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## Welcome to the fall 2015 edition of the UNESCO-UNEVOC newsletter for North America!

In this edition, we chose to focus on one of the main priorities of UNESCO-UNEVOC: “Greening TVET”. You will find a few examples of some of our actions that are linked to the environment.

CICan is particularly proud to introduce its new initiative with the Government of Canada, namely “CICan Clean Techn Internships.”

Thanks to this program, employers who hire an intern will be eligible for up to a \$12,000 subsidy. Interns are college and institute graduates from a science, technology, engineering or mathematics (STEM) program. Interns currently on leave from STEM studies may also be eligible. Employers may look for their own interns or may request CICan to provide them with potential candidates. The Clean Tech Internship will provide interns with opportunities to work for eligible employers who are improving environmental and economic outcomes in Canada.



The goal is to:

- connect employers with potential employees who have technical skills, and
- offer interns the opportunity to apply their practical knowledge to industry specific challenges.

This newsletter is also very timely. Indeed, the “Sustainable Campus Index” report 2015 lists top performers, best practices and trends. The report is produced by the Association for the Advancement of Sustainability in Higher Education (AASHE). AASHE runs the Sustainability Tracking, Assessment and Rating System (STARS), which is an industry standard rating system that many colleges and universities are using internationally. AASHE lists NAIT as “Rising Star”. George Brown College was also featured for their research credit program.

In total, there are 11 STARS rated CICan member colleges and institutions in Canada. We can definitely be proud, as this is a major achievement. More information about AASHE, including all STARS rated institutions, is available at the following web-site:  
<https://stars.aashe.org/>

Some of the stories here below were inspired by “The Systematic Design of Green Skills in Canada’s Colleges”, prepared by Helen Knibb on behalf of Colleges and Institutes Canada. This document, while still being drafted, received a warm welcome during a presentation in China

Happy reading!

Marie-Josée Fortin

## Sustainability Protocol - CICan

In November of 2007, Colleges and Institutes Canada, then ACCC, held a Symposium on Environmental Sustainability. Member institution leaders shared best practices for incorporating sustainability principles in vision statements, missions, core values, strategic plans, priorities, policies, operations, procurement strategies and ethical investments. As a result, a pan-Canadian Sustainability Protocol was developed promoting a systematic shift in college culture. Fifty-nine member colleges have signed the protocol and sustainability is now a program stream at the annual CICan conference.

Each college voluntarily participates in developing their own sustainability plans that can include mechanisms for tracking progress.



Colleges and Institutes Canada  
Collèges et instituts Canada

This newsletter was made possible thanks to the support of the Canadian Commission for UNESCO.

## Centres of Specialization, Excellence, Research and Innovation

Georgian College's Centre for Applied Research and Innovation (CARI) is the focal point for research, development and innovation at Georgian College. In 2013, Georgian College students and faculty initiated cutting-edge research on power use, quality,



consumption and costing for electric vehicles (EV) thanks to a first-of-its-kind charging station, carried out in partnership with PowerStream and Ford Motor Company of Canada. Electrical and other engineering students used this station to analyze the impact and opportunities that electric vehicles create for electric utilities and society in general.

Another example can be Lambton College's solid expertise in the area of bio-industrial processes. They indeed distinguished the college at the provincial and national levels.

As part of Lambton College's strategic plan for 2013-2018, the college is committed to establishing a Centre of Excellence in Energy & Bio-Industrial Technologies with distinctive programs and applied research initiatives that will bring recognition to Lambton College at a global level.

## College-sector partnerships

Fleming College's Centre for Alternative Waste Water Treatment and India's National Skill Development Corporation (NSDC) are partnering on skills development in water quality management. The goal is to collaborate on creating a new Centre of Excellence for Water in India addressing major skill gaps through standards, certification, education and training, mentoring and research. ECO Canada will assist in the development of new National Occupational Standards.



## Public-private partnerships (Small-to-Medium Sized Business)

In 2002 a pilot program was launched with the Natural Sciences and Engineering Research Council (NSERC) in collaboration with five colleges. The aim was to increase innovation at the community and/or regional level by enabling Canadian colleges to increase their capacity to work with local companies, particularly small and medium-sized enterprises (SMEs).



Since then, numerous clean technology projects have been developed under the program. Amongst those involved is the Collège Communautaire du Nouveau Brunswick which in 2010 received a \$2.3 million grant from NSERC to set up a biorefinery technology scale-up centre (BTSC) for the entire Atlantic region. The institution also received financial support from the New Brunswick Economic Development Department, the New Brunswick Department of Energy and the Atlantic Canada Opportunities Agency (ACOA) to purchase equipment for pilot scale processes.

The BTSC gives college and university researchers as well as companies the opportunity to test their product or process at near-production scale thus validating their technologies before undertaking commercial production or negotiating the value of their technology with a licensee.

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## Faculty Development

While many colleges offer short, faculty workshops, Nova Scotia Community College's Education for Sustainability (EFS) is a five day, 39-hour course devoted to the examination of sustainability through the lens of higher education. It is a multi-disciplinary, introspective and progressive process of portfolio learning that steers the learner through various levels of awareness on three levels: inward, outward and global. EFS is an elective credit course in the NSCC Community College Education Diploma Program (CCEDP).



## Regional solutions for sustainable development



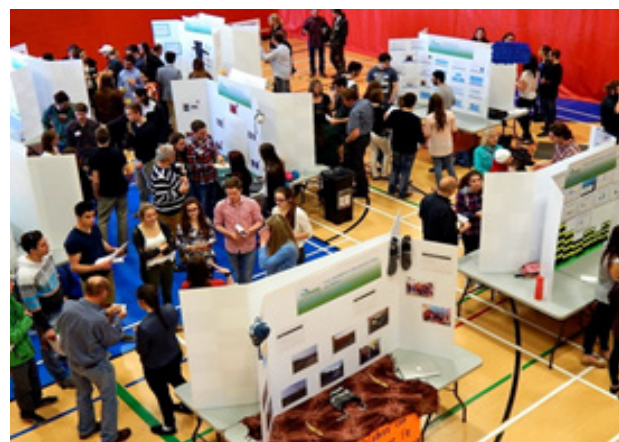
Yukon College's Cold Climate Innovation (CCI) is focused on the development, commercialization and export of sustainable cold climate technologies and related solutions for subarctic regions around the world. CCI supports the partnership between applied scientific researchers, industry and government dedicated to addressing cold climate issues affecting northerners.

CCI project areas include alternative energy, building construction, climate-related research, environmental remediation, food security and mechanical innovation.

## Introduction to scientific research at the Carleton-sur-Mer campus of Cégep de la Gaspésie et des Îles

For ten years, students from the Carleton-sur-Mer campus of Cégep de la Gaspésie et des Îles enrolled in humanities programs and nature sciences have been invited to participate in an initiation activity on scientific research that addresses themes related to sustainable development. Supervised by teachers from the Cégep and supported by the Centre for introduction to research and sustainable development assistance (CIRADD - Centre d'initiation à la recherche et d'aide au développement durable), students develop and conduct their research projects in the framework of the course on learning integration. These research projects allow students to use the skills and knowledge acquired during their college studies while contributing to the development of their region.

Since the beginning of this initiative, around 400 students have worked on over 200 research projects in conjunction with companies, organizations and communities in the region. The results of this research are presented at an annual scientific symposium. This year the conference was held in May 2015. About forty students have presented their results.



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**Worldskills 2015 – Nova Scotia Community College student wins silver**

Nova Scotia Community College Student Ryan Leedham brought the silver medal (Aircraft maintenance) to Canada at the 2015 Worldskills competition which took place in São Paulo, Brazil, in August of this year.

Congratulations!



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