

**People:**

Each year, our 7 members are offering applied education and skills training to over 500,000 students at 37 campuses. With over 30,000 graduates each year, Canada's polytechnics are graduating the next generation of:

- o Environmental Engineering Technicians and Technologists
- o Registered Forest Technologists
- o Environmental Science Technicians and Technologists
- o Brownfield Remediation Specialists
- o Environmental Chemical Engineering Technologists
- o Environmental Chemical Laboratory Technicians
- o Energy Management Technicians and Technologists
- o Environmental Health Inspectors

**Projects:**

At Canada's Polytechnics, applied research projects with an environmental focus help Canadian industry - specifically SMEs - solve problems and commercialize emerging environmental technologies. Lead by our industry experienced faculty, Polytechnics are involving our students in research projects which give them hands-on research experience so they can adopt and diffuse the latest environmental technologies. A few examples of environmental applied research projects include:

- o *VSC Zero-discharge Desalination Prototype*  
SAIT connected Volker Stevin Contracting Ltd. with the expertise required to research, develop and construct a prototype to test a portable desalination system transportable to settling ponds around the province to decontaminate salt impacted waters. The system successfully removes dissolved salts from saline water making it salt-free for the production of drinking water, effluent treatment and water reclamation.
- o *Biological Filter (Biofilter) Wall*  
Humber College with industry partner Natureira has undertaken a project measuring the impact of a four-storey Biological Filter on air quality and energy consumption in the University of Guelph-Humber building, located at Humber's North Campus. The novel method of indoor air biofiltration uses living plants and beneficial microbes in a biofilm as a biofilter to degrade pollutants and produce oxygen while cleaning the air in an energy efficient way.
- o *Permeable Pavement Project*  
Seneca College, in partnership with the Toronto and Region Conservation Authority, Walmart and the Canada Mortgage and Housing Corporation, is assessing the effectiveness of permeable pavement for use in stormwater management systems. Eliminating run-offs helps on-site revegetation and contributes to reducing water pollution. Seneca's project is powered by environmentally sustainable wind and solar technology.

**Places:**

Students and industry get the best of both worlds as applied education and applied research mesh seamlessly at our environmental Centres of Excellence. Some of these Centres include:

- o Seneca College's Centre for the Built Environment
- o Humber College's Centre for Urban Ecology
- o BCIT's Centre for the Advancement of Green Roof Technology
- o SAIT Polytechnic's Encana Environmental Technology Centre

**Partners:**

With their close relationships with industry - particularly SMEs - Polytechnics ensure their students acquire the skills that employers need. Industry guides curriculum development through Program Advisory Committees, partners with the institution on applied research projects, and most importantly, confidently hires the graduates of our environmental programs. A small sample of our industry partners in environmental areas include:

- o Environment Canada
- o ATCO
- o Encana
- o Enviro-Test Laboratories
- o Enerplus
- o Conematic Heating Systems
- o Cement Association of Canada
- o Air Quality Solutions
- o Lafarge Canada
- o Federation of Canadian Municipalities
- o Canadian Urban Institute
- o Elevated Landscape Technologies