

As part of The University of Western Ontario's strategic plan to foster growth and development in the key areas of energy and the environment, a new centre has been created to help lead the way for education and research on environmental issues.

The Centre for Environment and Sustainability

In 2004, Environmental Research Western (ERW) was established to meet the growing need to support interdisciplinary environmental research efforts from all areas within the physical, life and social sciences. The group was formed to encourage and develop joint environmental research projects not only among Science and Engineering faculty, but to increase their partnerships with other faculties, institutes and government agencies.



In turn, ERW has been a springboard for the creation of a new centre—the Centre for Environment and Sustainability—which is helping promote further multidisciplinary collaboration and is once again expanding the scope and capacity for Western's faculty to work in all areas of basic and applied 'green' research. The nature and vision of this academic centre make it a unique venture both at Western and on a national level, and will help the University continue to excel in the field of environmental sustainability. The Centre will also help Western's faculty link environmental science with environmental policy, and will enable them to use their research strengths to liaise further with industry partners to work on innovative projects.

The Centre's mandate is not only to facilitate environmental research partnerships but to provide a platform for training highly qualified personnel and other professionals who will become leaders in the field. In keeping with this aim, Western has launched an interdisciplinary, project-based program in Environment and Sustainability. Students will be able to pursue a collaborative, thesis-based Master's or PhD degree program, or a course-based Master's degree program. Dedication to the environment is also driving Western's commitment to hire outstanding research chairs, including those in geomicrobiology, ecosystem health, nuclear waste technology and reactor safety, environmental science and ecology, and now in environmental science and sustainability.

The Centre for Environment and Sustainability will be closely linked with the Biotron, a state-of-the-art facility that permits realistic ecosystem study with a breadth and scale that has not yet been achieved. It will also be affiliated with the Claudette Mackay-Lassonde Pavilion, an \$18 million, state-of-the-art, environmentally friendly and energy-efficient building that will house revolutionary environmental engineering and green technology research.

Research

The research being undertaken in connection with the Centre is extensive. Many people at Western working in areas such as sustainable development and environmental remediation, atmospheric science, environmental assessment and monitoring, conservation biology and environmental health are already recognized as experts in their fields, and the creation of the new Centre will help launch other research initiatives that exemplify its mandate. One such initiative is the Water Centre for Research, Testing and Training, a large facility for developing novel drinking and wastewater treatment processes. Another initiative is the Centre for Environmental Analysis, Modeling and Synthesis, which will advance studies in areas such as the chemical analyses of soil, water and biological tissue, information technology for GIS, statistical and mathematical modeling, and biodiversity analysis.

Other projects that have already resulted from Western's significant intra-university partnerships include:

- Research in environmetrics on topics such as water quality, reservoir systems, air quality and ground-level ozone.
- The biogeochemistry of mine tailings during their degradation and geomicrobiology.
- Paleoclimate reconstruction and the interactions among the lithosphere, hydrosphere, biosphere and atmosphere.
- Nuclear waste containment and disposal, nuclear reactor safety, new green solvent alternatives in chemical reactions, photochemical destruction of pollutants, and metal distribution, function and sequestration in biological systems.

For more information, please visit: www.uwo.ca/enviro/