Atlanticonnection

Inside

Navigating the Waters of Success

At the forefront of oceans technology in Atlantic Canada.

Photo: Courtesy of ICAN – The Canadian Coast Guard uses ICAN's Aldebaran navigation system.

Claire LePage

A Message from the Regional Executive Director

Welcome to the Fall 2006 edition of *Atlantic Connection*!

This fall, Industry Canada looks to continue working with Atlantic Canadians to foster the cutting-edge, to build partnerships and to strive towards objectives that make a difference for Atlantic Canada – a fair marketplace, an innovative economy, competitive industries and sustainable communities.

In this issue, we showcase several Atlantic Canadian initiatives that are helping to grow our regional economy. Cutting-edge companies and the power of partnerships – it's a fascinating story!

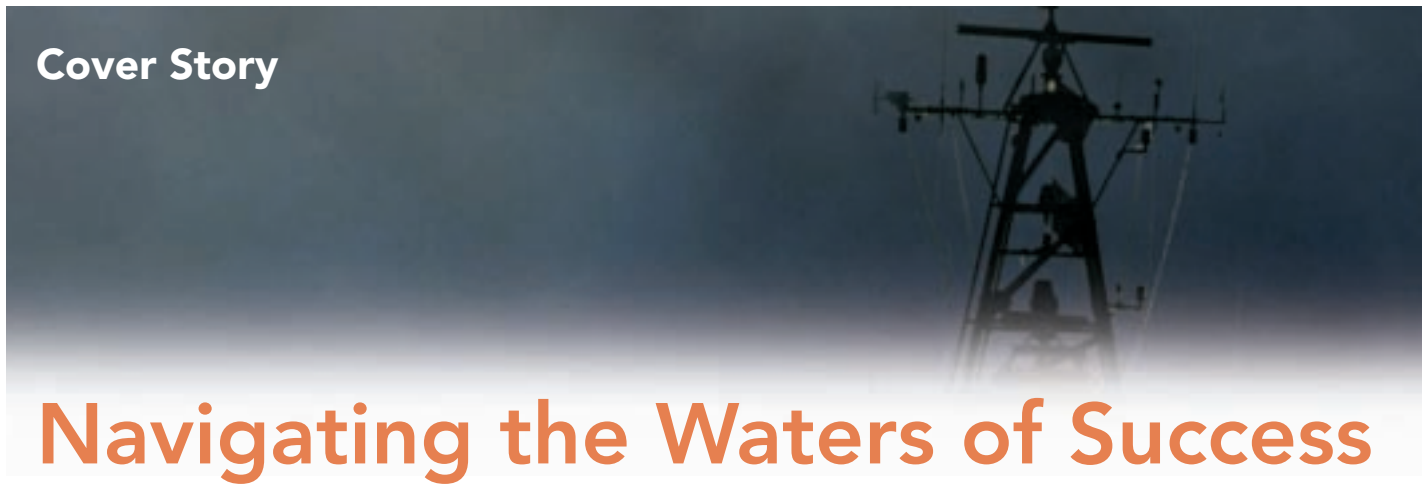
In our cover feature, we see how two companies, Metocean (Nova Scotia) and International Communications and Navigation (Newfoundland and Labrador), are developing cutting-edge software technologies and leading the pack in one of our region's key industries – ocean technology.

We also take a look at Progressive BioActives Inc., a PEI-based bioscience research company which credits its success to the development of key partnerships and a strong customer base.

In our remaining features, we continue on the theme of partnerships – partnerships that allow Atlantic Canadians to stay "connected" to the rest of the world, that look to the delivery of government services in isolated communities and that look to ensure our safety in emergency situations.

Happy reading!

Claire LePage
Regional Executive Director
Industry Canada



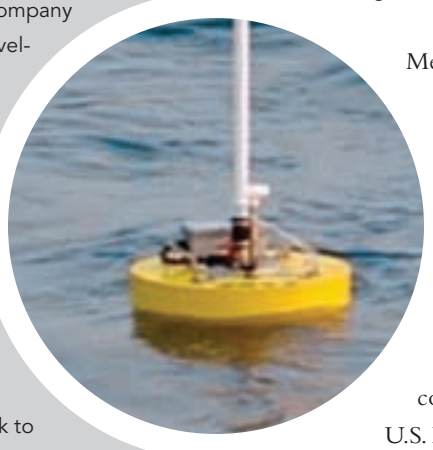
Cover Story

Navigating the Waters of Success

Recent developments in ocean technology are changing the way navies, port authorities and coast guards around the world operate. Two Atlantic Canadian software development companies are at the forefront of this change.

Metocean, a manufacturing and development company located in Dartmouth, Nova Scotia, specializes in designing and manufacturing air-deployed and ship-deployed drifting buoys. Ten years in the making, the Mobile Acoustic Scoring System (MASS) provides navies with a relatively low cost, deployable and recoverable scoring system to conduct live weapons training exercises at sea. In essence, it's target practice.

Using a system of five buoys, which a ship deploys in a chosen area, sailors measure the accuracy of their shots using the built-in GPS (global positioning system) located in each buoy. By linking MASS with a specialized computer program, they can take the practice one step further and simulate open-ocean attacks.



Metocean developed the product in partnership with the United States Navy. The company's president and CEO, Tony Chedrawy, can't suppress his enthusiasm about MASS. "It's like no other system in the world. The possibilities are endless."

MASS went on the market in 2005. Since then, Metocean has sold 20 to the U.S. Navy, each with a one million dollar price tag. Other countries are starting to take notice. While the U.S. Navy owns the patent, Metocean holds exclusive licensing rights and is the only company allowed to market the product. Tony says the development process was long but well worth it. "Our motto is 'Pride in our products, pride in our team, successful in our business'. That was our focus."

Metocean's proven expertise in ocean technology made them a logical choice for the U.S. Navy. In 2005, they won the National Research Council's (NRC) Canadian Innovation award for developing a 'profiling autonomous float'. The float measures the temperature and salinity of oceans, gathering data about climate change. The product was developed with advice and support from NRC's Industrial Research Assistance Program.

Another Atlantic Canada company riding a wave of success is International Communications and Navigation (ICAN). A recent winner of the Ernst & Young 2006 Atlantic Entrepreneur of the Year - Technology business category award, the company based in Mount Pearl, Newfoundland, specializes in marine navigation and surveillance software.

ICAN's product line includes Horizon (a shore-based vessel management system that allows users to automatically identify and track vessels), Aldebaran (an electronic navigational tool that integrates information from multiple sensors into a single electronic chart) and DataSwitch (a system that manages data from distributed sensors and clients).

Like Metocean, ICAN is a story of true entrepreneurial grit. President Neil Chaulk left an upwardly mobile job in the Canadian Coast Guard in 1997 to start the company based on little more than a gut instinct that he was on to something good. ICAN grew slowly but steadily until 2001 when the Dutch company, HITT, invested.

Industry Canada provided support to ICAN through contacts, advice and some export market development funding that allowed ICAN to gather market intelligence and establish international contacts.

Since 2004, ICAN's sales have increased by 50 percent annually. This success has also earned the company provincial recognition, including the Newfoundland and Labrador Association for Technology Industries' 2006 Company of the Year and the provincial government's 2005 Exporter of the Year.

While he appreciates the accolades of his peers, Neil says, "At the end of the day, you're only as good as your customers think you are."

Both ICAN and Metocean credit their success to customization. They say in a sector as broad as ocean technology, the ability to modify products to individual customer needs is critical.

With the help of federal and provincial government support, these companies have showcased these strengths at major international trade shows such as Nor-Shipping in Norway and Oceans in the U.S.

For more information about how Industry Canada works to foster ocean technology, visit: **www.ic.gc.ca**
To find out more about the above companies, visit: **www.metocean.com** *and* **www.icanmarine.com**

Visit us at: **www.ic.gc.ca**

Your opinion matters. Please contact us:

Industry Canada
1505 Barrington St., 16th floor
PO Box 940, Stn "M"
Halifax, NS B3J 2V9
Email: atlant-ic@ic.gc.ca

Personnel

Editors: **Pamela Roy, Rose May Gallant**
Contributors: **Gina Pecore, Suzanne Cyr, Cheryl Bell**
Design/Production: **Visual Communication Source**
Printing: **Acadie Presse** (Environmentally-friendly printing process)
Distribution: **BC Innovations**

PRINTED IN CANADA / IMPRIMÉ AU CANADA

ISSN 1712-9230
IC 60103

Warning: Severe Storm

Canada's new national alerting system will help get emergency messages to the public.

"Industry Canada is leading the development of Canada's first national public alerting system – CANALERT."

As Atlantic Canadians, we know how nature can lash out suddenly and with awesome force. And when snowstorms, hurricanes, forest fires, floods become emergency situations, we need to be notified, wherever we are and whatever we are doing.

In the past, although a number of regional and provincial public alerting systems have existed across the country, there has been no overall national system. Today, under the Emergency Preparedness Act, Industry Canada is leading the development of Canada's first national public alerting system.

When the new system is launched, CANALERT will offer two main advantages over the existing alerting system. The first is its interconnectedness: all the different regional and provincial systems will be linked together. The second is common protocols, which means that should a local alert grow and become a regional alert, the system can expand quickly to cover more territory and notify people at risk.

Here is how it works. If the fire department in a local town wanted to alert people within a 75-km radius of a forest fire, it would use a local terminal to send out an alert to the local community.

That same alert would also be sent automatically to a central system in Ottawa where it would be converted to a multiple alerting system that would target the area of the emergency. Alerts would go out across CBC television and radio, over Environment Canada's radio alert system, across the internet and via local cable and television stations. It might also be possible to send messages to cellphones and via landline dialing alert to the 911 telephone database in the area affected.

"If an emergency situation is on its way," explains Don Courcy of Industry Canada, "the people who could be affected need to know quickly, whether they are at home, driving their cars or even sleeping."

Should an emergency spread beyond the area of the initial alert, the warning can be broadcast more widely in just minutes because the systems are all linked. The CANALERT system is also compatible with the American public alerting system, in the event of an emergency affecting both countries.

"People in Canada often think that emergencies, such as the 2004 Asian tsunami, happen far away. But in November 1929 a tsunami hit the south coast of Newfoundland, killing 27 people," says Courcy. "And because it is an all-hazards system, CANALERT also covers man-made events, such as plane crashes and even war."

Of all the provinces, Alberta has the most advanced public alerting system, so its technology and experience of dealing with emergencies have been a valuable resource for Industry Canada in creating the new national system.

And recently in New Brunswick, a pilot project was carried out for the first direct-to-broadcast public alerting system. The system sends warnings from the New Brunswick Emergency Measures Organization to the Weather Network and Météo Média, which then appear on the bottom of viewers' screens in the areas affected.

When the new, country-wide public alerting system becomes a reality, Canadians can rest easy, secure in the knowledge that emergency alert messages will reach them—one way or another.

For more information on CANALERT and Industry Canada's role in emergency planning, visit: **www.ic.gc.ca**

Did you know?

…that radiofrequency fields are produced by the electronic devices in our homes (televisions & computers) and in our telecommunications industry (TV broadcasting, land mobile & cellular phones)? As part of its management of the radio frequency spectrum, Industry Canada looks to protect public safety around radiofrequency fields by ensuring that the telecommunications and broadcasting industry abides by Health Canada's "safety code 6" guidelines, and by ensuring limited public access to telecommunications towers and antennas when required.

For more information about safety & radiofrequency fields, visit: **www.hc-sc.gc.ca**

Industry Canada | Agencies and Branches in the Atlantic Region

- Aboriginal Business Canada
- Canadian Intellectual Property Office
- Competition Bureau Canada
- Industry Sector
- Information Highway Applications Branch
- Measurement Canada
- Office of the Superintendent of Bankruptcy Canada
- Operations Sector
- Spectrum, Information Technologies and Telecommunications
- Technology Partnerships Canada

Our Partners

- Atlantic Canada Opportunities Agency
- Business Development Bank of Canada
- Canadian Space Agency
- Canadian Tourism Commission
- Competition Tribunal
- Copyright Board Canada
- Enterprise Cape Breton Corporation
- National Research Council Canada
- Natural Sciences and Engineering Research Council of Canada
- Social Sciences and Humanities Research Council of Canada
- Standards Council of Canada
- Statistics Canada

Taking Root in PEI

In Prince Edward Island, the land of lush green fields and rich red soil, there's a new all-natural phenomena taking root that's giving livestock farmers around the world something to smile about.

Progressive BioActives Inc. (PBI), based in Charlottetown, has developed a chemical-free product that helps prevent and control certain diseases in animals by boosting their immune systems and making them stronger and healthier. For farmers whose livelihoods are continuously threatened by the risk of sickness and disease, this is very good news.

Shane Patelakis, CEO of Progressive BioActives, says the company's main product, ProVale™ was designed to strengthen the immune systems of pigs, chicken and fish in particular.

Photo: Courtesy of PBI

China is a strong part of PBI's Asia customer base, which also includes Thailand, Taiwan and South Korea.

"Progressive BioActives is at the forefront of PEI's $60 million bioscience research industry."

"ProVale's bioactive ingredient is derived from a specific region of a yeast cell wall," Shane explained. "It acts as an immune booster and has also been shown to be vaccine-like in its effectiveness. It allows the animal to better fight and manage bacterial, fungal and viral infections. It can be an effective and viable alternative to many growth promotion antibiotics common to the livestock market."

ProVale™ has generated quite a buzz. As of June, sales for 2006 had already surpassed total sales in 2005. The rapid increase in orders meant that, for a brief period, sales demand surpassed production capacity for its Canadian/U.S. clients. As a short-term solution, the energetic team went to work to upgrade their existing manufacturing facility.

They also agreed a major expansion facility was in order. PBI plans to construct a new, three million dollar production plant within the next year. This will increase ProVale™ production from 500 kilograms to over 4000 kilograms per month of the bioactive concentrate. This increase will help reach many animals since the dosages required are quite low. The new facility also means new employees and innovation capacity. Shane says they expect to have 18-20 people on staff, up from the current seven, when the new plant is commissioned.

The growth is exciting for PBI but according to Shane, the most attractive part of the new facility and increased staff will be the ability to focus on emerging product extensions in its ProVale™ line. The next generation of ProVale™ will be a stronger yet more rounded bioactive feed supplement for animals.

Consumer demand for antibiotic-free meat is driving the pork and poultry industries towards so-called natural and/or organic farming, and PEI is on board through its own natural pork initiative. The timing is great for PBI, which is banking on significant market demand for ProVale™.

"ProVale allows us to focus on sustainable agriculture practices," Shane said. "This product will also be expanded for use in companion animals such as dogs, cats and horses."

ProVale™ is in the process of registering its new ProVale™ feed ingredient with the Canadian Food Inspection Agency and hopes to have the base product on the market by early 2007.

Progressive BioActives is at the forefront of PEI's $60 million bioscience research industry and the company credits its success to several factors, such as developing key partnerships. PBI has secured investors and received strong financial support from, among others, the Atlantic Canada Opportunities Agency, TechPEI (PEI's Technology Development Agency), the National Research Council's Industrial Research Assistance program, the Atlantic Veterinarian College, and the Atlantic Swine Research Partnership.

They've also made good contacts, joining groups like PEI BioAlliance, an organization dedicated to building the province's bioscience sector.

A recent winner of the Business Development Bank of Canada's 2006 Entrepreneur Award for Prince Edward Island, Shane said PBI has also been fortunate in finding the right customers and early adapters in the industry. They work closely with small and large feed companies as well as local poultry and swine producers. PBI also has a strong customer base in Ontario, Quebec and the Maritimes as well as Taiwan, South Korea, Thailand and China.

For more information about how Industry Canada works to foster bioscience research, visit: ***www.ic.gc.ca****. To find out more about the above company, visit:* **www.progressivebioactives.com**

Creating New Knowledge

On July 19, 2006, the Honourable Maxime Bernier, Minister of Industry and Minister Responsible for the Canada Research Chairs Program, announced an investment of $66.9 million to support 90 Canada Research Chairs.

The announcement is helping Atlantic Canadians create new knowledge in several areas, including health and social sciences. Nicole Letourneau (Canada Research Chair in Healthy Child Development, University of New Brunswick) will develop tools for helping women suffering from postpartum depression, as well as mothers and children who are victims of domestic violence. Susan Machum (Canada Research Chair in Rural Social Justice, St. Thomas University) will conduct research on the future of rural communities in Canada, social justice and rural working conditions in forestry, fishing and farming.

The announcement also covers Atlantic-based research in the areas of culture, study of the atmosphere, geophysics, psychology and chemistry.

The Research Chairs Program looks to enhance Canada's competitiveness in the global, knowledge-based economy, to improve health, and to enrich our social and cultural life.

For more information, visit: **www.chairs.gc.ca**

Connecting with the World

With its many islands, scattered cities and remote communities, Atlantic Canada can sometimes seem a bit isolated. But in recent years, the Internet has been changing all that by forging connections that firmly link Atlantic Canada to the world — in areas as diverse as tourism and education.

In the education arena, the internet is making an impact. In Atlantic Canada, approximately 19% of young people do not complete high school. Later in their lives, many of these people want to take the high school equivalency exam. But returning to a classroom is not always possible.

Now, the challenge of the classroom need not be a barrier to completing school. In March 2006, Connect NB Branché launched the first ever bilingual, on-line mentored program to prepare candidates for their high school equivalency exams.

Initial computer training at community access points gets participants started. They then work through the modules at their own pace, either at home or through these community resources, getting help from their on-line mentors—often retired teachers—when needed. Pre-tests give participants credit for what they know already, so progress is often quicker than it would be in a classroom.

Results from the 165 participants so far show that the program is delivering a success rate comparable to classroom performance. Mike Hannay of Connect NB Branché says that other provinces are using the program and there has been a lot of interest from other countries like the United States and Romania as well.

In the tourism sector, Tourismtechnology.com, a low-cost technology advice service, is helping the region's tourism organizations and operators boost their presence on the web and attract visitors.

Don Cudmore of Tourism PEI explains that traditional advertising methods are often too costly for small operators. But the web gives them a cost effective and highly effective means of reaching a much wider audience.

"What we are finding," he says, "is that tourists are booking from much further away than before. And even though tourism has been slower this summer than it was earlier in the year, internet bookings have remained steady."

Réal Robichaud of Tourism NB says that operators in New Brunswick are also putting their technology training to good use and reaping the benefits. However, tourists are becoming more demanding, he says. "Tourists want to see the rooms and the grounds on-line. They almost want to smell the place before they book."

The challenge is to keep enhancing the technology to give tourists the quality they want. And when they like what they see, they book on-line.

This is Stan Cook's experience in Newfoundland. He owns and operates a sea kayaking business out of Cape Broyle, south of St. John's. "Every year for the past three years, on-line enquiries and bookings have doubled."

An enthusiastic beneficiary of Tourismtechnology.com, he speaks highly of the seminars, marketing information and technology guidance he has received, all at a low cost.

"For small operators," he says, "the internet is a wonderful equalizer. You don't have to be a big operator to have a strong presence."

And for Atlantic Canada as a whole, interconnectivity is enriching lives and—quite literally—bringing the world to its doorstep.

"For small operators the internet is a wonderful equalizer. You don't have to be a big operator to have a strong presence."

– Stan Cook

For more information on Industry Canada's Broadband for Rural and Northern Development Pilot Program or the Community Access Program, visit: **www.ic.gc.ca**

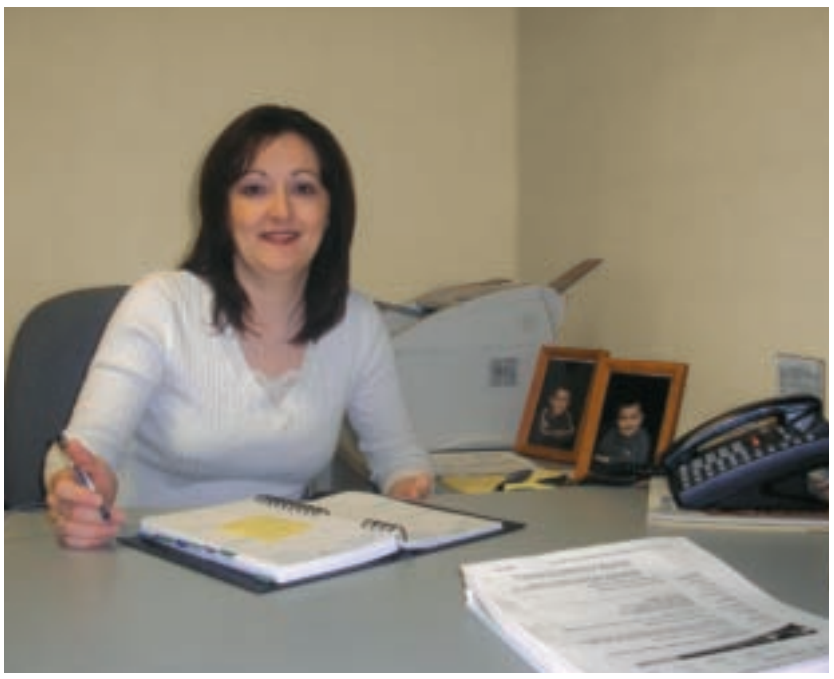
Celebrating Atlantic Canada's Aboriginal Entrepreneurs

Membertou, Nova Scotia, September 12, 2006 —Tammy Belanger of Green Leaf Enterprises receiving the Youth Entrepreneur of the Year award from Claire LePage, Executive Director, Industry Canada Atlantic Region. The presentation was part of the second annual Atlantic Canada Aboriginal Entrepreneurship Awards which recognize Aboriginal business achievements in Atlantic Canada. John Bernard of Dona Cona Inc. was also presented the 2006 Atlantic Entrepreneur of the Year award. Of the nine entrepreneurs who won awards in the various business categories at this event, six are clients of Aboriginal Business Canada. The event was sponsored in part by Industry Canada, the Atlantic Canada Opportunities Agency (ACOA) and Indian and Northern Affairs Canada. For more information on the awards, visit: **www.ulnooweg.ca**

Serving Remote Communities

Port-au-Port Peninsula residents now have greater access to government services.

Photo: Courtesy of Service Canada



Melinda Oliver-Morazé, Service Canada's bilingual, travelling representative.

Getting access to high-quality services is not always easy for those who live in remote areas. Just ask Robert Cormier, a resident of Cape St.-George, a small community located at the far end of the Port-au-Port Peninsula in Newfoundland and Labrador. He knows all about it.

"We sometimes feel isolated in our little rural communities, far away from everything," explains Mr. Cormier. "And as a Francophone minority, it's even worse."

That's why, in an effort to break through this isolation and provide better access to the services and benefits offered by the Government of Canada, Service Canada has opened a bilingual mobile outreach site to provide service for residents on the Port-au-Port Peninsula. The rural, mobile and bilingual service is a first in Newfoundland and Labrador.

"Before, we had to drive an hour and sometimes more to reach the closest Service Canada office in Stephenville," explains Robert Cormier. "The other option for getting information was the phone, but that's not always as fast and efficient as talking to someone in person."

Seven federal departments, including Industry Canada, contributed to the innovative project initiated by the Official Languages Committee of the Newfoundland and Labrador Federal Council. The region's population had asked for bilingual access to government services during public consultations on several occasions.

It's important to understand that the Port-au-Port Peninsula is the heartland of Franco-Newfoundland. Francophones are mainly grouped together in the communities of Black Duck Brook, Mainland and Cape St.-George. For them, accessing services in their language is a daily battle.

The Service Canada office is located in the offices of the Association régionale de la Côte Ouest at the Centre scolaire et communautaire Ste-Anne in Mainland. The centre is a major hub for the area's Francophone community and has a variety of educational, social, cultural, religious and sports activities. The addition of Service Canada expands the range of services available to the community.

Melinda Oliver-Morazé is Service Canada's bilingual, travelling representative. She works three days in Mainland and two days in Stephenville, the service centre for the region.

"So far, people using the services are very satisfied," says Ms. Oliver-Morazé. "They enjoy being served in the language of their choice without having to travel many kilometres to find the information they need."

According to Ms. Oliver-Morazé, the people she meets at Service Canada require a variety of information that can range from intellectual property to employment insurance and from business financing to the Canada Pension Plan.

The mobile office is located near the Community Access Program (CAP) site, which is very popular with people in the community.

"The region does not yet have high speed Internet, but by satellite, we do have access to this service. People really appreciate being able to use computers to find the information they're looking for or to fill out questionnaires online," explains Ms. Oliver-Morazé.

"Knowing that we can easily access information on the various departments in our own language makes us feel a little less isolated from the rest of the world," says Robert Cormier.

"Knowing that we can easily access information on the various departments in our own language makes us feel a little less isolated from the rest of the world."

- Robert Cormier

For more information on government services to Canadians, visit: **www.servicecanada.gc.ca**

Fostering Atlantic Canada's Environment Industry

There are a number of ways Industry Canada works to foster Atlantic Canada's environment industry, including working with industry and government partners to generate new knowledge that will benefit industry growth, productivity and competitiveness. The following reports on Atlantic Canada's environment industry were recently published in partnership with environmental industry associations and other government departments:

Foundation for Growth: Advancing Environmental Research Commercialization in Atlantic Canada (2006) —
This report provides insight into environmental research in the Atlantic Region, opportunities for collaboration, and an approach to engaging industry, academics and institutions in the commercialization of environmental research. The report is available at: **www.ic.gc.ca**

Focused for Growth: Market Access Strategy and Action Plan (2005) —
This report recommends an export approach for Atlantic Canada environment firms by targeting industry sub-sectors and geographic markets, and by using a phased approach to marketing activities. The report is available at: **www.nbeia.nb.ca**

For more information on how Industry Canada works to foster environment industries, visit: **www.ic.gc.ca**