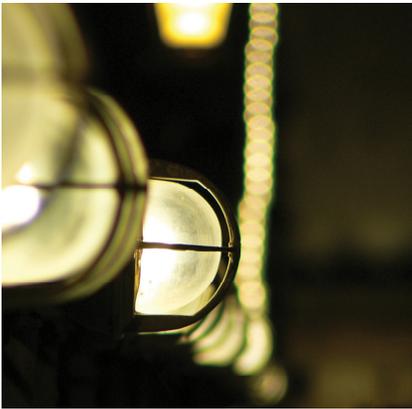


# Smart Purchases Big Impact

**Sustainable Purchasing Guide**  
**Sports Equipment**

*Sustainability... your university, your world*

A stylized black silhouette of a tree with many leaves.



## Introduction

This section provides information on currently available **sports equipment** options that can help to move the University of Saskatchewan toward its sustainability goals. Living within the boundaries of our sustainability goals requires us to apply two main strategies:

- Dematerialization** requires that we reduce the amount of materials as much as possible; and that we continually move toward the use of 100% recycled content.
- Substitution** requires that we find less harmful materials to replace those that currently damage and are not recyclable.

**Sustainable purchasing** is about including social, environmental, financial and performance factors in a systematic way. It involves thinking about the reasons for using the product (the service) and assessing how these services could be best met. If a product is needed, sustainable purchasing involves considering how products are made, what they are made of, where they come from and how they will be used and disposed.

Finally, remember that this is an evolving document – it will change with new information as our understanding of sustainability impacts and potential solutions improves.

**Purchasing Services**  
 Tel: (306) 966-6704  
 Email: [purchasing.services@usask.ca](mailto:purchasing.services@usask.ca)

**Office of Sustainability**  
 Tel: (306) 966-1236  
 Email: [fmd.sustainability@usask.ca](mailto:fmd.sustainability@usask.ca)

**Smart Purchases  
Big Impact**

Wherever possible **CHOOSE** products that employ a combination of characteristics listed in the left hand column, and **AVOID** products that demonstrate characteristic in the right-hand column.

CHOOSE	AVOID
<ul style="list-style-type: none"> <li>• Durability</li> <li>• Reparability</li> <li>• Recyclability</li> <li>• Fair Trade/EcoLogo/FCS certified</li> </ul>	<ul style="list-style-type: none"> <li>• Conventionally tanned leather</li> <li>• Composite or hybrid materials</li> </ul>

### Option: Choose Durability Strategy: Substitution and Dematerialization (SO 1, 2, 3)

Opt for high quality sports equipment that provides a long functional life. This reduces the ongoing impacts associated with both manufacture and disposal of low quality products. Similarly, purchase equipment that allows parts to be replaced and repaired as opposed to buying a new unit. Regular maintenance will further ensure the longevity of the equipment. If the equipment will only be used infrequently, consider leasing or renting it instead.

### Option: Choose Fair Trade Canada Certified Sports Balls Strategy: Substitution (SO 4)

Most sports balls are manufactured in areas where labour costs are low, and then they are transported to Canada. However, employees at these manufacturing plants may not have fair working conditions. Fair Trade Canada outlines strict guidelines that certified companies must abide by to ensure that fair and ethical labour practices are being followed.

### Option: Choose EcoLogo Certified Equipment Strategy: Substitution (SO 1, 2, 3, 4)

EcoLogo assesses the environmental and human health impacts of a product throughout its complete life cycle. Although not all sports equipment has been assessed by EcoLogo, those products which have been certified are the best choices available.

### Option: Choose Post Consumer Recycled Plastic and Rubber Content Strategy: Substitution (SO 1, 2, 3)

Some sports equipment includes some recycled materials. The best options are products made from post-consumer recycled content. These are products where the input materials are collected at the end of their useful life by consumers and remanufactured (e.g. basketballs that are no longer functional are melted and reformed into new basketballs). Pre-consumer recycled content refers to a recycled product where the input materials are scraps from the manufacturing process that are used in new products (e.g. plastic shavings that are re-melted and molded).

### Option: Choose Forest Stewardship Council Certified Rubber

Strategy: Substitution (SO 2, 3)

A rubber tree produces a sap that is extracted just like maple syrup. This sap is known as latex, and is typically harvested when the trees are 5-6 years old. Ideally, incisions are made just deep enough to tap the vessels without harming the tree's growth, and the sap is collected in small buckets. The Forest Stewardship Council of Canada certifies rubber that is completely natural with no added toxins or chemicals, and is tapped in a manner that is sustainable.

### Option: Choose Products Which Can Be Recycled

Strategy: Dematerialization (SO 1, 3)

Choose products from companies that offer to take back the used equipment for recycling. For example, nylon products such as the climbing rope can be melted down and made into clothes hangers, carpet fibres, or children's toys. Plastic or fibreglass

sports equipment can also be recycled into a whole new product such as patio furniture or park benches.

Products that are manufactured with hybrid or composite materials generally cannot be recycled. If a monomaterial product option is available and fulfills the desired purpose, it should be selected over a product made of composite materials.

### Option: Avoid Conventionally Tanned Leather

Strategy: Substitution (SO 3)

Leather tanning often involves use of heavy metals and chromium. Workers exposed to these chemicals can suffer health impacts including risk of dermatitis, ulcers and perforation of the nasal septum and respiratory illnesses as well as increased lung and nasal cancers. These chemicals can also leech into water sources affecting the people in the surrounding area.

## Arriving at the currently preferred options

### 1. Identify the service

Sports equipment is necessary for various physical activities.

### 2. Assess the need

The University of Saskatchewan is involved in many sports-based programs and events.

### 3. Identify the contents

Sports equipment is made of rubber, leather, aluminum, plastics or other durable synthetic fabrics.

### 4. Identify sustainability impacts

*i. ....systematically increasing concentrations of substances from the earth's crust?*

- Fossil fuels are also combusted to provide energy during the extraction of raw materials, transportation and the production of sports equipment.

- Aluminum is frequently used in sports equipment. Aluminum is a non renewable resource, so unless the aluminum content is recycled or recyclable, that equipment is contributing to increasing concentration of substances from the earth's crust.
- The petroleum or natural gas used as feedstock for most plastics is extracted from the earth's crust at a rate much greater than it is re-deposited back into the earth's crust.

*ii. ....systematically increasing concentrations of substances produced by society?*

- Any **plastic** components persist in the environment, contributing to an increase in concentration of complex human-made substances in nature.
- Leather tanning often involves use of heavy metals and chromium. These chemicals can leech into water sources.

*iii. ....systematically degrading nature by physical means?*

- If the rubber components of sports equipment are not harvested sustainably they can lead to the degradation of the forest and surrounding ecosystem.

*continued on page 3...*

#### 4. Identify sustainability impacts (con't)

- Plastic sports equipment does not naturally break down in the environment. Unless the plastic in the equipment is completely captured and reused it will accumulate in landfills displacing humans and wildlife.

*iv. ...systematically undermining people's ability to meet their basic human needs?*

- Depending on the equipment's country of origin, workers in manufacturing plants may or may not be protected by labour standards that meet international guidelines.
- Leather tanning often involves use of heavy metals and chromium. Workers exposed to these chemicals can suffer health impacts including risk of dermatitis, ulcers and perforation of the nasal septum and respiratory illnesses as well as increased lung and nasal cancers. These chemicals can also leech into water sources affecting the people in the surrounding area.

#### 5. Envision sustainable sports equipment

Sustainable sports equipment would not contribute to systematic increases of substances extracted from the earth's crust, or of human-made substances. This means that it would either (1) not contain any substances that could systematically increase in nature or (2) that these substances would be taken back and re-used entirely.

The energy used for extracting raw materials, producing and transporting the equipment would be generated from sustainable renewable sources in a carbon-neutral way, so that no carbon was allowed to systematically increase in the atmosphere and biosphere.

Sports equipment should be made by people working under fair and ethical conditions.

#### 6. Identify and prioritize alternatives

To identify the best options, review the Current Options on page one and choose the most appropriate alternative 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?
- b) Does the product or service create a flexible platform for the next step toward sustainability?
- c) Is the decision financially viable?

### Resources and Additional Information

1. Fair Trade Canada  
<http://fairtrade.ca/en/node>
2. Forest Stewardship Council of Canada  
<http://www.fscCanada.org/>



This guide was made possible through the generosity of the Whistler 2012 project, which shared its template and much of its research.