Sustainable Operations Plan

2020–2030 | VERSION 2 (UPDATED IN 2022)

DALHOUSIE UNIVERSITY

Acknowledgements

Prepared by the Office of Sustainability with engagement from campus and community members. Between 2019 and 2022, additional focus groups, surveys, reporting frameworks, literature and plan reviews, and a new University Strategic Plan provided revised content for the plan.

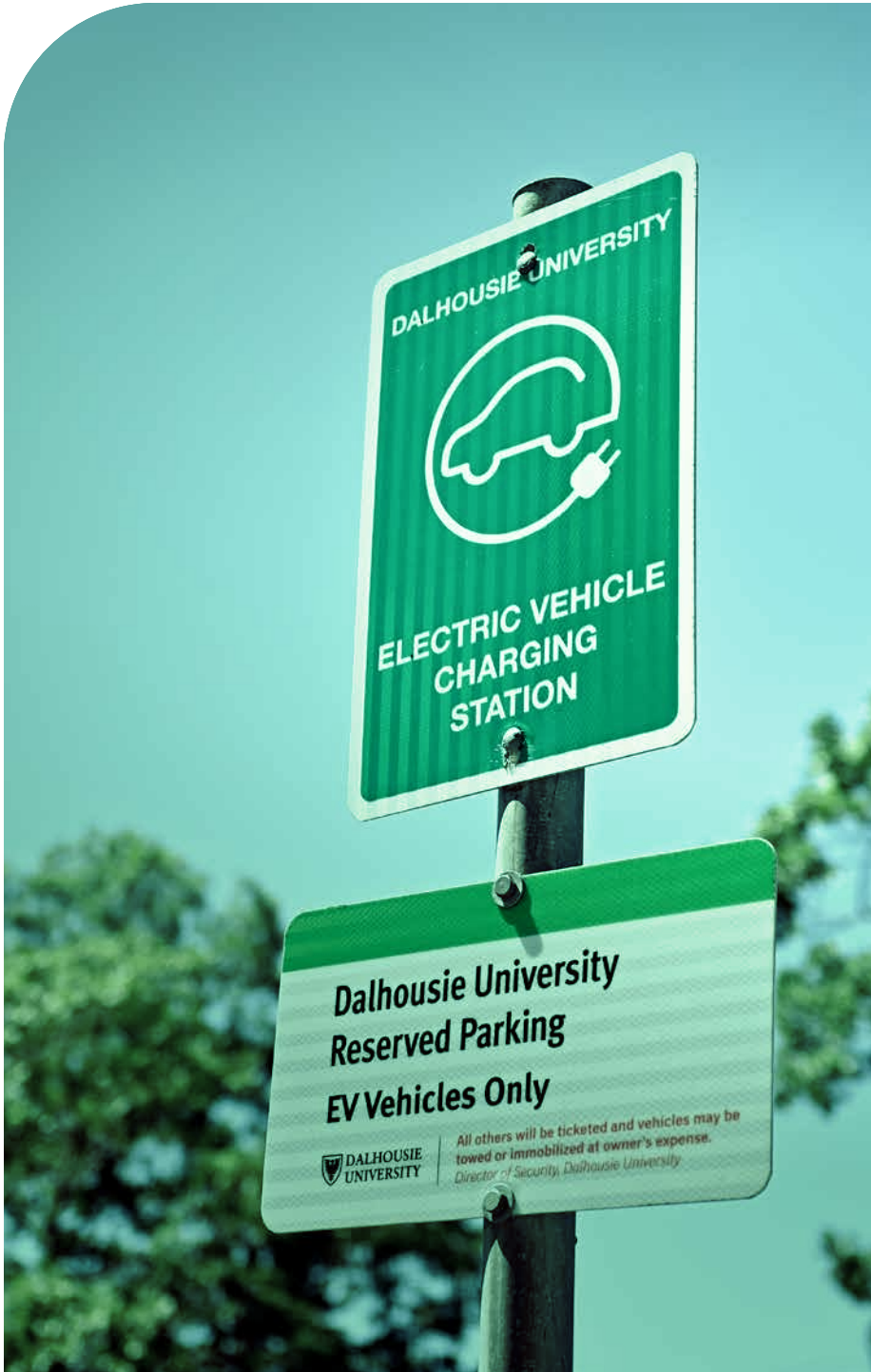
Land Acknowledgment

Dalhousie sits on the unceded territory of the Mi'kmaq people and recognizes the interconnectedness of all our relationships—to the environment and to each other—for generations to come.

We recognize that African Nova Scotians are a distinct people whose histories, legacies and contributions have enriched that part of Mi'kma'ki known as Nova Scotia for over 400 years.

Dalhousie recognizes and reports on the United Nations Sustainable Development Goals through reporting frameworks. This plan addresses Goal 3 Good Health and Well-Being, Goal 6 Clean Water and Sanitation, Goal 7 Affordable and Clean Energy, Goal 11 Sustainable Cities and Communities, Goal 12 Responsible Consumption and Production, Goal 13 Climate Action, Goal 14 Life Below Water, Goal 15 Life on Land, and connects to all of the other 9 goals.

Table of Contents

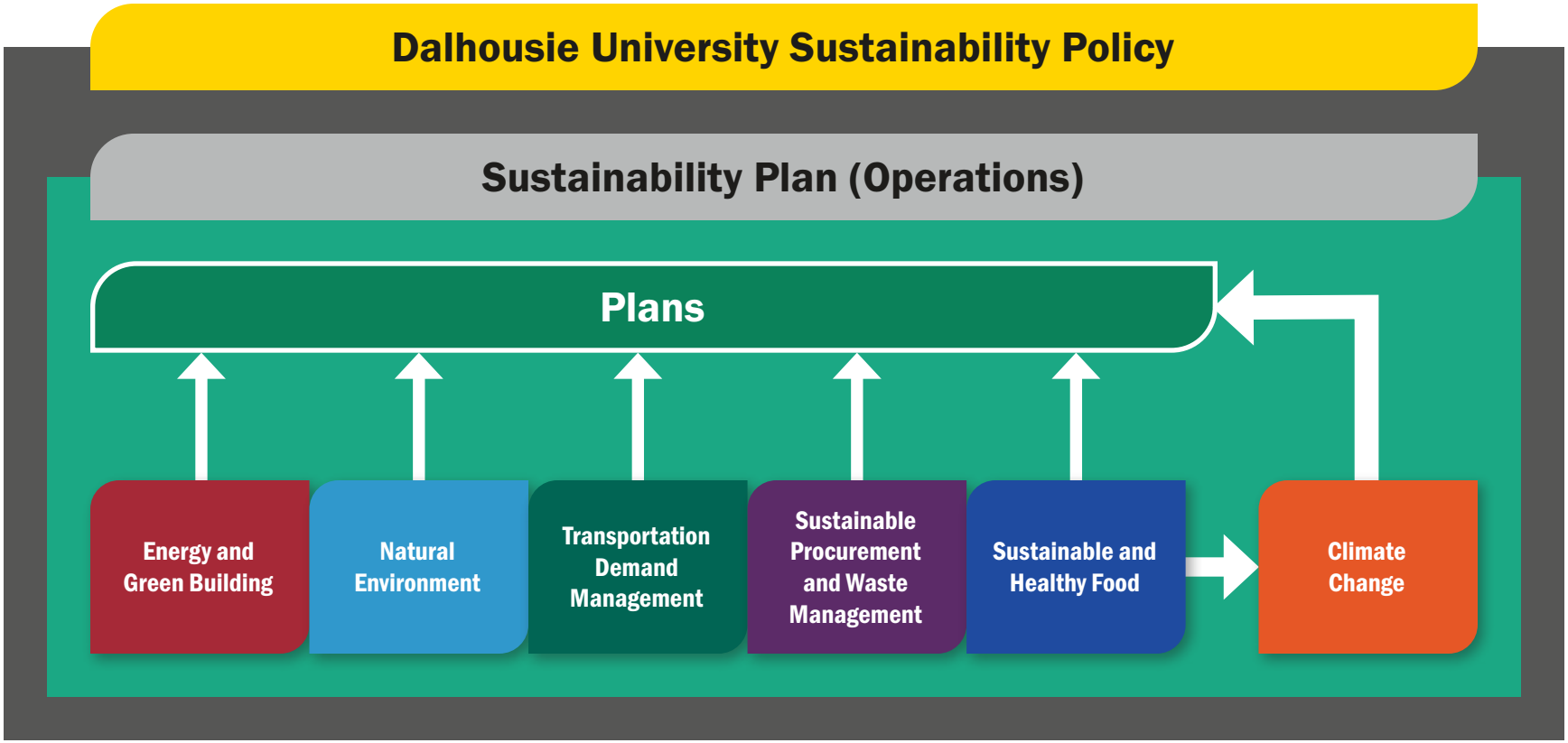


Electric vehicle charging station

1.0 **Purpose**

This plan provides strategic direction for achieving sustainability outcomes in campus operations. Strategies outlined in this plan are derived through an iterative process using qualitative and quantitative data at a system-wide and topical level. Six sub-plans provide the base for informing the key directions (Figure 1). Performance measures and targets are used to track progress.

Figure 1. Sustainability Plan Framework



2.0 **Scope**

This plan covers issues related to sustainability in campus operations. Strategies that emphasize ecosystem health, human and social benefits, and life cycle economics are a key focus for this plan and the University Office of Sustainability. It includes processes and outcome indicators that denote how we approach the work and what results we are pursuing. Broader sustainability reporting on academics, research, human resources, board governance (such as investments), and community and student initiatives is included in public international reporting through programs like the Sustainability Tracking Assessment Rating System (STARS) and Impact Rankings.

"Diversity of Nature"; created by Dalhousie students to make ecology field experiences more accessible to BIPOC (Black, Indigenous, and People of Colour) secondary school students. Photo Credit: Nicolas Winkler Photography, www.nicolaswinkler.com

3.0 Context

3.1 Definition

Sustainability concepts of intergenerational equity, respect for the environment, and economic conservation, such as the Mi'kmaq concept of Netukulimk, have been embedded globally in human cultures for thousands of years. Core concepts in sustainability definitions include:

- appreciation and respect of the natural world
- taking a short- and long-term planning approach
- integration of environmental, social, human, and economic goals in policies and activities
- public participation
- inter-generational as well as global, regional, and local equity
- continuous improvement
- good governance

The integration of these concepts differs depending on the sustainability definition used. The common concentric circle definition used in this plan, recognizes the earth and a healthy ecosystem as the outer ring and the foundation of existence, followed by the economy: what we do to serve and create, societal and health outcomes for people and other species (Figure 2).

Figure 2. Concentric circles identifying sustainability integration.

3.2 Situational Analysis

Dalhousie University's Halifax campuses (approx. 32 hectares in total), consist of many landscape types including: tree-lined streets and paths, open greenspace, tree stands, impervious surfaces, and naturalized areas in an urban setting. The Agricultural Campus (AC) in Bible Hill, NS, is comprised of about 200 hectares and includes many different landscape types: ornamental gardens, food gardens, agricultural fields, tree lined paths, and naturalized areas. A smaller area (32 hectares) makes up the more actively managed campus in a rural/village setting.

Dalhousie owns and operates 150+ buildings comprising over 544,000 square meters of building space. Dalhousie's buildings and houses date from 1850 to the present. The university has two district heating systems that connect over 95% of building spaces at both the Halifax and Agricultural campuses and some neighbouring properties in Halifax.

The university is a member of the U15, a group of research-intensive universities in Canada. Dalhousie is the largest university in Atlantic Canada. Over the last decade, Dalhousie's population and gross square meter of space has grown by approximately 1.5% per annum. There are over 20,000 students at Dalhousie.

Both the Halifax (Studley, Carleton and Sexton) and Agricultural (AC) campuses have Campus Master Plans that articulate built and natural environment and sustainability objectives, as well as challenges and opportunities for campus planning. Key internal drivers of campus development include academic and research needs; student life and residences; ancillary services like housing, athletics, and performance space; deferred maintenance; and specific sustainability, equity, diversity, inclusion and accessibility (EDIA) objectives. Some external factors impacting campus operations include student demographics and numbers; increased role of information technology in teaching, building systems, and student use; sustainability targets and directives; safety and security; codes and regulations; organizations interest/needs; geo-political landscape; ecosystem health and changes; and space usage (Figure 3).

Figure 3. Some internal and external drivers that influence campus operation sustainability efforts.

Internal Strengths

Dalhousie University has formally worked on environment and sustainability challenges through its curriculum, research, and operations for almost half a century. Many operational campus sustainability plans and policies were developed in the last decade including the Sustainability Plan and Policy, Climate Change Plan, Natural Environment Plan and Green Building policy. Several initiatives have been developed and implemented with campus partners including energy, waste, and water projects; green infrastructure, food, waste and energy research; residence Ecolympics competition; Green Labs; and an Employee Bus Pass. Progress on many key operational indicators is tracked and reported including reductions in energy, carbon, water, and waste and student engagement. In the last decade, Dalhousie and partners have spent over a $100 million on sustainability-related initiatives. These efforts have resulted in more than a 50% reduction in water use; a 13% reduction in energy use; more local, third-party certified, and plant-based food offerings; 20% absolute reduction in greenhouse gas emissions; increased planting of native and adapted species and vegetative systems in our greenspaces; and a 65% diversion of waste from landfills. There is a base of action to build actions for the next decade.

Internal Challenges

Like many institutions, Dalhousie has a significant deferred maintenance backlog of unfunded projects. This coupled with the age of some buildings and their functionality has created some challenges for the funding of major energy and climate infrastructure upgrades in new and existing buildings. Increasing demands for facilities capital and renewal funding, for multiple objectives, creates challenges for accessing capital. Staffing in key departments responsible for delivering campus sustainability objectives (Figure 4) are at capacity and in some cases is impacted by shortages. Technology and issues are rapidly changing. To modify or expand significantly the provision of services will require more investments.

The life cycle (capital, operating, and disposal) costs of goods or building systems may change if the true cost is accounted for. Decisions made based on capital versus operating costs, might not result in the best overall choice for the university.

Sustainability-driven decision making introduces additional complexity especially in the infancy stages of implementation. It requires people to think, consider, and act upon multiple sets of information including social, health, ecological, and economic impacts. Yet numerous benefits are clear if these considerations are incorporated. The initial time and effort required can be a barrier if there is not lasting commitment for change.

- The sustainability challenge is large though not insurmountable. It will require involvement from the campus community at all levels. A few sustainability advocates can make some headway but they cannot have the depth, knowledge, and capacity of a fully-engaged campus.

To meet the next set of climate and sustainability targets, investment will need to be increased. It will require continued investment from existing sources, (utility savings, facilities funding, and external grants) plus additional use of other financial instruments such as energy purchasing agreements for off-site renewable energy options and an examination of financial instruments such as green bonds, a climate change revolving fund, and community-based action funding.

Figure 4. Key roles related to sustainability in campus operations.

	Projects (Built and Campus Landscapes)	Behaviour	Sustainable Information Management	Planning & Policy	Monitoring & Reporting
Facilities Management (FM): The largest administrative unit at the university. FM is responsible for key areas such as building infrastructure, grounds, waste and recycling, custodial service, and parking.	LEAD	LEAD	LEAD	LEAD	LEAD
Finance: Manages finances of the university including budgeting and investing. Includes other services such as procurement and travel.	PARTNER	LEAD	LEAD	LEAD	PARTNER
Student Affairs and Housing: Responsible for key functions such as student residence and programming, bookstore, food and conference services, career and academic services, and student wellness.	PARTNER	LEAD	LEAD	LEAD	PARTNER
Information Technology Services (ITS): Provides a number of services including email, internet connections, web sites, computer labs, telephone services, computer training, and support.	LEAD	LEAD	LEAD	LEAD / PARTNER	PARTNER
Human Resources: Provides services such as benefits and pensions, payroll, employee and organizational development, staff relations, and staffing.	PARTNER	LEAD	PARTNER	LEAD	PARTNER
Environmental Health and Safety Office: Provides health and safety training, hazardous waste management, and administers smoke-free and scent free-policies.	PARTNER	LEAD	PARTNER	PARTNER	LEAD
Office of Sustainability: Mandate includes sustainability planning and advice, project development including funding for sustainability projects, student internships/research, education, and assessment and reporting.	LEAD / PARTNER	LEAD	LEAD	LEAD	LEAD
Student Organizations on Campus: (Student Societies, Student Sustainability Office, DSU, and other).	PARTNER	LEAD	LEAD	LEAD	LEAD
President & Vice-Presidents, Board [Lead Role in providing Direction in all areas]	LEAD	LEAD	LEAD	LEAD	LEAD
Faculties and Departments	LEAD / PARTNER	LEAD	LEAD	LEAD	LEAD
Students	PARTNER	LEAD	LEAD	PARTNER	PARTNER

External Challenges

The size of the sustainability challenge is significant. Rising per capita consumption and increases in human population has led to significant alterations of the earth. Major global-scale challenges are upon us from biodiversity loss to rapid climatic change to social inequities.

Recent research from the Intergovernmental Panel on Climate Change (IPCC) has shown climate-related impacts to be more rapid then originally projected. Current estimates suggest that human activities have raised global temperatures an average of 1°C over the last century. Continuing with business-as-usual is predicted to have catastrophic impacts on the planet and global population through increased droughts, disease, wildfires, sea level rise, flooding, and species loss.

Impacts are complex and progressively touching on all aspects of the economy and society. Those most vulnerable, and often less implicated, bear more of the burden created by the volatility and turmoil occurring in the Earth's systems as well as the societal repercussions.

In Canada, our expansive ecosystems, transport, and consumptive patterns find us grappling with issues such as air quality, climatic change, water quality, and habitat and species loss. Energy and water consumption and prices are rising. Conservation programs have been successful in off setting some of these increases. These trends are reflected in the campus community with increases in electronics, personal appliances, and other amenities along with other factors such as aging building systems, increases in enrollment, and research activity.

In Nova Scotia, electricity, water and fuel prices, on average, have risen continually over the decade. Nova Scotia continues to rely on imported high carbon energy, though reductions have been made. Nova Scotia has high rates of energy insecurity through price, access, and dependency on external sources. Sustainability solutions are holistic and require multi-party efforts. Governance, politics, and systems are not necessarily aligned with comprehensive approaches.

External Strengths

Numerous nations and organizations have developed policies, laws, and programs to make more sustainable change. The concept of sustainable development was introduced into the common lexicon in the 1980s as a response to global impacts. Efforts such as a ban on CFC production are direct examples of global action.

The federal government has released a number of new sustainability and climate plans, programs, and incentives. In 2022, the Nova Scotia Government adopted the Environmental Goals and Climate Change Reduction Act (2022), an update to the Environmental Goals and the Sustainable Prosperity Act. The Act sets out goals ranging from air emissions, renewable energy, water quality and waste management, and energy efficient buildings. Nova Scotia municipalities have released plans and are working on a number of climate initiatives. Many NGOs, businesses, and other government departments have sustainability thrusts, annual reports, and programs.

There is an increase in reporting and assessment of sustainability activity in universities and colleges. At all government and organizational levels specific sustainability efforts have been undertaken, though the speed and magnitude of change needed is increasingly being emphasized.

Dalhousie has the opportunity to increase strategic improvement and action. Understanding the strengths and challenges (Figure 5.) can help us focus our efforts to move to the next level of action.

Figure 5. Some of the key strengths and challenges connected to sustainability action

	Strengths	Challenges
Internal	▸ Structure, program and staff working on sustainability issues ▸ Drive from students, faculty, staff and society to make change ▸ Some success and progress made in the last decade ▸ Direction to support and move on sustainability and social responsibility in University Strategic Plan ▸ Some financing mechanisms	▸ Size of the challenge, and resources needed to make change ▸ Multiple demands on capital funding and facilities renewal ▸ Program limits based on current staffing ▸ Complexity of issues, and some actions such as supply chain transparency ▸ Universities not eligible for some major green infrastructure programs ▸ Mobilization of large changing community with a decentralized structure
External	▸ Building on partnership and collaborative opportunities ▸ More demands and requirements for sustainability performance ▸ Increased interest, policy, and reports highlighting the need for change ▸ Multi-nation partnerships ▸ Financial incentives and instruments that support consumption reduction	▸ Ecosystem degradation (land, air and water) ▸ Energy, food, and affordable housing security ▸ Volatile utility and food pricing ▸ Destructive global systems impacts (e.g., more volatile climate systems, biodiversity loss) ▸ Societal and systems violence and volatility, disease, and loss

In 2019, as part of the development of the new university strategic plan, self-study reports were issued based on key topic areas including Sustainability and Environmental Responsibility. A number of concrete recommendations across teaching, research, and operations were identified for better integration, performance, leadership, and inclusiveness. The recommendation from this report for operational strategies are also reflective of more recent focus group, meetings, literature reviews, and reporting framework analysis (Table 1).

Table 1. Summary of Key Sustainability strategies from recent engagement, sustainability reports and reporting frameworks, and literature.

Area of Focus	Potential Strategies	Implementation Considerations
Natural Resources: Reduce consumption, use, and reuse (food, materials/ waste, energy, water)	▸ New operational Sustainability Plan and upgraded targets ▸ Strategic Sustainable Purchasing Plan with senior leader support for central direction (e.g. green fleet, branded clothes, green buildings) ▸ Green Labs/Events program enhancement ▸ Continued program progress on consumption ▸ Major climate action projects funded and implemented	▸ Strategic investment in sustainable purchasing support ▸ Central direction and support for integrated strategies ▸ Long-term investments in larger projects
Landscapes: Biodiversity, health, and protection	▸ Focus on planned view of landscapes that incorporate concepts of sustainable urban design, biodiversity, adaptation, and Indigenous principles ▸ Continued program and project implementation on transportation demand management and natural environment	▸ Strategic view in campus and landscape master plan with approved and funded flagship projects
Pollution Prevention: GHGs, toxins, waste…	▸ Renewable Energy on and off campus ▸ Documented pollution prevention plans/programs	▸ Using operating funding to achieve objectives; Integrated planning
SDG/Sustainability Education on campus and in the community	▸ Develop university and community wide sustainability learning outcomes and education for implementation by faculties ▸ Peer educator and experiential programs ▸ University-wide sustainability plan/report linking objectives, targets and progress from across all areas of the university	▸ Resources for new position(s) dedicated to lead this work
SDG/Sustainability Research	▸ Innovation grants, leadership fellows, coordination support, knowledge exchange	▸ Resources for new position, grants, events, fellowships
Equity: Affordability, EDIA supports on and off campus, living wage, human and animal welfare	▸ New initiatives identified in university strategic planning process to improve performance in these areas ▸ Initiatives and communications should be framed to create accessible, representative and equitable spaces while understanding the intersectionality of social contexts	▸ Systematic data collection for affordability and supporting under-represented groups, target setting, expansion

4.0 Plan Development and Management Timeline

Many operational campus sustainability plans, policies, reporting frameworks, and projects were developed and implemented in the last decade. Figure 6 provides a snapshot of some of the campus operational sustainability activity.

Figure 6. Timeline information.

2008–2009	2010–2011	2012–2013	2014–2015	2016–2017	2018–2019	2020–2021
▸ Developed model for Sustainability Business Cases to fund projects, and release of Sustainability Policy ▸ Ecoolympics starts, as well as annual student internships ▸ Campus Tree Inventory created ▸ LSC Energy Performance Project ▸ Launch of annual energy and water efficiency programs and projects (5+ a year)	▸ Release of first Sustainability Plan, Climate Plan and GHG inventory ▸ Creation of sustainability criteria for the purchasing policy and promotion of sustainability purchasing tips ▸ Start of many green roofs, tree planting, and rain gardens ▸ Green Building Policy passed, sustainability features in all new buildings ▸ TDM Plan released, launch of first annual commuter survey, and start of EV stations and Bike centre	▸ Paper policy introduced, take out plastic bags removed from bookstore ▸ Creation of sustainability criteria for the purchasing policy and promotion of sustainability purchasing tips ▸ Biomass Replacement Guideline created ▸ Campus Energy Master Plan and Building Audits ▸ Employee Bus Pass Launched in addition to student pass	▸ Natural Environment & Waste Management Plan created ▸ Tupper Deep Retrofit Project started ▸ University Avenue cycling pilot partner ▸ MSC certification for Dalhousie Halifax dining Halls ▸ Offering fair trade products (coffee, tea and chocolate)	▸ Implemented the “Big Switch”—centralized waste sorting, enhanced C&D recycling, standardized all waste bins and signs—including removal of most single use garbage bins ▸ Upgrade of district steam to hot water at AC and Sexton, and biomass upgrades at AC to co-gen ▸ Implemented active transportation corridor on Sexton campus ▸ Major upgrades ongoing to ENERGY STAR equipment in labs and kitchens ▸ Sustainable and Healthy Food Plan launched	▸ Research into NS land protection as a carbon sink strategy ▸ Data centre—cold aisle containment and free cooling ▸ Launch of a reusable mug pilot program ▸ Launch of geo-exchange field, large roof top solar, and rain cistern feeding buildings at Sexton campus	▸ Using more ozonated water based cleaning ▸ Launch of Biodiversity Week ▸ Green Labs Program started ▸ Transportation and Accessibility planning ▸ Natural and pollinator gardens added ▸ Over 60 sustainability initiatives delivered over a decade
ONGOING Education programs, presentations, reports, monitoring, planning and policy development, and sustainability project implementation						

5.0 Vision, Principles and Scope

A one-page logic model highlights the key scope of the plan including vision, principles (values), outcomes, goals, actions, and a summary of indicators (Figure 7).

Figure 7. Sustainability Plan Logic Model

Vision: Seen as leader in sustainability in operations as we create positive social, health, ecological, and economic change on our campuses.

Principles

- Equity, Diversity, Inclusion, Accessibility
- Conservation, Biodiversity, and Efficient use of Natural Resources
- Pollution Prevention and Restoration
- Innovation, Continual Improvement, Education, and Engagement

Outcomes

- Respect, inclusion, diversity, and health
- Reduced ecological impact and improved ecosystem health
- Better life cycle economic decisions
- More sustainability knowledge, engagement, skills

Goals

Values, knowledge, skills, and social structures support sustainability and are endorsed.	Support organizational behaviours and physical systems that promote sustainability.	Decrease natural resource use (e.g., energy, water, products), and outputs (e.g., pollution, waste).	Increase renewable energy (on and off campus).	Enhance health and diversity of the campus ecosystems.	Increase sustainable transportation options.	Reduce GHGs and adapt to a changing climate.	Draw people to Dalhousie because of sustainability activity.

Key Actions

Planning, Policy, Advisory: Sustainability Plan, sub-plans and policy updated every 3-5 years; participation and integration with key university plans, advising on departmental initiatives; ongoing project planning for multiple issues.	**Behavioural Programs:** Campus programs (e.g., Green Labs, Ecolympics, Employee Bus Pass); lectures/presentations; issue campaigns; social media/online; workshops; student employment (e.g., peer educators, internships).	**Monitoring:** ongoing Energy/Water Management Information Systems (EMIS) activities; GHG reporting; Annual Reporting, International reporting support (e.g., STARS); surveying, auditing and reporting.	**Projects:** Transportation Demand Management (TDM) (e.g., cycling infrastructure); Natural Environment (e.g., tree planting); Solid Waste (e.g., bin system realignment); Energy and Water (e.g., air leakage, enhanced envelope, building retrofits, building systems and equipment, enhance sustainability features in new construction).

Indicators

- Engagement of students in campus sustainability operations activities
- Off campus partnerships and funding
- Programs, projects, resources, and reporting initiatives
- Support equity, diversity, inclusion and accessibility (EDIA) initiatives
- Increased diversion of solid, liquid, and hazardous waste from disposal (75% by 2030)
- Reduce electricity, fuel, water, and waste consumption
- Increase renewable energy supply on and off campus (100% renewable electricity goal)
- Increase sustainably and ethically sourced products
- Reduce greenhouse gases (GHG)s and implement climate adaptation strategies - 55% (scope 1 and 2) by 2030; 80% by 2040, carbon neutrality before 2050
- Increased travel (commuting and business) through sustainable modes – 85% by 2030
- Increase campus biodiversity
- Maintain and increase natural spaces
- Buildings achieve high performance green building standards
- Reduce pollution – air, water, land
- Transition to more plant-based food offerings

6.0 Goals, Actions and Targets

Six sustainability sub plans are integrated to provide the University Operations Sustainability Plan with key goals, objectives, actions (Figure 7.), indicators, and targets (Table 2). The plan includes processes and outcome indicators that denote how we approach the work and what results we are pursuing. Broader sustainability reporting on academics, research, human resources, additional operations indicators, and community and student initiatives is included in international reporting through programs like STARS and Impact Rankings.

Table 2. Key Performance Indicators—Process (baseline year 2010)

Indicator	Description	Targets
Engagement of students in campus sustainability operations activities	▸ Work with academic and research efforts by supporting on campus sustainability class projects, thesis, and related research efforts. Employ students all year round to work in the Office of Sustainability (OS).	▸ Number of students engaged
Off campus partnerships and funding	▸ Develop and support on-going networks, funding applications, and joint initiatives with community, government, and other external partners. This work supports our collective and university action.	▸ Number of networks and projects, funding raised, collaborations
Programs, projects, resources, and reporting initiatives	▸ Develop and support campus sustainability operations initiatives across all campuses.	▸ Number and type of initiatives
Support equity, diversity, inclusion and accessibility (EDIA) initiatives such as including respect, and increase awareness, and support of Mi'kmaq, other Indigenous, and African NS culture and teachings	▸ Increase knowledge and experience of OS staff and students of EDIA issues through discussion, participation in committees, and formal annual learning initiatives. ▸ Develop natural spaces, with Mi'kmaq led guidance, that highlight culturally important plants and trees. ▸ Host educational events focusing on healthy, sustainable, and affordable recipes and cultural exchange such as highlighting food and culture in partnership with or by the community. ▸ Remove barriers to accessibility such as improving accessibility in transportation guidelines, supports, and infrastructure. ▸ Implementation of just, equitable, and accessible climate strategies. ▸ Increase the number of social and environmental purchasing initiatives that support equity, diversity, inclusivity, and accessibility goals. ▸ Highlight EDIA speakers at our public events and continue to offer annual Black and Indigenous internship. ▸ Reflect EDIA goals in building projects through art, installations, naming, and infrastructure.	▸ Number and type of initiatives

Key Performance Indicators - Outcome

Indicator	Description	Targets
Increased diversion of solid, liquid, and hazardous waste from disposal	▸ Diversion rate from the landfill	▸ 75% by 2030
Reduce electricity, fuel, water, and waste consumption	▸ Reduction of natural resource consumption including energy, water, materials, and supplies	▸ 70% water reduction by 2030; hold growth and reduce consumption against baseline with conservation and efficiency
Reduce greenhouse gases (GHG)s and implement climate adaptation strategies	▸ Tangible campus GHG reductions ▸ Assessment and implementation of natural and built adaptation solutions to reduce risk caused by rapidly changing climatic conditions ▸ Scope 3 assessments and reductions through six sustainability sub-plans and actions	▸ 55% (scope 1 and 2) by 2030 ▸ Number and type of initiatives ▸ 80% by 2040, carbon neutrality before 2050
Increase renewable energy supply on and off campus	▸ Pursue 100% renewable electricity for Dalhousie and other partners ▸ Maintain and increase the number of on campus solar and earth energy systems ▸ Continue to maximize efficient use of waste biomass residuals for biomass co-generation	▸ 90–100% by 2030 ▸ Number and type of initiatives, % of efficiency
Increased travel (commuting and business) through sustainable modes	▸ Support for transportation demand management programs and strategies	▸ 85% of commuting trips made by walking, cycling, transit, carpooling, or remote work by 2030 ▸ Increase participation rates in TDM programs
Increase Campus Biodiversity	▸ Increasing the diversity of trees and vegetative plants on all campuses	▸ Increase number of species planted, proportional to the number of planted material (% distribution)
Maintain and increase natural spaces	▸ More plantings and education including tree planting, diversifying and adding gardens (e.g., rain, vegetative swales/berms, green roofs, food/pollinator) to provide shade, food, storm water control, shelter, carbon removal, air quality, biodiversity, aesthetic, real estate, reputation, and cultural benefits	▸ Increase the number of trees planted and campus vegetation that is indigenous and/or non-invasive

Indicator	Description	Targets
Buildings achieve high performance green building standards	▸ New buildings achieve comprehensive green building certifications such as LEED Gold or higher and may also pursue specific certifications related to carbon and energy. Buildings will be built towards evolving net-zero standards and meet and beat codes and regulations. ▸ Existing building upgrades will follow-high performance buildings standards including Dalhousie design guidelines and the University Sustainability Policy.	▸ All new buildings achieve high performance green building certifications ▸ Existing buildings met high performance building standards
Reduce pollution—air, water, land	▸ Reduce the release of air, water (fresh and marine), and land contaminants through pollution controls, reduction of fuel and pollutant use, and fuel, chemical and material switching.	▸ Number and type of initiatives, and measures
Transition to more plant-based food offerings	▸ Increase amount of plant-based food options.	▸ 50% +or more by 2030 (by plate, % of sales, weight/or volume)
Increase sustainably and ethically sourced products	▸ Increase sustainable and ethically sourced purchasing for key commodities such food, travel/fleet, IT/Telecom/ AV, stationary, textiles, appliances, professional services, furniture, custodial, energy/water, building/supplies.	▸ Number and type of initiatives, % increase where data is available for items like third-party certifications

7.0 Implementation & Evaluation

Assessment and reporting drives strategic action, helps to celebrate success, and shows transparency and trust. Key assessment and reporting requirements include:

- issuing an annual Sustainability Operations report based on the indicators and targets outlined in Table 2;
- action planning and commitments by faculties and departments to meet the vision set out in the University Sustainability Policy and Plan; and
- participating in international sustainability ranking programs such as STARS and Impact Rankings.

To feed information into these plans and reports, audits, and assessments will be conducted against our peers, community, and our own baselines. Assessments include qualitative data and quantitative data from sources such as invoices, program evaluations, energy management information systems, feasibility studies, external and internal trends, workshops/meetings, and campus audit results. Annual reports will include progress in comparison to baseline data and 2020 progress periods.

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