Environmental Pillar

Introduction

What is the Environmental Pillar

Aims to minimize environmental harm and maximize positive outcomes for a healthier environment. Focusses on issues like reducing greenhouse gas (GHG) emissions, pursuing NetZero, energy efficiency, zero-waste and circularity, and reducing water usage and toxicity. It also supports the adoption of a regenerative economy with clean and renewable technologies.

Environmental Risks / Opportunities

1. Greenhouse Gas (GHG) Emissions

GHG emissions resulting from the manufacture, delivery, use and/or disposal of a product or service (i.e. carbon footprint); as well as a supplier's management of Scope 1, 2, 3 GHG emissions.

2. Energy Use/Efficiency

Energy consumption/performance from the operation of a product over its useful life or energy efficient operations of the supplier.

3. Water Use/Efficiency

Water consumption/performance from the operation of a product over its useful life, water efficient operations of the supplier, and/or water consumption in the manufacturing process of a product.

4. Waste Reduction: Product Life Cycle & Circularity

Waste produced from each phase of a product's lifecycle from product design, manufacturing, use, and disposal; waste associated with the delivery of a service; waste management of the supplier; usage of recycled/repurposed materials.

5. Waste Reduction: Packaging

Waste associated with excessive or difficult to recycle packaging materials.

6. Resource Extraction & Impact on Biodiversity

The impact on biodiversity (including natural ecosystems, habitat, and wildlife) associated with the harvesting/resource extraction needed for the production of a product and/or operations of a supplier.

7. Toxics Management & Pollution Prevention

The release of toxic, hazardous, or other contaminants (solid, liquid, or gaseous) of concern into local air, land, or water systems.

Legislative Context

Federal Green Procurement

- **Federal Sustainable Development Strategy (FSDS):** This strategy outlines the Government of Canada's commitment to sustainable development, including promoting green procurement. It encourages federal departments and agencies to integrate environmental performance considerations into procurement decisions.
- **Greening Government Strategy:** This policy framework aims to reduce the environmental impact of federal government operations. The directive promotes environmentally responsible procurement practices by encouraging the purchase of low-carbon goods and services. It emphasizes lifecycle assessments and the reduction of carbon footprints in procurement decisions.
- **Green Procurement Policy (2006):** This federal policy mandates that environmental performance must be considered in the procurement of goods and services by government departments. It promotes the use of green products and services that minimize negative environmental impacts.

Canadian Net-Zero Emissions Accountability Act

The Canadian Net-Zero Emissions Accountability Act is the Government of Canada's commitment to achieve net-zero GHG emissions by 2050 and provides a framework of accountability and transparency to deliver on it. The Act establishes a legally binding process to set five-year national emissions-reduction targets as well as develop credible, science-based emissions-reduction plans to achieve each target. It establishes the 2030 greenhouse gas emissions target as Canada's Nationally Determined Contribution (NDC) under the Paris Agreement emissions reductions of 40-45 percent below 2005 levels by 2030.

Implementation Best Practices

Re-think and Reduce

The first step in a sustainable procurement decision is to ask yourself, "Do I really need to buy this?". The most sustainable purchases are the ones we never make. To reduce impact on the environment and the generation of waste that comes from the production and consumption of new resources you can ask these questions before purchasing new products:

- Is the product function still required? Is there an alternative / lower impact approach to addressing this need?
- Is the current product repairable / upgradable?
- Could other in-house assets satisfy the desired function?
- Is an access over ownership option viable? (ex. Product-as-a-Service (PaaS), leasing, renting, borrowing, sharing, etc.)
- Could a used / refurbished product satisfy the desired function?
- Could we reduce our rate of consumption of this product?

Taking a Life-cycle Approach

Simply put, every item has a life cycle from when it is first produced to when it reaches end of life, and each stage in the life-cycle will have different impacts on the environment. For example:

- Raw material extraction can require large portions of land, is damaging and polluting to ecosystems, and impacts the climate. Extraction can also require many resource inputs such as water and energy.
- Manufacturing or production also consumes many resources in its processes and can create harmful pollution and GHG emissions from the operation of heavy machinery.
- Distribution and transportation between any stage in the life-cycle releases GHG emissions.

- The use phase is interestingly often the least impactful stage despite a breadth of impacts including energy usage, waste from packaging, or the release of chemicals.
- Lastly, at end-of-life, a product usually becomes waste either ending up in a landfill or hopefully being recycled or composted – all of which have impacts related to emissions and land use.

In the context of procurement, considering a product's life cycle offers a helpful framework for identifying the largest environmental risks and thus creating requirements in your procurement documents to access and select options that are environmentally preferable.

Eco-labels or certifications can provide a good indication that a product has met a certain standard of environmental performance. When purchasing, you can request that products or suppliers have an eco-certification (either one in particular or one of a range of similar labels) as a specification in an RFP. Or look for eco-labels when making quick decisions on products or suppliers for low value and invitational competitive purchasing. The Eco-label Guide provides examples and guidance.

HIPO Environmental Hotspot Analysis

When initially developing your organization's High Impact Procurement Opportunities (HIPO) list, you will have pre-identified some of the most relevant environmental issues for each of the shortlisted purchasing categories. A more advanced step for addressing and mitigating specific environmental issues in your supply chain, would involve an environmental hot-spot analysis; for example, GHG emissions, waste, packaging, or water usage. This can be done using third-party platforms with environmental product data or more simply working with staff internally to brainstorm and identify which products generally contribute the most to the priority issue areas, thus focus on including relevant criteria into those RFPs.

Increase Impact Through Collaboration!
Identify and collaborate with other staff at the College who may be working on environmental objectives (ex. the Sustainability team, environmental planning, or facilities) to align with corporate goals and break down silos.

Evaluate Supplier Corporate Sustainability

Evaluating suppliers' corporate environmental performance, in addition to the features of the products they offer, is critical for maximizing positive impact and driving a sustainable society. By signalling to and selecting suppliers who have established commitments and progress to improve their environmental performance, you are creating demand and supply of more sustainable options for all.

An area of particular importance is measuring and reducing your organization's Scope 3 GHG emissions, which often rely on the commitment and disclosure of your suppliers. Globally, we cannot achieve net-zero by 20250 targets without addressing Scope 3. It is important to start evaluating suppliers within RFPs on whether they:

- Can describe policies and practices they use to measure Scope 1, 2, and 3 emissions,
- Have GHG emissions reduction targets in place; even better to be Science-based Targets,
- Can describe strategies and progress on activities they are implementing to achieve said targets
- Are disclosing emissions to a third-party monitor (ex. CDP or Net Zero Challenge).

Focus first on procurements where its likely that larger suppliers will be bidding, as small- and medium-sized suppliers may not have the resources to meet all of these criteria; though they should still have some strategies in place to manage their environmental footprint.

Glossary

Biodiversity: The variety of life in the world or in a particular habitat or ecosystem. High biodiversity is important for ecosystem resilience and human survival.

Carbon Footprint: The total amount of greenhouse gases, primarily carbon dioxide, that are emitted directly or indirectly by human activities. It is typically measured in units of carbon dioxide equivalents.

Carbon Neutral: Achieving a balance between emitting carbon and absorbing carbon from the atmosphere in carbon sinks. It is often achieved through a combination of reducing emissions and investing in carbon offset projects.

Carbon Offset: an action intended to compensate for the emission of carbon dioxide into the atmosphere as a result of industrial or other human activity, especially when quantified and traded as part of a commercial program.

Circular Economy: An economic system aimed at eliminating waste. It involves designing products for longer use, recycling materials, and reducing the reliance on finite resources.

Climate Change: Long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. It is largely attributed to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Ecolabels: Ecolabels are certifications granted to products, services, or companies that meet specific environmental performance criteria. These labels provide buyers assurance within purchasing decisions. The Eco-label Guide provides examples and guidance.

Environmentally Preferable: This term is often used to indicate that a product or service has a minimal environmental impact; having features or attributes that work to mitigate negative environmental issues.

GHG emissions: (including carbon dioxide, methane and nitrous oxide) trap heat in the Earth's atmosphere, leading to global warming. Rising temperatures are responsible for various environmental issues, including increases in extreme weather events, sea-level rise and biodiversity loss.

Green Washing: The practice of making misleading or unsubstantiated claims about the environmental benefits of a product, service, or company practices to appear more environmentally friendly.

Life Cycle Assessment (LCA): A technique to assess the environmental impacts associated with all stages of a product's life from raw material extraction through production, use, and disposal.

Renewable Energy: Energy derived from resources that are naturally replenished, such as sunlight, wind, rain, tides, and geothermal heat.

Scope 1, 2 & 3 emissions: Categories used to describe an organization’s GHG emissions based on their point of origin. Scope 1 emissions are those created directly by the company. Scope 2 emissions are indirectly created through the generation of purchased energy. Scope 3 emissions are indirect emissions that occur in a company's value chain.