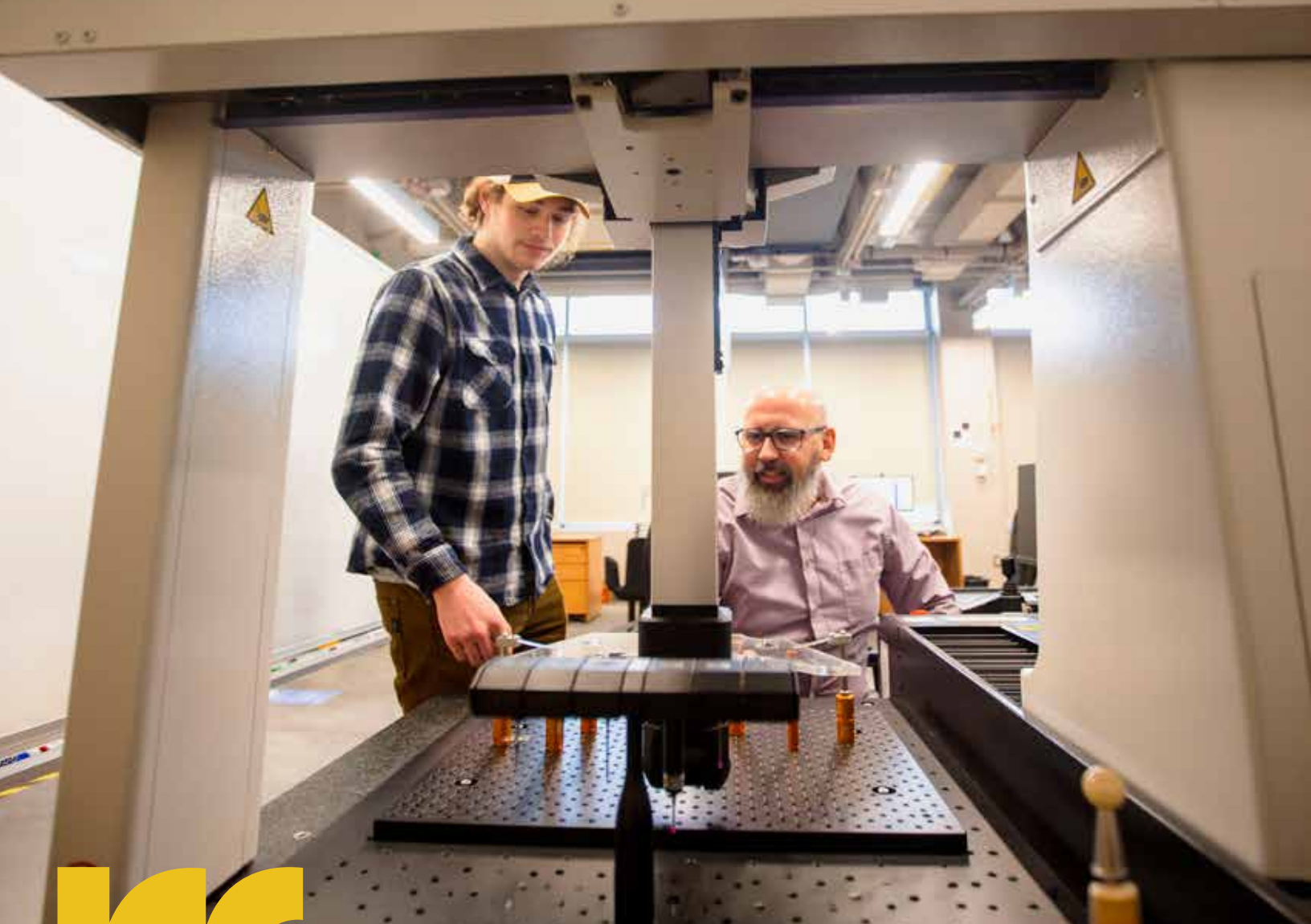


# THE INNOVATION ISSUE



MADE IN WELLAND | 2026 EDITION

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for Business

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# INNOVATION STARTS HERE.

## WELLAND IS WAITING.

When people think of Welland, they often think of our industrial heritage. That history remains an important part of who we are, but what excites me most today is how our community continues to evolve, innovate, and grow.

Across the pages of this year's *Made in Welland* magazine, you'll meet the companies, leaders, educators, and innovators helping shape our city's future. From advanced manufacturing and clean technology to logistics, workforce development, and entrepreneurship, their stories reflect the strength and diversity of Welland's economy.

Innovation is the thread that connects them. It can be found in new technologies, more sustainable practices, highly skilled jobs, and a commitment to finding better ways of doing things. These stories show that innovation isn't limited to major urban centres. It's happening right here in Welland.

Our city is experiencing significant growth, investment, and opportunity. We're building on our industrial strengths while welcoming new industries and new ideas. Businesses are choosing Welland for our skilled workforce, available employment lands, competitive business environment, and strategic location in the heart of Niagara. Minutes from the Canada-U.S. border and connected by road, rail, marine, and air transportation networks, Welland gives businesses access to customers and markets across North America and beyond. But location is only part of our story.



One of Welland's greatest strengths is how we work together. Partnerships among industry, education, economic development, government, and community organizations are helping businesses succeed, people build skills, and new opportunities take shape.

I invite you to explore the stories in this year's *Made in Welland* and meet some of the people and organizations moving our city forward. Together, they show why Welland is a place where businesses can invest, innovate, and grow.

A handwritten signature in cursive script that reads "Jessica Ruddell".

**Jessica Ruddell**  
Chief Administrative Officer  
City of Welland

## WELLAND:

# Open for business

With a strong commitment to fostering economic growth, and efficient approval processes, Welland is ready to meet the needs of growing industries. The city offers a dynamic lifestyle, attainable housing, and outstanding opportunities for business growth and investment.

## WELLAND:

# Low cost of living



### Welland

\$495,700



### Niagara Region

\$571,300



### Toronto Area

\$940,800

### Welland home prices are:



13.2%

lower than Niagara



47.3%

lower than Toronto

Source: Canadian Real Estate Association. June 2026

## Quick permit turnarounds

### Canadian Tire

- 120,000 sq. ft. expansion
- 15 week turnaround

### Longo's

- 41,000 sq. ft. grocery store
- 8 week turnaround

### Fonthill Lumber

- 96,000 sq. ft. manufacturing and warehouse facility
- 2.5 month turnaround (sawmill/woodworking plant)

### INNIO

- 500,000 sq. ft. manufacturing facility
- 8 week turnaround

### Leon's

- 46,700 sq. ft. furniture store
- 6 week turnaround

### 200 Downs Drive

- 25,000 sq. ft. multi-unit industrial facility
- 5 week turnaround

### Holiday Inn Express

- 51,700 sq. ft. hotel
- 4.5 month turnaround

### 150 Downs Drive

- 36,000 sq. ft. multi-unit industrial facility
- 3 month turnaround

## WELLAND:

# Geared to industry

Welland has developed deep workforce expertise, specialized supply chains, and a lasting competitive advantage across several manufacturing sectors, and we have the LQ data to prove it. Location Quotient (LQ) compares an industry's local concentration to the national average. An LQ of 10x, for example, means that industry is ten times more concentrated in Welland than it is across Canada. Among the city's most notable LQ figures:

51.5X

CLAY PRODUCT AND REFRACTORY MANUFACTURING

46.0X

ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

27.8X

FORGING AND STAMPING

24.8X

STEEL PRODUCT MANUFACTURING FROM PURCHASED STEEL

16.1X

GRAIN AND OILSEED MILLING

9.0X

IRON AND STEEL MILLS AND FERRO-ALLOY MANUFACTURING

7.3X

PRIMARY METAL MANUFACTURING

6.9X

OTHER GENERAL-PURPOSE MACHINERY MANUFACTURING

# Business briefs



## INNIO – Waukesha Engines

Manufacturing innovation doesn't end when an engine leaves the factory. At INNIO's 500,000 sq. ft. facility in Welland, where every new Waukesha engine is manufactured, the focus increasingly extends across the entire lifecycle of the product.

Through the company's reUp program, existing engines can be upgraded with OEM components and the latest technologies, extending service life while reducing waste and lowering the environmental impact of replacement.

Meanwhile, digital solutions such as SkidIQ enable operators to continuously monitor engine and compressor performance, using real-time analytics to improve efficiency, predict maintenance needs, and minimize downtime.

Together, these innovations reflect a shift in industrial manufacturing – from simply producing equipment to supporting smarter, more sustainable assets throughout their operating life. By combining advanced manufacturing with digital technologies and lifecycle solutions, INNIO demonstrates how innovation continues long after an engine is built.



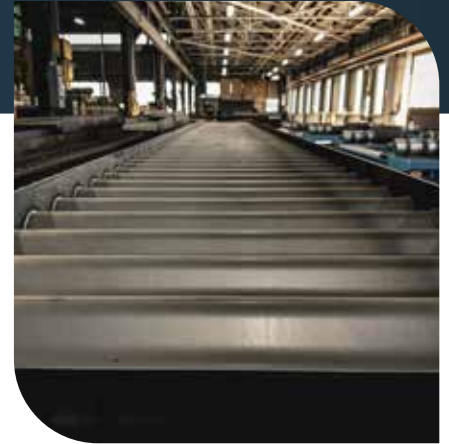
## Vision Greens

Welland-based Vision Greens received national attention earlier this year in Maclean's magazine as a company benefiting from the country's growing "Buy Canadian" movement.

The magazine reported that demand for the company's locally grown leafy greens has tripled, enabling Vision Greens to expand distribution in major grocery chains and independent grocers alike.

The article notes the company is planning satellite vertical farms in Vancouver, Calgary, and Montreal, underscoring the growing market for Canadian-grown produce cultivated through controlled-environment agriculture.

With consumers increasingly seeking domestic alternatives to imported produce, Vision Greens is positioned as an example of how Canadian ag-tech companies are innovating and scaling to meet demand from both retailers and shoppers.



## Steelcon

Steelcon is expanding its advanced manufacturing capabilities in Niagara with the support of a \$1 million FedDev Ontario investment. The funding will help establish an automated structural steel and joist fabrication shop, boosting throughput, precision, and production efficiency across the company's Welland and St. Catharines facilities.

The investment supports the acquisition of advanced fabrication equipment as Canada's steel industry adapts to shifting global trade conditions and increasing pressure to strengthen domestic supply chains. The project is intended to improve productivity, reduce costs, and help Canadian manufacturers remain competitive.

Steelcon has steadily expanded its presence in Welland since acquiring its Rusholme Road facility in 2023. Today, the 225,000 sq. ft. plant specializes in joist production, SIN Beam manufacturing, and metal deck fabrication, complementing the company's long-established operations in St. Catharines.

# Strategic specialty steel

Valbruna ASW modernizes one of Canada's most unique steelmaking facilities to serve critical industries at home and abroad

During WWII, Welland's Atlas Steel was a critical industrial contributor to the war effort, as Canada's largest specialty steel plant. Eighty-plus years later, the facility continues to play a role in Canada's strategic and economic wellbeing.

Global stainless steel giant Valbruna (which notably provided the stainless steel reinforcements needed to complete Barcelona's Sagrada Família architectural masterpiece) acquired the Welland facility in 2019.

The company committed to modernizing the plant through innovation and new technologies. Today, approximately 150 workers produce close to 100,000 tonnes of specialty steel annually.

A new 70-ton electric arc furnace (EAF) represents one of the most significant investments in the Welland plant's history. The nearly \$80 million project features a new furnace designed by Italian steel technology leader Tenova, a global supplier of advanced steelmaking equipment and process automation.

The project extends well beyond the furnace itself, incorporating a new air filtration system, automated alloy addition system, and upgraded water cooling equipment.

The result is a modern melt shop designed to improve efficiency, product quality, workplace safety, and environmental performance.

Key advantages include:

- State-of-the-art process control, allowing operators to precisely manage the steelmaking process while reducing consumption of electricity, electrodes, and process gases.
- Greater production flexibility, with the unique ability to efficiently manufacture both specialty stainless steels and carbon steels in the same furnace – a capability few steelmakers possess.
- Improved safety and productivity through an automated alloy addition system that eliminates the need for manual additions at the furnace, reducing heat loss while accelerating production.
- Cleaner operations, thanks to a new primary evacuation and dust filtration system that significantly improves air quality inside the melt shop while reducing fugitive emissions.
- Enhanced reliability, enabling the plant to consistently meet customer specifications and delivery schedules while operating more sustainably.

For Valbruna ASW, the investment is about more than replacing aging equipment. It strengthens the company's position as Canada's only specialty stainless steel melt shop, ensuring the Welland facility remains globally competitive while producing the high-value specialty steels that support critical industries including energy, infrastructure, aerospace, and advanced manufacturing.

"Specialty steels require the use of unique refining equipment and practices not available at any other steel mill in Canada," explains Tim Clutterbuck, Valbruna's Director of Corporate Relations.

In an environment where international trade is facing challenges and uncertainties, domestic access to critical resources is essential in many sectors, notably healthcare, energy, and security.

The stainless steel produced at Welland's Valbruna ASW mill has notable uses in healthcare, such as in MRI machines, which require a very niche nonmagnetic grade.

The plant also produces a special stainless grade used in the production of nuclear end fittings. Both the Bruce Power and Pickering nuclear refurbishment projects will be using steel made in Welland.

In July, another opportunity of national importance emerged for Valbruna ASW steel when Ottawa selected a German/Norwegian consortium as the preferred bidder for the country's new submarine fleet.

## DID YOU KNOW?



The Valbruna ASW site first began steel production in Welland back in 1918, as the Canadian Atlas Crucible Steel Co. It reorganized under the name Atlas Steels in 1928.

# "Specialty steels require the use of unique refining equipment and practices not available at any other steel mill in Canada."

- TIM CLUTTERBUCK, VALBRUNA ASW

Valbruna is confident that its product will meet the strict technical requirements needed for submarine construction, and has produced a trial order currently being evaluated by the German Naval Ship Building Standards.

Up to 70 tonnes of nonmagnetic stainless steel may be sourced for the overall project, and the consortium is eager to include Canadian industry where appropriate. It's a promising opportunity for Welland's flagship steel mill.



# Innovation drives a low-carbon future at Verbio



A Verbio terminal operator prepares to load a railcar with biodiesel at the company's Welland, Ontario, biodiesel plant.

Innovation often brings to mind cutting-edge technologies or entirely new products. At Verbio's biodiesel facility in Welland, innovation is equally about process improvements – finding smarter ways to reduce emissions, maximize resources, and produce cleaner end products efficiently.

Since becoming part of the German-headquartered Verbio group in 2019, the Welland operation has demonstrated how operational innovation can strengthen both manufacturing competitiveness and environmental performance.

The facility's main output is biodiesel, produced through transesterification, a process that converts renewable vegetable oils, notably Canadian-grown canola oil, into a cleaner-burning diesel alternative.

Rather than treating secondary outputs as waste or a low-value by-product, Verbio focuses on resource efficiency throughout the manufacturing process.

Alongside biodiesel, the process generates glycerin, a valuable co-product used in a range of industrial applications, including resins, coatings, and specialty chemicals.

In fact, glycerin is a major co-product. The Welland facility's annual glycerin capacity is substantial: approximately 12 million litres (compared to the approximate 96 million litres of biodiesel capacity).

Moreover, materials, water, and energy are recovered throughout the facility and reused wherever practical, reducing waste while improving efficiency. Recycling and recovery lower energy consumption as well as the carbon intensity of end products. It's truly a closed-loop approach to production.

"At Verbio, sustainability is embedded throughout our production process," explains Greg Northrup, President & CEO of Verbio North America. "By combining renewable feedstocks with efficient production processes and responsible use of co-products, we produce sustainable fuels that support Canada's climate goals and contribute to a more circular economy."

Since acquiring the Welland plant, Verbio has continued to optimize its operation. While many improvements occur behind the scenes, their impact has

# VERBIO'S CLOSED LOOP



Methanol and glycerin distillation columns at Verbio's Welland, Ontario, biodiesel plant, where continuous process improvements have enhanced efficiency and environmental performance.

been significant. Automation has been expanded, production systems have been optimized, and process controls have been enhanced to improve consistency, product quality, and overall operational reliability.

Upgrades to wastewater treatment and utility systems have improved resource efficiency while lowering operating costs and enhancing environmental performance. Energy-efficiency initiatives have substantially reduced natural gas consumption, helping decrease the facility's overall carbon footprint.

Many of these improvements draw upon expertise developed throughout Verbio's international operations. By adopting proven technologies and global best practices, the company has made the Welland operation more productive, more efficient, and better positioned to compete in an increasingly carbon-conscious economy.

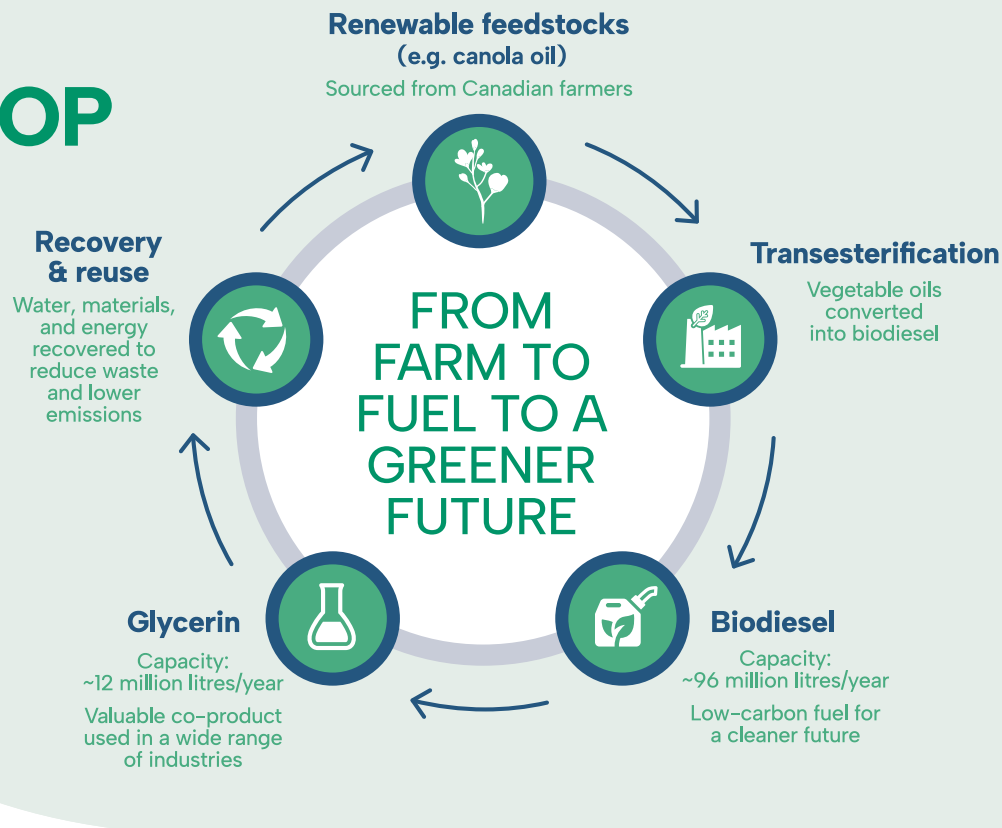
Verbio's investment in Welland also reflects broader trends shaping Canada's renewable fuels sector. Federal and provincial clean fuel policies, renewable fuel requirements, and growing demand for lower-carbon fuels continue to drive industry growth.

At the same time, Canada's strong agricultural sector provides a dependable supply of renewable feedstocks, particularly canola oil, creating a natural advantage for domestic biodiesel production.

Government programs such as the federal Biofuels Production Incentive have further strengthened the industry's competitiveness by encouraging investment in Canadian renewable fuel manufacturing. These policies help facilities like Verbio's Welland plant compete within the North American marketplace while supporting domestic supply chains and creating value from Canadian agricultural production.

As industry in Niagara continues to embrace innovation, Verbio offers a compelling example of how operational excellence and sustainability can work together. By combining advanced manufacturing practices and continuous improvement with renewable feedstocks,

the Welland facility is helping position both the region and Canada for a more competitive, resilient, and lower-carbon industrial future.



## DID YOU KNOW?



Compared to diesel, biodiesel has the potential to reduce GHG emissions by more than 80 per cent on a lifecycle basis.

Biodiesel-powered engines have been shown to deliver similar torque and horsepower as diesel-powered engines.

Source: Natural Resources Canada

# Building more than buildings

Canadian Metal Buildings plans 100,000-square-foot facility in Welland

For more than a century, Welland has been known as a city that builds things. From steelmaking and heavy manufacturing to today's advanced manufacturing operations, the community has continually adapted to meet the changing needs of industry.

That evolution is about to take another significant step with Canadian Metal Buildings' (CMB) decision to establish a new state-of-the-art manufacturing facility in the city.

The Stoney Creek-based company is planning a massive 100,000-square-foot facility in the River Road Business Park, the City's flagship shovel-ready industrial zone. It's a long-term investment in Canadian manufacturing, advanced production technologies, and skilled trades, reinforcing Welland's growing reputation as a destination for innovative industrial investment.

CMB excels in manufacturing custom steel building systems that are engineered for performance, efficiency, and long-term durability. Planning for ample space in both the new plant and adjacent property was a key driver in the decision to locate in Welland.

The project is expected to create more than 100 skilled positions spanning manufacturing, engineering, project

management, logistics, quality control, and business support.

For Canadian Metal Buildings, Welland offers a combination of advantages that align with the company's vision for growth.

"Welland was a natural fit for our next phase of growth," says Lucas Bruzzese, CEO of Canadian Metal Buildings. "The city has a strong industrial heritage, a skilled workforce, excellent transportation access, and a business community that understands the importance of manufacturing and economic development."



The investment also reflects Canadian Metal Buildings' commitment to domestic manufacturing, sourcing Canadian materials whenever possible, and delivering home-grown building solutions to customers across the country.

The new plant will significantly expand production capacity and innovation is at the heart of the project.

Canadian Metal Buildings is designing the facility around advanced manufacturing principles that improve safety, quality, productivity, and scalability. Planned investments include automated material handling systems, advanced CNC processing equipment, robotic welding technologies, automated coating and finishing systems, enhanced quality control, and fully integrated digital production planning.

Together, these technologies will create a highly coordinated manufacturing environment where information flows seamlessly alongside materials. Digital production planning helps eliminate bottlenecks and optimize scheduling and resource allocation. Automation reduces repetitive tasks, while precision equipment ensures consistent quality across every component.

The company is also applying lean manufacturing principles throughout the plant's layout. Instead of treating manufacturing as a series of isolated steps, the facility is being designed to create a continuous flow from raw material receiving through fabrication, finishing, shipping, and delivery.

Innovation extends well beyond machinery.

Canadian Metal Buildings is investing heavily in digital tools, automation, artificial intelligence, and continuous



Artist's rendering of CMB's new facility planned in Welland.

## “We wanted to invest in a community that shares our long-term vision.”

— LUCAS BRUZZESE, CANADIAN METAL BUILDINGS

process improvement. The objective is ambitious: to become one of North America's most technologically advanced manufacturers of pre-engineered metal building (PEMB) systems.

These capabilities arrive at a time when demand for pre-engineered steel buildings continues to expand across multiple sectors.

Developers and owners of industrial facilities, warehouses, manufacturing plants, agricultural buildings, aviation hangars, institutional projects, and public infrastructure are increasingly turning to engineered steel systems that can be delivered more quickly, constructed more efficiently, and provide predictable project outcomes.

CMB is strategically addressing key trends within these industries to build faster, control costs, and improve sustainability, all important measures to minimize risks.

For Welland, the investment reflects a broader transformation underway across the city's manufacturing sector. Traditional industrial strengths are increasingly being complemented by automation, robotics, digital technologies, and advanced production systems.

Canadian Metal Buildings' decision to establish one of Canada's most advanced pre-engineered steel building

manufacturing facilities in Welland demonstrates that innovation often builds upon an existing industrial foundation. By combining skilled people with modern manufacturing technologies, the company is helping shape the next chapter of Canadian manufacturing – one that is being built in Welland.

### TECHNOLOGIES DRIVING CMB'S NEW FACILITY:



**AUTOMATED  
MATERIAL  
HANDLING**



**ADVANCED  
CNC  
PROCESSING**



**ROBOTIC  
WELDING**



**ARTIFICIAL  
INTELLIGENCE**



**ENHANCED  
QUALITY  
CONTROL**



**AUTOMATED  
COATING AND  
FINISHING**



**INTEGRATED DIGITAL  
PRODUCTION PLANNING**

# Seaway completes hands-free mooring transformation

Adapting the game-changing technology to the Welland Canal was a feat of engineering

Innovation has been at the heart of how the St. Lawrence Seaway Management Corporation (SLSMC) continues to modernize one of North America's most important trade corridors.

The completion of the Hands-Free Mooring (HFM) system in Lock 8 (at the Lake Erie end of the Welland Canal) marks the final milestone in a transformation that has taken place across the Seaway system over the past decade.

Hands-free mooring involves remote-controlled vacuum pads that secure a ship in place while it is in a canal lock. As the lock fills or empties, the vacuum mechanism rises or lowers along a vertical rail.

Previously, immobilizing a ship within a lock involved heavy mooring lines, and every lock transit required coordinated effort between the ship's crew and line handlers on shore.

The concept of HFM was pioneered in Europe. Building on that foundation, the SLSMC worked with industry partners to adapt the technology for use in deep-water locks, something that had never been done before. All but one lock along the Welland Canal is between 13 metres (43 feet) and 15 metres (49 feet) in height.

In a typical installation, three vacuum pad stations, each with two pads, is sufficient to safely secure a ship while inside a canal lock.





Close-up of a vacuum pad in the Hands-Free Mooring system.

HFM became much more than a technology upgrade. Over several generations, the SLSMC continued refining the system to meet the unique demands of deep-water lock operations.

The benefits are enormous: improved employee safety and strengthened operational reliability.

The project also transformed how the Seaway operates. As HFM was introduced, the SLSMC modernized its operating model by transitioning from local lock management to regional operations control centres, allowing locks and bridges to be monitored and operated from centralized facilities in the Welland Canal and Montreal-Lake Ontario regions.

Lock 8 was the final and one of the most technically challenging installations. It is considered a guard lock, meant to adjust the canal's water level, not specifically to raise or lower ships. As a low-lift lock—as little as 0.5 metres or 1.6 feet—it involved additional engineering, testing, and refinement before the technology could be commissioned safely and reliably.

With the completion of Lock 8, all Canadian locks operated by the SLSMC are now equipped with HFM systems. The technology has also been implemented at two U.S. locks, reflecting the continued

modernization of the binational Seaway and contributing to a more consistent operating experience for customers.

The SLSMC continues to invest in the Niagara region through major infrastructure renewal and development projects. From lock modernization

and bridge rehabilitation to property development and other strategic investments, these projects support local contractors, suppliers, and skilled tradespeople while contributing to the regional economy.

# Niagara's Welland Canal IN 2025 BY THE NUMBERS



196  
years in  
operation



27  
million  
tonnes  
of cargo



26%  
wheat's  
share of total  
tonnage  
(the largest single  
commodity)



3,230 cargo  
vessel  
transits



298  
days of  
navigation  
(a Canal record)



~70  
cruise ships  
transited  
the canal



99 total height  
(metres) of all  
eight locks  
(326 feet)

Source: St. Lawrence Seaway Management Corporation, 2025 Traffic Report

# Supporting Niagara's next generation of manufacturing innovation

How WAMIC helps local  
manufacturers turn ideas  
into practical results

Innovation is often associated with breakthrough technologies or multimillion-dollar research labs. In reality, many of the biggest gains in manufacturing come from solving smaller, practical problems: perhaps eliminating production bottlenecks, testing a new process before investing in equipment, or finding a better way to manufacture an existing product.

Helping companies bridge that gap between ideas and implementation is the mission of Niagara College's Walker Advanced Manufacturing Innovation Centre (WAMIC).

Since opening its doors, WAMIC has become a cornerstone of Niagara's innovation ecosystem, connecting businesses with applied research expertise, specialized equipment, and student talent.



Approximately two-thirds of the centre's industry partners are based within Niagara, including many in Welland. They represent a broad cross-section of the regional economy, from advanced manufacturing and agrifood to marine, healthcare, tourism, greenhouse technology, and electric mobility.

"Ultimately, the integration between WAMIC and its industry partners is built on relationships and trust," says Neil Wilkinson, WAMIC's Associate Director.

"Trust has been earned by consistently delivering quality work, supporting companies through applied innovation projects, and demonstrating that WAMIC can be a responsive, capable partner in helping industry advance new technologies, improve processes, and build internal capacity."

That collaborative approach reflects Niagara College's longstanding commitment to applied research. Rather than conducting research for its own sake, projects are designed to solve real business challenges while providing students and recent graduates with valuable hands-on experience.

Each year, WAMIC undertakes approximately eight to ten major applied research projects. Supported by a permanent team of engineering technologists and nearly 7,000 sq. ft. of lab and shop space, these initiatives often involve designing, prototyping, and field-testing technologies in areas as diverse as food processing, HVAC systems, modular housing, greenhouse technology, and healthcare equipment.

Many projects help companies move from an early concept toward a demonstrable prototype, a critical stage that can

determine whether a new technology ultimately reaches the marketplace. While that journey can take several years, reducing technical uncertainty early can significantly improve the prospects for commercial success.

At the same time, WAMIC completes another 40 to 50 highly targeted innovation projects annually through a fee-for-service model. These shorter engagements address immediate operational needs, including reverse engineering obsolete parts, producing custom jigs and fixtures, implementing digital technologies, improving production workflows, and supporting pre-certification testing for industry standards.

For many businesses, these projects provide an accessible first step into innovation, delivering measurable improvements in productivity, quality, and efficiency without requiring significant upfront investment.

While advanced technologies such as industrial 3D printers, laser scanners, and digital prototyping equipment attract considerable attention, WAMIC believes innovation is not always about deploying the newest machinery.

"Innovation does not always depend on large equipment purchases," says Wilkinson. "In many cases, the greatest value comes from incremental innovation: improving workflows, identifying bottlenecks, reducing waste, improving ergonomics, or finding low-cost ways to increase productivity."

That philosophy resonates with many manufacturers, particularly small and medium-sized firms that often face capacity, skills, or equipment gaps when trying to modernize their operations.

Some companies simply lack the internal resources to dedicate employees to process improvement projects. Others want to explore new technologies but are reluctant to commit significant capital before understanding the return on investment. Still others require specialized training before adopting new manufacturing methods.

WAMIC helps reduce those barriers by providing technical expertise, access to advanced equipment, student and graduate researchers, customized training, and connections to government funding opportunities and other innovation partners.

The result is a model that allows companies to experiment, validate ideas, and build confidence before making larger investments.

As Niagara's manufacturing sector continues to evolve, WAMIC demonstrates that sometimes the smartest innovation isn't about taking bigger risks; it's having the right partner to help reduce them.

## About Niagara College

nc



**Full-time students:**  
Close to 11,000



**Campuses:**  
Welland **EST. 1967**  
Niagara-on-the-Lake **EST. 1998**



**Programs:**  
100+



**Accolades:**  
NC regularly ranks in the top ten among Canada's best research colleges, including a #1 ranking in 2019, 2024, and 2025.

Source: Research Infosource

# NC's other innovation centres



Niagara  
College



Research  
and Innovation

WAMIC is one of five innovation centres under Niagara College's Research and Innovation umbrella. All aim to deliver innovative solutions and assist Ontario businesses with applied research. Each specializes in different sectors, with a focus on industries that reflect Niagara's economic strengths.



## Business and Commercialization Innovation Centre (BCIC)

BCIC's team combines experienced marketing professionals with student and graduate researchers in business-related studies. They work primarily with small businesses and start-ups seeking support with strategic and tactical marketing support.

### Services:

- Primary research
- Market research
- Business strategy
- Social media content creation
- Brand kit development
- Photography and videography



### BCIC in action

The BCIC recently worked with the Niagara-on-the-Lake Chamber of Commerce to develop a new brand identity, as well as a robust new website to promote the organization and its member businesses.

## Food and Beverage Innovation Centre (FBIC)

The Niagara region has a well-established reputation for gastronomy tourism, backed by a strong ecosystem of wineries and craft beverage producers. The FBIC is well positioned to support innovation and commercialization of new food and beverage products and processes. From new recipe and concept development to shelf-life testing, prototyping, and small batch processing, the FBIC pairs industry partners with the right expertise and equipment.

### Services:

- Product development
- Beverage processing pilot plant
- Beverage laboratory services
- Food safety and regulatory guidance

### FBIC in action

The FBIC recently worked with Edmonton-based Top Health Ingredients to develop and scale a functional carbonated beverage that showcases the company's plant-based ingredients in a consumer-ready format.



## Healthy Aging and Wellness Innovation Centre (HAWIC)

HAWIC aims to improve the quality of life of older adults by conducting applied research, shifting perspectives, and sharing knowledge. The research team at HAWIC investigates and explores innovative solutions for tackling the challenges faced by our aging population, while working alongside students and academic programs, industry partners, and community organizations.

### Solutions:

- Aging-in-place
- Community
- Care and services
- Technology
- Education and knowledge mobilization



### HAWIC in action

HAWIC recently worked with Linhaven Long-Term Care Home on its creative Fins, Feathers, and Fur initiative, using robotic companion animals to support older adults living with dementia.

## Horticultural and Environmental Sciences Innovation Centre (HESIC)

With a strong horticultural sector anchored by vineyards, tender fruit farms, and greenhouses, the Niagara region is fertile ground for HESIC's services. The centre specializes in growth trials with horticultural crops that evaluate innovations and technologies, contributing to their development and moving them towards commercialization.

### Services:

- Genomic services
- Greenhouse and controlled environment agriculture trials
- Hops analysis
- Technology and innovation evaluations
- Product collaboration and development

### HESIC in action

HESIC recently partnered with Walker Environmental to evaluate biochar as a greenhouse growing media amendment for basil and gerbera greenhouse crops, demonstrating its potential to improve plant growth while increasing nutrient retention and reducing fertilizer losses.



# Connecting entrepreneurs to opportunity

A Q&A with two champions of small business in Niagara

For entrepreneurs and small businesses in Welland, success is strengthened by access to the right expertise and support. Innovate Niagara and the St. Catharines Enterprise Centre (SCEC) play a central role in that ecosystem, connecting startups with mentorship, funding opportunities, advisory services, and valuable business connections.

Together, they help transform promising ideas into viable companies while equipping established small businesses with the resources needed to innovate, scale, and compete in an increasingly competitive economy.



Mayor Frank Campion (right) congratulates three Welland Starter Company Plus recipients, a program run by the SCEC to support new businesses. Companies represented from left to right: Big Carms Italian Market, Reflect Reset Renew Therapy Services, and Sweet Canines Shop.



N'ora Kalb, CEO of Innovate Niagara

We talked to N'ora Kalb, CEO of Innovate Niagara, and Rob Belchior, Small Business Consultant, St. Catharines Enterprise Centre, about the state of entrepreneurship and innovation in Niagara.

### How do you see entrepreneurship in Niagara today?

**NK:** Entrepreneurship in Niagara is definitely growing, but perhaps more importantly, it's evolving.

We're seeing more people explore entrepreneurship as a viable career path, whether they're launching technology startups, consumer brands, service businesses, or social enterprises. There's a growing confidence that you don't have to leave Niagara to build something meaningful and scalable.

**RB:** While the reasons people start businesses have evolved, the entrepreneurial spirit remains strong. Some are pursuing opportunities they have identified in the marketplace, while others are looking for greater flexibility, independence, or the ability to turn a passion into a profession.

We continue to see a steady flow of people exploring entrepreneurship as a career path. Through our partnership with the City of Welland, we have helped 47 new businesses launch in Welland between 2023 and 2025 alone.

### What support can your organization offer to small businesses when it comes to innovation and emerging technologies?

**RB:** One of the most important roles we play is helping entrepreneurs navigate what can often feel like a complex

landscape of programs, resources, and technology options.

We don't position ourselves as experts in every field, or as tech gurus, but we do act as a trusted guide. Entrepreneurs often come to us with questions about artificial intelligence, e-commerce, automation, digital marketing, software tools, funding opportunities, or how to improve productivity. We help them understand what resources are available and connect them with the right organizations, programs, and specialists when needed.

**NK:** At Innovate Niagara, we help entrepreneurs and small businesses turn ideas into viable, growing businesses by providing the tools, expertise, and connections they need to innovate with confidence.

Innovation doesn't always mean inventing a new technology. It can mean launching a new product, adopting emerging technologies like AI, entering a new market, or finding better ways to operate and serve customers.

Our role is to help businesses identify those opportunities and develop a clear path forward. We want entrepreneurs to know they don't have to navigate that journey alone. Niagara has a strong and collaborative innovation ecosystem, and we're proud to help businesses tap into it.

**Small businesses in Welland have access to a very strong network of support organizations. In addition to both of yours, there's the City of Welland's economic development office, Venture Niagara, Brock University, Brock LINC, Niagara College's Research & Innovation Centre, and more. What's behind this robust ecosystem?**

**NK:** I think part of Niagara's success comes from its size. We're large enough to have a diverse economy and strong institutions, but small enough that relationships matter and collaboration happens naturally.

There is a willingness among organizations to share knowledge, make introductions, and align efforts around helping businesses succeed. One of Niagara's greatest strengths is that organizations here genuinely work together.

**RB:** One of Niagara's strengths is its collaborative approach.



Rob Belchior, Small Business Consultant, St. Catharines Enterprise Centre

## Tech knowledge growing fast in Niagara

Between 2010 and 2021, the St. Catharines/Niagara census area witnessed a **124.6** per cent increase in scientific knowledge production, measured by published outputs. Most of this growth was in technology-related subjects.

This was the fastest growth in Ontario, and the third fastest in Canada.

Economic development teams, post-secondary institutions, innovation organizations, and business support organizations meet regularly throughout the year to share information, identify opportunities, and discuss how we can better support entrepreneurs.

While each organization has a different mandate, there is a shared understanding that no single organization can provide every service an entrepreneur may need. Our ongoing conversations help build strong relationships and create a more connected support system for businesses.

### How is AI changing the landscape for start-ups in Niagara?

**RB:** Artificial intelligence is becoming an increasingly valuable tool for entrepreneurs, particularly in the early stages of building a business.

For many small business owners, AI can help improve productivity, streamline routine tasks, assist with research, generate content ideas, support customer service, and reduce the time spent on administrative work. This allows entrepreneurs to focus more of their energy on serving customers and growing their business.

At the same time, AI is not a replacement for business knowledge, strategy, or human judgment. Like any tool, its value depends on how it is used. Entrepreneurs who take the time to understand its strengths and limitations are often able to gain the greatest benefit.

**NK:** AI is having a very real and increasingly visible impact on start-ups and established businesses in Niagara.

Over the past year, we've seen a noticeable shift in the types of businesses coming through our doors. The majority of early-stage founders we're engaging with now have some form of AI component built into their business model

# The Niagara Innovation Ecosystem



A prime example of collaboration in Niagara is the recent launch of the Niagara Innovation Ecosystem website, a shared platform designed to help entrepreneurs more easily navigate the many programs, organizations, events, and resources available throughout the region.

Eleven partner organizations, including the SCEC and Innovate Niagara, joined forces in developing the [niagarainnovation.ca](http://niagarainnovation.ca) website.

– whether that's using AI to enhance a product or service, or building entirely AI-enabled solutions.

At the same time, established businesses are also actively integrating AI tools into their operations to improve efficiency, streamline workflows, and enhance customer experience.

What's most striking isn't just the presence of AI, but how quickly it has moved from being an emerging trend to a default consideration for many entrepreneurs and business owners. It's now a standard part of how people are thinking about productivity, scalability, and competitiveness from day one.

**“AI is having a very real and increasingly visible impact on start-ups and established businesses in Niagara.”**

N'ORA KALB, CEO, INNOVATE NIAGARA



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# Recover. Refine. Recharge.

Strategic alliance gives local graphite stockpile a second life

For generations, Welland's economy was built on heavy industry. Steelmaking, manufacturing, and carbon electrode production shaped the city's identity and provided thousands of skilled jobs.

While much of that industrial landscape has evolved, one notable legacy site is now poised to play an unexpected role in Canada's electric vehicle future by supplying graphite – the material serving as the anode of the ubiquitous lithium-ion battery.

Graphite is usually mined and processed, or manufactured synthetically. ReGen Resource Recovery, however, is focused on reclaiming material that has been sitting in plain sight for decades.

Working in partnership with Linamar Corporation, ReGen plans to recover an estimated 340,000 tonnes of graphite from the former Union Carbide plant that operated in Welland from 1907 to 1999.

Once refined to battery-grade specifications, the material could theoretically supply graphite for approximately 4.8 to 6.8 million electric vehicle batteries, a remarkable example of how yesterday's industrial assets can become today's critical minerals.



## DID YOU KNOW?

Demand for graphite is very significant. It takes 10 to 15 times more graphite than lithium to make a typical lithium-ion battery.



In 2024, ReGen won the Canadian Urban Institute's "Brownie Award" for Best Large Project, highlighting innovation and excellence in brownfield remediation.

# From an unused legacy byproduct to battery-ready graphite



**Sorting and pre-processing**  
Collect carbon materials



**Crushing/milling**  
Milling or shaping graphite particles to achieve desired size



**Thermal upgrade (graphitization)**  
Align carbon structure into ordered graphite form required for battery performance



**Spheroidization**  
Shaping graphite particles to geometry suitable for battery anodes



**Final coating**  
Surface treatment to enhance electrochemical performance

The project reflects a broader transformation taking place across Welland. Historically known for heavy manufacturing and traditional industry, the city is increasingly becoming part of Ontario's advanced manufacturing and electric vehicle supply chain, where a reliable domestic supply of input materials is key to the sector's future.

According to Natural Resources Canada, the country ranks eighth for graphite mining, well behind China which boasts nearly 80 per cent of the world's production. Canada possesses significant natural graphite deposits, but mining and processing new material requires years of permitting, substantial capital investment, and considerable energy.

ReGen's approach offers a different path by recovering graphite that already exists. The advantages of recycling are immense.

"Reclaimed graphite is a practical way to reduce reliance on mined materials," explains Anna Vujovic, ReGen's Executive Vice President for Partnerships & Initiatives.

"By reusing the existing graphite, we help lower environmental impacts such as land disturbance, water use, and emissions. At the same time, we're supporting a more resilient supply chain by keeping valuable carbon materials in circulation and returning them to productive use."

Reclaimed graphite also has many advantages over synthetic graphite,

a capital-intensive manufacturing process that consumes vast amounts of energy to sustain the high temperatures involved.

"Reclaimed graphite starts with existing carbon structures, potentially reducing the amount of processing required and lowering the overall carbon footprint," says Vujovic.

According to ReGen, its recovery process is expected to have one of the industry's lowest carbon footprints while also helping diversify North America's supply of battery-grade graphite.

That combination of sustainability and supply chain resilience attracted auto parts giant Linamar, one of Canada's largest advanced manufacturing companies, into the strategic partnership announced earlier this year.

Together, the companies plan to commercialize technologies capable of processing reclaimed graphite at industrial scale. While engineering work continues, the long-term vision is to develop integrated operations capable of processing thousands of tonnes annually.

The project represents more than a new manufacturing investment. It illustrates how innovation increasingly means finding new value in existing resources.

By transforming a legacy manufacturing asset into a domestic source for battery production, the partnership is helping ensure that Welland's industrial story continues, this time powering the vehicles of today and the future.

# Kit Steel reinforces Ontario

Construction projects across the province are “Made in Welland”

When an arena opens, a fire station rises, or a school welcomes its first students, few people ever think about what lies hidden beneath the concrete.

Yet every one of those structures depends on reinforcing steel – rebar – that gives concrete the strength to withstand decades of use. It’s an essential component of modern construction, even if it remains largely invisible once the work is complete.



Because of rebar, many buildings across the province can rightfully claim, at least in part, to be made in Welland.

That's thanks to Kit Steel, the first manufacturer to break ground in Welland's new River Road Industrial Subdivision, investing millions in a purpose-built 12,787 sq. ft. rebar fabrication facility.

The company specializes in fabricating reinforcing steel for commercial, industrial, and institutional construction projects across Ontario, transforming straight lengths of steel into precisely cut, bent, and welded assemblies that become the structural backbone of buildings and infrastructure.

The timing of the company's arrival in Welland was anything but conventional.

Construction began during the height of the Covid-19 pandemic, bringing uncertainty and logistical challenges to virtually every aspect of the project. Company representatives still remember standing ankle-deep in mud alongside Mayor Frank Campion at the November 2020 groundbreaking ceremony before watching their new home gradually take shape.

"Dealing with the City and the team at Welland Economic Development was actually the easiest and most pleasant part of the build," they noted. "We were welcomed in Welland and felt appreciated for building a modern manufacturing facility in the city."

Prior to breaking ground, the company worked closely with economic development officials to find the right fit.

Businesses like Kit Steel that set up shop in the River Road industrial zone may qualify for municipal incentives, notably under the Niagara Gateway Economic Zone and Centre Community Improvement Plan.

Welland's manufacturing community is tight-knit. Through these connections, including conversations at the City's Captains of Industry golf tournament, company leaders learned about FedDev Ontario's Regional Tariff Response Initiative, a program designed to help manufacturers strengthen their competitiveness.

Kit Steel submitted a detailed application and successfully secured \$650,000 in federal funding to modernize its operation.

The investment is contributing to the purchase of two of the most advanced rebar cutting and bending systems available today, equipment that will significantly increase productivity while reducing material waste.

For a business operating in a high-volume, low-margin industry, those efficiencies can make a meaningful difference. It's a

philosophy of continuous improvement, embracing emerging technology and innovative ways of doing things.

Kit Steel has built a culture around data-driven decision-making, measuring and tracking virtually every aspect of production to identify trends, solve problems quickly, and continuously improve performance.

In addition to basing operational decisions on experience, they are increasingly informed by real-time information that helps maximize productivity, reduce waste, and better serve customers across Ontario.

The approach reflects a broader shift taking place throughout advanced manufacturing, where digital information is becoming just as valuable as physical equipment.

It also positions Kit Steel to compete in an industry where precision, efficiency, and delivery schedules are every bit as important as the steel itself.



## Niagara Gateway Economic Zone and Centre Community Improvement Plan

The Gateway CIP provides financial incentives to revitalize, strengthen, and diversify Welland's economy by promoting private sector investment, development, redevelopment, and construction activities on employment lands in the Gateway CIP project area.

Three incentive programs are available

**1 Tax Increment Grant**

(five or ten year period)

**2 Development Charge Incentives**

(up to 100 per cent)

**3 Planning Application Fee Grant**

(100 per cent grant)

# Keeping Niagara on track

GIO Rail is modernizing short-line logistics to help Niagara manufacturers stay connected and competitive

For many Niagara manufacturers, efficient transportation is critical to reaching customers and staying competitive. Today's short-line railways are doing much more than hauling freight, becoming technology-enabled logistics partners that connect local industry to continental supply chains.

That evolution is evident at Welland-based GIO Rail, which operates 82 kilometres of track. Last year, the company handled more than 5,400 revenue carloads for more than 20 customers, while providing railcar storage services for five additional businesses.



Much of that traffic supports the chemical, oil, and gas sectors, but GIO's role extends well beyond simply moving railcars from one location to another.

"We see ourselves as a logistics partner," says Neil Johnson, the company's Vice-President and Chief Operating Officer. "Our goal is to make rail transportation accessible, flexible, and efficient for manufacturers of all sizes."

One of the biggest barriers to rail transportation has traditionally been infrastructure. Many manufacturers lack direct rail access, making truck transportation the default option. GIO overcomes this through its transloading facilities, where freight can be transferred between trucks and railcars. Then it connects shipments to CN Rail's network for distribution across North America.

This allows companies to benefit from the cost efficiencies of rail without investing in their own rail sidings.

The company also assists customers in establishing rail service, helping them navigate everything from shipping logistics to operational requirements.

For manufacturers considering expansion or looking to diversify their transportation options, that expertise can significantly reduce the complexity of adopting rail.

Beyond traditional short-line services, GIO Rail also provides maintenance and management services for industries that have rail infrastructure of their own. GIO supports projects involving track construction and maintenance, as well as mechanical services for railcars.

The company even offers a rail school to train aspiring conductors or industrial rail operators.

Behind the scenes, GIO Rail has been investing in digital technologies that modernize its day-to-day operations. The company recently migrated to a new rail inventory management platform that provides greater integration with commonly used business software, enhanced customer functionality, and more sophisticated analytical capabilities.

The investment reflects a broader transformation occurring throughout the short-line rail industry. Rather than relying on manual paperwork and disconnected systems, today's rail operators increasingly depend on digital platforms that provide

# GIO Rail's track network in Niagara



real-time visibility into railcar movement, inventory management, and customer information.

While software is changing how railways operate today, GIO is also watching technologies that could shape tomorrow's industry.

Battery-electric and alternative propulsion locomotives represent one promising area, offering the potential to reduce emissions and decrease reliance on traditional diesel power as the technology matures.

Drone-based infrastructure inspections are another emerging tool that could improve the speed and safety of monitoring track conditions and other railway assets.

For short-line railways, innovation often looks different than it does in large manufacturing plants. Rather than robotics or automation on the production floor, the focus is on smarter logistics,

better visibility, and more efficient asset management. Incremental improvements in scheduling, tracking, and infrastructure maintenance can deliver significant benefits across an entire supply chain.

Those efficiencies matter in a region like Niagara, where manufacturers compete in national and international markets and depend on reliable transportation networks to move raw materials and finished products.

As Niagara continues to attract investment in advanced manufacturing, clean technology, and industrial development, companies like GIO Rail provide an important connection between local production and the broader North American freight network. Modern rail logistics may not always be visible, but they remain a critical part of keeping the region's economy moving.

# Strength in numbers:

## the Niagara Industrial Association

### THE NIA

#### BY THE NUMBERS

~300  
members   
45 members in Welland

More than  
20,000   
jobs in Niagara  
supported by industry/  
manufacturing



Niagara is home to a remarkably engaged manufacturing community, and the Niagara Industrial Association (NIA) has championed networking, advocacy, and shared problem-solving on behalf of nearly 300 members.

We talked with Executive Director Jordan Sherlock to learn more about how the NIA supports the region's industrial sector.



Jordan Sherlock, NIA Executive Director

### **Representing the industrial sector in a mid-size region like Niagara, the NIA punches well above its weight. Why is that?**

**JS:** A big part of our success has been staying focused on the people we're here to serve. From the beginning, the NIA's goal has been to build an organization that genuinely reflects and responds to the needs of Niagara's manufacturing community.

This starts with listening. We spend a great deal of time talking with our members, understanding the challenges they're facing, and making sure those priorities shape everything we do.

Whether it's advocating on issues like workforce development, infrastructure, energy costs, trade, or government programs, we're focused on the issues that matter most to manufacturers, not what we think they should care about.

At the same time, we've worked hard to create meaningful opportunities for businesses to connect with one another, share ideas, learn from experts, and collaborate on common challenges.

Manufacturing can sometimes be a competitive environment, but in Niagara it's also a community. When companies

come together to solve problems and share knowledge, the entire sector becomes stronger.

That member-first approach has been the foundation of everything we do. It has built trust, encouraged businesses to become active participants rather than passive members, and helped establish the NIA as a credible, representative voice for industry across the Niagara region.

When members know they're being heard and see that their input leads to action, they're much more likely to stay engaged, and that's really what's allowed the organization to grow into what it is today.

**One of the things that stands out about the NIA is the diversity of your membership. Unlike regions that are closely identified with a single sector – automotive in Windsor, mining in Sudbury, petrochemicals in Sarnia-Lambton – Niagara brings together manufacturers from a wide range of industries.**

**JS:** We see Niagara's diversity as one of our greatest competitive advantages. Unlike regions that are defined by a single dominant sector, Niagara's manufacturing community spans a wide range of industries, from marine and aerospace, to food processing and metal fabrication, to automotive, chemicals, industrial equipment, and advanced manufacturing.

That diversity brings different experiences, ideas, and approaches to the table under the larger manufacturing umbrella, which creates opportunities for innovation and collaboration that may not happen in a more specialized region.

A great example is our plant tour programming, where NIA manufacturers open their doors to share best practices and learn from one another. We've seen companies discover new ideas around productivity, safety, technology, and operational efficiency by looking beyond their own industries.

**Welland's identity has long been rooted in heavy industry, but today's manufacturing sector looks very different. As legacy manufacturers modernize and new firms establish operations in the region, innovation has become essential to competitiveness. What role does the NIA play in helping its members adapt, innovate, and position themselves for future success?**

**JS:** We help manufacturers navigate change by making sure they have access to the information, resources, and relationships they need to remain competitive.

Manufacturing has evolved significantly, and success today requires more than just having a strong operation: it requires continuous improvement, adoption of new technologies, access to skilled talent, and the ability to respond quickly to changing market conditions.

A big part of what we do is create opportunities for manufacturers to learn from one another and stay connected. Whether through industry-focused events, educational workshops, plant tours, or networking opportunities like our Business After 5 events and membership meetings, we're focused on getting manufacturers in the room together.

Some of the most valuable insights often come from peers who are facing similar challenges and have found practical solutions.

We also recognize that innovation doesn't happen in isolation. The NIA works closely with education partners, government, and economic development organizations to help address workforce needs, encourage technology adoption, connect businesses with funding opportunities, and open doors to new markets.

Our goal is to ensure that both legacy manufacturers and new businesses have the support they need to adapt, grow, and continue building a strong and competitive manufacturing sector in Niagara.



Steel fabricator Steelcon has a new facility in Welland, as well as two sites in nearby St. Catharines.

The Corporation of  
the City of Welland

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