Corporate Sustainability Program

Oct 30, 2019

Business Case (DRAFT)

Toronto and Region Conservation Authority

5 Shoreham Drive, Downsview, ON M3N 1S4

Corporate Sustainability Program
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Project Contact: Bernie McIntyre, Senior Manager, Corporate Sustainability and Community Transformation
Community Transformation, Community Engagement and Outreach E: bernie.mcintyre@trca.ca

1. Introduction

This report presents the business case for TRCA to develop and implement a Corporate Sustainability Program (CSP) that is integrated with the business planning and reporting processes of the organization. The integrated CSP will build on past sustainability initiatives at TRCA, align sustainability actions with the 2018 update to the corporate Strategic Plan, *Building The Living City* (2013), and entrench key sustainability considerations of climate, environment, society and economy, into the operational decision making of the organization. By adopting this integrated approach to sustainability, TRCA will be positioned to accomplish some of its business needs, generate greater value for the organization and the communities served, through the normal course of implementing its mandate.

TRCA has undertaken a wide variety of sustainability related actions over the years. But it has not achieved the level of impact that an integrated Corporate Sustainability Program could provide. This is due in part to sustainability being addressed as individual initiatives separate from the core business decisions of the organization. This limits the impact of the sustainability initiatives to the scope of the projects undertaken. As a result, not all operational projects and programs include consideration for sustainability and many opportunities to create value for the organization and the communities served were missed.

TRCA initiated its corporate sustainability work in 2002 with the creation of an environmental management system. Since then achievements have included:

- Policies on pesticide use, green fleet, green procurement and tracking of energy use;
- Restoration Services building certified as the second LEED (Leadership in Energy and Environmental Design) Platinum building in Ontario (2007);
- Corporate fleet was one of the greenest in Canada according to third party audit (2009);
- Cross divisional consultations on corporate sustainability activities and objectives conducted by staff (2010)
- Corporate energy management plans, solid waste management plans and green cleaning procurement procedures and published the corporations first Global Reporting Initiative (GRI) aligned corporate sustainability report (2010 onwards);
- Most recently, staff provided input to the HVAC retrofit of Black Creek Pioneer Village Visitor Centre; procedures for construction and demolition diversion; updated procurement policy; and the design of the new head office that is expected to achieve LEED Platinum and WELL Silver.

Through a CSP that is integrated with operational decision making, the program can support business units to incorporate sustainability considerations that address important business needs, create consistency across the organization and generate a variety of benefits and co-benefits. The results of the integrated program would:

- Align operational and infrastructure decisions with the sustainability related desired outcomes of the updated strategic plan;
- Align operational and infrastructure decisions with the sustainability objectives of municipal partners;
- Increase efficiency and operational performance;
- Improve resilience and reduce climate risk;
- Reduce environmental impacts;
- Increase social co-benefits including staff training and awareness;
- Generate positive recognition and reduce reputational risks;
- Generate funding for projects;

In the private and public sectors there is growing awareness that by integrating sustainability as a core part of business practices, organizations can better manage risks and generate long-term value for the organization and their stakeholders. Successful corporations have shown that integrating sustainability into their business planning and reporting has contributed directly to their financial success.[1]

Integrating sustainability into decision making requires an approach that can effective address all three levels of decision making: strategic, tactical, and operational while also supporting consistency across the organization in decision making. A paper on Enterprise Risk Management (ERM) and incorporating sustainability Lead by Ernst and Young LLP said it best: (reference)

"Sustainability is relevant to all parts of the business…..Sustainability must permeate organizational thinking from the boardroom and executive suite to the shop floor. It needs to be integrated into division, business unit and operational planning and activities to be truly effective."

In order to provide a consistent scalable approach to integrating sustainability, staff are proposing the use of four sustainability lenses (Table 1). Sustainability lenses are a set of perspectives that prompt users to consider the sustainability costs, benefits and consequences of their decisions. The lenses are derived for the three key sustainability considerations of environment, society and economy with the addition of climate as a significant risk to the other sustainability considerations.

Integrating Sustainability into Decision Making

Sustainability is about making decisions that consider the broader implications of those decisions in the short, medium and long term. To effectively integrate sustainability into an organization requires transformation of three levels of decision making, strategic, tactical, and operational.

- Strategic decisions (the "why") set policies and define overall objectives, are comprehensive, long term and relatively general. Strategic decisions focus on the broad, enduring issues for ensuring an organization's effectiveness over a long period of time.
- Tactical decisions (the "what") focus on more intermediate-term issues such as interpreting policies and objectives and providing guidelines for operational decision making. The tactical planning in an organization is more specific than strategic planning, dealing more with issues of efficiency rather than with long-term effectiveness.
- Operational decisions (the "how") are focused, short term and specific. Operational decisions focus on day-to-day activities within and organization such as efficient, cost-effective application of resources to solving problems and meeting objectives. (Encyclopedia of Business and Finance 2001)

Table 1: Sustainability lenses and the intent of their application.

Sustainability Lens	Intent
Climate Change Mitigation and Adaptation	Reduce our corporate contribution to climate change to the extent possible and ensure that our facilities and operations are resilient to changes in climate
Environmental Stewardship	Ensure that TRCA facilities and operations have a positive impact on aquatic systems, natural heritage and biodiversity
Social Development and Wellbeing	Ensure that TRCA facilities and operations contribute positively to the social development and wellbeing of the communities they serve.
Economic Development	Ensure that TRCA facilities and operations contribute positively to the economic development and prosperity of the communities they serve while using public funding in a wise and effective manner

1 – Sustainability Incorporated – Integrating Sustainability into Business, A Guide for Sustainability Practitioners. 2015

It can be very challenging to influence decision making in a consistent manner between divisions, business units and between strategic, tactical and operational decisions. This is where the sustainability lenses and the decision support tools that the CS team would create, would help to develop that consistency.

Sustainability is a path one chooses, a journey, not a destination. Over the years, TRCA has undertaken a wide variety of sustainability related initiatives along the sustainability path. Moving forward pulling these activities together into a Corporate Sustainability Program that is integrated with corporate decision making will take TRCA to the next level in sustainability thinking that fulfill business needs and generate benefits for the organization and the communities served.

2. Business Need

Business need is defined as the gap between the current state of business and what is needed to achieve the corporate goals. The 2018 update to the Corporate Strategic Plan brought a greater clarity and focus to the outcomes TRCA wished to achieve that help communities in its jurisdiction become more sustainable and prosperous. These desired outcomes articulate TRCA's business objectives or goals and this project proposes to update the existing CSP so that it aligns with the corporation's business objectives. The integrated CSP that results from this initiative will support many of TRCA's business needs including:

1. Alignment of operational practices and infrastructure with the sustainability related desired outcomes in the updated corporate Strategic Plan;
2. Alignment of operational practices and infrastructure with the sustainability objectives of municipal partners;
3. Reduced environmental impacts of operations and infrastructure;
4. Funding for operations and infrastructure projects

The business needs identified above are interconnected and as a result, benefits from supporting one business need also support other business needs. Below is a description of each business need addressed by the CSP.

1. Align operational practices and infrastructure with the sustainability related desired outcomes in the updated corporate Strategic Plan

TRCA needs to ensure that the decisions made regarding its operations and infrastructure contribute to the sustainability related desired outcomes outlined in the 2018 update to the Corporate Strategic Plan. Appendix 1, 2, 3 and 4 identify the corporate desired outcomes that the CSP would contribute to either directly or indirectly. In addition to ensuring that operational and infrastructure decisions are consistent with the business objectives of the organization, it will ensure that TRCA's operations are consistent with what our external programs are requesting our stakeholders consider. Addressing this business need will also contribute positively to business needs 2, 3, and 4.

2. Alignment with the sustainability objectives of municipal partners;

Nearly all the regional and single tier municipalities in TRCA's jurisdiction have embraced the concept of sustainability from a corporate or community wide perspective (Appendix 5). The most active of our municipal partners in this area are the City of Toronto and the Regional Municipality of Peel. Both partners have mechanisms in place to address climate change and their corporate social, economic and environmental impacts. These efforts are guided by established sustainability programs and strategies. The Region of York is becoming more active, in addition to their overall sustainability strategy and energy management plan, they have recently initiated a regional climate change action plan. The path taken by Durham Region has sustainability embedded within their

planning at the community scale. Common themes within these corporate strategies and plans are climate, environment, social and economic impacts. Municipalities are important funding partners for TRCA and are actively interested in TRCA contributing to achievement of their objectives.

3 Reduced environmental impacts;
As a conservation organization, ensuring that the environmental footprint of our operations and infrastructure is minimized, is critical for achieving many corporate desired outcomes (see Appendix 1 through 4). Environmental impacts of interest include air, water and soil pollution, solid waste, procurement, and the management of natural systems on corporate owned lands. Effectively managing these impacts will contribute to alignment with corporate desired outcomes and municipal partner objectives.

4 Funding for projects;
Although incorporating sustainability into decision making is for the most part cost neutral (beyond program staffing costs), there will be circumstances where funding will be required to support pilot projects or achievement of aggressive targets. The CSP team would work with affected business units to identify funding opportunities, prepare proposals and support implementation.

3. Business Objectives

The business goal of the CSP is to integrate consideration for sustainability into operations and infrastructure decisions in a manner that creates the best long-term value for the organization and its stakeholders. The business objectives that support achievement of that goal include:

- Support the use of total cost of ownership (financial and environmental) in all sustainability related decisions;
- Secure external funding to offset or supplement internal funding for sustainability related initiatives whenever possible/applicable;
- Engage, educate, train and provide decision support tools (policies, guidelines, standard operating procedures) to enable the inclusion of sustainability considerations in decision making;
- Reduce the environmental footprint of TRCA operations and infrastructure;
- Mitigate the impact of TRCA operations and infrastructure on climate change;
- Increase the resilience of TRCA operations and infrastructure;
- Create sustainability related co-benefits for the communities served;
- Generate profile and recognition for the organization as a leader in the application of sustainability best practices;

4. Benefits to TRCA

The cornerstone of a sustainability program that is integrated with the business practices and decision making of the organization is that it generates tangible benefits through the normal course of delivering the corporation's core mandate. An integrated sustainability program assists the organization in finding synergies between its core operations and additional value and benefits that could be achieved. In addition to helping TRCA operations and infrastructure align with the updated Corporate Strategic Plan and the direction of key municipal partners, the Corporate Sustainability Program can:

1 Identify opportunities to maintain or reduce costs while achieving targeted sustainability outcomes;
2 Improve resilience and reduce climate risk;

3. Increase social and other co-benefits including staff training and awareness of sustainability;
4. Reduce reputational risks and create positive recognition;

Below are some examples of how the CSP influences decision making to provide tangible benefits for the organization. These examples result from the historic approach of ad hoc interactions with business units on sustainability issues. The integrated CSP would take a systematic approach to engagement which would increase the breadth and depth of benefits to the organization. The interconnectivity of these benefits means that benefits cascade from one category into other categories providing additional co-benefits. Table 2 provides an example of the overlapping benefits brought by sustainable choices from actions to increase solid waste diversion through the Sustainable Waste Management Plan.

Table 2: An illustration of the benefits that accrue from applying sustainability approach to increasing solid waste diversion.

Sustainability Lens	Benefits from increasing solid waste diversion from landfill to recycling
Economic	• Cost Savings: recycling costs less to collect than garbage • Local Resources: generates post-consumer recycled resources for local markets • Local Economy: reclaimed material used locally, keeping money in the community
Environmental	• Landfill Capacity: eliminates the need for waste to be landfilled • Natural Resources: reduces the demand for virgin material
Social and Wellbeing	• Local Jobs: reclaimed material used by businesses, supports sustainable jobs • Air Pollution: recycling collected less frequently than garbage leads to fewer truck trips that contribute to air pollution thus impacting community health
Climate Change	• Collection GHGs: fewer truck trips mean less fuel consumed resulted in lower GHG emissions from transportation • Supply Chain GHGs: Post-consumer product made by diverted material provides low-carbon alternative product

TRCA's current work provides examples of how a sustainability perspective can inform decision making to reduce risks, create opportunities and generate value. Bolton Camp is a good example where the concept of sustainability was used to create the direction for the project and as a result, value for the community. The projects forward thinking to deliver social, environmental and economic benefits to the community, while minimizing GHG emissions, Bolton Camp was able to attract diverse stakeholders and community support to implement the project.

The heating, ventilation, and air conditioning (HVAC) retrofit at Black Creek Pioneer Village (BCPV) provides another example of how using a sustainability perspective can provide value to the organization. A detailed engineering study was undertaken on the BCPV visitor centre to evaluate options for replacement of the HVAC system as the equipment was at or approaching end of life. The cost to replace the equipment like-for-like was $1.4 million but would have only resulted in a small reduction in operating costs and GHG emissions. Using the climate sustainability lens an option was identified to switch the majority of fuel use at BCPV from natural gas to electricity using air-source heat pumps. The switch to electricity was expected to reduce GHG emissions by over 70%. Using an economic lens the incremental cost of this option was compared to the like-for-like option. Air source heat pumps would cost $635,000 more but the long-term reduction in operating costs, due to the efficiency of the heat pumps would result in a simple payback of 7 years and positive net present value over 20 years. Used together, the climate and sustainability lenses were used to steer the project in a positive direction that created long term value for the organization.

Another example is the solar PV panels that were planned for the new TRCA head office. The rationale for the solar Photo Voltaic (PV) panels was two-fold, to achieve points toward Leadership in Energy and Environmental Design (LEED) Platinum certification and to reduce carbon emissions from the facility. On the surface, substituting solar PV panels for at least a portion of the electricity use in the facility would seem to be a good idea. The 2017 Ontario grid had average carbon emission factor of 20g CO_2 equivalent for each kWh consumed and while a solar panel emits no carbon, the scientific literature indicates that depending on where the panels are created due to the carbon content of the energy used to create the panels can vary considerably. In fact, one comprehensive National Renewable Energy Laboratory in the United States (NREL) study indicated that the Life Cycle Assessment (LCA) carbon emissions can vary from 18g CO_2e/kWh to 170g CO_2e/kWh with a median of 32g CO_2e/kWh. Using a climate lens in our procurement process we can help ensure that the solar PV panels contribute to our goal of reduced carbon emissions and avoid the risk to climate and our reputation if we were to procure panels with LCA emissions greater than the average for the Ontario grid.

Implementation of the Corporate Solid Waste Management Plan provides another example of the positive impact of using a sustainability lens when evaluating our operational practices. Using an environmental stewardship lens on the solid waste generated from construction and demolition projects identified the opportunity to significantly improve diversion rates at no cost to TRCA. Corporate sustainability staff worked with staff from the Project Management Office (PMO) to develop language to insert in RFP's for construction and demolition, putting the onus on the successful contractor to achieve the outcome staff required. The more than 80% diversion rate achieved during the initial pilots is now standard practice for these types of projects. Diverting solid waste material supports local green jobs, provides resources to fuel the circular economy, while also reducing landfilling and the need to extract virgin natural resources.

The examples described above illustrate how a sustainability perspective or lens can influence our decision making and add value. The social, economic and environmental lenses shaped the Bolton Camp project generating partnerships and funding. A climate lens would influence the solar PV panels we buy for the new head office. An environmental stewardship and economic lens allowed us to achieve more than 80% solid waste diversion at no additional project cost. Overtime, as the integrated CSP develops it will create tools and provide training to help all business units incorporate the four lenses of sustainability into their decision making. This approach is similar to many other corporate sustainability programs such as Metrolinx and Infrastructure Canada, The US EPA and New York's Department of Transportation, amongst others.

5. Program Scope

The scope of what the CSP will address is defined by the four sustainability lenses and the key issues identified from the analysis of the alignment with the corporate strategic plan outlined in Appendices 1 through 4. Specifically, the program will work to address the 17 key issues outlined in Table 3.

Table 3: Sustainability lenses and key issues that would be addressed through the integrated Corporate Sustainability program.

Sustainability Lens	Intent	Key Issues	Description	Examples
Climate Change Mitigation and Adaptation	Reduce our corporate contribution to climate change to the extent possible and ensure that our facilities and operations are resilient to changes in climate	GHG Emissions Direct and Indirect (Scope 1&2)	Emissions from energy consumption sources owned or controlled by TRCA	• Natural gas and electricity used at TRCA facilities • Fossil fuels used by TRCA fleet and equipment
		GHG Emissions Embodied and Supply Chain (Scope 3)	Emission from creation and transport of products abd services procured by TRCA	• Travel in personal vehicles for TRCA business • Landfill of TRCA solid waste • GHGs related to products (office supplies, food, materials, equipment) and services (consultants, contractors, couriers, business travel)
		GHG Sequestration (terrestrial natural heritage)	Removal of GHG from atmosphere through carbon sinks owned or controlled by TRCA	• Planting trees, shrubs and plants • Protecting and enhancing ecosystems (forests, wetlands, soils)
		Resilient facilities and Operations	Ability of TRCA operations, infrastructure and staff to absorb the shocks and stresses of climate change and recover as rapidly as possible to normal capacity and efficiency	• Upgrading facilities and equipment to withstand extreme weather event;Planting trees, shrubs and plants • Increasing the redundancy of important facilities and equipment (e.g. backup power, appropriate stock of necessary supplies/equipment); • Upgrading corporate policies and procedures to integrate impacts of climate change; securing data access. storage, transmission during adverse weather conditions
Environmental Stewardship	Ensure that TRCA facilities and operations have a positive impact on aquatic systems, natural heritage and biodiversity	Pollution to air, water and soil	Air, water and land pollution generated through TRCA operations (Criteria Air Contaminants, Chloride/Salt, contaminated soil, spills)	• Air pollution from energy consumption (buildings, vehicles, equipment) • Chloride/salt use for winter maintenance • Spills
		Water (storm and potable)	Water conservation and management at TRCA sites and facilities.	• Water used for pools, washrooms, kitchens, offices, irrigation • Surface water run-off and ground water infiltration
		Natural Heritage	Environmental protection of the ecological health and biodiversity of natural heritage systems from natural and human-induced threats (e.g. climate change, invasive species) through operational practices on TRCA lands.	• Protection and enhancement of natural heritage including landscape, vegetation communities, plant and animal species. • Protection and enhancement of aquatic systems, habitat and species. • Integrating climate change considerations into the restoration, monitoring and maintenance of natural heritage systems (e.g. plant species selection in light of climate change, monitoring and reporting on the effects of climate change on natural heritage, proactive watering and pruning practices)
		Solid Waste	Disposal, diversion and reduction of solid waste from TRCA assets and operations.	• Reducing, reusing and recycling of waste at offices, sites and facilities • Organic waste collection and processing (anerobic digestion/composting) • Project generated waste from construction and demolition activities
		Environmental Procurement	Procurement by TRCA of products and services that are created with minimal environmental impacts and minimize future climate risks.	• Purchasing eco certified products (FSC paper and lumber, Fair Trade coffee, LEED buildings) • Low-carbon and low-VOC products • Products made from post-consumer recycled content • Integrating climate risk into procurement practices (e.g. has the supplier/service provider assessed their climate risks? Should resilient design factors be required, for example in an RFP?)
Social Development and Wellbeing	Ensure that TRCA facilities and operations contribute positively to the social development and wellbeing of the communities they serve.	Community Benefits	Programs and projects designed to provide social and economic benefits for local communities and equity-seeking groups.	• Agreements that support the provision of community assets • Projects that include opportunities for local small scale businesses • Procurement that includes training and employment for under-served communities.
		Staff Training for Sustainability	Training programs to help TRCA staff implement sustainable business practices	• Orientation for new staff on awareness of sustainable practices, procedures and policies • Lunch and learn events to engage staff on sustainability issues • Periodic outreach to divisions and business units
		Staff Accountability for Sustainability Performance	Staff objective-setting and evaluation processes for sustainability built into job descriptions and annual work plans.	• Workplans that include responsibilities for sustainability. • Job descriptions that have sustainability roles outlined. • Workplans with specific metrics that support corporate targets.
		Corporate Recognition	External recognition for the application of sustainability best practices	• Awards and other recognition for leadership in sustainability. • Awards and recognition for sustainability projects and program outcomes.
Economic Development	Ensure that TRCA facilities and operations contribute positively to the economic development and prosperity of the communities they serve while using public funding in a wise and effective manner	Economic Value of Activities	Estimating the economic value of good or service TRCA operations account for.	• Economic contributions of programs to regional economy. • Costs of damages avoided (e.g. from flooding and erosion) and why this is important in light of a changing climate.
		Economic Value of Natural Capital and Ecological Services	Assignment of the economic value that TRCA owned or managed ecosystems and/or ecosystem services contribute.	• Economic value of forests, wetlands and watersheds owned by TRCA • Economic value of ecological services provided by TRCA land.
		Total Cost of Ownership	The purchase and operation cost of TRCA assets determined by evaluating life-cycle direct and indirect costs/benefits.	• Life-cycle costs/benefits of products and services from creation to disposal. • Total carbon footprint of individual products and services. • Full cost accounting incorporating capital and operational costs.
		Funding for Sustainability	Identify and secure funding to support sustainability projects and programs	• Government and foundation grants for pilot projects and practices. • Revolving fund of operating cost savings from successful projects to fund future projects.

6. Program Activities

The intent of the CS program is to have each division and respective business unit include consideration for sustainability in their decision making. There are 4 activities that the CS team will focus on once the business case has been approved:

- Develop Draft Corporate Sustainability Targets and Implementation Strategy: The document would be prepared in consultation with key staff and subject matter experts from across the organization and would achieve the following objectives:
    - Quantify the key issues identified for each sustainability lens to identify the magnitude of impact;
    - Identify appropriate targets for each issue based on good science, alignment with stakeholders, accepted standards and the Corporate Strategic Plan desired outcomes;
    - Evaluate TRCA's ability to achieve each target;
    - Prioritize the issues based on the results of the analysis above;
    - Identify potential implementation scenarios and recommend targets and implementation actions;

- Present Draft Corporate Sustainability Targets and Implementation Strategy to SLT: Obtain input and finalize the draft report based on feedback from SLT.

- Prepare Three-Year Work Plan: Based on the results of the Corporate Sustainability Targets and Implementation Strategy and consultations with key operational business units prepare a 3-year work plan for the CS program. Business units identified in the workplan would be required to include the CS team in the relevant decision processes. The CS team will work with the BU's to apply the sustainability lenses and to identify the need for guidelines, standard operating procedures and other tools to support the BU's. The CS team will also quantify and report on the outcomes from applying the sustainability lenses.

- Report to TRCA Board of Directors: Prepare Board Report and powerpoint presentation.

7. Program Development Budget, Deliverables and Timing

The deliverables for the development of the Corporate Sustainability Program are outlined in Table 3. Funding to complete these deliverables is available from the fund account 414-60. A three-year program with priority activities and budget will be prepared as part of the 3 year workplan.

8. Key Success Measures and Criteria

The business goal of the CSP is to integrate consideration for sustainability into operations and infrastructure decisions in a manner that creates the best long-term value for the organization and its stakeholders. Based on an assessment of the Corporate Vision, Mission, Values and the previous assessment of the alignment between the updated Corporate Strategic Plan and the Corporate Sustainability Program, staff identified the following key success measures for the program:

- Reduce the environmental impact of TRCA's operations and infrastructure;
- Reduce long-term operational costs and generate funding for projects;
- Increase staff awareness, understanding and application of sustainability best practices;
- Increase the community benefits generated by TRCA's operations and infrastructure.

Metrics and targets for these key success measures will be developed as part of the Corporate Sustainability Targets and Implementations Strategy in the next phase of the program development. KPI's for the program would be developed in partnership with the Strategic Business Planning and Performance team.

Appendix 1: *Climate Change related Strategic Plan strategies and desired outcomes that can be directly or indirectly impacted by TRCA infrastructure and operations.*

Climate Change Lens	
Desired Outcome	**Relationship to Sustainability Program**
Strategy #1: Green the Toronto region's economy	
Sustainability measures implemented in all major new developments and in retrofits of existing developments to reduce environmental impacts.	Taking action to ensure new buildings, retrofits and renovations achieve a high-level of environmental performance directly reduces TRCA's negative environmental impact from operations.
Strategy #2: Manage our regional water resources for current and future generations	
Adaptive measures to address climate change are integrated into infrastructure projects to ensure their durability and resilience.	TRCA facilities and lands integrate climate change adaptation and resiliency into new and existing infrastructure.
Strategy #4: Create complete communities that integrate nature and the built environment	
Existing and new communities are planned to integrate natural systems and achieve a less impactful (e.g. lower carbon) environmental footprint	TRCA facilities are part of communities and contribute towards their environmental footprint TRCA facilities and operations are used to demonstrate, educate and train communities on low-impact development.

Appendix 2: Environmental Stewardship *related Strategic Plan strategies and desired outcomes that can be directly or indirectly impacted by TRCA infrastructure and operations.*

Environmental Protection Lens	
Desired Outcome	**Relationship to Sustainability Program**
Strategy #1: Green the Toronto region's economy	
Sustainability measures implemented in all major new developments and in retrofits of existing developments to reduce environmental impacts.	Taking action to ensure new buildings, retrofits and renovations achieve a high-level of environmental performance directly reduces TRCA's negative environmental impact from operations.
Strategy #2: Manage our regional water resources for current and future generations	
Adaptive measures to address climate change are integrated into infrastructure projects to ensure their durability and resilience.	TRCA facilities and lands integrate climate change adaptation and resiliency into new and existing infrastructure.
Toronto Region waterways are suitable for swimming, fishing, and recreational activities.	TRCA operational practices on its lands and facilities can contribute directly to this desired outcome
Source water quality and quantity is maintained or improved.	TRCA operational practices on its lands can contribute to source water protection and improvement
Strategy #3: Rethink greenspace to maximize its value	
The region's natural heritage system is protected to support, maintain, and enhance existing biodiversity and ecological functions.	TRCA operational practices on its lands can directly impact this desired outcome
Strategy #4: Create complete communities that integrate nature and the built environment	
Existing and new communities are planned to integrate natural systems and achieve a less impactful (e.g. lower carbon) environmental footprint	TRCA facilities are part of communities and contribute towards their environmental footprint TRCA facilities and operations are used to demonstrate, educate and train communities on low-impact development.

Appendix 3: Social Development and Wellbeing *related Strategic Plan strategies and desired outcomes that can be directly or indirectly impacted by TRCA infrastructure and operations.*

Social Development and Wellbeing	
Desired Outcome	**Relationship to Sustainability Program**
Strategy #1: Green the Toronto region's economy	
Green infrastructure projects and training programs to support governments and industry in their efforts to renew and deliver efficient and resilient infrastructure in more sustainable new developments and in neighbourhood retrofits.	TRCA infrastructure and facilities are used as demonstrations and for training of government and industry
Strategy #4: Create complete communities that integrate nature and the built environment	
Existing and new communities are planned to integrate natural systems and achieve a less impactful (e.g. lower carbon) environmental footprint	TRCA infrastructure and facilities are used as demonstrations and for training of government and industry
Strategy #5: Foster sustainable citizenship	
Improved community awareness and understanding of important environmental issues and the work being done by TRCA to protect the environment and make the region more sustainable.	Communication of best practices and achievements by TRCA on its own lands and facilities contributes directly to this desired outcome
Strong community leadership in, and ownership of, watershed planning, community planning, and sustainability initiatives.	TRCA staff involvement in corporate sustainability initiatives contributes to fostering sustainable citizenship
Strategy #7: Build partnerships and new business models	
Ensuring TRCA's networks and strong relationships with senior levels of government and private sector stakeholders are leveraged to accelerate progress on member municipality objectives.	TRCA leadership on corporate sustainability can foster relations with senior levels of government
Strategy #8: Gather and share the best sustainability knowledge	
TRCA programs and projects are evidence-based and informed by both high-quality local research and global best practices.	TRCA facilities and operational practices are informed by and contribute to the development of the best-sustainability knowledge
Strategy #9: Measure performance	
Community and infrastructure planning, design, operation and renewal in member municipalities is informed by the best sustainability knowledge and research, including data and studies by TRCA, member municipalities and other leaders in the jurisdiction.	TRCA facilities and operations contribute to the development of a common understanding about environmental and sustainability goals
A common understanding about environmental and sustainability goals, targets and measurements in the jurisdiction that facilitates collaboration and collective action.	TRCA facilities and operations contribute to regional sustainability goals and targets through collaboration and collective action.
Strategy #10: Accelerate Innovations	
Recognition for TRCA and its member municipalities as leaders in sustainability innovation.	Ensure that TRCA facilities and operations are recognized as leaders in sustainability
Staff are supported in piloting innovative ideas to address sustainability challenges, and to help generate optimal results from finite resources.	Corporate Sustainability program supports staff in piloting innovation and sustainability practices
Strategy #11: Invest in our staff	
All staff are informed and supported to effectively perform their roles.	Program supports HR in defining sustainability considerations within staff roles
A healthy work / life balance that promotes wellness for all staff.	Policies and practices that support family-life commitments, flexible work locations, and provide social benefits to employees demonstrates corporate commitment to employee well being while also providing environmental benefits.
Strategy #12: Facilitate a region-wide approach to sustainability	
TRCA initiatives are coordinated with member municipalities and partners to address the most important environmental issues in the jurisdiction.	Where appropriate operational practices are coordinated with municipal partners
Stakeholders across the region within the jurisdiction collaborate effectively to advance action on sustainability issues with major, measurable impact.	Corporate sustainability collaborates with organizations external organizations to share best practices

Appendix 4: Economic development *related Strategic Plan strategies and desired outcomes that can be directly or indirectly impacted by TRCA infrastructure and operations.*

Economic Development Lens	
Desired Outcome	**Relationship to Sustainability Program**
Strategy #1: Green the Toronto region's economy	
Sustainability measures implemented in all major new developments and in retrofits of existing developments to reduce environmental impacts.	Promoting and being a leader in the procurement of innovative technologies and practices that achieve eco-efficiency provides cascading indirect benefits through the supply chain, helping to normalize sustainability and transform the wider economy.
Ecologically sound agricultural practices on TRCA managed lands in support of community economic development and agricultural viability objectives.	Procurement and leasing practices can support and influence the production of local eco friendly agricultural products.

Appendix 5: Sustainability actions in place by TRCA municipal funding partners

Overall	Climate	Social	Economic	Environment	Matrix of corporate plans, policies, by laws, or strategies focused on Sustainability at TRCA municipal funding partners ●=Existing/Formally Entrenched ○= In development /Informally Entrenched □= Focused on community sustainability, not corporate sustainability
○					**City of Toronto** corporate sustainability initiatives led by Environment and Energy Division through TransformTO Strategy
	●				***Mitigation:*** Change is in the Air: Climate Change, Clean Air and Sustainable Energy Action Plan (2007) ***Adaptation:*** Climate Change Adaptation Strategies – Ahead of the Storm (2008) & Resilient City (2014) ***Target:*** 30% below 1990 GHG levels by 2020, 65% below by 2030, 80% by 2050
		●	●		***Procurement:*** Social Procurement Policy within the City's Procurement Processes (2016) ***Target:*** 1) Increase diversity of the City's supply chain, 2) Increase the number of employment, apprenticeship and training opportunities leveraged for people experiencing economic disadvantage
				●	***Energy:*** Energy Conservation and Demand Management Plan ***Target:*** Reduce energy consumption by up to 30%
●					**Peel Region** corporate sustainability initiatives connects to Peel Region Strategic Plan and Long-term Financial Planning Strategy
	●				***Mitigation and Adaptation:*** Peel Climate Change Strategy (2011) ***Target:*** 10% below 1990 GHG levels by 2019, 37% below by 2030, 80% by 2050. Recently adopted IPCC science- based target of 45% below 2010 by 2030 and carbon neutral by 2050.
		●	●	●	***CSR:*** Corporate Social Responsibility Strategy. Corporate Social Responsibility (2017) ***Environment Target***: Environmental footprint will be minimized through our business operating practices ***Social and Economic Target:*** Increased social & economic benefits for the Peel community. ***People Target:*** Improve as a model employer through our business and operating practices
●					**York Region** corporate sustainability led by Sustainability Strategy (2007), post-report most initiatives led by Vision 2051 Strategy
				●	***Energy:*** Energy Conservation and Demand Management Plan Update (2016)
	○				***Mitigation:*** Regional Climate Change Action Plan (TBC) ***Target:*** Zero GHG emissions by 2051
□					**Durham Region** corporate sustainability is not focused on operations, but at community planning for sustainability
				□	***Energy:*** Durham Community Energy Plan (TBC)
	□				***Mitigation:*** Durham Community Climate Change Local Action Plan (2012) ***Target:*** 20% below 2007 GHG levels by 2020, 80% by 2050 ***Adaptation:*** Durham Community Climate Adaptation Plan (2016)