Awareness

Biodiversity initiatives also serve an important educational role by demonstrating conservation in action. Restoration projects and ecological infrastructure provide opportunities for visitors to understand how ecosystems function and how targeted interventions can support recovery.

Progress Toward the 2030 Habitat Restoration Target

Collectively, these initiatives contribute to the Zoo's goal of restoring 200 acres of habitat by 2030. While progress is cumulative and often incremental, continued expansion of restoration activities and nature-based infrastructure indicates positive momentum toward this target.

Beyond on-site outcomes, these efforts support broader conservation objectives by improving ecosystem function, enhancing climate resilience, and reinforcing the Zoo's role as a contributor to biodiversity protection at both local and regional scales.

Community Impact and Partnership

Our Framework

Community engagement plays a critical role in advancing Toronto Zoo's environmental sustainability objectives by extending impact beyond the campus through collaboration with partners, volunteers, and the broader public. The Zoo recognizes that challenges such as climate change, waste reduction, and biodiversity protection require collective action beyond institutional boundaries.

As a result, the Zoo's approach focuses on enabling participation, building awareness, and demonstrating practical sustainability solutions that can be adopted in everyday life. These efforts align with the Zoo's mission to inspire conservation action while supporting broader municipal and regional sustainability priorities.

2025 Progress

In 2025, the Zoo expanded community engagement through a range of sustainability initiatives, partnerships, and educational programming.

Key initiatives included:

- participation in Toronto Climate Week events
- expansion of corporate and community volunteer opportunities
- delivery of visitor-facing sustainability education and demonstrations
- collaboration with partners to implement circular economy and environmental initiatives

These efforts help translate sustainability concepts into tangible experiences, connecting environmental action with community participation.

Climate and Sustainability Engagement

The Zoo participated in the inaugural Toronto Climate Week, contributing to citywide climate awareness and resilience initiatives. Activities included:

- a climate-focused webinar series attended by 46 participants
- a shoreline clean-up event attended by 32 volunteers

These initiatives positioned the Zoo as an active contributor to local climate action while strengthening connections with the surrounding community.

Collaborative Partnerships

Partnerships continue to play a central role in extending the reach and impact of the Zoo's sustainability initiatives. Through collaboration with corporate, academic, and community partners, the Zoo is able to pilot new approaches, scale programs, and demonstrate practical sustainability solutions in a public-facing environment.

These partnerships support the implementation of circular systems, environmental education initiatives, and operational improvements, while reinforcing the Zoo's role as a convenor and collaborator in advancing sustainability.

Community Partnerships in Urban Greening

In 2025, the Zoo's horticulture team supported the Malvern Community Garden, contributing technical expertise in soil preparation, planting, and site development. This collaboration reflects the Zoo's broader commitment to supporting urban greening initiatives that enhance local food systems, strengthen community connections, and improve neighbourhood resilience.

By contributing expertise beyond its campus, the Zoo extends its environmental impact into the surrounding region and supports community-led sustainability efforts.

Education and Behaviour Change

Community engagement initiatives play an important role in connecting sustainability concepts to individual actions. Through interpretive programming and interactive experiences, visitors are encouraged to understand the environmental impacts of everyday behaviours and to participate in conservation-focused initiatives.

These efforts reinforce the connection between individual choices and broader environmental outcomes, supporting long-term behaviour change.

Youth Engagement and Future Environmental Leadership

Youth engagement remained a key focus in 2025. Through partnerships, internships, and experiential learning opportunities, the Zoo continued to introduce young people to sustainability, conservation, and environmental careers.

These programs provide meaningful educational experiences while helping to build environmental literacy and support the development of future leaders. By engaging youth in real-world sustainability initiatives, the Zoo reinforces its role in shaping the next generation of environmental stewards.

Digital Transformation

Our Framework

Digital transformation is becoming an increasingly important component of the Zoo's sustainability strategy. As environmental initiatives expand across energy, water, waste, and biodiversity, effective management requires reliable data, consistent monitoring, and improved visibility into operational performance.

The Zoo is therefore strengthening its Digital Environmental Management systems to support real-time monitoring, performance tracking, and evidence-based decision-making. By integrating digital tools into sustainability management, the Zoo can move from reactive reporting toward proactive performance optimization.

These systems also support transparency and accountability by enabling standardized environmental reporting aligned with recognized sustainability frameworks and municipal climate initiatives.

2025 Progress

In 2025, the Zoo continued expanding its digital environmental monitoring infrastructure.

Key developments included:

- expanded digital monitoring of energy and water consumption
- improved data collection systems for environmental metrics
- integration of sustainability data into internal reporting dashboards
- development of data structures required for Scope 3 emissions accounting

Together, these initiatives represent an important step toward a more data-driven sustainability management system.

From Manual Tracking to Integrated Data Systems

Historically, environmental reporting relied heavily on manual data entry and spreadsheet-based tracking. While effective in early stages, these methods become increasingly difficult as monitoring expands across multiple systems, facilities, and reporting frameworks.

The Zoo's shift to digitized environmental data systems reduces manual collection and improves the accuracy, consistency, and timeliness of reporting. Automated data capture from meters and monitoring platforms enables more efficient aggregation and analysis while reducing the risk of errors or data gaps.

Digitization also allows staff to redirect effort from routine data collection toward higher-value activities such as performance analysis, system optimization, and strategic planning. Rather than compiling data

Enabling Decarbonization and Resource Optimization

Digital monitoring plays a critical role in supporting decarbonization and resource efficiency. Understanding when and where resources are used enables targeted reductions and operational improvements.

Real-time data allows teams to evaluate building and system performance, verify efficiency gains, identify excessive consumption, and adjust systems to reduce waste. This capability is particularly important as the Zoo implements more complex initiatives such as electrification, renewable energy integration, advanced water reuse, and circular waste systems, all of which require continuous performance monitoring.

Digital systems also support scaling of sustainability initiatives by providing a reliable baseline to track improvements, assess pilot projects, and replicate successful solutions.

Supporting Carbon Accounting and Scope 3 Reporting

Digital transformation strengthens the Zoo's ability to measure and report greenhouse gas emissions in alignment with recognized frameworks. As Scope 3 inventory development progresses, the ability to organize and analyze data across operational and supply chain categories becomes increasingly important.

Digitized systems enable more consistent tracking of emissions-related data across energy, water, waste, and procurement activities, providing a stronger foundation for emissions calculations aligned with frameworks such as the GHG Protocol and ISO 14064.

These platforms also allow integration of environmental and operational data, helping identify relationships between resource use and emissions outcomes, which will be increasingly valuable as reporting requirements expand.

Strengthening Transparency and Accountability

Digitization enhances transparency and accountability by making environmental performance data more accessible and standardized. This supports clearer communication of progress to internal leadership, municipal partners, and the public.

Digital dashboards enable visualization of trends, benchmarking against targets, and tracking progress toward environmental goals. Over time, these systems can support more advanced approaches such as carbon budgeting, scenario modeling, and predictive analytics to guide future investments and operational strategies.

As the Zoo expands its use of digital systems, data platforms, and emerging technologies such as artificial intelligence, it also recognizes the associated increase in energy demand and potential emissions impacts. These considerations are being incorporated into the Zoo's evolving Scope 3 emissions framework, with a focus on monitoring, managing, and mitigating digital-related environmental impacts over time.

Looking Ahead: TZNet0 Road Map

Toronto Zoo is entering the next phase of the TZNet0 Environmental Sustainability Plan, shifting from foundational system-building toward scaled implementation and measurable outcomes. Achieving net-zero emissions, water, and waste targets by 2030 will require continued investment in infrastructure, data systems, operational integration, and strategic partnerships.

Strategic Priorities

Advancing Campus Decarbonization
Implementation of the Net-Zero Transition Plan will continue through electrification of fleet and equipment, modernization of building systems, and expansion of energy performance monitoring. Upgrades to major facilities will reduce reliance on fossil fuels while improving operational reliability.

Expanding Circular Economy Systems
The Zoo will build on strong diversion performance by expanding reusable and refillable systems, strengthening organics processing, and embedding circular principles into procurement and operations. Future efforts will focus on reducing waste at the source, improving material recovery, and scaling programs such as the Friendlier reuse system.

Scaling Water Stewardship and Green Infrastructure
Progress toward net-zero potable water will be supported through expanded recovery and replenishment initiatives, continued growth of green infrastructure such as floating wetlands, and enhanced monitoring systems to guide water efficiency and resilience under changing climate conditions.

Strengthening Responsible Supply Chain and Scope 3 Action
Completion of the Scope 3 baseline will enable targeted action across the Zoo's value chain. Priorities include integrating sustainability criteria into procurement, strengthening supplier engagement, and reducing emissions and environmental impacts associated with goods, services, and capital projects.

Advancing Data-Driven Environmental Management
Digital environmental management systems will continue to expand, improving real-time monitoring, reporting, and decision-making across energy, water, waste, and emissions. These systems will support performance optimization, carbon accounting, and more strategic capital planning.

Expanding Community Impact and Partnerships
The Zoo will continue to grow its role as a community sustainability leader by expanding volunteer programs, strengthening partnerships, and increasing opportunities for public participation in conservation and climate action initiatives.

From Foundations to Measurable Impact

The progress achieved in 2025 established the infrastructure, data systems, and governance frameworks required to support long-term transformation. As these systems mature, the Zoo is increasingly positioned to translate planning into measurable environmental outcomes.

By integrating sustainability into core operations and decision-making, Toronto Zoo is building a resilient, low-carbon, and circular campus, one that supports both environmental performance and its mission to protect wildlife and inspire conservation action.