



Canada: Water Filtration Equipment Industry

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Summary

Canadians are becoming more and more concerned with the need to conserve water, provide environmentally friendly methods of water treatment and reducing the amount of energy, bacteria, contaminants and additives in their water systems.

Canada's most populated areas are feeling immense pressure in constantly supplying and maintaining water resources with a rapidly decaying infrastructure. There is an expectancy of vast investment required to renew aging infrastructure in four of Canada's major provinces within the next 5-10 years to improve drinking water and wastewater.

This report provides information regarding water filtration equipment and the growing export opportunities for U.S. firms within Canada. Despite various interpretations of Canadian water standards and guidelines, the need for municipal infrastructure renewal creates many export opportunities for U.S. firms and offers a variety of partnership options.

Market Demand

Canada is striving, as a nation, to become an environmental steward in water technology and efficiency. Technological progresses in membrane filtration, ultra violet light, desalination techniques and reverse osmosis are essential for success in Canada. In addition, Canadians rely on water quality engineering and monitoring to capture essential water distribution data. Recent global events caused a demand for technological solutions to solve water supply and filtration problems, not only in the areas of water purification, wastewater treatment, water quality management and water re-use, but also in tackling global disaster relief, reconstruction, rehabilitation and humanitarian needs.

Canada's water and wastewater firms are actively developing, acquiring and commercializing a large variety of new and innovative technologies. They are also successfully adapting existing technologies to new industries and pursuing market diversification strategies both domestically and internationally. Canadian imports of water filtration equipment have grown 40% in the past five years, an obvious sign of market demand.

Canada contains 20% of the world's freshwater supply and 7% of renewable fresh water; however the six main watersheds that produce Canada's water occupy less than 3% of the nation's land area. Globally, Canada ranks fourth in availability of fresh water per capita. With 80% of the population and industrial base located within 100 miles of the U.S. border, the high levels of demand for water is found within provincial districts under considerable urban pressures - a result of high industrial/commercial demand, population growth and threats from pollution.

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The five main users of water in Canada are:

1. Thermal power generation-60%
2. Manufacturing-18.5%
3. Municipal-9.5% (Rural and Domestic (1.5%))
4. Agriculture-8%
5. Mining-4%

Market Data

Import, export and local production figures are based on estimates provided by industry sources and statistics published by Industry Canada and Statistics Canada. The following products, identified with their Harmonized System (H.S. Codes), are included in this analysis:

HS Code	Description
HS 842121	Filtering or purifying machinery and apparatus-for water

Statistical Data

	2005 in millions \$	2006 in millions \$	2007 in millions \$	2008-2009 Estimated
Total Imports	133.2	157.8	223.8	232.7
Exports	236.9	287.2	278.3	289.4
U.S. Imports	98.1	116.1	171.0	177.8
U.S. Market Share	73.6	73.5	76.4	76.4
Exchange Rate	0.847	.08470	1.100	1.100
Inflation Rate	2.0%	2.0%	2.0%	2.0%

Exports from the U.S. to Canada have grown significantly over the last four years, increasing from U.S. \$70 million in 2002 to US\$116 million in 2006, for a total rise of 40% in nominal terms. Total Canadian imports in this classification were valued at US\$157.8 million in 2006 with the U.S. capturing 74% of the market share. The U.S. maintains a majority market share, with varying larger shares held annually by France: 18.84% in 2006; Italy: 27.02% in 2007. Chinese exports to Canada also have seen an increase due to inexpensive manufacturing processes; however they continue to own a relatively small 3% market share.

Given the bulk and size of much of this equipment, shipping costs to Canada will usually preclude any chance for long term, competitive pricing. Also, without the local support and servicing network required for the Canadian market, third-country imports, especially from the Pacific Rim, are not likely to gain in market share.

Best Prospects

With an increasing awareness of environmental issues within Canada and the world, Canadians are becoming increasingly more concerned with saving energy, reducing the amount of water being used per capita and drinking safe water. Evading the negative effects of bacteria, odor or flavor is also very important. Thus, energy saving methods and environmentally friendly water filtration methods are being sought by various municipal governments. Popular municipal water filtration methods within Canada include ultra violet light, ozone, reverse and hyper osmosis and membrane filtration. Municipal projects involving such technology are expected to continue to rise in all subsectors including design, construction, equipment and supplies. Water metering is also growing in popularity and is being used in Eastern Canada.

Point of Entry (POE), Point of Use (POU), and smaller filtration systems that serve fewer than 500 people are widely used in the more remote areas of Canada. They are increasingly popular in areas where water boil advisories often occur. Two incidents of bacteria contaminated water have occurred as recently as 2001 in Canada (Walkerton and North Battleford) causing Canadians to become more aware of E.Coli and Cryptosporidium filter systems and altering their perceptions of water quality.

Other areas of water filtration with good prospects include: desalination techniques (reverse osmosis), biosolids management, biological treatment, specialized pumps (hand, solar or wind), gates and valves, vacuum breakers, fittings and connectors, isolation valves and water storage (reservoirs).

Key Suppliers Domestic

Prominent Fluid Controls www.prominent.ca

Desalination, pH, water recycling and metering and storage equipment company with a national presence since 1960.

Eimco Water Technologies-Part of GLV Inc. www.glv.com

Supplier of liquid-solid and liquid-liquid separation technologies for municipal water treatment. Process includes screening, to primary sedimentation, to biological treatment and final filtration.

WaterTiger www.watertiger.net

Water filters and purification equipment products, parts and accessories. Products include reverse osmosis units, ultra violet light units, biofiltration water treatment, whole-house purification systems, BioSand water filters, sediment filters and solar or wind powered pumps.

John Meunier www.johnmeunier.com

Canadian company dating to 1948, now part of the Veolia Water Group which serves over 100 countries. Provide services and products to municipal potable water, wastewater and industrial water groups. Services include desalination, ultra violet treatment, screening, clarification equipment, membrane filtration and reverse osmosis. Also provide trademarked equipment for several industries as well as municipalities throughout Canada. Providing clarifiers and filters for the Seymour-Capilano municipal water treatment project in BC and have other projects in Summerland, Red Deer and Calgary, AB.

Dayton & Knight Ltd. www.dayton-knight.com

Consulting engineering company that acts as a consultant and project manager for water treatment plant projects. Past projects include: Abbotsford, BC's membrane filtration plant, micro-membrane filtration study for Revelstoke, BC and the membrane filtration plant on the Sunshine Coast, BC.

Aquasource www.aquasource.ca

Canadian company offering bottled water and water coolers of different designs. Other products provided include: water softeners, distillers, reverse osmosis, iron and H₂S filters.

Other Canadian distributors/suppliers include:

Filter Innovations Inc. (ON) www.filterinnovations.com

R-Can Environmental Inc. (ON) www.r-can.com

SS Filtration & Development Company Ltd. (ON) www.ssfiltration.ca

Key Suppliers Foreign

Doulton- www.doultonfilters.com

British Berkefeld and Doulton ceramic filters (long-term popularity, although not NSF approved), reverse osmosis, shower filters, whole-house systems and other filters.

Zenon-Part of General Electric's water division www.gewater.com

Provide membrane filtration products, parts, servicing and equipment as advanced as on a municipal level, wastewater treatment, ion exchange and a variety of counter top products (reverse osmosis, filter cartridges and other POE and POU products).

Siemens Canada www.siemens.ca

Provides municipal sized filtration devices and equipment, as well as conventional counter top alternatives for the home. Membrane filtration, ultra violet disinfection, clarification filters and other controls. Has had recent developments for the city of Revelstoke, BC.

Aquatech www.aquatech.com

Facilities in 45 countries, and over 700 installations, including an Ontario filtration plant. Innovations in desalination, water management and water re-use challenges. Provides full services for municipalities with

products including: pre-treatment, ion exchange, membrane processes, wastewater recycling, zero liquid discharge and evaporative processes. Offer pre-engineered trademarked products such as WaterTrak, Recomax and Crystal. They provide packages as well as the option of customization.

Katadyn www.katadyn.com

Swiss company offering various POU and POE products including travel water filters, desalinators, mug filters and chemical water disinfectants (microorganisms).

Note: Canadian Water Magazine's 2008 issue includes a comprehensive list of major distributors/suppliers and manufacturers currently active in the Canadian water industry, including a variety of prominent US companies.

Prospective Buyers

Municipal governments in each Canadian province are responsible for contracting companies for the municipal-level water filtration facilities projects. Each municipality has its own preferences, prices and goals when seeking to update infrastructure or build a new water treatment plant.

There is an expectancy of vast investment required to renew aging infrastructure in four of Canada's major provinces within the next 5-10 years to improve drinking water and wastewater. Due to an inability of the government to fund all such improvements, municipalities are seeking to partner with private firms willing to finance, construct and operate the much needed new facilities.

The Municipal Rural Infrastructure Fund of Canada announced several projects, in progress, to bring drinking water facilities up to standard in several rural communities within Canada. A complete list of these projects can be reviewed at: <http://www.infrastructure.gc.ca/cgi-bin/mrif/mrif-search.pl?lang=e&KEYWORD=drinking+water> or <http://www.infrastructure.gc.ca/cgi-bin/mrif/mrif-search.pl?lang=e&KEYWORD=water+filtration>

Market Entry

U.S. companies supplying water filtration and analysis equipment to Canada have a competitive advantage over third-country competitors due to the similarities between Canadian water guidelines and the U.S. EPA accepted standards. In Canada, U.S. companies have a solid reputation for quality and are well known for their turnkey solutions, which include engineering, technology, project management, reliable equipment and after-sales service. When necessary, U.S. companies bidding on municipal or larger water filtration projects have also offered financing and insurance options in their bid.

The Canadian government does not restrict foreign tenders or products by means of import barriers and other laws, but rather competition is encouraged to provide quality service and products at lower prices.

The [Guidelines for Canadian Drinking Water Quality](#) is published under the auspices of the Federal-Provincial-Territorial Committee on Drinking Water (Committee). The Committee is composed of representatives from all provinces, the Yukon, Northwest Territories and Nunavut, Health Canada and Environment Canada. Health Canada acts as Secretariat to the Committee and as such prepares the technical documents which are reviewed by committee members. These guidelines require that technical standards, benchmarks and targets for water quality be provided to assist federal departments and responsible authorities to meet its requirements, providing consistency in the management of drinking water systems on a national basis.

Although Canada does not officially require certification for POE and POU products, UL, NSF and other U.S. standards are known and accepted. As a result, CSA standards appear on many products used in Canada. There are no current government approvals required for water filters being sold on the Canadian market and no standards for E. Coli removal from water. However, when asked, Health Canada will recommend any product approved by the EPA (as far as E. Coli removal products). To date, two thirds of the drinking water filtration devices in the Canadian market are not certified or approved by the EPA or have passed any NSF

testing. Health Canada has twice attempted to introduce laws to enforce companies to certify their products, however the laws were voted down and only guidelines remain.

There is a common belief with Canadians that bottled water is safer than tap water. Past years have shown an increase in the purchase of bottled water until recently when information became public knowledge that certain grades of plastics in bottles can cause severe side effects. Most companies, however, unless specified on the bottle as being from a spring or mineral water, filter tap water and bottle it. In Canada, pre-packaged water is considered a food item and is regulated under Division 12 of the Food and Drug Regulations Requirements. These regulations cover all coliform, aerobic bacteria or other harmful substances to ensure that bottled water offered for sale is safe for human consumption.

Health Canada is in the process of creating more stringent regulations for dissolved contents of bottled water to prevent bacterial and chemical contamination. The Canadian Food & Drugs Act and Regulations do not require a license to sell bottled water; however, as soon as the product is offered for sale, it becomes subject to inspection by the CFIA. For additional licensing requirements, contact Canadian provincial and municipal governments.

Market Issues & Obstacles

Thanks to the North American Free Trade Agreement (NAFTA), American made products enter Canada almost entirely duty free. NAFTA came into force on January 1, 1994 and replaced the U.S.-Canada Free Trade Agreement that was implemented in 1989. The phase-out of tariffs between Canada and the United States was completed on January 1, 1998, except for tariff-rate quotas (TRQ) that Canada retains on certain supply managed agricultural products. Canada still maintains some non-tariff barriers of concern at both the federal and provincial levels, impeding access to the Canadian market for U.S. goods and services. However, recent studies show that 99 percent of all trade passes across the border without incident or without controversial trade restrictions. Many Canadian standards are harmonized with U.S. standards.

Doing business in Canada is not, however, exactly the same as in the United States, and U.S. companies should beware of the discrepancies. While customs documentation, bilingual labeling and packaging requirements and Canadian federal and provincial sales tax accounting may seem onerous at first compared to domestic shipments, most exporters find that with a little experience, they can master the requirements. There are also many international trade professionals such as customs brokers, freight forwarders and consultants that can, for a fee, handle much of the research and paperwork for smaller exporters without international sales departments.

The key to achieving market penetration for export sales to Canada is making the transaction resemble as much as possible a Canadian domestic transaction for the Canadian customer. One good way to do that is for the U.S. exporter to become a non-resident importer and take the entire importing burden off the shoulders of the Canadian importer.

The official languages in Canada are English and French, while English is the main business language used in most provinces other than Quebec. Since the predominant language in the province of Quebec is the Quebec dialect of French (analogous to the relationship of American English to British English), promotion and packaging need to reflect local needs as well as Quebec's French language requirements.

Unlike the U.S. Canada uses the metric system for trade, however both variations are acceptable.

Trade Events

Canadian National Wastewater Management Conference and Policy Forum: www.cwwa.ca (host)

Canadian Water Network Retreats: www.cwn.ca

Canadian National Conference and Policy Forum on Drinking Water: Different topics and policies discussed each year that pertain to drinking water management in Canada.

Resources & Contacts

The Canadian Environmental Solutions (<http://strategis.gc.ca/ces>) is a comprehensive directory of Canadian water and wastewater firms providing technologies, products and services to every sector of the economy.

The Canadian Water and Wastewater Association (www.cwwa.ca) is the national voice of the municipal waste and wastewater sector in Canada that addresses water and wastewater issues at a national level.

The Canadian Water Resources Association (www.cwra.org) is a national organization of individuals and organizations connected with the management of Canada's water resources.

The Canadian Water Quality Association (www.cwqa.com) is a national organization of individuals and organizations interested in water quality education, management and improvement.

International Trade Canada (www.itcan-cican.gc.ca) supports the development of trade by providing services to exporters, developing policy, and by attracting investment in the Canadian economy.

Water Quality Index (www.waterquality.ec.gc.ca)

National Water Research Institute (www.nwri.ca)

Canadian Council of Ministers of the Environment (www.ccme.ca)

For more information, the U.S. Commercial Service in Vancouver, Canada can be contacted via e-mail at: Cheryl.Schell@mail.doc.gov; Phone: 604-685-3382; Fax: 604-687-6095 or visit our website: www.buyusa.gov/your_office.

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