

Environmental Industries

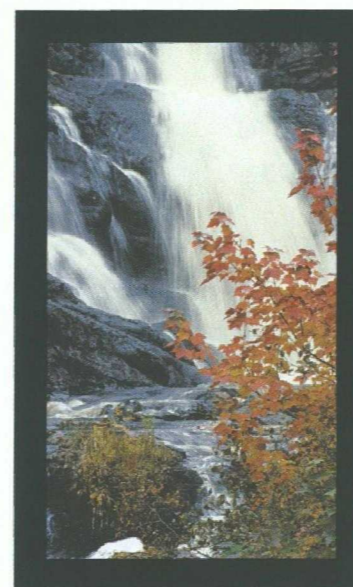


Most countries recognize that economic growth and environmental protection go hand in hand. While many nations are quickly developing their own capabilities, they also need efficient and workable innovations in services and equipment.

Clients and joint-venture partners around the world are looking to Canadian companies to provide the needed expertise for a wide range of environmental undertakings, whether they involve soil, water or air. More than 800 of Canada's environmental companies are active exporters, and Canada is a world leader in environmental services, biotechnology, remediation, monitoring and instrumentation.

WASTEWATER MANAGEMENT

Canadian industrial wastewater management firms, associated research and development centres, and universities have developed expertise and technical solutions for complex municipal and industrial water and wastewater treatment requirements. Some processes and applications in which Canadian firms specialize include:



— Canadians have a strong attachment to their environment. They wish to preserve the quality of their air and water, protect nature and conserve wildlife. Public opinion polls in Canada consistently show that the environment is a high priority for Canadians. Nearly all Canadians believe that governments and corporations should show greater concern for the world's ecology. These concerns in Canada — and similar concerns in other countries — have helped to foster a Canadian environmental industry that has a reputation for innovative approaches to ecological challenges.

— Approximately 4500 Canadian firms are active in the environmental industry. These firms earned about \$16.7 billion in 1995, of which \$4.8 billion came from the sale of manufactured goods such as membranes for water treatment, heat exchangers, ventilation systems, recycling equipment, alternative fuel vehicle components and hydro turbines. About \$9 billion came from the sale of services such as consulting and environmental and energy engineering, as well as a wide range of scientific and technical services. These included spill prevention and clean-up, geomatics, remote sensing, waste management, laboratory testing and general research. Environment-related construction activities generated \$2.8 billion in revenues.

PROCESS

APPLICATIONS

Anaerobic technology

Energy recovery that offers a significant cost savings

Sequencing batch reactor technology

Effluent treatment that produces a highly sanitized result and offers significant cost savings

Biological nutrient removal

Phosphorus removal to less than 0.3 mg/L and nitrogen removal to 1 mg/L at temperatures of less than 10°C

