BRITISH COLUMBIA'S ENVIRONMENT INDUSTRY

The B.C. environmental industry includes over 1,300 companies with revenues close to $2 billion. The main components of the sector are environmental construction, recycling, and solid and hazardous waste management, consulting services, water and wastewater goods and services, renewable energy, air pollution and noise control, analytical services, and green building and sustainable urban planning.

The largest sub-sectors - environmental construction, recycling, and solid waste management account for most of the industry's revenues, but are not export focused. The export oriented sub-sector reported revenues of around $600 million in 2002 and $175 million in export sales, an indication of its relatively small size. This sub-sector consists of two very distinct, but interdependent, areas:

- A predominantly high technology component ("technology component"), comprised mainly of small, young (less than five years old) B.C. firms producing goods and services in a growing and evolving industry. This component is highly fragmented and serves diverse clients, accounting for about two-thirds of the export-oriented sector.

- An environment-related consulting engineering, R&D and related services component ("engineering services component"), which accounts for the remaining one third of the sector.

In British Columbia and elsewhere in Canada, the environmental sector is undergoing a process of re-orientation and renewal. The waning focus on pollution prevention at source not only is decreasing the demand for traditional and often more expensive end-of-pipe pollution control technologies, it is spurring more energy-efficient and cleaner technologies for application in the primary resource, manufacturing, energy and service sectors.

The aforementioned situation is forcing the sector to redefine itself and to form new alliances and partnerships with governments and academia focused more broadly on sustainability. The drivers of the transformation process are as diverse as the client base of the industry itself. Changing environmental management practices in the private sector, new approaches to public policy making with respect to environmental protection, and shifting economic forces globally are helping to reshape the sector.

No longer focused on "end-of-pipe" solutions to treat pollutants released into the air, water or soil, the sector is evolving into a complex and rapidly changing constellation of engineering, analytical and design services designed to help businesses incorporate environmental considerations into their production processes and in their dealings with client communities and customers.

The sector is now much more closely linked to organizations involved in sustainable community development; green building design and construction; energy efficiency and eco-industrial networking; sustainable urban infrastructure; and sustainable resource management.

AREAS OF STRENGTH

Alternative Energy Systems and Associated Technologies

Fuel Cells

Clean Fuel Technologies

Small Scale Hydro

Biomass Co-generation Systems

Urban Environmental Management Systems

Contaminated Site Remediation

Brownfield Reclamation

Green Building Design

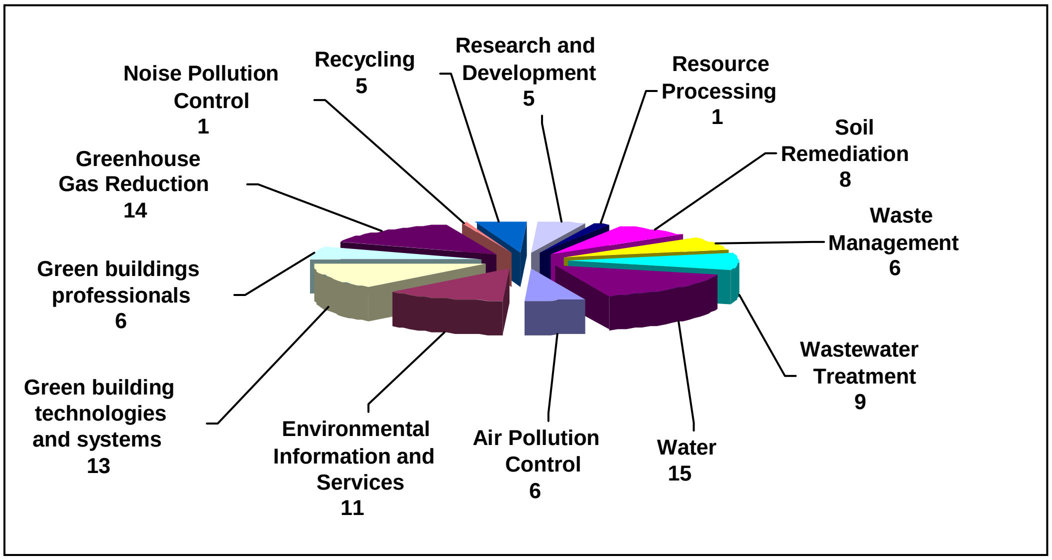
Planning for Sustainable Communities

Integrated Environmental Solutions

Water/Wastewater Technologies Services and Solutions

The sector has traditionally drawn strength from its domestic client base. However, in recent years, opportunities in the export market have become more enticing, a reflection not only of the increasing globalization of the sector but also of Canada's growing international reputation for quality technological and environmental expertise, particularly related to water and wastewater treatment, liquid and solid waste management, environmental instrumentation and analysis, energy efficiency and renewable energy, and engineering and consulting services.

SECTOR OVERVIEW



Despite this growing interest in the international market, most firms in this sector are small to medium-sized enterprises that often lack the money, managerial capacity or staying power needed for extensive technology development and/or international market expansion activities. Only 100 BC firms regularly export environmental goods services, and the main markets they serve are (in order): the United States, Europe, and South America. The Asia Pacific accounts for only 10-15% environmental exports ($23 million in 2000). Fewer than 50 B.C. firms exported Pacific during 2002.

But as was noted earlier, the sector is capable of great innovation and has a future in the international marketplace. The challenge is to identify where comparative and competitive advantage lies particularly when it comes to new technology development.

While the industry in BC remains small, there are strong indicators it has the capability to compete in the international environmental market. The experience of a number of BC high technology firms shows that small firms can become larger and world leaders in their niches with the right combination of technology, financing, and market development support.

An Aegis Management Consulting report for Industry Canada suggests that Canadian companies have their best opportunities in developing countries (China included) in the areas of water/wastewater goods and services, air pollution control and abatement, environmental monitoring and instrumentation, 'greentech', renewable energy, environmental consulting, as well as solid waste management and potable water supply systems and retrofits.