## WHAT IS SUSTAINABLE PURCHASING?

Sustainable purchasing involves the critical evaluation of products, services and processes that move the university towards procurement decisions that provide the best value, i.e. total cost of ownership with the lowest environmental and social impacts. "Cradle to grave" costs need to be considered such as, how the products are made, what they are made of, where they come from, how they will be used and how will they be disposed of.

Wherever possible, choose products that have attributes or qualities that can be measured favorably against the Checklist for Sustainable Purchases.

## IS SUSTAINABLE PURCHASING MORE EXPENSIVE?

Although the upfront cost of a sustainable product *may* appear to be more, the Life Cycle Cost of the sustainable product is often less (for example, through energy or water savings).

Another contributing factor to the sometimes increased price of sustainable products is the smaller demand for these emerging products as compared to more traditional products.  A competitive market will not develop until consumers and purchasers demand sustainable products.

## WHAT IS THE NATURAL STEP?

The Natural Step (TNS) is a globally accepted framework designed to be scientifically valid and widely applicable to guide strategic planning and decision making toward sustainability.  TNS can be applied at multiple levels: community, business, household or individual.  At the heart of the framework are four TNS sustainability principles and a formalized process for achieving sustainability.

The University of Saskatchewan has adopted the TNS sustainability principles as our framework for the identification of Sustainability Objectives (SO's).

| APPLIED TNS FOR THE U of S | |
| --- | --- |
|  | Reduce the U of S's contributions to **systematic increases in concentrations of substances from the Earth's crust** (e.g. by increasing energy efficiency), |
|  | Reduce the U of S's contributions to **systematic increases in concentrations of substances produced by society** (e.g. through recycling), |
|  | Reduce the U of S's contributions to **systematic physical degradation of nature** (e.g. using certified wood or alternates) |
|  | Reduce the U of S's contribution to **systematic undermining of the ability of others to meet their basic human needs.** (e.g. by purchasing certified products). |

# THE SIX STEP APPROACH

This six-step approach to making purchasing decisions is based on TNS and Whistler 2020 Framework and the *Strategic Life Cycle Assessment (LCA) Reframing Traditional Boundaries Using Sustainability Constraints*

This approach is intended to be used as a tool through the assessment process and assist in critically evaluating products to contribute to our Sustainability Objectives.

### Step 1:  IDENTIFY THE PRODUCT'S SERVICE

What service(s) does the product help provide and does this service support the goals of the university?

### Step 2:  ASSESS THE NEED FOR THE PRODUCT

Can you meet the desired service without purchasing a tangible product?
Can you purchase a service rather than a product?
Can you rent, lease, share or borrow the product rather than buying it? If this is not reasonable, is a used or re-furbished product a viable option?

### Step 3:  IDENTIFY THE PRODUCT CONTENT

If 'NO' to Step 2 questions, what are the main components of the current product, including what is required to make and use the product?

### Step 4:  IDENTIFY SUSTAINABILITY IMPACTS

How does the current product contribute to violations of our sustainability objectives?  Answers to the following questions will help determine whether continued use of the product may move us away from our Sustainability Objectives.

   a) **How does the product potentially move us away from Sustainability Objective #1?**
   *(Reduce and eventually eliminate our contribution to systematically increasing concentrations of substances from the earth's crust)*

   It moves us away from SO 1 if it contains, or relies on:
   • **Scarce metals/minerals (inorganic)** – These products contain metals/minerals that are not commonly found in the natural environment.  This is especially true if the scarce metals are disposed of in nature at the end of their useful lifecycle (rather than being recycled in technical cycles).

   • **Fossil fuels (organic)** – These products contain or are based on fossil fuels, which disperse in nature in the form of emissions such as carbon dioxide ($CO_2$).

   *Technical cycles* or 'tight technical loops' refers to cycles (usually part of an industrial process) where materials can and are reused indefinitely in processes that allow the substances to accumulate in nature.

   b) **How does the product potentially move us away from Sustainability Objective #2?**
   *(Reduce and eventually eliminate our contribution to systematically increasing concentrations of substances produced by society)*

   It moves us away from SO 2 if it contains, or relies on:
   • **Non-Natural, non-biodegradable substances** – These products contain persistent, human-made substances that are allowed to disperse in nature (rather than being recycled in technical cycles).

- **Toxic/hazardous substances** – These products contain substances that are also non-natural and non-biodegradable, but deserve special mention due to their acute toxicity and impacts on human health and living systems. Various warning labels will mark products that contain these substances.

c) **How does the product potentially move us away from Sustainability Objective #3?**
*(Reduce and eventually eliminate our contribution to systematically increasing the degradation of nature by physical means)*

It moves us away from SO 3 if it contains, or relies on:
- **Over-harvested resources** – These products contain resources that are harvested at such a rate that they cannot be replaced by nature. Natural resources that are slower-growing and resource intensive are particularly susceptible to overharvesting.

- **Mismanaged sources/systems** – The inputs for these products come from natural systems that are managed in a way that compromises their natural functions. Over-harvesting is one form of mismanagement.

- **Destroyed/displaced natural systems** – These products directly or indirectly displace and physically destroy natural areas.

d) **How does the product potentially move us away from Sustainability Objective #4?**
*(Reduce and eventually eliminate our contribution to systematically undermining the ability of others to meet their basic human needs)*

It moves us away from SO 4 if it contains, or relies on:
- **Inefficient use of materials and energy** – These products contain or use more material or energy than is required.
- **Unfair/inequitable sourcing** – Products that do not provide a fair or liveable wage for those in the production process.
- **Other** – The product, or the production process may interfere with others' abilities to meet their basic needs such as subsistence, education, freedom and protection.

## Step 5: ENVISION A SUSTAINABLE PRODUCT/SERVICE

Once potential sustainability impacts are understood, Step 5 is intended to help identify solutions that are more closely aligned with the U of S's Sustainability Objectives. It sets the *vision* of a sustainable product or service in the future so that we can *backcast* from the *vision* (Step 5) to the *current reality* (Step 4,) to identify the first steps on the journey between the vision and the reality.

In the future, a sustainable product/service:
- Does not contain scarce metals and minerals that are allowed to accumulate in the natural environment, or if it does, they are 100% recyclable and not allowed to disperse in nature (reused in tight technical cycles).

- Does not contain petroleum or depend on fossil fuels for energy, or if it does, they are 100% recyclable and not allowed to disperse in nature. These products are made using sustainable energy in a carbon-neutral process.

- Does not contain human-made (synthetic), non-biodegradable materials that are allowed to accumulate in the natural environment, or if it does, they are 100% recyclable and not allowed to disperse in nature.

- Uses materials/energy efficiently.

- Does not prevent others from meeting their basic needs.

**Step 6: IDENTIFY & PRIORITIZE ALTERNATIVES**

Step 6 helps identify the product or service that offers the best pathway toward meeting all four of our Sustainability Objectives by using the following three criteria for assessment:

a) **Does the product or service move us in the right direction with regards to our four Sustainability Objectives?**

   This requirement of moving 'toward' sustainability is relative.  As long as we are making decisions that are *more* sustainable than the alternatives, the university is moving along the continuum of 'un'sustainability toward a sustainable future.

b) **Does the product or service create a flexible platform for the next step toward sustainability?**

   The objective here is to ensure that the choice of product/service will provide a stepping-stone toward becoming more sustainable, as the product/service was envisioned in Step 5.  Consider whether this product/service or supplier reduces or eliminates future options for improvement.

c) **Is the decision financially viable?**

   Outcomes of financial analysis will need to be balanced against Sustainability Objectives and the technical/performance requirements.  The analysis should include the total cost of ownership, potential savings and revenue.  Also, consider the opportunity costs?  In other words, how does a premium paid for this product/service affect the potential to make other sustainability investments?