HI-TECH TRAINING FOR ABORIGINAL STUDENTS

BUILDING A GATEWAY FOR FOREIGN BUSINESS

2010 FARNBOROUGH INTERNATIONAL AIR SHOW

ACCESS WEST

FALL 2010

Creating Jobs in Western Canada:

Canada's Economic Action Plan

Leveraging the 2010 Winter Games

Commercializing Micro and Nanotechnologies

Western Economic Diversification Canada
Diversification de l'économie de l'Ouest Canada
Canada

Access West is published by Western Economic Diversification Canada.

Editor: access.west@wd-deo.gc.ca

ACCESS WEST

WD OFFICES

British Columbia
Suite 700, 333 Seymour Street
Vancouver, BC V6B 5G9
604-666-6256

Alberta
Suite 1500, Canada Place
9700 Jasper Avenue
Edmonton, AB T5J 4H7
780-495-4164

Suite 400, Standard Life Building
639 - 5th Avenue SW
Calgary, AB T2P 0M9
403-292-5458

Saskatchewan
P.O. Box 2025, Suite 601
119 - 4th Avenue South
Saskatoon, SK S7K 3S7
306-975-4373

Manitoba
620 - 240 Graham Avenue
Winnipeg, MB R3C 0J7
204-983-4472

Ontario
Suite 500, Gillin Building
141 Laurier Avenue West
Ottawa, ON K1P 5J3
613-952-2768

Disponible aussi en français
ISSN: 1495-6802 (print)
ISSN: 1495-6543 (online)

FALL 2010

MESSAGE FROM THE HONOURABLE LYNNE YELICH

The Honourable Lynne Yelich, Minister of State for Western Economic Diversification.

THIS YEAR, THE WORLD SAW EXACTLY what Western Canada is capable of accomplishing. The Vancouver 2010 Olympic and Paralympic Winter Games brought the world to our doorstep, allowing Vancouver to play host to not just top athletes, but also world and business leaders. Before, during, and after the Games, Western Economic Diversification Canada (WD) seized every opportunity to help Western Canada showcase its strengths to the world.

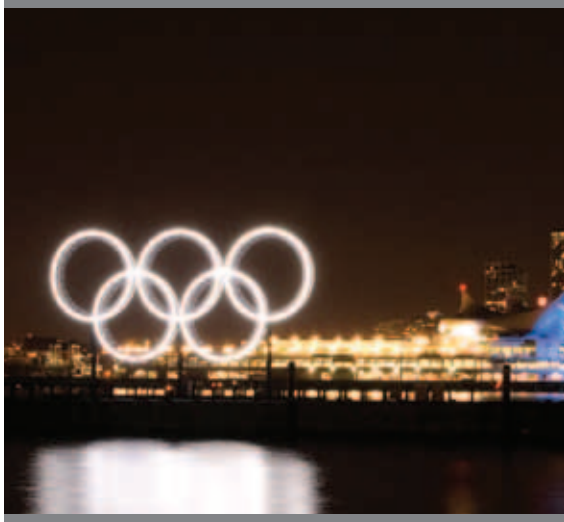
Even while Canada and the rest of the world were struggling with one of the worst economic downturns in recent history, WD's investments in projects promoting innovation, community economic and business development were helping our region emerge from this recession stronger than ever.

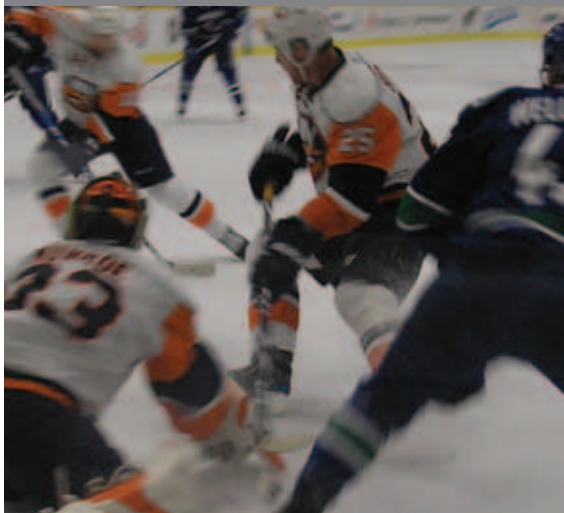
Our investments in innovation are improving the productivity of traditional and emerging industries, and putting Western Canada at the forefront of the knowledge-based economy. In Alberta, WD investments are helping the Alberta Centre for Advanced Microsystems and Nanotechnology Products (ACAMP) commercialize micro and nanotechnologies. In Saskatchewan, the Saskatchewan Food Industry Development Centre will transform a wide variety of agricultural crops into innovative consumer food products. And in British Columbia, a recent WD investment is helping the University of British Columbia establish cutting-edge 3D technology to further mining research.

Accounting for nearly half of all existing jobs, small businesses are a vital source of economic growth in the West and remain a top priority for WD. We invest in projects that equip the next generation of entrepreneurs and skilled workers with what they need to thrive in the global marketplace. In Manitoba, WD has invested in CentrePort Canada Inc., which will take advantage of duty and tax relief programs and Winnipeg's key location to leverage foreign investment and link businesses to international markets.

WD also continues its work with other levels of government and communities to help them adjust to challenging economic circumstances and promote rural diversification. Over the past year, our Department has been busy delivering the Community Adjustment Fund and Recreational Infrastructure Canada program under Canada's Economic Action Plan throughout Western Canada. These programs are creating jobs, and helping workers and communities get back on their feet.

Western Canada has a lot to offer the world, and as this issue of *Access West* illustrates, WD is working hard to help western economies, entrepreneurs, and innovation prosper. I am confident that our efforts will assist Western Canada in emerging stronger than ever. Because a stronger West is a stronger Canada.





MICRO AND NANOTECHNOLOGY TRANSFORMING ALBERTA INDUSTRIAL BASE

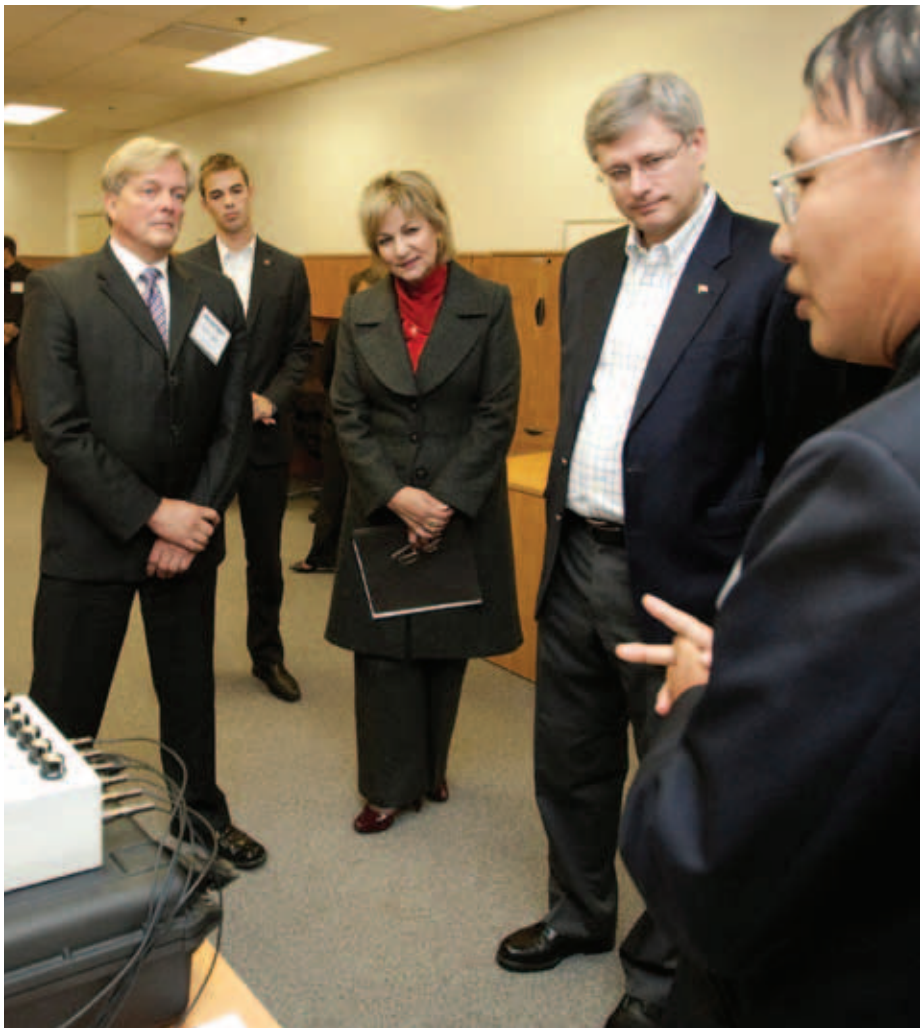
FORTY YEARS AGO, THE WORD WAS microelectronics. Today, the hot topic is nanotechnology. At least, that's the case at the Alberta Centre for Advanced Microsystems and Nanotechnology Products (ACAMP), where commercialization of micro and nanotechnologies is helping transform the province's industrial base.

ACAMP is a not-for-profit organization that provides specialized business services to microsystems and nanotechnology (MNT) clients. WD, together with the Government of Alberta and industry partners, played an important role in helping to launch the initiative more than two years ago. WD has subsequently invested a total of more than $8.9 million towards the installation of state-of-the-art equipment at the Centre.

The most recent investment of over $1.9 million is supporting the extension of ACAMP's development and commercialization services into new specialized areas, including geomatic products, laser product assembly, and microfluidic devices.

"With this support, corporations will now have the capability to compete worldwide in the area of complex integrated micro and nano based systems," said Ken Brizel, CEO of ACAMP.

This latest investment builds on WD's previous contributions towards the purchasing of equipment. Thanks to a $3.5 million contribution in May 2009, manufacturers in Alberta's biomedical, agricultural, communications, environment, and forestry sectors – along with energy and aerospace interests – have access to Canada's first low-temperature co-fired ceramics packaging facility. They also have access to the technical and business development staff at ACAMP.



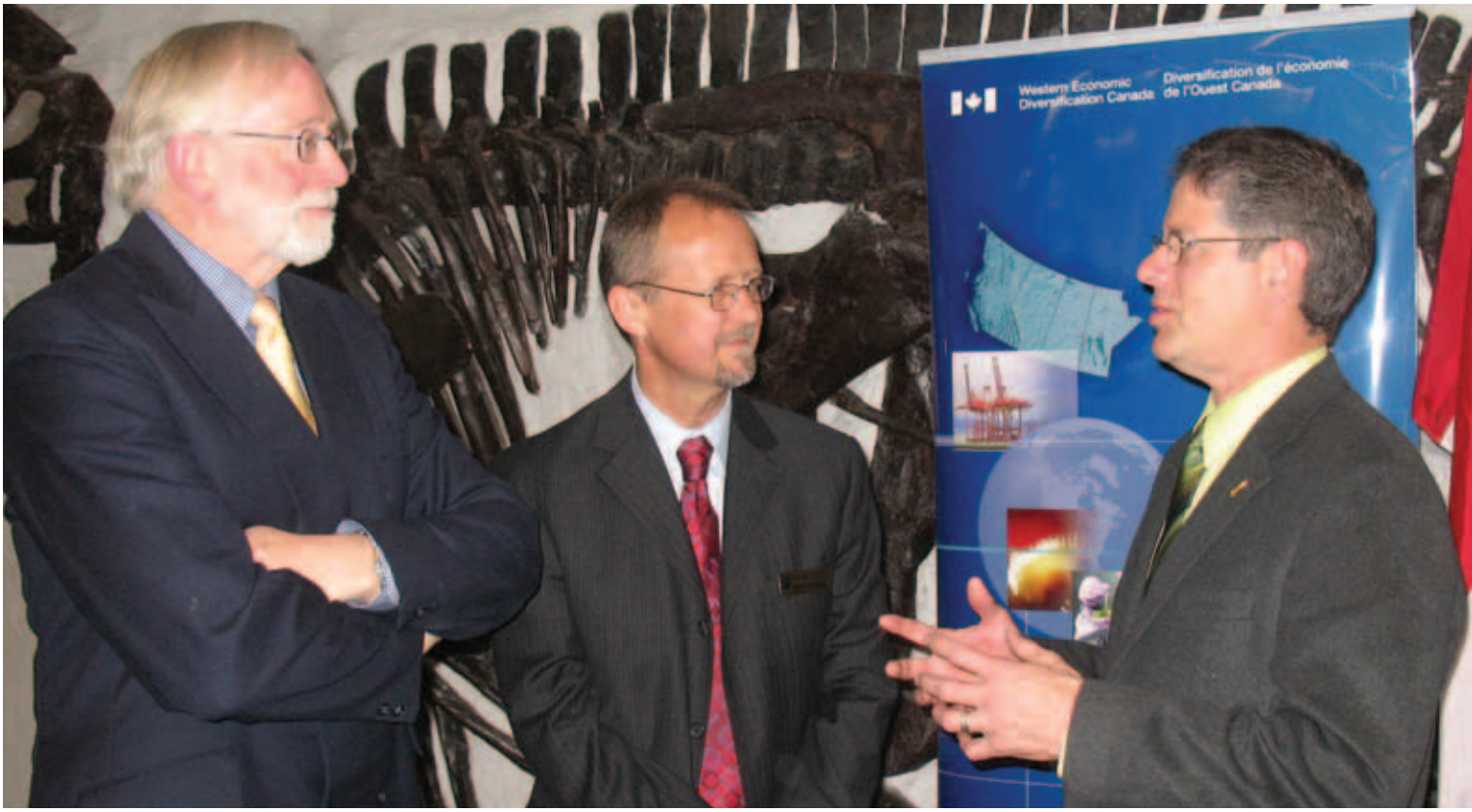
Prime Minister Harper and Minister Yelich tour the ACAMP facility at the October 8, 2010 announcement.

Assembly technologies, such as low temperature co-fired ceramics, are inorganic non-metallic materials that can withstand extreme conditions, making them ideal for environments in which conventional metal or plastics would fail. "Those kinds of temperature differences cause normal electronics to burn up," said ACAMP's CEO, Ken Brizel. "A lot of companies haven't had much experience or expertise in building those kinds of products before."

The oil and gas industry, for one, has a long wish list for electronic monitors that can work at the bottom of a well, where temperatures can climb to upwards of 200 degrees Celsius. Aerospace firms have similar needs for orbiting satellites whose parts can tolerate triple-digit temperatures both above and below zero.

"We're bringing processes and technologies to Alberta that didn't exist before," said Brizel. "We help companies design for manufacturability and then they go home and mass produce them."

If an entrepreneur has managed to get past the idea stage into prototyping, they're a candidate to join the Centre's client list, now at 48 companies and growing. "We only work with clients who have a working prototype and are incorporated," added Brizel. "It's not about basic research; it's about diversifying the province's economy with cutting-edge products." In addition to a manufacturing facility, the Centre offers clients advanced simulation tools that analyze products in a virtual environment, and runs a series of seminars for innovators across the province. AW



MP Mark Warawa meets with UBC's Dr. Don Brooks and Dr. Simon Peacock following WD's funding announcement.

UBC USES 3D TECHNOLOGY TO ADVANCE MINING RESEARCH

NOT EVERY UNIVERSITY WOULD HAVE the capacity to accept a sizable donation of diamond exploration drill core. But at the University of British Columbia, the Department of Earth and Ocean Sciences received such an offer from one of the world's largest mining companies.

Fortunately, the university had also received a $960,000 commitment from WD to help establish a smart mineral exploration and mining research centre. Professor Greg Dipple, who now directs the formally titled Centre for Environmental Change and Planetary Stewardship, said the timing couldn't have been better. "We wouldn't have this amazing collection if we hadn't had the good luck of securing funding a few months before," he said.

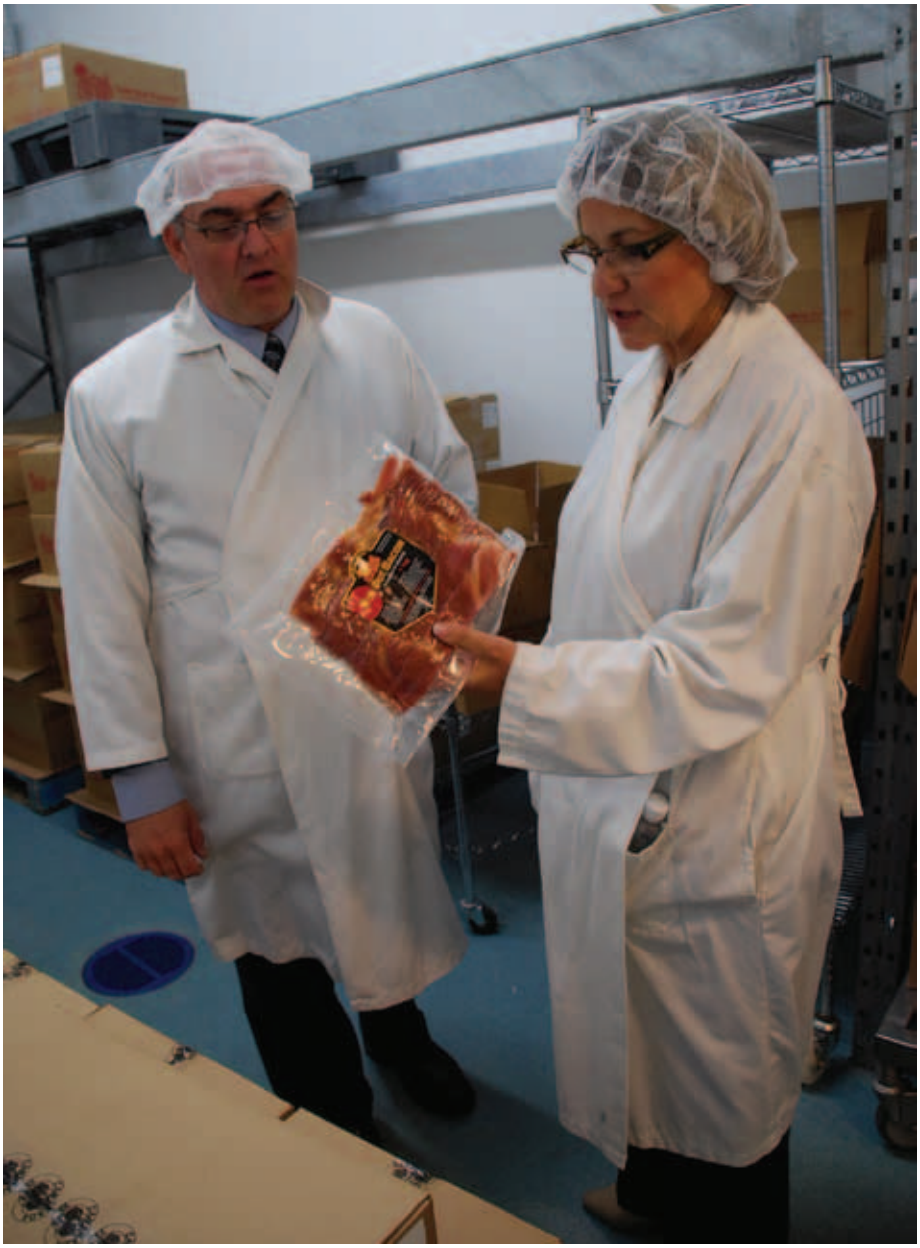
The drill core is housed in the Centre's new Field Support Facility, which doubles the university's storage capacity for such materials. The core will give researchers invaluable insight into the geology of Northern Canada.

In addition to housing the drill core, the Centre used WD support to assemble a cutting-edge visualization facility, which uses the same polarized imaging technology as the new generation of 3D films, such as the highly acclaimed "Avatar." Students and faculty can examine complex data from oil and gas deposits or mineral formations in three dimensions without leaving campus, cutting travel expenses significantly. "Now we're hosting meetings with industry on campus," said Professor Dipple. "It's having a real effect on research."

The third element of the Centre is the Environmental Interface Laboratory, essentially a large sand tank that allows researchers to simulate how water and other materials flow and react underground. For example, one team is studying the capacity of certain mine wastes to absorb carbon dioxide as part of the global effort to find ways to mitigate the climate-changing effects of fossil fuel use.

The Centre is devoted to improving mineral exploration technologies and minimizing their impact on the Earth. Most of the Department of Earth and Ocean Sciences' 170 graduate students and 45 faculty members will make use of the new facilities, which are scheduled to move into a new $75-million complex on the UBC campus in 2012. AW

MAKING HEALTHIER FOOD WITH NEW TECHNOLOGY



Dan Prefontaine shows Minister Yelich one of the many products developed and commercialized with the assistance of the Food Centre.

CONSUMERS WANT MORE CHOICES in healthy snacks. Farmers need to stay competitive and make the most efficient use of their crops. New food processing technology in Saskatoon is helping address both demands.

Since December 2009, the Saskatchewan Food Industry Development Centre has been taking advantage of a new $78,300 package of accessories for its extruder, purchased with a contribution from WD. The Centre bought the twin screw extruder two years ago with $800,000 in WD support. The twin screw extruder can transform a wide variety of agricultural crops, from soybeans to peas, into innovative consumer food products. With the new accessories, the extruder's potential in exploring commercialization opportunities are greater than ever.

"Extrusion is used in a wide range of familiar food products, from cereals, pasta, and snack food to animal food," said Dan Prefontaine, the Centre's President. "But the real growth industry these days are healthy snacks and easy-to-prepare main courses, particularly foods that don't include ingredients like wheat or soy, to which many consumers are either allergic or have aversions."

At the same time, demand for alternatives to meat is driving much of the innovation.

"You can make a product with extrusion that's very similar in appearance to meat," said Prefontaine. "The idea is not to replace meat, but to give people alternatives." From the farmer's point of view, the new extrusion equipment also offers a chance to make use of byproducts, such as pea shells, that otherwise would be thrown away.

So far, the Food Centre has attracted a dozen clients from across North America hoping to create new, healthy alternative food products. "We've already developed a couple of gluten-free products," said Prefontaine.

Besides human food, the upgraded extruder is also capable of producing pet food and biodegradable packaging materials that can fill the same niche as plastic foam "peanuts," only in a more ecologically responsible manner. AW

STATE-OF-THE-ART EQUIPMENT ATTRACTS TOP TALENT

MANITOBA'S GROWING LIFE SCIENCES sector is luring top research talent to the province, thanks to state-of-the-art laboratory equipment recently acquired by the University of Manitoba.

At the university's new Centre of Excellence for Regenerative Medicine, the purchase of modern scientific equipment was a key factor in the decision of several leading scientists to come to Winnipeg. In each case, it was the chance to work on state-of-the-art machines that sealed the deal, said Dr. Geoff Hicks, Director of the school's Regenerative Medicine Program.

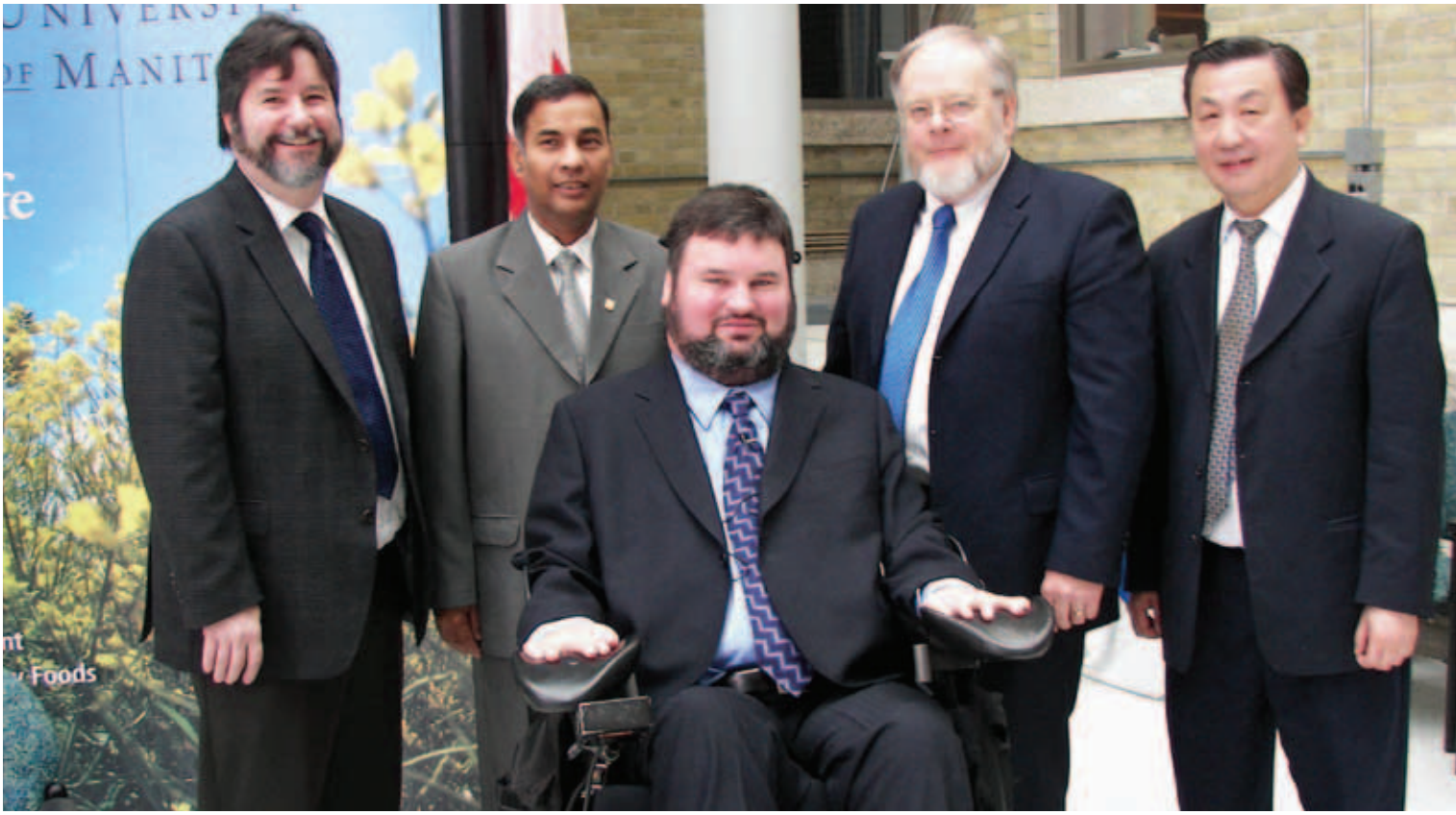
Among the "essentials" is a device that can identify and isolate stem cells, the primitive cells that can transform themselves into all of the specialized cells in the body. This device attracted Dr. Afshin Raouf, who studies the role of stem cells in breast cancer. "He wouldn't have come without it," said Dr. Hicks.

Similarly, neurobiologist Dr. Soheila Karimi made the move to Winnipeg in large part because of a new confocal microscope, a device that gives researchers extraordinarily sharp images of the tiniest of cellular components. Dr. Karimi's research focuses on how stem cells can be used to repair spinal-cord injuries. From heart attacks to Parkinson's disease to diabetes, the list of possible applications for stem-cell therapies is constantly growing.

Dr. Hicks' team will also take advantage of the combined resources of the burgeoning biomedical research community in Manitoba. The goal is to put the Centre at the forefront of regenerative medicine research and offer top-quality health care, said Dr. Hicks. "The hope is the clinical applications will be quick and direct."

In May 2009, WD committed $1.7 million toward purchasing the equipment for the Centre, which is the only such facility in the Prairie region. In addition to attracting new highly qualified personnel to the region, WD's investment is expected to generate additional research funding estimated at $7.2 million over the first three years of the project. The investment will also allow the Centre to pursue new collaborative relationships with complimentary facilities worldwide, generating new research opportunities and associated grant funding.

The research done at the Centre will provide the basis for the development of new medical procedures for the regeneration of muscles, heart tissues, nerve tissues and brain tissues in relation to various diseases. AW



L to R: Dr. Geoff Hicks, Director of Regenerative Medicine; Dr. Digvir Jayas, Vice-President, Research, University of Manitoba; Minister Steven Fletcher; Dr. Dean Sandham, Dean of Medicine; and Dr. Patrick Choy, Associate Dean (Research) Faculty of Medicine at the University of Manitoba's Centre of Excellence for Regenerative Medicine.

SEEKING NEW FORMS OF ENERGY CONSERVATION

HOMES FITTED WITH FULLY AUTOMATED APPLIANCES MAY BE CLOSER TO reality than people may think, thanks to the kind of research being conducted at the British Columbia Institute of Technology (BCIT). Soon, your freezer will know to turn off when it's empty, while the washing machine and dishwasher will negotiate which gets priority during peak energy use hours. Coordinating these automated activities will be an "intelligent agent" somewhere between your home and the local power supplier.

Welcome to the microgrid, a critical element of the global campaign to conserve energy according to a team of engineers at BCIT. "There's no doubt we're moving toward new forms of energy conservation measures," said Dr. Hassan Farhangi, Director of BCIT's Microgrid project at the school's new Centre for Applied Research and Innovation.

The BCIT Microgrid is a six-year experiment in putting new electricity production and distribution technologies to work. The microgrid will act as a testbed where communication technologies, smart metering, power generation, and even smart appliances will be integrated. It will also be used for applied research and development for future electricity grids.

In October 2009, through the Western Economic Partnership Agreement, WD announced a $2 million federal investment to help BCIT develop this leading-edge electricity grid demonstration project.

The first phase of the project – installation of the energy monitoring and control equipment – is underway. Next comes two years of testing and tinkering. Project goals include improving energy grid reliability, efficiency and compatibility.

"BCIT Microgrid is planning for almost one megawatt of renewable electricity generated on the Institute's campus," said Dr. Farhangi. "There are several solar arrays, a planned small wind turbine and a multi-fuel generator that can run on a variety of different fuels. Our target is to turn BCIT into an independent power producer."

According to Dr. Farhangi, there's no other similar campus-wide system in Canada that combines smart appliances with sophisticated metering and computer-controlled distribution networks to keep electricity consumed by the school to a minimum. AW

BCIT President Don Wright, MP Russ Hiebert and MLA Richard Lee outside of the Centre for Applied Research and Innovation building.

HIGH-TECH TRAINING FOR ABORIGINAL STUDENTS

IN RESPONSE TO A NEED IDENTIFIED by industry, the Centre for Aboriginal Human Resource Development (CAHRD) is delivering training to prepare Aboriginal students for high-demand trades needed to support Manitoba's industrial growth and competitiveness.

Training is delivered through a division of CAHRD, the Neeginan Institute of Applied Technology - a unique centre that delivers certified trades training programs in partnership with industry, universities and colleges. The Neeginan Institute provides an opportunity for students, many of whom would otherwise be unemployed, to raise their skill or academic level so they can undertake training for high-demand trades. CAHRD is a community driven, not-for-profit human resource development organization that delivers education, training and employment services to Winnipeg's urban Aboriginal population, as well as support services like housing and child care. This inclusive, holistic approach is key to the success of the program and results in graduates taking on long-term sustainable jobs.

In April 2010, Minister Yelich announced a Government of Canada investment of $379,977 ($276,669 from WD and $103,308 from Indian and Northern Affairs Canada through the Urban Aboriginal Strategy) for CAHRD. The funding provides equipment and tools to help Aboriginal students become skilled workers in the aerospace industry in areas such as gas turbine repair, as well as overhaul and manufacturing.

"This initiative is providing good career potential within the aerospace sector for Aboriginal students, and as a result, is proving to be beneficial to Winnipeg's Aboriginal community," said Wayne Helgason, Chairperson of the Board of Directors at CAHRD. "It also shows that CAHRD, in partnership with industry and government, is responding to current labour market needs."

TESTING MEDICAL DEVICES AT NEW BIOMEDICAL CENTRE

THERE IS MORE THAN ONE WAY TO TEST new medical devices. An innovative way is to build a device that can simulate what happens inside the body – enter the ElectroForce Systems Group, a division of the Bose Corporation.

Better known for its speakers and other home audio products, Bose is applying its expertise in electrical systems to the biomedical field by teaming up with researchers at the University of Calgary. The two partners are in the process of setting up the Bose Biomaterials and Tissue Engineering Technology Development Centre, which is intended to be a world leader for the development of biomedical "test frames."

The frames create an artificial testing environment in which temperature, pressure, oxygen levels and other conditions can be precisely controlled using the same technology behind the electrical motors Bose uses to reproduce sound. The goal is the development of new gear to diagnose, treat and prevent diseases.

"We could design stents that would help expand blood vessels and see how they respond to the stresses and strains of the human body," said Dr. Jeff Dunn, Canada Research Chair in Biomedical Imaging and a Professor in the Department of Radiology. "We'll be the only group in the world with all the Bose test frame equipment in one place."

Building, outfitting and staffing the new Centre will cost about $7.3 million, with WD contributing just over $4 million of the total and the balance from the province, both through the Canada-Alberta Western Economic Partnership Agreement. Some 20 researchers are expected to move into the new labs later this year, said Dunn.

Bose has been working for several years with University of Calgary teams studying the company's test frames. So when the university raised the prospect of a dedicated research centre, the decision to work together was an easy one for both sides. "Their approach to research just seemed to mesh well with ours, both philosophically and at the personality level," said the General Manager of the ElectroForce Systems Group, Ed Moriarty.

Bose has long had a strong research division, Moriarty said, but until now there was no central laboratory dedicated to the biomedical gear. AW

Neeginan has formed strong partnerships with both Boeing Canada and Standard Aero. Currently, 16 participants have been accepted into a program at Boeing, 11 participants are training to be gas turbine repair and overhaul employees for Standard Aero, and 26 other companies are working with CAHRD to hire graduates.

This project builds on previous WD funded projects with CAHRD for the Neeginan Institute to provide training in trades such as welding, machining, carpentry, milling, lathe operation, and aerospace maintenance. This training is helping fill Manitoba's labour shortages in trades with skilled Aboriginal people. AW

Minister Yelich (centre) with Neeginan Aerospace Training Centre students.

CUTTING-EDGE TESTING FACILITY OPENS IN NORTHERN MANITOBA

Following the grand opening Minister Yelich operates the jet engine throttle with Saman Raza, MDS Project Coordinator.

NORTHERN MANITOBA AND THE world's aviation industry will benefit from the development of a state-of-the-art cold weather testing and research facility in Thompson. On October 29, 2010, Minister Yelich joined federal, provincial and industry leaders for the grand opening celebrations of the Global Aerospace Centre for Icing and Environmental Research (GLACIER) facility and the not-for-profit Environmental Test, Research and Education Center (EnviroTREC).

"Our Government is proud to be involved in this exciting partnership," said Minister Yelich. "By working together to develop this state-of-the-art facility we are promoting cutting-edge technology, and creating high-quality jobs and educational opportunities right here in northern Manitoba."

EnviroTREC is a year-round research facility that specializes in supporting engine icing certification and research and development of new, more efficient and advanced aerospace designs. Through partnerships with secondary and post-secondary educational institutions, EnviroTREC will offer a wide variety of aeronautical sciences and aerospace research and maintenance programs to attract, develop, and retain highly-qualified professionals within Canada. The testing technology used will also be applicable in other sectors, such as bus and automotive manufacturing.

EnviroTREC is co-located with industry in the new facility built by GLACIER, which is a limited joint venture between Rolls-Royce Canada Limited and Pratt & Whitney Canada.

"Without the efforts and financial support of Western Economic Diversification Canada, this facility would not be here today," said Roxie Binns, Thompson Unlimited's Winter Weather Testing Development Coordinator. "This icing facility has elevated Thompson to the global stage, clearly showing that we are a Centre of Excellence for cold weather testing, and bringing with it opportunities for the entire community."

Government of Canada funding for the facility, including a WD investment of $8.4 million, is helping this major northern initiative create value-added economic activities in northern Manitoba as the knowledge and technology developed in Thompson emerge into commercial opportunities. AW

ALBERTA'S RURAL DIVERSIFICATION INITIATIVE

Community Futures Alberta's Rural Diversification Initiative (RDI) is an important WD-funded program that is helping to deliver significant economic gains through partnerships between communities and entrepreneurs. In order to compete, rural communities must build long-term sustainability, adapt to the current economy, and maintain a broad economic base with a variety of businesses and jobs. The following are just two examples of how RDI is working in Alberta.

ONLINE TECHNOLOGIES HELP DIVERSIFY ALBERTA ECONOMY

In September 2008, RDI invested more than $150,000 towards the implementation of the South East Alberta Technology Strategy (SEATS). The Strategy, led by Community Futures Entre-Corp, brings technology-based businesses and Medicine Hat College together to address the growing demand for skilled workers and leverage business opportunities in the technology sector. To date, the project has provided one-to-one support to several technology clients and allowed Medicine Hat College to kick-start a new technology co-op program.

The SEATS project, which also receives funding from the Government of Alberta, has enabled Community Futures Entre-Corp to become an approved service provider to the province's Innovation Voucher Program. To date, seven businesses have been awarded vouchers including Accessible Accessories Ltd., a software company already participating in Community Futures Entre-Corp's Business First Incubator.

The Medicine Hat software developers – a husband and wife team – only needed a little support from the local Community Futures office. Today the company is responsible for supplying the web interface for the online accessory shops of numerous car dealers. They've also added five employees. "You don't even notice that it's not a GM or Ford site," said Sean Blewett, the General Manager of Community Futures Entre-Corp.

Part of the impetus for the project, Blewett added, is the fact the technology sector tends to work with clients from outside the region, and doesn't have a strong local profile. As a result, companies have difficulty finding skilled employees. "There's a lot of demand from employers, but not a lot of young people are going into the technology programs," said Blewett. "They're used to the idea of just walking out of school into the oil and gas jobs."

So, in addition to the kind of training and office support the Community Futures program gives companies like Accessible Accessories, the project is also working with Medicine Hat College in the hope of convincing more students to pursue high-tech jobs. AW

TOWARD A HEALTHY BUSINESS COMMUNITY

For a town that got its start in one of the dirtiest of industries — coal mining — Canmore has come a long way. Today, this picturesque southern Alberta town near Calgary is working hard to win the title of healthiest community in Canada.

"Healthy Canmore" is a fledgling project born out of the realization that the town had become a top destination for outdoor enthusiasts, who in turn were attracting large numbers of health and wellness practitioners to keep them in shape. Three years ago, a summit at the Silvertip Resort led to a loose alliance that is on the verge of becoming a formal organization this year.

The advantages of a trade association are well known, but it's not always a simple matter of convincing disparate interests to join forces. Canmore boasts dozens of health and wellness professionals, but there are sometimes divisions between the conventional physicians and the alternative medicine practitioners.

"The biggest problem is these two sectors don't always talk to each other," said Jodie Eckert, Economic Development Coordinator for Community Futures Centre West, which is managing a $198,000 grant from RDI to turn the Healthy Canmore vision into reality. "Instead of having everyone working alone and in their own silos, we're trying to have them come together."

Already, the "Canmore – A Community of Healthy Living and Wellbeing" project is finding success. After completing a study of the area's health and wellness sector in 2008, the second phase of assembling an alliance has already generated considerable positive publicity. So much so, said Eckert, that at least one new practitioner has relocated to Canmore to take advantage of the cooperative business environment. "Everybody likes to come into a community that's going in the same direction," she said.

Among the project's goals is to see four new health and wellness businesses open by March of 2011. So far, Eckert reports, ten new businesses have signed on. They're also aiming for a two per cent increase in employment.

Helping draw new interest is the annual Canmore LifeFest, an industry expo that features workshops and showcases from a wide range of exhibitors, including everything from medical practitioners to massage therapists. The third expo was held on November 13, 2010. AW

BUILDING A GATEWAY FOR FOREIGN BUSINESS

ALTHOUGH CENTREPORT CANADA, Winnipeg's new inland port, may still be in its infancy, it hasn't stopped businesses from across the country from wanting to take advantage of a unique opportunity.

From high-end agricultural products to windows, the list of candidate goods for shipment through CentrePort seems destined to be a long one. And that's without even trying. "We actually are not marketing ourselves right now because we've been focused on the foundational elements," said CentrePort CEO Diane Gray. "At the same time, companies are coming to us. We're working with a dozen firms who are interested in working in Winnipeg."

CentrePort is a 20,000 acre transportation, trade, manufacturing, distribution, warehousing and logistics centre near Winnipeg's James Armstrong Richardson International Airport. CentrePort will offer businesses two primary advantages. Using Canada's tax and duty advantages, exporters won't have to pay duties and tariffs until their products reach the consumer. "It's about easing cash flow management," explained Gray. Second, Winnipeg has few rivals when it comes to transportation options. No airport in Canada sees more dedicated daily cargo flights than Winnipeg's. Add to that three Class 1 rail carriers — CN, CP and Burlington Northern Santa Fe – and the options for moving goods are immense.

Those factors convinced a group of public- and private-sector organizations that met in the summer of 2008 to call for the creation of CentrePort. WD and the Province of Manitoba provided $3.5 million in October 2009, for start-up and operations.

The next step, while fielding calls from those eager to get involved, is the servicing of the land required to host the port. Gray said some businesses are eager to take advantage of "single-window access" to the federal government's programs as soon as possible.

Gray and her colleagues are also wasting no time establishing relationships with other North American inland ports. In January 2010, federal, provincial, municipal and business leaders joined her team on a tour that included stops in Guanajuato, Mexico; Dallas and Fort Worth, Texas; Memphis, Tennessee; and Chicago, Illinois. AW

COMMERCIALIZING TOP TECHNOLOGICAL IDEAS

FROM DESIGNER CROPS TO NUCLEAR engineering, Saskatchewan is growing its reputation as a technological innovator. However, these innovative ideas and products still have to make it to market.

"We've had some very advanced research," said Susan Gorges, the CEO of SpringBoard West Innovations. "But it is a fact that economic benefit only comes if those discoveries get into the marketplace."

A three year old, non-profit organization based in Regina with a mission of commercializing the province's best technological ideas, SpringBoard recently opened a second office in Saskatoon with $3.3 million in support split equally between the provincial government and WD. The organization works with high-tech entrepreneurs to fine-tune products, business plans and marketing strategies. "They know how to run a lab and do research, but they don't tend to be great business people," said Gorges. "That's where we come in."

The new Saskatoon office will work closely with the University of Saskatchewan, where many entrepreneurs do their early work. The goal is to give small- and medium-sized businesses some of the advantages typically available only to large corporations. The major players in communications technologies are revamping their product line every six months, pointed out Gorges, making it tough for start-ups to compete. "How do I slip a new product into that environment when Nokia or Motorola are doing that kind of thing every six months?"

But with SpringBoard's help, Saskatchewan is competing. Michel Fortin, CEO and President of Prevtec Microbia West, can testify to that. Thanks to assistance from SpringBoard's new Saskatoon office, his biotech firm is approaching the final stages of licensing for a trio of pig vaccines that will be produced in collaboration with the Saskatchewan Research Council. When approved, the vaccines could be providing work for as many as 20 staff in the province.

"We might have been able to do it all ourselves," said Fortin. "But without SpringBoard West, it would have taken a lot more time and it wouldn't have been at the same level as it is."

In all, SpringBoard has fielded more than 175 inquiries since it opened in 2007. As of March, it was working with 24 active clients. The new office brings its full-time staff to 10, including four innovation officers. Gorges said they are sometimes referred to as the "surround sound" team because of their multidisciplinary approach to advising clients. AW

CAPITALIZING ON CLEAN TECHNOLOGY

WESTERN CANADA IS TAKING THE lead in the race to capitalize on clean technology, according to a new report on the industry in Canada. Not only are B.C. and the Prairies shedding their historic reliance on raw materials, but they are home to a disproportionately large share of firms developing or commercializing products and services that "reduce or eliminate environmental impacts."

The authors of the *2010 SDTC Cleantech Growth & Go-to-Market Report* surveyed more than 400 Canadian firms. Among their findings was a convergence among the regions toward a stronger clean-tech sector. The West, in particular, is having no trouble matching national trends.

"There are more similarities than differences in terms of the makeup of the technology companies across the country, with the main take away being that companies grow faster if they shift their spending from R&D to sales and marketing when their product is ready for customers. We have to know when to stop polishing the technology and when to dig into the market and sell," said co-author Celine Bak of the Russell Mitchell Group, which produced the report in collaboration with Sustainable Development Technology Canada and the Ontario Centre for Environmental Technology Advancement.

Not only is each region embracing similar technologies, such as biofuels and clean-energy generation, but the relative contribution of each technology to the sector is quite similar across the country.

Where the regions did diverge, the West appears to be on the cutting-edge. In B.C., for example, there are at least 95 clean-tech companies, far more than would be expected based on the province's share of the national gross domestic product. Indeed, the two regions with the highest share of clean-tech companies compared with share of national GDP were B.C. and the Prairies.

Bak stated that the report is one of the first to provide a detailed picture of Canada's industry. "From the research, it is clear that the industry has what it takes to make an important contribution to the West's strategic energy, water, and greenhouse gas management plans," she said.

Encouraging better information sharing on the nature and performance of the industry is a key aim of the project. The report is available online at www.cleantechnologyreport2010.ca. A database of the companies that formed the basis for the report is at: www.cleantechnologyreport2010.ca/database. AW

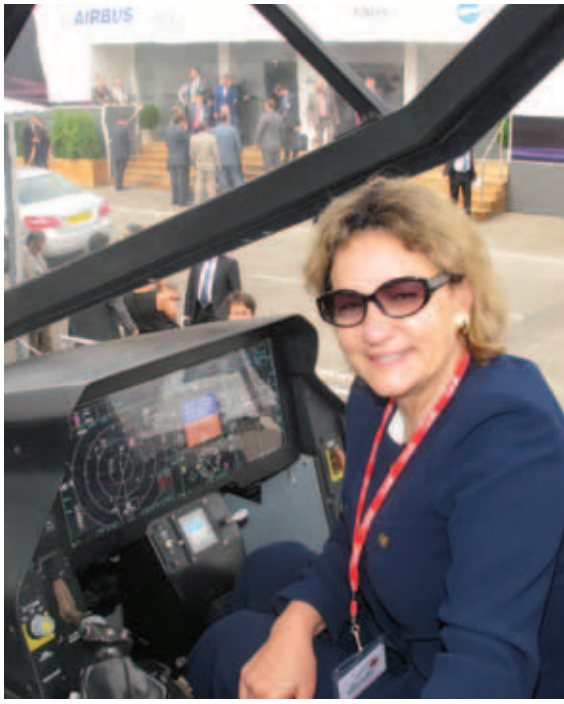
WESTERN CANADA'S AEROSPACE SECTOR SOARS AT THE FARNBOROUGH INTERNATIONAL AIR SHOW

SUPPORTING WESTERN CANADA'S aerospace and defense sector was the focus of Minister Yelich's attendance at the 2010 Farnborough International Air Show in the United Kingdom - the largest aerospace event of the year.

Over three days, the Minister played a direct role in advocating on behalf of western Canadian industry. She participated in key meetings with senior officials from global aerospace and defence companies that have significant Industrial and Regional Benefit (IRB) obligations in Canada, representing business opportunities for the western Canadian aerospace and defence industry. Minister Yelich also promoted the strength and success of western Canadian companies by joining Viking Air and Avcorp in two important announcements that will benefit the West.

The world-class Air Show attracted more than 120,000 trade visitors, with representation from 40 countries, and provided a great venue to promote Western Canada's competitive edge in the aerospace industry.

Western Canada's aerospace industry employs approximately 15,000 people, generates $4 billion in annual revenues, and takes part in a wide range of both civil and defense aerospace activities. Strategic events like Farnborough are helping to ensure that western Canadian firms are well-positioned to compete for IRBs and global aerospace opportunities by showcasing their strengths on an international stage. AW



Minister Yelich at the Farnborough International Air Show this summer.

THE 2010 WINTER GAMES

The end of the Vancouver 2010 Olympic and Paralympic Winter Games doesn't mean the benefits and opportunities spurred by the Games have ended. WD has been there to support the Games and its legacy in many ways, some of which include providing funding for Metro Vancouver Commerce to encourage foreign direct investment, showcasing French language and culture to the world, and by promoting fuel cell technology through the use of Whistler's hydrogen-powered buses.

2010 WINTER GAMES BRING A WORLD OF BUSINESS TO VANCOUVER

THE GAMES WERE A RARE OPPORTUNITY FOR A REGION TO SELL ITSELF as business-friendly. With Vancouver's chance to play host to the world in 2010, nine of the municipalities that comprise the greater metropolitan area joined forces to take advantage of the economic opportunities provided by the Games.

With the help of $800,000 in WD support, Metro Vancouver Commerce, a consortium of the municipalities' economic development agencies, was able to help host 100 "investment-ready" senior executives representing 75 corporations from around the world, matching them with some 160 local businesses.

"It was really all about being able to deliver the message that Metro Vancouver is a very competitive place to do business," said the consortium's project manager, Jamie Hunter.

The invitees were selected from a list of 400 candidate companies from the green building, aviation, and digital media sectors, as well as other creative enterprises, such as the film industry.

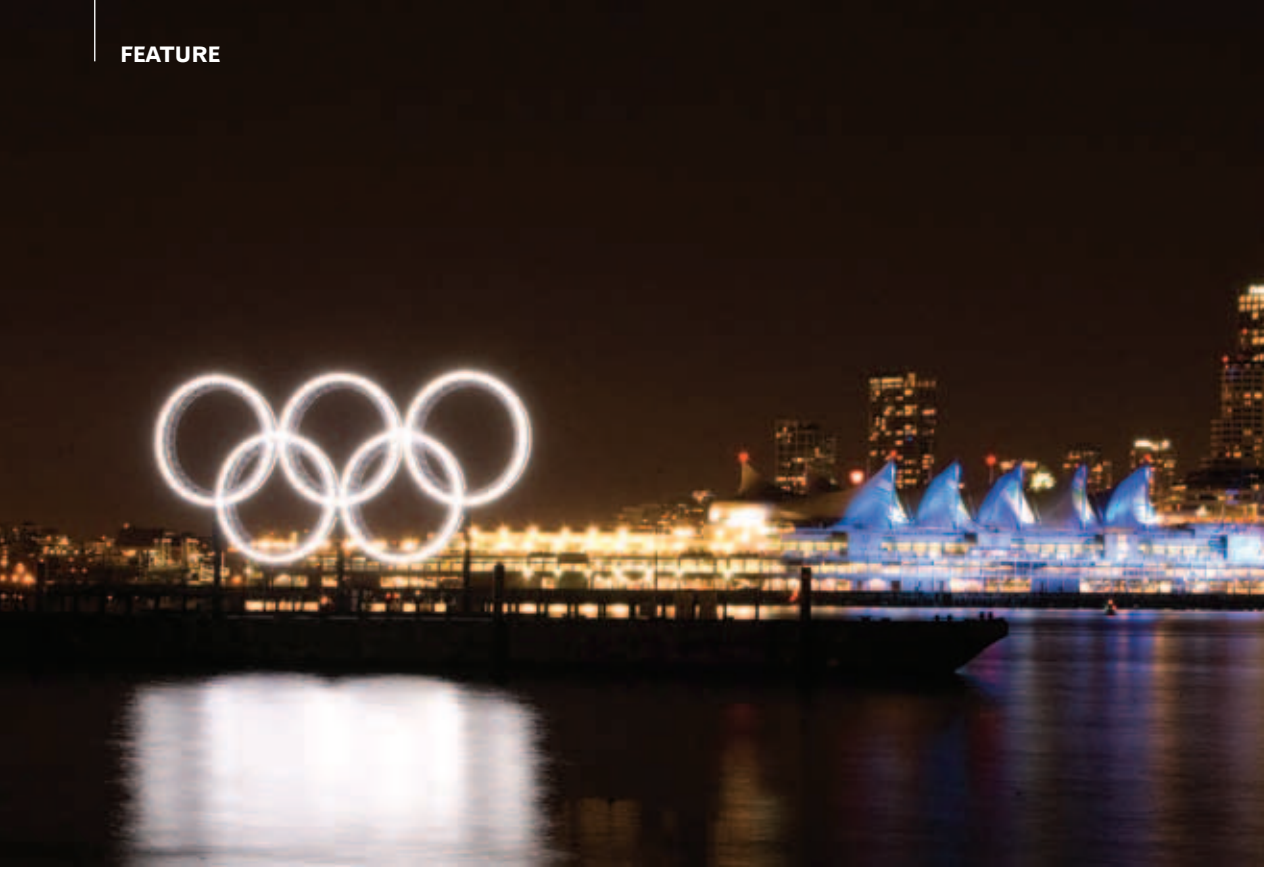
The executives were set-up with a series of peer-to-peer activities including a tailored Games experience, whereby Western Canada's attractive business climate was showcased. Among the host partners were video-game maker Electronic Arts, biomass-to-gas innovator Nexterra, and Chrysalix, a venture capital firm specializing in the energy sector.

Evaluating the project's total success will take time. However, just 60 days after the end of the games, the project surpassed its $20 million dollar goal, with Metro Vancouver Commerce announcing close to $60 million in new international investment. AW

Top: Photo courtesy of © VANOC/COVAN

Left: Man in Motion, Rick Hansen, gives Minister Yelich a tour of the Vancouver Olympic Village.

Right: Minister Yelich speaks at the kick-off of the 2010 Winter Games' Saskatchewan Day.



Above: The hydrogen fuel cell powered illuminated rings shine silver after Team Canada wins another silver medal during the 2010 Winter Games in Vancouver. *Photo courtesy of Canadian Hydrogen and Fuel Cell Association*

SHOWING OFF FUEL OF THE FUTURE AT THE 2010 WINTER GAMES

WHISTLER IS RENOWNED FOR ITS SKIING, HIKING, BIKING AND SPECTACULAR scenery. Less well known are the village's hydrogen-powered buses, the world's largest fleet. B.C.'s premier tourist village took full advantage of the Games to showcase this technology, which promises to play a major role in the global energy mix of the near future.

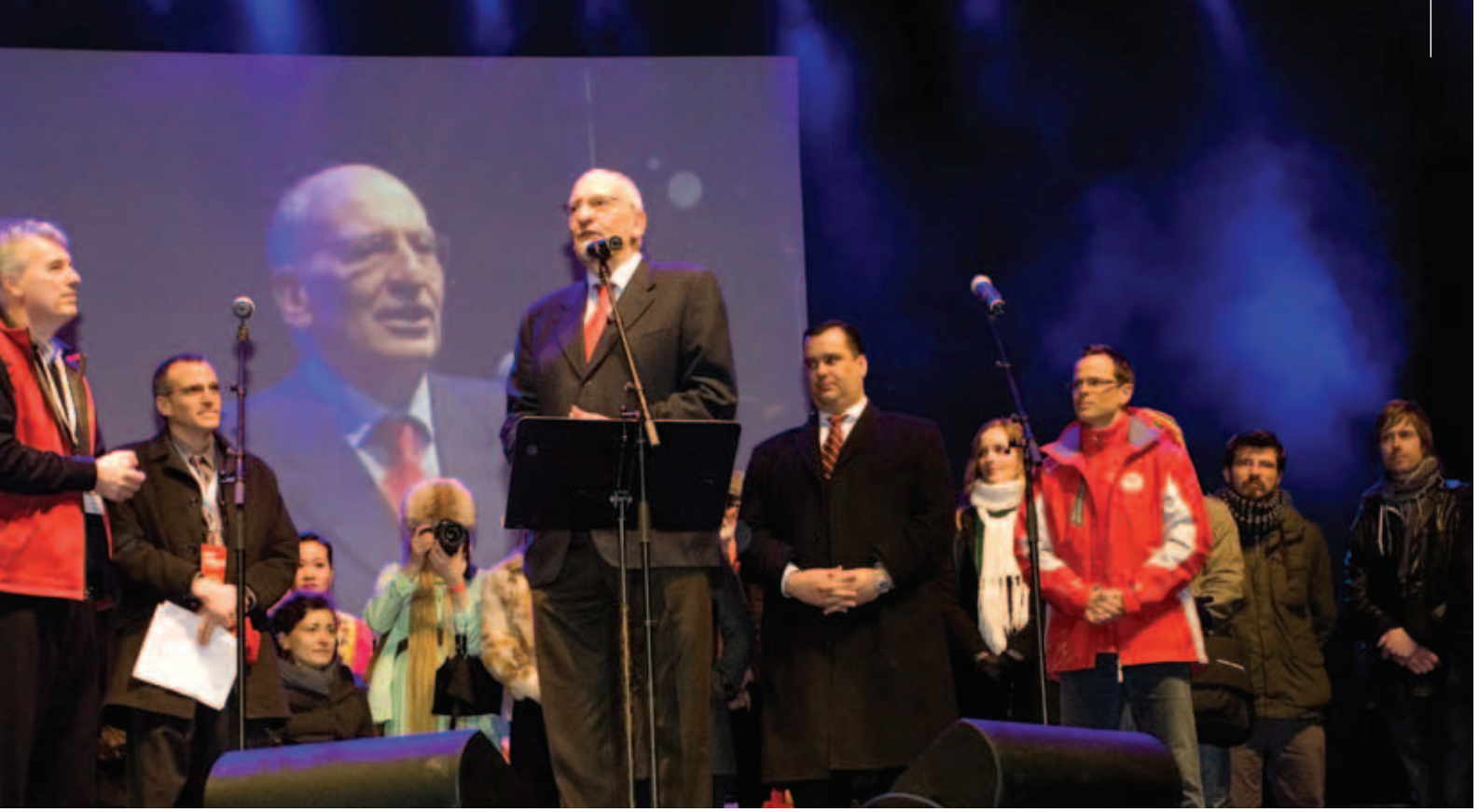
"We're just at the beginning of the innovation curve for this technology," said John Tak, President of the Canadian Hydrogen Fuel Cell Association. "Each year, companies are driving down costs and improving performance and durability."

Tak and fellow fuel cell advocates received some $300,000 from WD to promote the technology during the Games. The fact that 20 of Whistler's 28 buses run on hydrogen fuel cells that produce zero carbon emissions gave them a head start.

But since Whistler was only home to half the events, organizers created a virtual fuel cell bus, filled with computer simulators and information, and installed it at the BC Pavilion on the fourth floor of the Vancouver Art Gallery. "People didn't have to go up to Whistler. They could sit and watch the scenery passing by right from there," said Tak.

The campaign included bus and SkyTrain advertisements and a demonstration fuel cell to power the 14-metre-tall illuminated rings floating in Coal Harbour. "We also made really good use of social media generating hits on our www.poweringnow.ca website," Tak said.

The vast majority of B.C.'s electricity is already produced at clean hydroelectric dams, making B.C. fuel cells among the greenest power sources in the world. "Even better," said Tak, "there are two chemical plants in North Vancouver that produce hydrogen as a byproduct. Today, the province is capturing that hydrogen and killing two birds with one very renewable stone." AW



Pascal Couchepin, Grand Témoin de la Francophonie for the 2010 Winter Games, and Minister James Moore welcome spectators at the official opening of Place de la Francophonie, a celebration of francophone art and culture which ran on Granville Island throughout the Vancouver 2010 Olympic Winter Games.

B.C. DISPLAYS BILINGUAL SPIRIT AT THE 2010 WINTER GAMES

AMONG THE BENEFITS OF BEING ABLE to host the Games is the opportunity to share the country's national spirit with the rest of the world. In Canada's case, that means showcasing both official languages on the stage, along with the podium.

Quebec is often the province visitors think of when it comes to Francophone heritage. However, the rest of Canada is home to many thriving francophone communities from the historic Maillardville in British Columbia to St. Boniface in Manitoba. The Government of Canada wanted to ensure that the 2010 Winter Games would help showcase this richness and diversity to all those attending the Games.

And so WD provided $500,000 in support, in collaboration with Canadian Heritage's $1.2 million contribution, for La Place de la Francophonie, a venue located on Vancouver's popular Granville Island. The space featured a daily program of francophone-related musical performances, exhibitions, trade shows and special events. At least 10,000 visitors passed through the market each day, according to Donald Cyr, Executive Director of the *Société de développement économique de la Colombie-Britannique (SDECB)*. The *SDECB*, a non-profit organization which promotes Francophone business interests in the province, was at the forefront in working with WD and the Place de la Francophonie to give the Games a bilingual touch.

Musicians from across Canada performed, including Gregory Charles, Yelo Molo, Malajube and Éric Lapointe. Comedians Mike Ward, Rachid Badouri, and Louis-José Houde, among others, dazzled crowds with their clever punch lines and witty repertoires.

For those looking to take a break from the entertainment, WD in cooperation with *SDECB*, supported an agri-tourism showcase where producers could present a variety of food products and tourism experiences. Many a visitor was delighted to sample apple cider from Quebec and other authentic fare from across Canada.

La Place de la Francophonie's closing day was February 28th, 2010; however, the effect it had on promoting awareness and appreciation of French Canadian culture and business will live on in the memories of those who took part. AW

THE GOVERNMENT OF CANADA'S ECONOMIC ACTION PLAN

With Canada's Economic Action Plan (EAP), the Government of Canada aimed to counter the effects of the global recession and sustain Canada's economic advantage now and for the future.

Under EAP, WD is delivering the Community Adjustment Fund (CAF) and Recreational Infrastructure Canada (RInC) program in Western Canada. These two initiatives support EAP by creating jobs, upgrading community infrastructure and stimulating local economies across the West.

As of November 10, 2010, over $187 million of CAF funding has been paid out to 314 approved projects across the west, with 47 projects fully completed. While at the same time, over $61 million in RInC funding has been disbursed to 718 approved projects in Western Canada. To date, 233 of these RInC projects have been fully completed.

As WD continues to deliver these two programs, communities and industries most affected by the downturn are already seeing results of this plan in action. Businesses have begun hiring again, with the economy adding nearly 430,000 jobs since July 2009. For more information, visit: http://www.actionplan.gc.ca/

RECREATIONAL INFRASTRUCTURE CANADA (RINC) SUCCESS

"HOCKEYVILLE" GETS RENO FOR PRO TEAMS

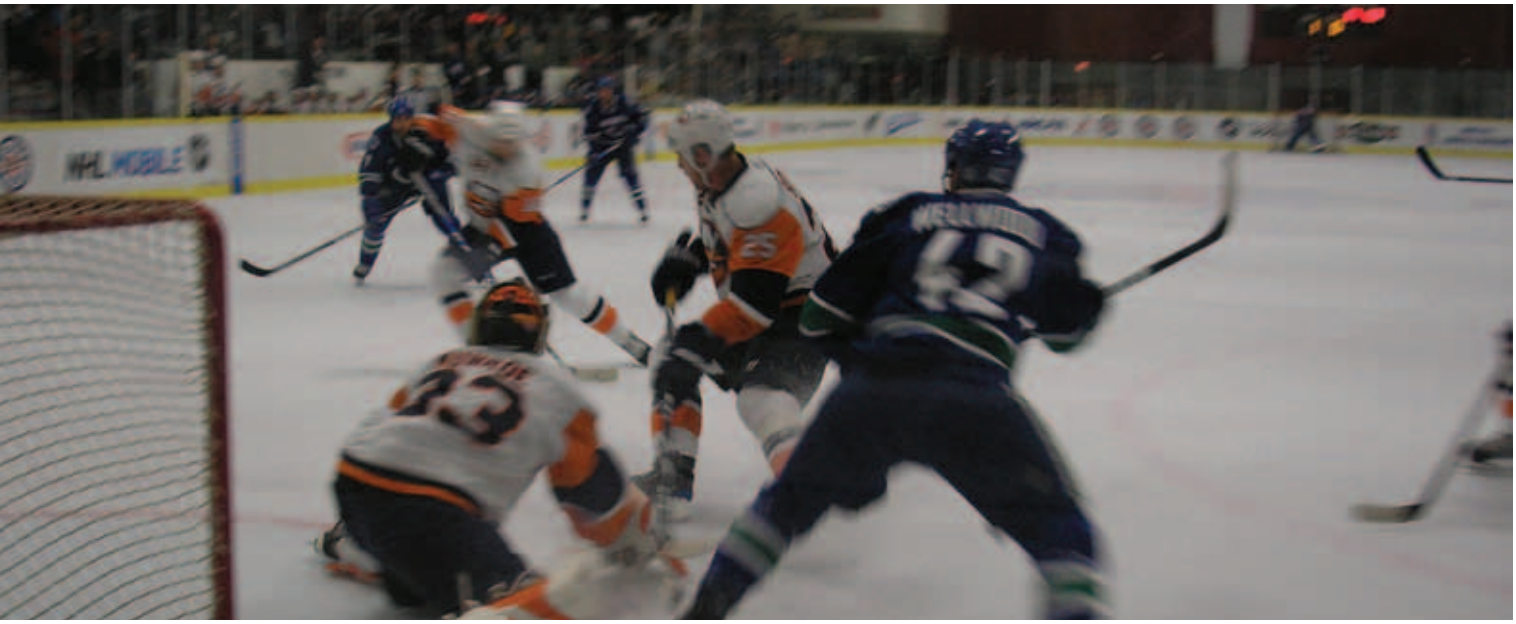
WHEN KRAFT FOODS CHOSE TERRACE, B.C. as Canada's "Hockeyville" for 2009, the city knew it had a problem. The recognition that comes with starring in a CBC television reality program and hosting an NHL game was welcome, but something had to be done about the state of the city's 35 year-old Main Arena, of the Terrace Sportsplex.

"We ripped off the Main Arena's boards and took a look at the supports. All of them would have to be re-welded," recalled Carmen Didier, the city's Leisure Services Director. In addition, the glass above the boards was short of the standard height of six feet.

The Kraft award came with $100,000, but the required renovations to the Main Arena would cost twice that much. Within a few months, however, the shortfall had been covered. Among the new funding sources was over $145,000 in RInC funding from WD.

The WD support also helped with upgrades to the adjacent Hidber Arena, which needed heated bleachers, acoustic panels and insulation to extend the facility's life and usability.

By the time the Vancouver Canucks and New York Islanders arrived for the big game in the Main Arena on September 14, 2009, new boards and glass were in place and the entire complex had been given a fresh coat of paint. The event attracted a capacity crowd of 1,100, plus another 6,000 watching on a giant television screen in the nearby George Little Park. The Canucks won, 2-1. AW



The Vancouver Canucks take on the New York Islanders at the renovated Main Arena of the Terrace Sportsplex for Kraft Hockeyville 2009.

MAKEOVER IMPROVES WILLIAM LUTSKY YMCA'S REPUTATION

Fitness clubs don't usually feature locker rooms in their promotional literature. Given the importance of first impressions, it's hard to exaggerate the importance of a clean and safe place to change and store one's gear.

YMCAs are no exception. In fact, pleasant locker rooms play a key role in the organization's welcoming reputation across North America, said Janet Tryhuba, General Manager of Relationship Development & Engagement for the YMCA in Edmonton. "We were reviewing our member surveys that had some negative feedback," she recalled. An inspection showed a need for a complete makeover, including new drywall, floor and ceiling tiles, plumbing, and lights.

The cost of the over $350,000 renovation was split equally among WD, the province and the YMCA operational budget. The WD support came through RInC.

Since the project's completion earlier this year, membership has already grown by 300, and the new locker room should be able to accommodate another 700 members. AW

CREATING SPORTS OPPORTUNITIES

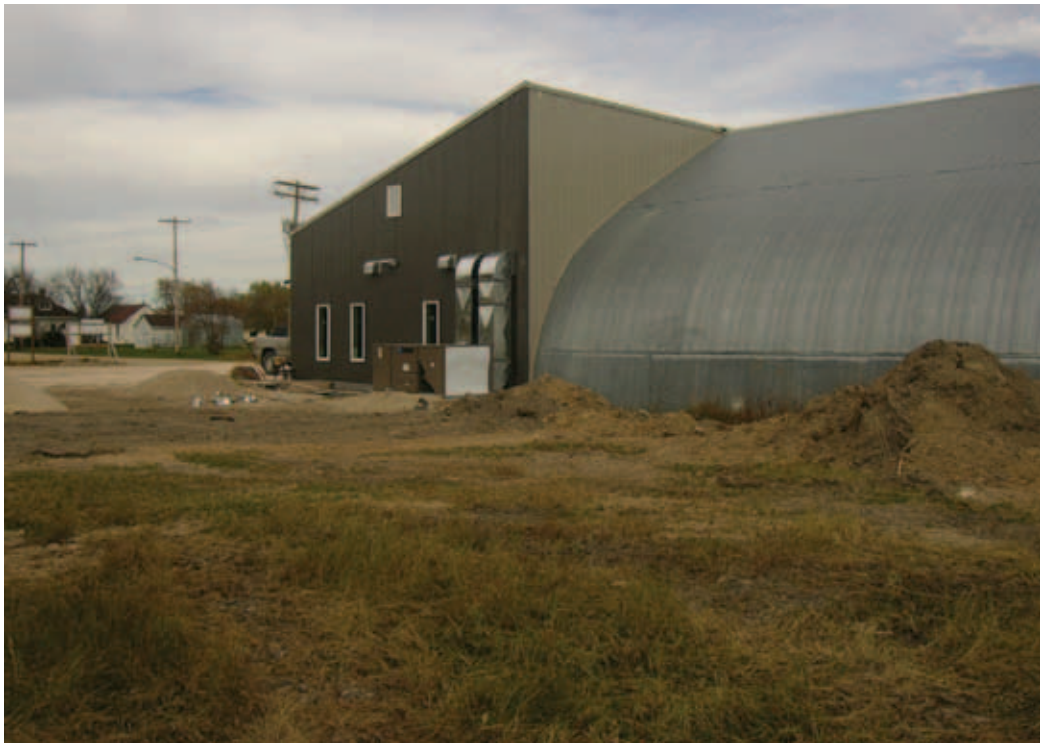
The recreational options available in the Regional Municipality of Lawrence are about to become much more numerous.

These opportunities are thanks to a new $600,000 community centre taking shape in front of the curling rink that for 50 years has served the municipality's 500 residents in and around Lawrence, an agricultural community some five hours drive northwest of Winnipeg.

As with many small towns in Canada, the rink has been a focal point for community life. But when construction on the new complex is complete – December 2010 is the target – residents will also be able to make use of a fitness facility, an outdoor skating rink, and a multi-purpose meeting hall. New office space will allow visiting doctors and accountants to examine patients and help with taxes respectively.

"This is something that's been discussed for ten years now," said building committee chair Walter Tymchuk. "Some of the existing facilities in this part of the country are getting kind of old."

The project took hold in early 2009, with over $196,000 in funding from WD through the federal government's RInC program. The province's share is about $115,000. As well, a fundraising committee has organized a series of monthly raffles, and the regional municipality is providing interim financing until the balance is raised. By December, it looks as though residents will be able to enjoy sporting activities both indoors and out. AW



The new Rorketon Multiplex in its final stages of completion.

L to R (holding the EAP sign): MLA Greg Brkich, Minister Yelich, and Kenaston Mayor Dan O'Handley, with local residents at the Kenaston Pool.

POOL MAKING WAVES

Tots to teens are enjoying the upgrades to the Kenaston swimming pool. The improvements have resulted in a cleaner, healthier and safer environment for users—youth participating in swimming lessons, swim instructors, lifeguards, as well as recreational swimmers.

The 20 year old facility was showing its age but upgrades completed in winter 2009 have significantly improved its exterior appearance and the interior atmosphere. The new chlorination system ensures swimmers a healthy environment that meets provincial regulations. With a new roof, the leaks and associated musty odour, particularly in the dressing rooms, were eliminated. Replacing the exterior doors improved the security of the building at night and during off-season.

Staff find the new chlorination system more user friendly. They've also noticed a big improvement to the lighting and a reduction in the humidity with the new metal roof. "It used to be like a greenhouse in here," says Alex Jewell, pool manager. "The new chlorination system is so much easier to operate."

Mayor Dan O'Handley stressed the pool plays an important economic role, "People from Hanley, Bladworth or Hawarden drive to town for swimming lessons and stop to buy groceries." The incremental business generated by this recreational facility is essential to the vitality of Kenaston's business community.

The Government of Canada invested over $6,500 to the upgrades of the pool through its Recreational Infrastructure Canada (RInC) program. The town and province contributed matching amounts, and the Kenaston Lions Club contributed $9,900 for the roofing supplies. AW

COMMUNITY ADJUSTMENT FUND AT WORK

FUELING THE FUTURE

The big fuel tankers driving around on the city streets are usually all we see of the petroleum industry, other than the routine fill-up at our favourite local pumps. Seldom do we consider where the fuel comes from and what happens to the waste it generates.

Each year, Manitobans consume over 400 million litres of diesel fuel and generate over 12 million litres of waste motor oils. This waste motor oil is one of the largest sources of the potentially environmentally harmful bi-products motorists produce. Motor oil can be a serious contamination threat to water, and the burning of waste motor oil is a very high source of emissions.

Todd Habicht saw that as an opportunity when his grandfather proposed a project to turn waste oil into an ultra clean diesel product. Since 2005, Habicht has been developing a method and a company to refine waste hydrocarbons – including used motor oil, but also other industrial lubricants – into a pure diesel fuel. This summer his company, HD-Petroleum, opened its facility in southern Manitoba and is ramping up to handle a significant portion of the province's motor oil waste.

The housing for the complex, which will include the refinery itself and storage tanks, was built earlier this year with over $479,000 in funding from WD. The WD support came through the Economic Action Plan's Community Adjustment Fund

"We are able to say that the capacity of the plant is much greater and we will be able to accommodate future growth in the market," said Habicht. He added that he fully expects to increase his staffing by adding second and third shifts in the future. Habicht is pleased that his end product is "100 per cent diesel fuel. It has no additives at all."

Part of the financing will help pay for start-up wages for the company's initial six - eight employees. Letters of intent from suppliers indicate HD-Petroleum could see about 100,000 litres of waste oil coming in each month. That will make it the largest used-oil-to-diesel recycling operation in the province. AW

Crews work to install the thermal reactor, which is the heart of the HD-Petroleum thermal cracking process.

A NEW CHAPTER FOR THE SILVER SAGE COMMUNITY CORAL

Situated in the city of Brooks in southern Alberta, the Silver Sage Community Coral has served as an important agricultural complex for local community members and organizations since it was opened in 1997. Yet, there was still significant unfulfilled potential for the facility to play an even larger role in attracting greater numbers of visitors and events to the region, especially given its accessible location halfway between Calgary and Medicine Hat on Hwy. 1. The challenge was a limited amount of space at the existing facility.

With an investment of $238,000 through the Community Adjustment Fund, combined with funding from the County of Newell No. 4 and an in-kind contribution from the Eastern Irrigation District, the Silver Sage Community Coral has been able to add a multi-purpose building that can accommodate more year-round activities. From 4-H camps and horse and cattle shows to commercial trade and agricultural events, the venue has opened the door to more possibilities, with plans already underway to host a recreational and ATV show and social gatherings.

"Without that addition, they wouldn't even think of coming here," says the facility manager, Jonathan Drake. "The new building makes the entire facility more accessible to a wider range of groups."

The new multi-purpose building, which opened this year after construction wrapped up in early March, provides a covered 80-by-100 foot winterized venue with improved lighting and extra space for agricultural shows and events.

Development of the project created short-term construction jobs, and the goal is to add both a full-time and part-time position over the next year. But the real economic impact is being felt through the hosting of additional events and the ability for existing events to continue growing. The expected increase in visitors to the region could help provide a welcome boost to local merchants, restaurants and hotels.

If the reaction of the local community is any indication of the venue's coming success, the future is bright.

"Everyone who comes into the new building comments on what a great addition it has been," adds Jonathan Drake. "It allows events to run much more smoothly and efficiently." AW

Workers process wood in a forest fire salvage program just outside of Pelican Narrows, Saskatchewan.

FINDING VALUE IN BURNED FOREST

The fire that destroyed huge swaths of northern Saskatchewan forests two years ago was the last thing the region's already struggling forestry sector needed. But a burned forest still has some value for those willing to do the work.

The Peter Ballantyne Cree Nation (PBCN) was willing. With $1.5 million in assistance from WD, the PBCN was able to put together a salvage operation that turned the burned trees into the raw material for fence posts, building logs and saw logs. The logs were cut and peeled onsite and then sent out to facilities for treating. In the process, the PBCN's Mee-Toos Forest Products operation put 50 men to work for six months of the project with a second year of activity now underway.

"Those logs will only be good to use for a year or two after the burn," said PBCN Chief Darrell McCallum, adding that the project also helps clean out the forest.

Residents of three communities are employed in the salvage: Sandy Bay, Pelican Narrows and Deschambault Lake, all of which have seen only sparse employment opportunities in recent years. "There's a lot of (mineral) exploration, but nothing solid," said McCallum. Hydro-electric development is also in the works, but in the meantime, forestry salvage is proving the most reliable source of work for many members of the PBCN.

McCallum said project organizers are considering harvesting other forestry material from the burn and processing them into wood pellets for pellet stoves. The WD support came through the Community Adjustment Fund (CAF), one of two federal government programs delivered by the Department under Canada's Economic Action Plan. AW

NEW EMS BUILDING A HOT ADDITION TO THE VILLAGE OF NAKUSP

After 80 years in service, the Village of Nakusp's firehall is being replaced. Small, rundown and inefficient, the aging facility has earned its retirement. The new emergency services centre, funded by WD, could not come a minute too soon, according to a village representative.

"The new facility is needed because the old fire hall, approaching 80 years old, is dilapidated and not large enough to house the equipment that we now have," said Bob Lafleur, on behalf of the Village's Mayor, Karen Hamling.

"The Volunteer Fire Department, Search and Rescue and BC Ambulance have been looking for new homes for years," he said.

He went on to explain that some of the equipment is currently stored in other locations, thus delaying response time. Housing all services in one building will increase efficiency and accessibility.

"The benefit to the community is obviously better service, better location, and better coordination of emergency incidents, including an incident command centre that the Fire Service and the Provincial Emergency Program can access, with a back-up generator," Lafleur continued.

The new Emergency Response Centre will also be home to a regional training centre. Currently, all the training is completed elsewhere, costing the Village both money and resources. The Village will work with Selkirk College to provide training for 13 people under the first-ever local apprenticeship program.

The $1,345,000 WD investment, under the Western portion of the Community Adjustment Fund (CAF), will also create 10 new full-time jobs and will sustain another 6 - 10 jobs through the hiring of local contractors in the community. Without this investment, the Village would not have been able to complete the construction of the new building.

The new facility is expected to open by year's end. AW

CENTRE OF EXCELLENCE REPRESENTING INTERESTS OF PRINTERS

DOMINATED BY SMALL OPERATIONS and run primarily by owner operators, the printing business in Canada is not well understood. In fact, it's a fiercely competitive industry, one characterized by rapid technological change.

"People not directly involved with printing take this industry for granted and don't know much about it," said Josh Ramsbottom, coordinator of the country's first and only Centre for Excellence in Print Media.

The Centre, located at NorQuest College in Edmonton, was set up two years ago to help the printing industry do business more efficiently and competitively. WD helped with start-up funding of $1.4 million, and it is stepping in this year with another $897,000 to be spent over a two year period. The purpose of the Centre and the funding from WD is to enhance the competitiveness and productivity of the Western Canadian printing industry by providing a Western Canadian incubator for testing and implementing new technologies.

The new WD funds will allow the Centre — and the NorQuest students who train there — to keep current with a new industry-wide software standard known as JDF. Just as HTML allows web browsers to render pages accurately, JDF ensures documents are handled consistently by a variety of printing systems. "We hope to be completely JDF-compliant by 2012," said Ramsbottom.

While keeping up to speed on the latest hardware and software is critical, the country's printers also need assistance looking out for their collective interests as an industry, something few print shops have the luxury to do. With the Canadian Printing Industry Association being based in Ontario, "having an entity in the western provinces that industry can turn to for help is really important," said Ramsbottom.

The Centre has been recognized by PrintAction Magazine as one of the top 101 events "that helped shape Canadian printing since the start of the century." Industry is also helping out the Centre. One of the world's leading printing management software producers, Avanti, recently donated $185,000 worth of software to the Centre. AW

MAKING NEW PRODUCTS FROM BEETLE-DAMAGED LOGS

ENCOURAGED BY A WARMING climate, the mountain pine beetle is taking its toll on the western Canadian forestry industry as it eats its way through millions of hectares of once-valuable trees. Yet, the potential of these trees was not lost on a team at the University of Northern British Columbia (UNBC).

While pine beetle-damaged lodgepole pine logs are used for a variety of unique products and building uses, there had been little done with the blue-hued milled wood chips. But it turns out that those wood chips, when mixed with Portland cement, make a superior synthetic wood product.

There is a market for wood chips within traditional industries like pulp and paper mills and the new bio-energy industry (pellet fuel). However, this new product provides an opportunity to derive higher economic value from beetle-damaged wood. That was the discovery UNBC graduate student Sorin Pasca made several years ago as part of his master's studies in ecosystem science and management.

Now the task of convincing industry to embrace "Beetlecrete" as the building material of the future has been handed to Dr. Sungchul Choi and Dr. Alex Ng, professors in Marketing and Finance at UNBC. Their marketing research is funded in part by more than $154,000 from WD.

"It's not a new idea. It's been done in Europe for almost a hundred years," said Ng. "What's new is using beetle-killed wood waste." But he wonders how industry and consumers will respond to that new idea. Moreover, will they accept it as a green building product?

So far, prototypes of Beetlecrete have found their way into countertops at the Union of British Columbia Municipalities headquarters in Victoria (a Gold LEED certified government building), the Ramada Hotel in Prince George, and a bench at UNBC. Other possible uses include floor and ceiling tiles, partition systems, and desks.

According to Ng, response elsewhere has been positive. "Until we took some samples to some trade shows, it wasn't clear that it would be seen as a 'green' product," he said. But so far, said Ng, it has been accepted. Wood-concrete material is already produced and well received in a number of countries. AW

University of Northern British Columbia's Robert Van Adrichem shows the Honourable Jay Hill how the university is turning beetle-damaged wood into an economic opportunity.

Construction of the new International Vaccine Centre (InterVac), which will improve VIDO's capacity to serve the country's medical needs.

Canadian Publication
Mail Agreement
no. 40063159

If undeliverable please return to:
Western Economic
Diversification Canada
Suite 500, Gillin Building
141 Laurier Avenue West
Ottawa, Ontario K1P 5J3

WORLD-CLASS RESEARCH LAB BRANCHES OUT

WHEN CANADIANS FACED THE unknown threat posed by severe acute respiratory disease (SARS) in 2003, health officials turned to a consortium of research groups, including the Vaccine and Infectious Disease Organization (VIDO), for help. The non-profit research centre, based at the University of Saskatchewan, was a logical player in the race to find a vaccine. But the results of the consortium's work couldn't be tested at home. Instead, they were sent to the United States.

It was the same story with bovine spongiform encephalopathy (BSE), commonly known as mad-cow disease. VIDO teams offered unparalleled research, but they had no capacity for testing vaccines or other intervention strategies. So again, a need was left unmet.

That shortcoming is scheduled to be a thing of past, said Dr. Andrew Potter, VIDO's director and CEO. The difference is a new $140-million research complex to be known as the International Vaccine Centre. Construction and outfitting of InterVac, as its known, is nearing completion. It should be finished by the end of the year and open for business in early 2011. When it is, VIDO will grow from 160 staff and students to over 200. More importantly, it will include a biosafety level 3 containment facility, one that can accommodate not just lab mice, but animals as large as cattle.

"In order to take research right from square one to the end, you have to study the pathogen," said Potter. The level 3 rating allows researchers to handle tuberculosis, the SARS and West Nile viruses, and other pathogens that can be fatal to humans, and for which treatments are not known. This is second only to Level 4, which is designed for disease-causing organisms which are typically not normally seen in Canada and for which no adequate treatment exists, such as the ebola virus. InterVac, "will make us the top institute in the world in our field in terms of capacity," said Potter.

Not that VIDO doesn't already enjoy a reputation for excellence. Thanks to the collaborative, interdisciplinary work environment fostered by the University of Saskatchewan – there is a veterinary college, an agricultural college and a medical school, all next door – VIDO has always been able to attract top people to its labs. "We've got one of everything," said Potter. "There's even a college of law, which is increasingly important in our field, and a school of public health, which draws on many other disciplines."

The new building – which has been in the works for six years is being funded with $57 million from the province, $250,000 from the city of Saskatoon, and $49 million from the federal government - much of that in the form of support for capital costs and equipment from WD. The funding will make a big difference to VIDO's capacity to serve the country's medical needs, for both humans and animals. When it came to the most recent health threat to dominate the agenda, pandemic flu, the gap between what's needed and what's possible to do was frustratingly wide, Potter said. "We can do a little bit now, but not nearly what we want to be able to."

Ultimately, VIDO researchers are hoping to shift their focus from responding to public health threats as they arise to developing tools the medical community can use to anticipate and react to emerging viruses. Said Potter: "We can make some pretty good guesses as to what the threats may or may not be, but what we really need is the technological platform to able to act quickly in the face of new threats." AW