Canadian Transportation & Sailings Trade Logistics





Strong Performance for 2020

BY MARK CARDWELL



Photo: Sept-Îles Poi

For many places and industries, the unfortunate impacts of Covid-19 have made this a year to forget. But for the Port of Sept-Îles and its mining partners on Quebec's rugged North Shore, strong demand for steel, bullish prices for iron ore and an ability to maintain flu-free operations are making 2020 a year to remember.

"Business has been booming since the start of the pandemic," said Pierre Gagnon, the long-time President and CEO of the Port of Sept-Îles. "Our producers have the pedal pushed to the metal."

As of Oct. 31, roughly 26 million tonnes of iron ore mined from the Labrador Trough had been shipped from the port's docks and terminals in 2020.

Iron-ore shipments are expected to climb to 32 MT by end of December, making 2020 the sixth consecutive year in

which the Port of Sept-Îles has experienced an annual increase in the shipment of this merchandise.

And that's not all.

Port officials are still hoping to reach the 35.2-MT mark by year's end which includes all other merchandise handled. That would be a new annual tonnage record for the Port of Sept-Îles, eclipsing the all-time record of 34.9 MT set in 1974.

"As of right now there's an outside chance we'll break the record because ships are still lining up," Gagnon told Canadian Sailings in early November. "But even if we fall a few shiploads short, it's still been a heck of a year for our facility."

Twenty-twenty started off with a bang for the Port of Sept-Îles, with the facility's four mining partners – Iron Ore Company of Canada (a division of Rio Tinto), Quebec Iron Ore (a division of Champion), Tacora Resources and Tata Steel – shipping 7.9 MT of mostly iron ore during the first three months of the year.

New monthly tonnage records were established for January, February and March, resulting in the best first-quarter result in the port's 70-year history.

Similarly, 112 bulk carriers visited the port's docks and installations during that period, a nearly 50-percent increase in ship traffic over the first three months of 2019.

After reaching a first-quarter monthly high of 3.1 MT in March, when the Covid-19 pandemic reached fever pitch in much of the industrialized world, shipped tonnage at the port slipped slightly to 3 MT in April, as economies went into recession and iron ore analysts revised their mining and metals production and consumption forecasts sharply downwards.

In May, however, monthly tonnage totals were on the rise again, hitting a year-high peak of 5 MT in July. That was a half-shipload shy of the Port's monthly record of 5.1 MT set in 1979.

"Demand and prices for steel and iron ore remain strong," said Gagnon. "And we're optimistic that will continue well into 2021 and beyond."

According to Gagnon, the pandemic created both unique and unexpected supply issues and demand conditions that have benefitted producers of iron ore in many parts of the world, including Canada.

Covid-19 cluster outbreaks and subsequent government lockdowns, for example, have forced mine closures and caused major operational and output disruptions in several of the world's Top-Ten iron ore producing countries, including Brazil (second), China (third), India (fourth) and South Africa (sixth).

At the same time, global demand for steel and iron ore, the world's most commonly used metal and most traded commodity, has risen sharply as countries implement massive infrastructure stimulus programs aimed at boosting their economic recoveries from the pandemic.

"Steel is a correlation vector married to economic cycles," said Gagnon, a mining and mineral engineer from Sept-Îles who worked for Quebec Cartier Mining (later acquired by ArcelorMittal) before joining the Port as President & CEO in 2002. "On a macro scale the steel market is way up as industries retool worldwide and massive public works projects ramp up across Asia, Europe and the United States."

He noted that demand for iron ore is especially strong in China, which is the world's largest commodities consumer. "That's helped to keep world prices high," said Gagnon.

The Chinese, he added, are also buying more high-quality ore to blend with lower-quality material in an effort to lower greenhouse gas emissions in its steel production industry.

Though Canada ranks No. 8 among iron ore exporting countries with only 2 percent of the global market – almost all of it mined from the Labrador Trough, shipped 400 kms south by rail and loaded onto bulk carriers in both the ports of Sept-Îles and nearby Port Cartier (run by Arcellor-Mittal) - Gagnon said the quality of Canadian ore is second to none.

"Our product is more pure with fewer contaminants," he said. "That means better steel products and less slag for producers to get rid of after processing."

An added bonus, said Gagnon, is that blending ores fetch an extra US\$10-12 premium in the marketplace, where ore prices peaked at a US\$130 a tonne in September – the highest price since the historical low of US\$38 a tonne in 2015 and double the price of a year ago – though they have since pulled back to track around the US\$120 mark.

"When you compare that to 2012, when prices were at an all-time high of US\$180 and the Canadian dollar was trading at par with the U.S. dollar, our producers are making roughly the same amount of money now because our dollar is trading at around US\$0.75," he said.

Gagnon also credited the rigorous health measures put in place by the Port, its mining partners and their many subcontractors for helping to avoid the introduction and spread of Covid-19 in their mining, railway and port operations.

Those measures include screening of mine workers who fly in and out of the Quebec/Labrador mining towns of Fermont and Labrador City, and strict protocols regarding social distancing and mask wearing in the workplace and living areas.

The Port has also imposed strict onsite protocols and allowed many of its 15 staff members to work remotely from home.

"Like us, our mining partners have put the most stringent public health measures and guidelines in place and people are being very responsible in respecting and following those directives," said Gagnon. "As a result there have been no disruptions in production. And we're working hard to ensure things stay that way."

Taking Action to Preserve the Environment

BY MARK CARDWELL

As buried treasures go, centuriesold sediment from the bottom of a bay likely wouldn't make it onto most people's Top-Ten list.

But for marine bio-geographer Emilie Saulnier-Talbot, the core samples that were extracted from the Bay of Sept-Îles this year by two Canadian research vessels are worth their weight in gold.

"They are like time capsules that will allow us to go back and measure the historical changes that have occurred in the water," said Saulnier-Talbot, an associate professor at Université Laval (ULaval) in Quebec City and the first holder of the school's new research chair on coastal ecosystems and port, industrial and maritime activities. "That will give us the baselines and references we need to assess the current situation."

Created in February at ULaval's Northern Research Institute (INQ) and funded to the tune of \$1 million over the next five years by the Port of Sept-Îles and INREST, a Sept-Îlesbased non-profit research group that specializes in environmental and workplace health issues, the new chair aims to enhance our understanding and knowledge of the impacts that commercial port operations have on their surrounding marine ecosystems and to identify practices and protocols that will help ensure the sustainable development of those facilities.

A first step was taken when the Canadian Coast Guard-operated Arctic research vessel Amundsen visited the Bay of Sept-Îles in March



and took two long (1.5 metre) core samples plus several shorter ones.

In September, another scientific research vessel – the Coriolis II, a Rimouski-based ship that is owned and operated by a consortium of five federal and provincial government agencies and post-secondary schools – returned to take a second group of core samples.

Saulnier-Talbot is now preparing to study those samples, which are stored in a fridge in her lab at Université Laval.

An expert in diatoms – single-celled algae that react rapidly to physical changes in water like light, temperature and pH levels, much like the proverbial canary in a coal mine –

she plans to use spectroscopy and do elemental analysis of carbon and nitrogen traces from ages-old algae and bacteria pigments in the sediment to get a better picture of what she calls "the water-sediment interface" in the Bay of Sept-Îles.

"I'm hoping we can go back 1,000 years, though we need to do carbon dating to confirm that," said Saulnier-Talbot. "But we for sure can go back 150 years, which is the period that interests us the most."

According to Saulnier-Talbot, studying the physical and biological variables in the water coastal environment over time "will help us to infer and quantify changes that have occurred there past and present."

Though her work is focused in Sept-Îles, she said the relative newness of modern commercial port activities there may provide benchmarks and presumptions about the impacts that everything from heavy industry and maritime activities to global warming and ocean acidification are having on ecosystems in the Gulf of St. Lawrence.

"Sept-Îles is an amazing model bay because the port is only 70 years old," she said. "And it's both rare and refreshing to see a port authority investing so much time, interest and money in environmental research."

The new chair was not the only major initiative to evolve this year from the growing environmental partnership between the Port and INREST.

The two first partnered up in 2013, with the city of Sept-Îles, in a five-year, three-phase study on the environmental health of the Bay of Sept-Îles.

The bay received a clean bill of health in the final report from the INREST-run environmental observatory created for the study, which recommended continued investigation and monitoring.

In July, the Port and INREST announced the creation of the Centre for Industrial Port Expertise – or CEIP – a new INREST-run research body that will support the observatory's work and study the larger issue of industrial port ecosystems.

Backed by \$350,000 in funding from the Quebec government's Blue Fund program, \$250,000 over five years from the Port of Sept-Îles and long-term financial assistance from the city of Sept-Îles and port partners like IOC/Rio Tinto, Aluminerie Alouette and Minerai de fer Québec, CEIP will also notably work to develop a marketable version of a management model aimed at helping ports to identify and manage environmental and operational challenges.

The so-called Enviro-Actions model is based on the establishment of environmental observatories in industrial port areas that collect samples, use real-time data and satellite images to provide quality portraits of water, sediment, and other ecosystem elements. The instrumentalized system also sends alerts to management when environmental values change.

"After spills or other preventable problems you often hear senior managers say, 'Oh, if we'd only known,'" said Dr Julie Carrière, executive director of both INREST and CEIP and a chemical engineer with more than 30 years of consultancy experience on environmental and health and safety projects in Sept-Îles and across Canada. "Our approach is to help ports to prepare rather than to react."

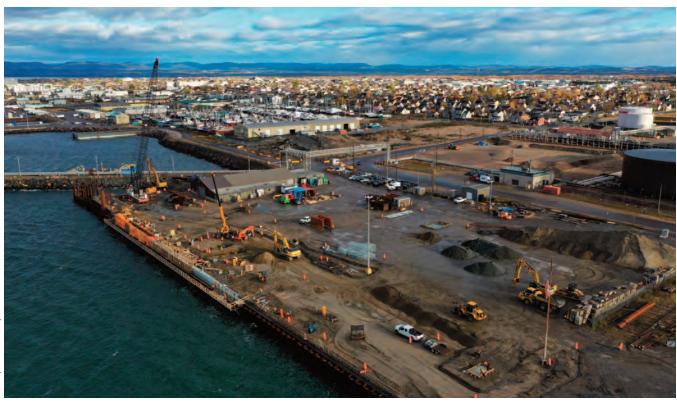
According to Carrière, the work being done by INREST, CEIP and the new chair is helping to make Sept-Îles a hotbed of environmental research on marine and port ecosystems - and she credits senior officials at the Port of Sept-Îles for providing the vision, encouragement and financial support needed to make it happen.

"We're developing tools and expertise here that are both unique and useful for ports all along the St. Lawrence River and elsewhere," she said. "But it wouldn't be possible without the openness and commitment of the Port of Sept-Îles to preserve the environment. They have been the key elements and partners in bringing obscurity to life and in pushing us to go further in our work."



Pointe-aux-Basques Terminal Under Major Renovation

BY MARK CARDWELL



hoto: Sept-Îles Port Authority

When the Pointe-aux-Basques terminal was built by the federal government in Sept-Îles in 1950, it was designed primarily to support the new iron ore mining operations that were then being launched in and around the Labrador Trough, 600 kilometres north.

Seventy years later, the terminal is undergoing a nearly-complete, \$20-million makeover that will allow it to continue buttressing the growth of those now-massive mining operations as well as northern and coastal communities on Quebec's rugged North Shore.

"The terminal has always been a lifeline into our region and a critical component of its development," said Manon D'Auteuil, director of engineering and sustainable development at the Port of Sept-Îles. "But we needed to increase its size and capacity in order to handle heavier cargo."

The upgrade began in May, when vibratory hammer-driven pilings and sheet piles were added to the front of the ex-

isting wharf and upper tie rods, fenders and the mooring system were replaced and/or upgraded.

The original 180-metre-long wharf, which is on the eastern extremity of the port of Sept-Îles, right next to Iron Ore Company of Canada's property, was also lengthened 40 metres (or 15 per cent) by backfilling the space between the existing jetty and the retaining wall and redoing the terminal surface.

Most of that work, which is being paid for in equal shares by the Port of Sept-Îles, the federal government (through the National Trade Corridors Fund) and the Quebec government (through its maritime transportation infrastructure program), is expected to be finished by year's end, with only the asphalt overlay and paving remaining to be completed in the spring.

The terminal is scheduled to reopen in July 2021 when cargo and passenger services to North Shore communities onboard the *Bella Desgagnés* resume at the Pointe-aux-

Basques dock. Those services were moved to the cruise ship terminal a year ago in preparation for the renovation project.

According to D'Auteuil, the upgrades to the Pointe-aux-Basques terminal will make it much better suited to meet the increasingly robust needs and demands of iron ore mining companies, northern communities and modern intermodal shipping.

In addition to being lengthened, the Pointe-aux-Basques terminal has had its bearing capacity more than tripled from 15 to 50 kilopascals, enabling handling of much heavier cargo.

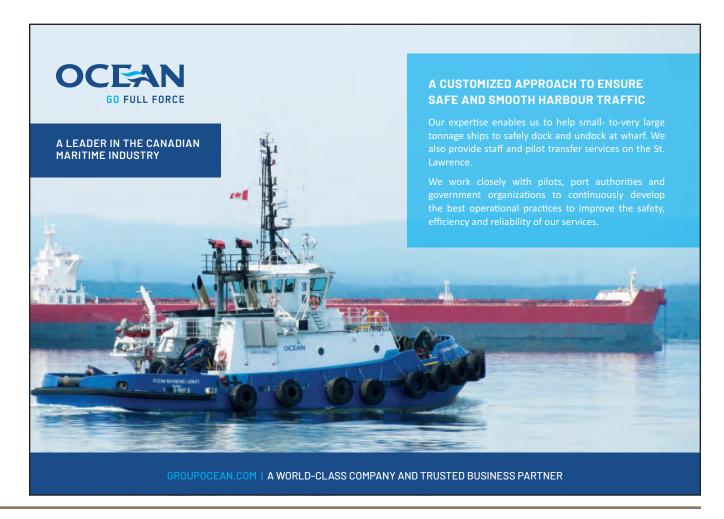
"Cargo today is much bigger and more diversified," she said. "We now handle things like full-length railroad rails, huge generators, train locomotives and massive industrial machines and parts. There's also more general cargo and big specialized items like industrial assembly for mineral processing."

Until now, D'Auteuil said the Port has had to redirect ships carrying oversized cargo across the Bay of Sept-Îles to La Relance terminal, where those items can be loaded onto trucks or railroad cars before being brought back to the Pointe-aux Basques dock or shipped directly from La Relance.

"Now we'll be able to handle everything at the Pointe-aux-Basques terminal," she said. "It will make everything so much easier and greatly improves our operational abilities and capacity."

"THE TERMINAL HAS
ALWAYS BEEN A
LIFELINE INTO OUR
REGION AND A CRITICAL
COMPONENT OF ITS
DEVELOPMENT."

Manon D'Auteuil



Contributing to Groups That Benefit our Community

BY MARK CARDWELL



Official opening of the ice oval at the Old Post: Port representatives, Pierre D. Gagnon and Patsy Keays, with Marée Motrice representatives, Virginie Lamontagne and Luc Charest, and members of the local community.

To hear Luc Charest tell it, active volunteerism, and gestures of goodwill by residents and local businesses is the spice of life in a remote community like Sept-Îles.

"Being involved and getting people together in fun, healthy ways is what it's all about," said Charest, a Sept-Îles native and a co-founder of Marée Motrice, a new local group dedicated to developing volunteer-based community activities and events.

Last winter the group spearheaded the creation of a big outdoor ice oval inside the palisade walls of the Old Post, a historical fur-trade interpretation site on the edge of town that operates during the summer months.

Armed with shovels, brooms and hoses, some 200 volunteers built and maintained the 400-metre-long oval from the Christmas Holidays to early March 2020.

Dubbed the Patinoire du Gardien (the Guard's Rink) in honour of Charest, a sound engineer with the local Innu community who lives next to the Old Post and moonlights as site watchman, the oval circled a small forest and was equipped with white and coloured lights that lit the ice and trees, benches and a counter where volunteers served free hot chocolate and chicken soup.

The oval attracted an estimated 3,000 skaters from Sept-Îles and the Uashat mak Maliotenam Innu reserve and received extensive local media coverage.

"It was an amazing activity that got rave reviews," said Virginie Lamontagne, a regional coordinator for Télé-Québec and another Marée Motrice co-founder.

Though the Covid-19 pandemic has cast doubt over the oval's return this winter, Lamontagne said several commu-

nity groups have provided money and materials to build boards around the ice and to buy and install a prospector's tent with a wood-burning stove.

The Port of Sept-Îles made a notable contribution of \$15,000 to the project.

"We owe a big thank-you to the Port for helping to enhance the oval experience," said Lamontagne. "Everyone loves it and wants to see it continue."

The Patinoire du Gardien was just one of 13 non-profit, volunteer-based community projects and activities that received a total amount of \$120,000 in funding from the Port in 2020 – a \$20,000 increase over 2019.

In February, for example, the Port was a major sponsor of a show by Quebec recording star Dan Bigras that raised nearly \$18 000 for La Maison du Transit, a local homeless shelter.

With the onset of the pandemic in March, the Port offered

a mix of financial and in-kind assistance to various community groups, including the purchase of a freezer for a local food bank and Easter eggs for seniors in low income housing units.

The Port also contributed to three annual fund raisers – L'Envol Maison de la famille, United Way, and 5 à Huîtres Maritime - by covering the cost of food and beverages in gourmet take-out meals.

The Port also provided four community groups - Centre d'action bénévole Le Virage, Recyk et frip, Comptoir Alimentaire de Sept-Îles and l'Élyme des sables palliative care centre – with free 30-second TV ads for a month each on the TVA network for the North Shore region.

"It was a way for us to help them get the visibility they deserve but couldn't otherwise afford," said Patsy Keays, the Port's Director of Corporate Affairs. "Contributing to groups that benefit our community is something we take very seriously."



New Developments at the Multiuser Dock Terminal

BY MARK CARDWELL

Major investments by the Port of Sept-Îles and its partners in and around the multiuser dock at the Pointe-Noire sector are helping to speed up and improve loading operations at North America's deepest dock and biggest bulk handling facility.

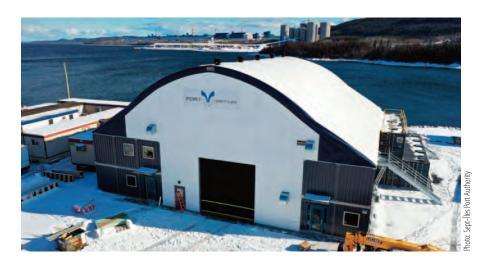
Work is nearing completion, for example, on a striking new office and workshop building made of 25 sea containers for port workers and stevedores who run operations at the multiuser dock 500 metres away.

The 40-foot containers are attached together to form a U shape, with offices over two floors on one side and a cafeteria, vestiary, washrooms and showers on the other. An arched middle area with commercial garage doors will allow machinery and other equipment to be serviced indoors.

"It's an original design concept, very maritime and industrial," said Étienne Bouchard, civil engineering technician at the Port of Sept-Îles and the project manager. "The containers are arranged like a puzzle, it's not a linear construction. Inside there are offices and hallways and common areas and windows like in a modern office building."

According to Bouchard, the exterior will be finished by the end of November and the interior by mid December. He expects workers with the Port and Logistec, which has the operational contract for the multiuser dock, will begin using the new facility before Christmas.

The new container building replaces the nearby clutch of four plywood halls-connected office/work trailers and a sanitation trailer that have been used by workers since 2012, when construction on the multiuser dock began.



who want to share freight costs and benefit from the economy of scale of large bulk carriers at our multiuser dock," said Pierre Gagnon, President and CEO of the Port of Sept-Îles.

Those abilities will improve, he added, once the \$180 million worth of upgrades and investments being done by SFP Pointe-Noire in the Pointe-Noire sector are finished by next year with a complete rehabilitation of the stockyard area.

In addition to the galleried conveyor to the multiuser dock, those improvements include a new \$30-million electrical station and distribution network and a \$20-million doubling of the transport capacity of the Quebec government-owned railway that services the port and mining company partners.

"Those massive investments will help to speed up loading at the multiuser dock and increase the operational capacity of this unique, state-of-the-art multiuser complex, combined with SFP Pointe-Noire ground facilities," said Gagnon. "The future of these facilities has never looked brighter."

Though the dock has been operational since 2018, when the galleried conveyor that carries iron ore concentrate to its two massive ship loaders from the Société ferroviare et portuaire de Pointe-Noire (SFP Pointe-Noire) stockyards 1,500 metres away went into operation, the trailers have remained.

"They were a temporary installation that no longer met our needs," said Bouchard. "This new building is much better suited to the needs of a busy, modern facility like our multiuser dock which offers 50 tonnes of annual capacity to the industry."

In addition to handling a record number of ships and iron ore in 2020, the multiuser dock's renown as a world-class facility grew in late September when it loaded nearly 200,000 tons of iron ore from three different mining companies onboard a single ship, the Pacific South.

The ship took on iron ore from Tacora Resources (80k tons), Tata Steel (79k tons) and IOC (39k tons) and carried it to ports in England and Holland.

"It's a testament to the flexibility and capability offered to our mining clients