A stronger **West**. A stronger **Canada**.

ACCESS WEST

summer 2012

www.wd-deo-gc.ca

STRENGTHENING WESTERN CANADA'S SHIPBUILDING INDUSTRY

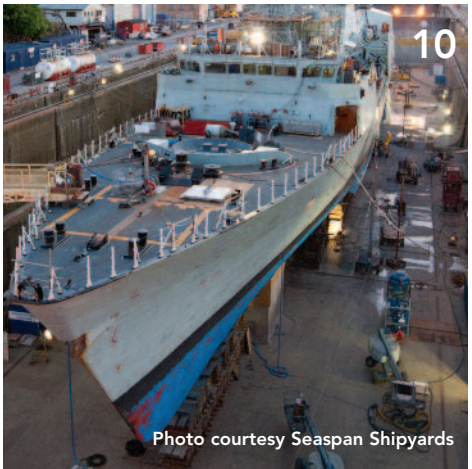
See how Western Canada's Shipbuilding Action Plan is creating jobs, growth, and long-term prosperity

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

Canada

ACCESSWEST summer 2012

IN THIS ISSUE



Access West is published by Western Economic Diversification Canada.

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

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)

Design: The Bytown Group, Ottawa

ON THE COVER:

Minister Yelich makes an announcement in Esquimalt, British Columbia as shipyard employees look on.

MESSAGE FROM THE HONOURABLE LYNNE YELICH

Minister of State for Western Economic Diversification.

When faced with an unprecedented global economic crisis, our Government responded by focusing on job creation and returning to economic growth. At Western Economic Diversification Canada (WD), we are continuing to do our part by helping to build a strong, dynamic, and prosperous western Canadian economy.

At WD, we are dedicated to ensuring western Canadian businesses have the tools they need to succeed, at home and around the world. As you'll read in the coming pages of Access West, WD has accomplished this by making timely investments in a number of dynamic industries.

I am especially proud of the work our Government has done through WD with our Western Canada Shipbuilding Action Plan. The Action Plan was launched to ensure western Canadian businesses benefit from our Government's $33 billion shipbuilding initiative, and is playing a key role in showcasing and supporting Western Canada's shipbuilding industry. In the West, this role is more important than ever. Economic activity in British Columbia's shipbuilding industry is expected to bring up to 4,000 new jobs to the West Coast. With initiatives such as our Shipbuilding Summit, we have a plan to create jobs and secure long-term growth in an important industry.

But this is just the beginning. With investments made across Western Canada, we have created jobs and new economic opportunities. From British Columbia to Manitoba, WD has been an important partner in the western Canadian economy.

I am committed to ensuring that western businesses are well-positioned to remain internationally competitive and successful. We do this with investments in training and equipment to guarantee that our workforce and industries are prepared to adapt and grow. As well, WD links small- and medium-sized businesses in the West with prime contractors and decision makers to ensure that they can take advantage of emerging market opportunities.

I am confident that WD's range of programs and activities create a foundation that builds the prosperity and competitiveness of the West. Together, we are working to build a stronger West for a stronger Canada.

GROWING THE FOOD INDUSTRY

Canada's food growers have always enjoyed a strong reputation world-wide. But as competitors race to bring new products to market, innovation is just as important as tried-and-true techniques. Leading that race in Saskatchewan is the Food Industry Development Centre, thanks in part to WD.

Minister Yelich and Food Centre staff operates a bottling machine for sour cherry and apple juice.

The Food Centre, as it's more commonly known, recently received an investment from WD to purchase new equipment for use in product and process development, which will enhance domestic and international competitiveness.

The availability of the new equipment will aid users in finding ways to reduce costs, enhance food safety, increase product lines and become more competitive. Investing in research and development facilities, such as the Food Centre, provides an integrated approach to developing the food industry in Western Canada.

"The new funding has allowed us to adopt new technologies that will diversify our services and spur innovation in the industry," said Dan Prefontaine, President of the Centre. "By giving local companies access to the new technology, we're helping them focus their resources and reduce the risks that come with building their business and entering new markets."

Prefontaine said the West can expect to see long-term benefits for Saskatchewan's agriculture industry as a whole. New research and development activities are now in progress for a wide variety of value-added food products.

Federal support like this is particularly useful in Saskatchewan, where 300 food processors create $2.5 billion in annual sales.

"We are pleased to promote increased competitiveness and productivity in Saskatchewan's food industry," said Minister Yelich. "WD's investment will help food processors create high-value jobs and stimulate economic growth across the province." AW

TESTING **STATE-OF-THE-ART IMAGING** TECHNOLOGY

When it comes to the structural integrity of airplane or automotive parts, quality control is critical. At Red River College's new Centre for Non-Destructive Inspection Technologies (CNDI) in Winnipeg, the objective is to detect flaws in solid metal and composite objects without damaging them.

With federal support from WD, the CNDI is providing access to state-of-the-art non-destructive imaging equipment to inspect products before they reach the assembly floor. Aerospace companies with access to CNDI's new imager are now able to detect hidden flaws in materials more efficiently and effectively, and with greater confidence.

"This exciting project will create a competitive advantage for key sectors in Manitoba's economy," said Minister Yelich. "This technology will enable local companies to produce better and more cost-effective products that will help create jobs and growth in our communities."

The most sophisticated equipment at the centre is the laser ultrasonic testing scanner, which uses one laser to generate an ultrasonic wave in the part being tested and a second to measure the wave's path. Any flaws will turn up in the form of changes to the path.

"The technology is incredibly sensitive," explained Fred Doern, chair of the college's Mechanical, Manufacturing and Communications program. "It was originally developed to study a modern stealth jet fighter. But it could very well be used on bus, airplane or auto parts."

According to Doern, there's a critical shortage of personnel trained in the use of these new imaging technologies, both at the senior and entry level.

Helping to address this shortage, an education program will be created in partnership with industry to train, certify and upskill the non-destructive labour pool in Manitoba. WD funding was also used to purchase X-ray tomography equipment (the technology behind hospital CAT scans) and data analysis software. The new facility, located at the college's industrial campus at Magellan Aerospace in Winnipeg, will serve as both a testing facility for the local aerospace industry and a teaching and certification tool for the college. AW

Minister Yelich announces an investment towards the Centre for Non-Destructive Inspection Technologies.

COSMIC RAYS TO IMPROVE MINING EXPLORATION

Looking for valuable mineral deposits while making a minimal impact on the environment has inspired a team of scientists in Vancouver to come up with a way to use a free resource: cosmic rays.

The technique allows geologists to take three-dimensional pictures of what lies beneath the surface, in the same way a CAT scan records images of the inside of a patient's body. But instead of using artificially generated rays, these geologists record the paths taken by muons, subatomic particles which are constantly bombarding the Earth. The density of the underground material affects each muon's path through the Earth, and detectors translate that data into information about the location and kind of ore.

A recent WD investment in Advanced Applied Physics Solution (AAPS) for their muon geotomography project helped demonstrate new technology that will enable high precision mineral exploration of dense ore deposits.

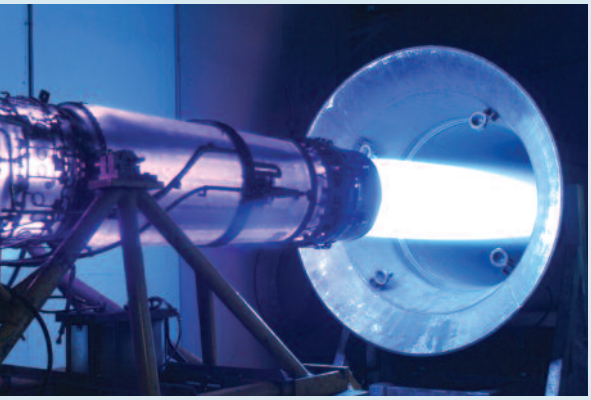
Led by UBC Professor Doug Bryman, who patented the ore-locating technology, the AAPS team has already built one prototype detector and tested it at a mine on Vancouver Island.

"We're now in the process of building additional detectors thanks to the WD funding, and we're going to take them to areas of the province where no one has looked for ore resources before," said Konstantine Sarafis, Vice-president of Business Development at AAPS.

"Mining is a major contributor to our resource-based economy. By investing in this project, our Government is ensuring that our key sectors develop the tools necessary to grow and provide highly-skilled jobs for Canadians," said Minister Yelich. "Our Government will continue to do its part to help build a more globally competitive and productive mining sector." AW

DIVERSIFYING **AEROSPACE TECHNOLOGY DEVELOPMENT**

A new engine-testing laboratory is poised to help keep Manitoba at the leading edge of aerospace technology development, thanks to an investment from WD.



Wind Tunnel Fans at the testing centre [L-R: Michael Kulkelko (WestCaRD), Brent Ostermann (StandardAero), Ross Hornby (GE Canada), Minister Yelich, Kim Olson (StandardAero), Vic Gerden (WestCaRD).

West Canitest R&D Inc. (WestCaRD) is teaming up with two industry leaders to turn an aircraft winter certification facility into a year-round testing operation. WD funds helped to purchase specialized equipment to refine aircraft engine performance, reduce pollution, and keep products competitive.

The $50-million GE Aviation Engine Testing, Research and Development Centre opened this year at Winnipeg's James A. Richardson International Airport as part of GE and Standard Aero's efforts to stay on the forefront of cold-weather engine development. Now, through the WestCaRD contribution, it is expanding into a range of new fields, including smart sensors, high-speed data systems and emissions reduction equipment.

"Our Government's support solidifies Manitoba's place in global aerospace as the world's leading cold weather testing location," said Minister Yelich. "Investments like this are vital to fostering economic growth and creating high value jobs for Western Canadians."

The new centre will also be working with Red River College and the University of Manitoba, schools that specialize in aerospace technology.

By enabling this key sector to continue to succeed and thrive in a globally competitive environment, WD is helping the Manitoba aerospace industry contribute to a stronger and more diverse western Canadian economy. AW

KEEPING UP WITH THE **MINING SECTOR**

Left: Minister Yelich announces significant investment towards specialized training equipment to be used by SIAST's new Mining Engineering Technology program.

When a resource sector booms, the search for qualified workers is on. In Saskatchewan, the demand for mining engineers trained on the latest equipment has never been higher. Five new mines are expected to open in the province over the next three years alone, and several more are expanding their operations.

Meeting that demand is the mission of the new Mining Engineering Technology Program at the Saskatchewan Institute of Applied Science and Technology (SIAST). Funding for the new program, including an investment from WD, is now in place, meaning the first students will be in classes this fall.

WD funds were used to purchase a wide variety of training equipment, from geophysical survey gear to computers and bore-hole cameras.

"We're buying the latest technology because we want to ensure our students learn on the type of equipment they'll use when they launch their careers with the mining industry," said SIAST's Dean of Technology, Jamie Hilts.

While other western provinces already have similar programs, the new SIAST courses are the first of their kind in Saskatchewan.

"Our Government recognizes the role this key sector plays in job creation and economic growth," says Minister Yelich. "We are proud to invest in equipment for this exciting new program, which will create jobs and support the rapidly-growing mining industry."

Two years ago, the industry was looking for about 45 qualified mining technologists in the province each year. By 2017, more than eight times as many will be needed. When fully operational, the new course should be able to effectively address potential labour shortages and strengthen Saskatchewan's mining industry, now and in the future.

GIVING CANADIAN ATHLETES A **COMPETITIVE ADVANTAGE**

Minister Yelich helps push new sports and wellness technology development with (from left) Mr. Claude Lemieux, CEO of Graf Canada; Dr. Jon Kolb, Director of Sport Science, Medicine, and Innovation for Canada's Own the Podium; Mr. Troy Crowder, President of True Stride and (in driver's seat) Brian Hughes, member of SAIT Polytechnic's fabrication lab team.

Sledding headfirst downhill at 130 km/h, chin just millimeters from an ice track, makes skeleton racing one of the most extreme and exciting sports. Winning takes more than courage and practice, though. That's where the Sports and Wellness Engineering Technology Institute (SWETI) comes in.

The Institute is playing a critical role in keeping Canada's skeleton racers at the top of their game. Two years after SWETI engineers took on the challenge of building a better sled in 2008, Canadians took four out of the top six spots at an international competition in Calgary. An investment from WD allowed SWETI to apply the same expertise to the sports and wellness sector as a whole. The funding will help the Institute improve its capacity for prototype design and fabrication and mechanical design engineering.

"Our Government is committed to supporting Alberta's growing strengths in developing innovative new products and technologies," said Minister Yelich. "By enabling businesses in the sports, recreation and wellness industries to improve their international competitiveness, this initiative will support economic growth and job creation in Western Canada."

The Institute, which is based at SAIT Polytechnic in Calgary, was established to work with companies and not-for-profit organizations to develop new materials and designs for sports and wellness products. Whether it's faster bobsleds, better-fitting hockey skates that reduce injuries, a bi-directional pedalling system for bicycles that allows athletes to ride longer, or even wheelchairs that can travel smoothly over varied terrain, the initiative is helping to transform a wide range of innovative new concepts into reality. This enables businesses in the sports, recreation and wellness industries to improve their competitiveness and access the expertise needed to successfully bring their ideas to market.

"Highly skilled graduates from SAIT will be able to design and develop uniquely Canadian equipment to give our Canadian athletes and industry a competitive advantage," said Alex Zahavich, Director of Applied Research and Innovation Services at SAIT. "Now we have more opportunities to collaborate with partners in this growing industry."

Meanwhile, the Institute is hard at work making further refinements to the skeleton sleds that will be used by Canadians at the 2014 Winter Games in Sochi, Russia.

EXPANDING **AGRICULTURAL RESEARCH** DEVELOPMENT

Agricultural research can take a long time. Researchers can wait a full year for crops to materialize. But what if you want to grow three generations each year? That is an advantage that the Phytotron is providing researchers at the University of Saskatchewan (U of S) in Saskatoon.

One of the largest research greenhouses worldwide, the artificial growing environment at the U of S, is going through its own growth spurt, thanks to funding from a partnership of industry and government agencies.

"Our Government understands that investments in agricultural innovation create new crops for Canadian farmers, and help to strengthen our economy," said Agriculture Minister Gerry Ritz. "That's why we are proud to be supporting the Phytotron and the important research it facilitates."

The expansion will bring the complex up to 100 percent capacity later this year. The WD support is being used to purchase and install eight new refrigeration units, which remove excess heat produced by the Phytotron lights, and new computer controllers for most of the 183 chambers.

The economic advantages of this project can be felt throughout Western Canada. Pulse and lentil crops grown in the West produced $2.2 billion in sales in 2009, and in 2008, export sales of canola reached $2.8 billion. Both of these crops were developed at the U of S facility, resulting in an economic impact of $14.1 billion across Canada and proving that the facility is instrumental in developing new varieties of crops that are generating sales around the world. AW

Minister Ritz announces funding to enhance the capacity of the Phytotron research facility at the U of S.

BOOSTING WESTERN CANADA'S SHIPBUILDING INDUSTRY

Minister Yelich makes an announcement in Esquimalt, British Columbia as shipyard employees look on.

In February 2012, Minister Lynne Yelich stood before a crowd of western Canadian shipbuilders at the Esquimalt Graving Dock to announce the launch of Western Canada's Shipbuilding Action Plan. This Plan supports the West's shipbuilding industry and helps it to remain internationally competitive and sustainable.

Developed in support of the Government of Canada's 30-year, $33 billion National Shipbuilding and Procurement Strategy (NSPS), Western Canada's Shipbuilding Action Plan ensures that the West's shipbuilding industry is well-positioned to pursue opportunities presented by the NSPS.

"Our Government is committed to supporting Western Canada's maritime and shipbuilding industry," said Minister Yelich. "Our Action Plan for this industry will create jobs and stimulate long term economic growth in Western Canada."

When Vancouver Shipyards, part of the Seaspan group of companies, was selected under the NSPS to build the next generation of non-combat vessels for the Canadian navy, it didn't take long for the B.C. shipbuilding industry to see the economic potential.

As a concrete first step in implementing the Action Plan, WD made an investment toward the creation of the Industrial Marine Training and Applied Research Centre (IMTARC) in Esquimalt. When operational, it will supply entry-level training as well as leadership and management, technology transfer and revitalized apprenticeship programs.

Above: A Frigate undergoes upgrades at the Victoria Shipyards. Photo courtesy Seaspan Shipyards.

IMTARC will ensure the sustainability of British Columbia's shipbuilding and repair industry by training highly qualified workers. Programs will be both broad and specific to the sector's requirements, including entry level training for new entrants, leadership and management skills, technology transfer, and revitalized apprenticeship programs.

Economic activity in British Columbia's shipbuilding industry is expected to grow from $450 million to $800 million, bringing up to 4,000 new jobs to North Vancouver, Victoria, Nanaimo and Port Alberni. Ensuring that Canadians fill those jobs is the primary goal of the new centre, which is being run by the B.C. Resource Training Organization.

Delivering on its goal to bring together western small- and medium-sized enterprises (SMEs) with key players in the shipbuilding industry, WD partnered with Seaspan Marine to host a Shipbuilding Summit on May 23, 2012. This event allowed western SMEs to meet with Vancouver Shipyards and Irving Shipbuilding, as well as their first tier suppliers, to discuss specific shipbuilding projects and the opportunities they offer Western Canada. WD intends to build on this summit by hosting supplier development tours that showcase Western Canada's shipbuilding capabilities and link western businesses to the key decision makers.

Over the coming months and years, WD will continue to examine opportunities to link western SMEs with prime contractors, educate stakeholders and examine investment opportunities that will further support Western Canada's shipbuilding industry, create jobs and encourage economic growth in the West. AW

CONNECTING WITH NEW OPPORTUNITIES AT THE WESTERN CANADIAN SHIPBUILDING SUMMIT

On May 23, 2012, as an important step in delivering Western Canada's Shipbuilding Action Plan, WD partnered with Seaspan Marine to host the Western Canadian Shipbuilding Summit in Vancouver. Minister Yelich delivered opening remarks, outlining the Government of Canada's ongoing support for Western Canada's shipbuilding industry.

"Events like the Shipbuilding Summit are crucial in helping western Canadian businesses showcase their expertise and continue to grow," said Minister Yelich. "This is a valuable part of Western Canada's Shipbuilding Action Plan, which is creating jobs, economic growth, and long-term prosperity in the West."

The event brought together over 350 small - and medium-sized businesses to connect with new business opportunities in British Columbia's thriving shipbuilding industry.

STRENGTHENING ALBERTA'S BEE AND HONEY INDUSTRY

BEES are pollinators of countless crops around the world. Few species rival their importance to food production and the agriculture industry. WD is helping improve our understanding of what bees need to stay healthy with an investment in the new National Bee Diagnostic Centre.

Located at the Beaverlodge Research Farm, the Centre will make Grande Prairie Regional College (GPRC) and the province of Alberta a leader in beekeeping diagnostic technology. The funding covers capital expenses, including the assembly of a three-piece modular and mobile laboratory – the only one of its kind in Canada.

"This is the ideal location for us," said the Centre's Director, Bruce Rutley. "The College already has the only commercial beekeeping training program in the country and the leading bee researchers."

The need for comprehensive diagnostic services for bees recently assumed an unprecedented level of urgency with the advent of "colony collapse disorder," a poorly understood and sometimes dramatic decline in bee populations across North America and Europe.

Addressing this problem is crucial to keeping Western Canada's beekeeping industry healthy and competitive, which is exactly what this project is helping to do.

The Centre will focus on the detection and diagnosis of diseases, provide valuable data to bee researchers, and help ensure beekeepers meet government regulations. By performing hundreds of tests each year for Canada's 6,700 commercial beekeepers, the Centre will also help ensure the health of bee populations across the country. AW

CANADA'S BEE INDUSTRY BY THE NUMBERS:

Annual honey production exceeds **$100 million** nationally.

Approximately **475,000** colonies are located in the prairie provinces and they produce 80% of Canada's crop.

Bees, through their pollination of fruit, vegetables and canola, increase agricultural production by two to eight times, with an estimated value of **$2 billion** dollars annually across Canada.

There are approximately **7,000** beekeepers in Canada, operating a total of **600,000** colonies of honeybees.

Peace River MP, Chris Warkentin, announces funding towards Grande Prairie Regional College to establish the National Bee Diagnostic Centre.

Left to right: Dr. Francisco Alhanati, Acting Managing Director of C-FER Technologies; Brian Wagg, Manager of New Technology Initiatives for C-FER Technologies; MP Mike Lake; and Mel Johnson, TransCanada Pipelines.

ENSURING **ECONOMIC GROWTH AND SAFETY** OF RESOURCE EXTRACTION

There aren't many places where industry can test a natural gas pipeline, but the Centre for Frontier Engineering Research (C-FER) Technology's operation at the Edmonton Research Park can do just that. Now, thanks to support from WD, the list of tests the Park can accommodate is getting longer.

"The funds from WD have increased our capacity to match the growing need for tests in extreme environments in the Arctic and undersea," said Brian Wagg, Manager of New Technology Initiatives at C-FER. "This is giving Canadian industry the chance to get at the gas that people know is there, but has been trapped because of a lack of transport infrastructure."

Arctic and subsea environments impose great stress on pipelines. C-FER's labs allow engineers to bend and pull lengths of pipe to find out how cracks will behave under the most trying conditions on land, and test whether they can tolerate the high pressures of the seabed. Without that knowledge, assuring regulators that pipelines are safe in the far north could be difficult.

"Our government's investment in this initiative will support C-FER Technologies in continuing to meet the growing demand for innovative technologies, materials and processes," said MP Mike Lake.

C-FER is a not-for-profit applied research organization that helps manufacturers and service companies carry out full-scale testing of large components used in undersea, arctic and oil sands operations before taking them to the field. Its testing facility is unique in Canada and is one of only a handful of such facilities in the world.

The WD support is also expected to help generate spin-off business and enable companies to more efficiently develop oil and gas resources across Canada. AW

Workers harvest a crop of cranberries in Delta, BC.

ENHANCING COMPETITIVENESS IN THE CRANBERRY INDUSTRY

The vast majority of the cranberries grown in Canada – and about 12 percent of North America's entire supply – come from the lower Fraser Valley and Vancouver Island. Protecting and expanding that industry is the mission of a new research centre funded in part by a contribution from WD.

The Cranberry Research Centre, located in Delta, B.C., will be the first of its kind in Canada, and just the fourth on the continent. Once complete, researchers will experiment with both established and new varieties of cranberries in hopes of increasing yields.

"We'll be trying to determine which varieties have the best characteristics to grow in our climate and environment," said Todd May, President of the BC Cranberry Research Society, which manages the new facility. "What we're building should be able to test just about everything that could affect a cranberry farm."

"Cranberry farmers play a vital role in keeping the region's economy strong and creating jobs," said Parliamentary Secretary Kerry-Lynne Findlay. "Our Government recognizes the importance of safeguarding and strengthening this industry, which in turn will bring the potential for job creation and economic growth."

The creation of the research centre will bring both short- and long-term economic benefits to the region: the construction of the facility will create immediate local jobs and, further down the road, the B.C. Cranberry Growers Association estimates that for every 80,000 pounds of berries grown annually in BC, one full time job is created or maintained.

HELPING THE ENVIRONMENT BY **BURNING WASTE**

Through an innovative, ground-breaking technology, wood and agricultural waste material can now be burned to create a form of charcoal called biochar, which can be used to store carbon in the soil rather than releasing it into the atmosphere.

With an investment from WD, a team at Lakeland College in Alberta is preparing to apply the technique on a wider scale. Biochar is the end product of pyrolysis and a soil additive that can help soil retain water and nutrients and increase crop productivity. It can even enhance revegetation rates on reclaimed land. Though the chemistry of pyrolysis is well understood, the industrial application of what is essentially a form of charcoal is still a relatively new concept to most farmers.

"People have played with this for a while. Our goal is to get some hard numbers on what's feasible," said Melvin Mathison, Dean of Environmental Sciences at Lakeland College. "It's got a lot of potential."

Mathison said that several companies have wood-based by-products that don't have a lot of economic uses, but his team is working hard to turn that waste into a revenue stream.

The funding is being used to purchase a pair of mobile pyrolysis units, which will convert wood and other agricultural wastes into biochar at a rate of one tonne a day. The goal is to help landowners convert their agricultural waste into biochar and apply it to their fields.

WHAT IS PYROLYSIS?

The burning of wood and other organic materials without oxygen is known as pyrolysis. Like combustion, it is a high-temperature chemical process. Unlike combustion, it takes place in the absence of oxygen and so does not produce carbon dioxide. The main end product of pyrolysis is charcoal, or biochar, which when buried, stores carbon in the soil rather than releasing it into the atmosphere.

Carbon

COMPOSITES: THE WAY OF THE FUTURE IN MANUFACTURING

Composites are found everywhere, from bathtubs and shower stalls to gas stations and amusement park water slides. And composite technology is behind many fascinating advances; for example, research involving reinforced carbon and glass fibres is producing significant innovations that are revolutionizing aerospace, shipbuilding, sports equipment and industrial products.

And with both of the world's largest aircraft manufacturers – Boeing and Airbus – shifting away from traditional materials in aircraft manufacturing in favour of carbon fibre reinforced composites, it's clear that composites are the way of the future. In fact, composite materials make up over 50 percent of the new Boeing 787 Dreamliner aircraft.

WD recognizes that Western Canada's composite industry, researchers and service providers could use a little of that kind of synergy themselves. To help with this, the department has contributed more than $9.8 million to the creation of a Pan-Western Composites Research Network.

"Investments like this are key in furthering our goal of creating jobs and growth," said Minister Yelich. "It will go a long way toward creating the conditions that will help western Canadian aerospace, automotive, and marine manufacturing sectors succeed. Businesses in those sectors are increasingly using composite materials because they represent a durable, light-weight, lower cost alternative to use in their manufacturing processes."

The new network, led by Professor Anoush Poursartip, a composites expert who has received global recognition for his work on process design software and the aerospace industry, will be based at the University of British Columbia in Vancouver. Network nodes will be set up at the University of Victoria, the University of the Fraser Valley, and at the Composites Innovation Centre in Winnipeg. Additional nodes are expected to come online very soon in Alberta and Saskatchewan. Staff will work with businesses at each node, distributing important information, training, and networking.

WHAT ARE COMPOSITES?

The guiding principle of composite material is creating strength through diversity. Composites, which are also called reinforced plastics, can be used to create a vast array of high quality products with significant market demand. They are the combination of two or more substances to create something that does the job better than either part can do on its own.

Poursartip said composites present both opportunities and challenges.

"When you get it right, you are a hero, and the benefits are huge," he said. "Simply, you can make lighter structures more cheaply. Lighter means less fuel consumption, less environmental impact."

"Other countries are investing significant amounts in the field," added Poursartip. "But we believe the Pan-Western Composites Research Network is different. We're creating something that bridges the gap between academic research and commercial development."

Poursartip said that already, the network has had "huge buy-in" from the western Canadian industry, and international firms have also expressed strong interest. But the arrival of the new funding marked a critical turning point for the network. "WD is really being visionary in understanding the need of the composite industry," he said.

Sean McKay, Executive Director of Winnipeg's Composites Innovation Centre, said the network will help the West prepare for the challenges of industry competition as it will further industry's understanding of composite manufacturing processes.

McKay emphasized the importance of assimilating the necessary science and fundamental understanding of manufacturing issues into everyday operations to reduce defects and improve efficiencies. These measures are "essential to remain competitive in today's global market place," said McKay.

The network complements other ongoing initiatives aimed at developing and demonstrating composite manufacturing technologies in Canada, said McKay. One example is the Canadian Composites Manufacturing R&D consortium, which was created to promote national collaboration on composite manufacturing and is proving how partnerships can create greater opportunities for success. AW

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

Please contact the editor at
access.west@wd-deo.gc.ca

ACCESSWEST