### **ENVIRONMENTAL GUIDELINES FOR CULTURAL SPACES CANADA CLIENTS**

#### The Federal Government's commitment to the environment

The Government of Canada has committed to building a more energy-efficient and less emissions-intensive society by participating in the global effort to address climate change. Canada's Climate Change Plan aims to help us all rethink the way we use energy. This includes encouraging waste reduction, recycling, pollution prevention and energy conservation in projects that the government funds.

#### **Commitment of Canadian Heritage**

The Department of Canadian Heritage supports this federal commitment through the Department's Sustainable Development Strategy, which includes a commitment to integrate sustainable development into Canadian Heritage programs and policies delivered directly by the Department or in partnership with others. The Cultural Spaces Canada (CSC) Program will help achieve this goal by encouraging and supporting environmentally sound and energy efficient projects (as eligible costs) as well as by increasing client awareness regarding environmental protection and energy conservation measures.

## **Meeting Federal Environmental Requirements**

Certain CSC projects will require an environmental assessment (EA) under the *Canadian Environmental Assessment Act* (CEAA). When the act applies an EA will be required for a construction or renovation project unless the project is of a type specifically excluded from an EA as set out in CEAA's *Exclusion List Regulations*. Excluded projects are typically relatively small structures that are not within 30 metres of a body of water or that would not result in the release of polluting substances into a body of water. The act is unlikely to apply to CSC projects for specialized equipment purchases or feasibility studies.

Under CEAA, the Department of Canadian Heritage must ensure that an EA is carried out for any proposed "project" (as defined by the act) that it intends to fund. Commonly, federal departments require a project proponent (recipient of the funds) to carry out the EA and prepare a report on the results. Departments then commonly provide study terms of reference and review and approve the EA report.

For more information contact: Canadian Environmental Assessment Agency: http://www.ceaa-acee.gc.ca/index\_e.htm

#### Introduction to "Green" building

"Green building" includes making planning/designing, materials, and construction decisions based on environmental considerations. It benefits humans, the community, the environment, and a project's bottom line. Examples of "green" initiatives include new and better building solutions which conserve energy, salvaging and incorporating existing materials in new ways, and avoiding use of unnecessary materials.

## Benefits of undertaking "Green" projects

Proper project planning can help reduce the nature and extent of a project's potential environmental impact. For example: the site selected for a building will strongly influence the potential for harm to wildlife habitat, water bodies, or other environmental features; the size layout and structural design of a building will determine how efficiently it uses energy; and the materials used for construction may vary in their environmental impact. Other benefits include:

- Energy conservation leads directly to cost savings as well as reducing pressure on scarce energy resources. It also reduces the greenhouse gases implicated in climate change.
- Waste reduction and recycling alleviate pollution and ease pressure on landfill sites. It also saves money when materials are used efficiently.
- As public facilities, environmentally sound CSC projects can serve as examples of sustainable development, help raise community awareness, and build an organizations image.

## Eligible "Green" projects under the CSC Program

Examples of eligible projects include:

- Feasibility studies- Environmental assessments, environmental site assessments, energy conservation analyses or plans, and waste management plans.
- Specialized equipment Purchase of energy conserving lights, HVAC systems, and other specialized equipment, purchase of eco-labelled products; replacement of existing equipment with more energy conserving equipment
- Construction/Renovation Can include but is not limited to energy efficiency measures (such as heating and cooling systems, windows and lighting, insulation, etc), renewable energy technologies (solar, wind, geothermal, etc), ventilation and air quality, use of non toxic materials, waste reduction/ recycling through use of salvaged materials, hiring of LEED certified builders, and energy efficient design practices.

# How to find suitable and qualified experts for environmental input to CSC projects: There are three main sources of relevant expertise:

- For evaluating building sites to ensure there are no significant environmental concerns, a qualified
  firm should conduct and Environmental Site Assessment (ESA). The firm should have experience in
  conducting ESAs following standards such as those of the Canadian Standards Association (CSA
  International): <a href="http://www.csa.ca/Default.asp?language=English">http://www.csa.ca/Default.asp?language=English</a>
- \$ For design and construction of environmentally sound and energy conserving buildings, a Leadership in Energy and Environmental Design (LEED) certified builder should be considered. For information, contact the Canada Green Building Council: http://www.cagbc.org
- \$ For evaluating the overall environmental performance of an organization or facility, an environmental audit by a certified expert is called for. The Canadian Environmental Auditing Association provides auditor certification and other services for environmental auditing pursuant to the ISO 14000 program: <a href="http://www.ceaa-acve.ca/">http://www.ceaa-acve.ca/</a>

#### KEY WEBSITES AND PROGRAM/AGENCIES FOR MORE INFORMATION

#### **Green Construction**

There are many good sources of guides and guidelines for environmentally sound construction including:

#### 1. The Canada Green Building Council:

http://www.cagbc.org

The council is a Canadian non-profit organization whose mission is to disseminate information about energy and environmental issues in the building sector from other sources and organizations around the world. <u>Contact:</u> use email at info@cagbc.org

### **LEED Training Workshops**

http://www.cagbc.ca/building rating systems/leed training workshops.php

The Canada Green Building Council offers an intensive, one-day technical overview of the LEED Canada-NC 1.0 Green Building Rating system in locations across Canada.

#### 2. Natural Resources Canada, Office of Energy Efficiency (various programs):

<u>http://oee.nrcan.gc.ca</u> This web site links to several programs that provide information and guidelines for energy conservation in construction. These include:

- 1. The Energy Innovators Initiative (EII) helps commercial businesses and public institutions explore energy efficiency options and strategies. The EII offers access to tools, services and financial incentives delivered through Energy Innovators Officers who work with members as they pursue energy management planning and retrofits.
- 2. Commercial Building Incentive Program (CBIP) offers a financial incentive for the incorporation of energy efficiency features in new commercial/institutional building designs. The objective of this new incentive is to encourage energy-efficient design practices and to bring about lasting changes in the Canadian building design and construction industry. The program requirements are based on two documents: the Model National Energy Code for Buildings and CBIP Technical Guide:

<u>Contact:</u> general inquiries about Office of Energy Efficiency's programs: <a href="http://oee.nrcan.gc.ca/eii">http://oee.nrcan.gc.ca/eii</a> or call toll free 1-877-360-5500

### 3. Canadian Environmental Assessment Agency (CEAA)

http://www.ceaa-acee.gc.ca/index e.htm

CEAA is a national organization dedicated to administering and promoting environmental assessment policies and practices of the federal government by putting the Canadian Environmental Assessment Act (The Act) into practice. The Act sets out in legislation a clear, legally precise, EA process for all projects requiring federal action or decisions. CEAA also ministers a <u>Participant Funding Program</u> which supports individuals and non-profit organizations interested in participating in environmental assessments."

<u>Contact</u>: General Inquiries 819 - 997-1000 Also - Tel.: (613) 957-0700 Fax: (613) 957-0935 (Website lists regional offices)

### 4. Link with Sustainable Building Information System

\d 4<u>www.sbis.info</u>

The SBIS system is designed to provide users with non-commercial information about sustainable building around the world, and to point or link the user to more detailed sources of information elsewhere. Contact: Nils Larsson at larsson@sbis.info

# **5. Federation of Canadian Municipalities - Green Municipal Fund** http://kn.fcm.ca

The Government of Canada has endowed the Federation of Canadian Municipalities with \$250 million to establish the Green Municipal Funds and support municipal government action to cut pollution, reduce greenhouse gas emissions and improve quality of life.

# **6. U.S. Department of Energy (with other organizations), Sustainable Building Technical Manual:** http://www.sustainable.doe.gov/freshstart/articles/ptipub.htm

This comprehensive manual shows how to design, operate, and maintain environmentally friendly buildings. The manual provides information on the economics of green building; pre-design strategies; passive solar design; heating, ventilation, and air-conditioning systems; electricity; plumbing; indoor air quality; acoustics; selection of building and landscaping materials; and housekeeping.

# 7. Buildinggreen.com, Checklist for Environmentally Responsible Design and Construction: http://www.buildinggreen.com/ebn/checklist.html

Buildinggreen.com is "an independent company committed to providing accurate, unbiased, and timely information designed to help building-industry professionals and policy makers improve the environmental performance, and reduce the adverse impacts, of buildings". Their simple checklist provides some useful pointers for green builders.

#### OTHER USEFUL INFORMATION:

#### **Environmental Codes of Practice**

An environmental code of practice involves a stated commitment by the organization to protect the environment. This may be in the form of an environmental policy, with certain goals and objectives, and perhaps specific responsibilities within the organization. Depending on the size and complexity of the organization, the environmental policy could be supported by a more detailed set of approaches and procedures to reduce impacts and enhance environmental benefits throughout the organization's operations. This might include procedures for recycling, waste reduction, energy conservation, and handling of toxic materials.

A wide variety of guidelines and standards have been developed for improving an organization's environmental performance:

## 1. CSA International: Website - http://www.csa.ca/Default.asp?language=English

Perhaps the most comprehensive and best known environmental codes of practice are the ISO 14000 series. This series, developed by the International Organization for Standardization (ISO), includes detailed environmental policy and environmental management guidelines and standards applicable to organizations of all types and sizes. Member countries within the ISO are intended to apply the approved standards consistently. In other words, environmental procedures under the standard should be applied the same way in Brazil for example as they are in Canada. Each country may develop interpretive documents to assist organizations to apply the standards within the country. In Canada, CSA International publishes the ISO 14000 series and has developed and published several interpretive documents. These documents include guides and guidelines applicable to organizations of all sizes.

**2. Environment Canada:**\_Website -http://www.climatechange.gc.ca/english/issues/what\_can/index.shtml On its "What can we do about climate change?" web page, Environment Canada provides wide-ranging information and guidelines for reducing greenhouse gas emissions in day-to-day activities. See especially the "at work" and "on the road" links.

#### Eco-labelling

Many countries have developed programs for evaluating and certifying environmentally sound products. Canadian information sources include:

## 1. The Environmental Choice Program:

http://www.environmentalchoice.com/index.html

The purpose of the Environmental Choice Program is to encourage the supply of and demand for products and services which have less stress on the environment. By empowering consumers with the tools to make informed choices, it is expected that individuals and companies will choose more environmentally preferable products.