

Unique Economic Advantages in Canada Through the Conservation of our Water Resources.

One way Canada's business communities can lead the way in conserving our resources is through using water more efficiently. Water efficiency will also trigger new economic activities for water-related manufacturing and service sectors, encouraging new business opportunities and job creation. These opportunities create additional economic advantages by lowering costs to business and in generating clients in support of businesses that implement sustainable practices. The Canadian Council of Ministers of the Environment believes that improved water efficiency practices are essential to sustainable development.

According to the Organization for Economic Co-operation and development "Canada ranks a dismal 28th among the 29 nations of the OECD in terms of per capita water consumption. Only Americans use more water than Canadians. Since 1980, overall water use in Canada has increased by 25.7%. This is five times higher than the overall OECD increase of 4.5%. In contrast, nine OECD nations were able to decrease their overall water use since 1980 (Sweden, the Netherlands, the United States, the United Kingdom, the Czech Republic, Luxembourg, Poland, Finland and Denmark)." The Canadian trend can not be maintained in the long run and it is prudent that we take steps to conserve our natural resources while supporting a strong and vibrant economy.

In Canada, residential, commercial and institutional buildings represent more than a third of total greenhouse gas emissions (Roundtable on the Environment & Economy's "Energy-Related Green House Gas Emissions in Canada 2050 Report") and the single largest opportunity to make progress towards Canada's 2020 target of 200 Mt (megatonnes) reduction in GHG. By 2015, the Canada Green Building Council aims to recognize 100,000 buildings and 1 million homes (new and existing) using 50% less energy and water than the 2005 baseline for their building type, while achieving exemplary environmental standards in the other LEED categories. Saving water through efficient new building techniques and through retrofitting existing buildings is one of many ways businesses can participate in water conservation.

Since 1965 observation wells have been recording declining water levels related to human activities. The decreases are mostly a result of intensive local groundwater pumping for agriculture, industry and municipal water supplies and, in urbanized areas, decreased recharge due to impervious surfaces. It is critical to increase the productivity of the water that we do use by doing more with each unit of water. Agriculture accounts for the highest water usage, followed by industrial applications. By concentrating on improving our water productivity, we can assist in the continuation of a healthy economy. There are many ways in which we can employ our water more efficiently. Water use efficiency measures are a viable and beneficial means to conserving water.

The Canadian government program "Every Drop Counts" has identified four main water efficiency categories that are currently available. These initiatives fall within the jurisdiction of municipal governments and/or public utilities and include:

1. Structural:

- metering
- water recycling systems
- wastewater re-use
- flow control devices

- distribution system pressure reduction
- water saving devices (efficient fixtures, appliances and retrofits)
- drought resistant landscaping (xeriscaping)
- efficient sprinkling/irrigation technology
- new process technologies
- plant improvements

2. Operational:

- leak detection and repair
- water use restrictions
- elimination of combined sanitary/storm sewers to reduce loadings on sewage treatment plants
- plant improvements

3. Economic:

- rate structures
- pricing policies
- incentives through rebates and tax credits
- other sanctions (fines)

4. Socio-political:

- public education
- information transfer and training
- regulatory (legislation, codes, standards and by-laws)

To conserve our water it is important to start managing our water more efficiently. Business communities can take an active role in managing water by gauging their consumption and by using the existing programs and resources available to them. By taking a stand for the conservation of water, Canada's businesses can lead the way for their economic sustainability and for the environmental sustainability of the communities that support them.

Recommendations

That the federal government:

1. Make water conservation a priority and provide incentives to businesses that participate in water conservation.
2. Partner with provincial governments, businesses and other stakeholders to implement and develop cost effective strategies and goals for efficient water usage and conservation.;
3. Urge provinces to work with municipalities and regional districts to install a water metering system.
4. Develop an auditing program to assist businesses in gauging their water usage and once the audit is complete, design a program of measures or actions based on the

goals and objectives, opportunities for water efficiency improvements, costs and benefits, and other criteria specific to each organization.

5. Promote continual improvement in water conservancy to business consumers by supplying them with updated solutions on water conservation practices and programs available to them.

Canada Green Building Council;

<http://www.cagbc.org/leed/initiative/index/articles251.htm>

Environment Canada http://www.ec.gc.ca/Water/en/info/pubs/action/e_action.htm

The Organization for Economic Co-operation and Development: <http://www.oecd.org/>

Water Conservation—Every Drop Counts

http://www.ec.gc.ca/water/en/info/pubs/FS/e_FSA6.htm

“Design for Water”, Heather Kinkade -Levario