



The St. Lawrence  
Seaway Management  
Corporation

Corporation de Gestion  
de la Voie Maritime  
du Saint-Laurent



**Annual Corporate  
Summary 2021-2022**

A green corridor leading to economic growth and opportunity





**Front cover photo:** Built in 2021, Algoma's "Captain Henry Jackman", which is 35% more fuel efficient than older vessels, is a great example of how partners in the maritime industry are leveraging technology to increase cargo capacity while reducing their carbon footprint.

Over the years, The St. Lawrence Seaway Management Corporation (SLSMC) has invested in modernizing and optimizing its operations. These improvements have strengthened its position as an essential transportation corridor for the efficient movement of products between North American and world markets.

Through improvements and the use of technology, the St. Lawrence Seaway Management Corporation (SLSMC) has reduced its Green House Gas Emissions well ahead of the targets set by the Federal Government for the year 2030, which is helping drive sustainability.

Moving forward, we will continue to promote the use of vessels versus other less environmentally-efficient modes of transport, work with partners in the maritime industry to further reduce Green House Gas Emissions, contribute to the creation of a Green Corridor and help respond to global supply chain disruptions.

**Terence Bowles, President and CEO**

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# OUR VALUES

**Safety:** We do it right. We do it safely.

**Respect:** We do right by others.  
We are accountable for our results.

**Integrity:** We act ethically. We are fair,  
honest and open.

**Innovation:** We continuously improve  
through creativity and technology.

**Collaboration:** We work as a team.





# OUR MISSION

We serve our customers by passing ships through a safe, secure and reliable waterway system in a cost effective, efficient, environmentally and socially responsible manner to deliver value to the North American economy.





# OUR VISION

The SLSMC and its partners... an essential and responsive transportation system connecting the heartland of North America to the world.



# PRESIDENT'S MESSAGE



On March 24, 2022, an opening ceremony was held in the Niagara Region to mark the Seaway's 64<sup>th</sup> navigation season. This year, we were able to host an "in person" event and welcome back many industry, political and community members. The CSL Welland was the opening vessel and it displayed a newly commissioned mural in honour of the Canada Summer Games, being held this summer in the Niagara area.

During the event, Transport Minister Omar Alghabra recognized the Seaway as an essential link between the Great Lakes and the Atlantic Ocean, and thanked the Seaway and its employees for their role in delivering essential goods.

The measures we implemented at the outset of the COVID pandemic, along with constant monitoring, allowed us to maintain safe worksites and operations. In fact, we did not lose a single shift because of a COVID outbreak during the last two navigation seasons. Our Seaway employees deserve enormous credit for this achievement, and for maintaining non-interrupted shipping on the Seaway during the pandemic.



Operationally, the Seaway had another successful year in 2021/22, with more than 38 million tonnes of cargo transiting the system, an increase of 1 percent year-over-year. Whereas in 2020 grain was our mainstay, due to the drought in Western Canada, there was a significant drop in grain exports in 2021. The gap was filled by increased iron ore and steel shipments, which reflected an overall improvement in the world economy. In terms of revenue, we ended the year at \$83.6 million, plus \$7.7 million in revenue generated from lands administered by the Corporation. This allowed the Corporation to fully cover \$52.3 million in manageable costs and contribute \$39 million to asset renewal.

Maintenance and system upgrades are part and parcel of our business. Each year, millions of dollars are spent on Asset Renewal Plans, including \$75.7 million in 2021/22. This level of spending not only ensures the reliability of our infrastructure, but provides employment to many contractors who carry out this work, especially during the winter works period of January to March.

The last two years have shown that marine transportation remains a resilient mode for transporting goods around the world, even during times of shortages and interruptions in the supply chain. For its part, the Seaway has played a key role as a reliable transportation corridor, ensuring consistent and predictable service.

The Seaway is consistently available more than 99% of the time. Its excellent safety record, its focus on leveraging technology, along with its low carbon footprint and energy efficiency, make

it a strong partner for industries and communities on both sides of the Canada / United States border. We work closely with the U.S. Great Lakes St. Lawrence Seaway Development Corporation to ensure our operations and strategic objectives are aligned, and that we provide a seamless service to carriers and shippers using the bi-national Seaway system.

Weather conditions were such that the 2021 navigation season closed without any concerns about ice. As part of a five-year pilot program, for the third consecutive year, the Welland Canal's season was extended to early January. With climatic changes and improvements being made, we are now working towards a later closing date for the Montreal-Lake Ontario section of the waterway. Of course, we are cognizant that our ability to operate later is dependent on the amount of ice in the system in any given year and the support of the Canadian and US Coast Guard ice-breaking vessels.

While on the subject of water and weather conditions, over the years we have worked with other stakeholders to implement mitigating measures that allow vessels to transit the system safely, even at higher water flow levels. As always, this is a delicate balance and we monitor the water levels closely to ensure we can operate safely, while minimizing the impact to residents of communities adjacent to the waterway.

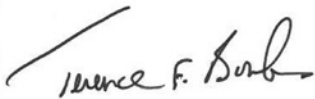
Climate change and the increasing negative impacts we are witnessing serve as a wakeup call for each of us to take more concrete actions to turn the tide and ensure future generations grow up in a healthy world. Over the years, along with producing hydro-electric power, the Seaway has taken steps to reduce its carbon footprint, including adding electric vehicles and

equipment. We are now well ahead of the 2030 targets set by the Federal Government for greenhouse gas emissions. Our next step is to work with other stakeholders to make the Great Lakes / St. Lawrence Seaway system a truly “green corridor”.

Looking ahead, we realize that there are still many unknowns in relation to the pandemic, consumer habits and the Russia / Ukraine conflict. Nevertheless, we continue to explore opportunities to increase existing commodities, and work with shippers, carriers and other partners to attract “New Business”, as the current Seaway locks and channels can easily accommodate a 50% increase in tonnage.

The Corporation is in its 25<sup>th</sup> year since commercialization, and we are proud of our achievements over this first quarter century in becoming a more modern and efficient transportation route. We are now working towards the renewal of a long-term management agreement with the Federal Government, which builds on the momentum we have established thus far.

So, all in all, 2021/22 was a good year for the Seaway. We faced challenges, both because of the pandemic and the world economic and geopolitical situation. I believe these have made us stronger and ready to tackle the next wave of challenges and opportunities.



**Terence F. Bowles**  
*President and CEO*

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transportation route.**

# BUSINESS GROWTH

The results for 2021/2022 cover shipping activity between March 19, 2021 and January 7, 2022.

**Simple.**  
**Competitive.**  
**Connected.**

**Simple.** The Corporation through HWY H<sub>2</sub>O is focused on creating an easy, streamlined approach to doing business on the Great Lakes – St. Lawrence Seaway System.

**Competitive.** Continued toll incentives and the unique ability to bring transportation decision makers together create a System that is economic and competitive.

**Connected.** The network of contacts and connections via HWY H<sub>2</sub>O is vast and experienced.



## Traffic Results

Seaway traffic reached 38.2 million tonnes in 2021, 0.4 million tonnes (1.1%) above 2020 results.

In a year that tested supply chains around the world, the Seaway remained a beacon of unwavering reliability.

Seaway users could depend on the System to deliver their goods, allowing them to maintain operations in an environment

of strong demand. Several Seaway staples bounced back after being negatively impacted during the COVID-19 pandemic, including general cargo shipments, which improved by an imposing 73% over 2020, as North-American manufacturers once again turned to the Seaway to ensure timely and reliable delivery of critical steel

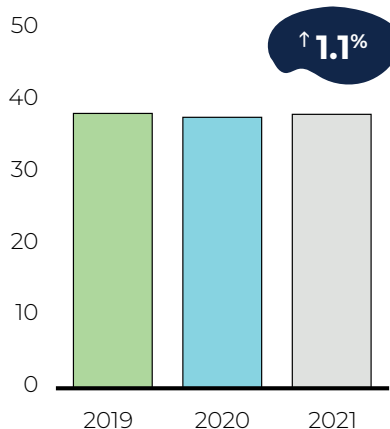
and slab imports. Also, the lifting of COVID-19 containment measures allowed liquid bulk cargoes to gain back a portion of the ground lost during the pandemic. The category closed the year with a 5% increase.

Beyond being a dependable supply chain for their core business, Seaway users count on the System's adaptability to take advantage of opportunities offered by international markets. In 2021, these included a myriad of export commodities such as iron ore, which increased 13% year-over-year, as well as coke and potash which contributed to the 8% increase of the Dry Bulk segment.

These exceptional results more than offset the substantial 20% drop in export grain shipments, caused by a drought event that affected crops in key growing areas.

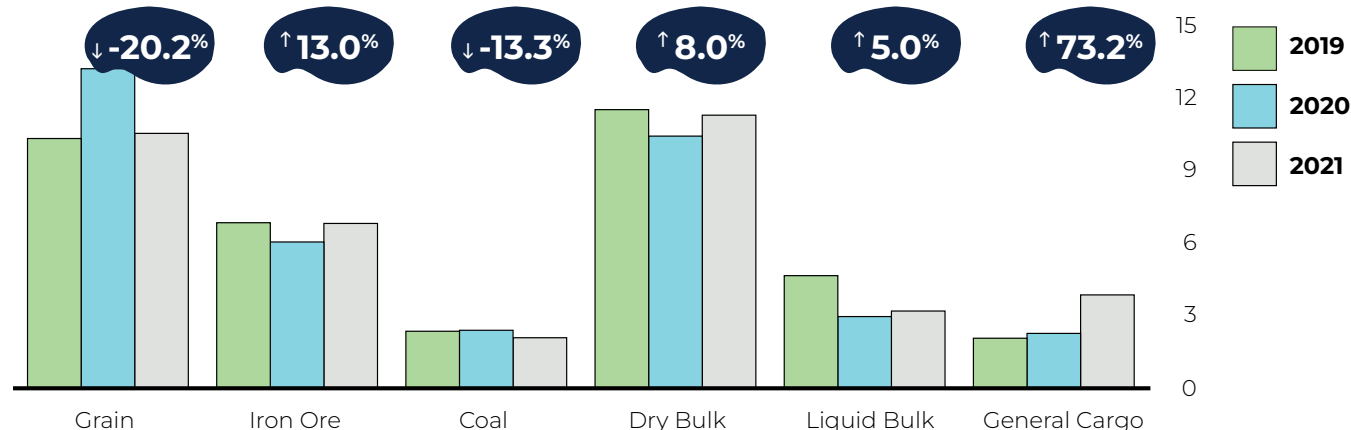
### TOTAL TONNAGE

(total cargo in millions of tonnes)



### RESULTS BY CARGO TYPE

(total cargo in millions of tonnes)



## Working with Shippers to Provide New Supply Chain Alternatives

### Seaway Real Estate

The Corporation manages substantial land holdings and is always interested in exploring new business opportunities, especially those that contribute to the competitiveness of the HWY H<sub>2</sub>O system and reinforce its position as a global trade corridor. Its teams work closely with community stakeholders to ensure optimal utilization of these lands, as well as to diversify cargoes and provide further economic development for each region in which the Seaway operates. The Corporation's Market Development activities help create awareness of available Seaway lands and provide information to attract business that can benefit from the proximity of the Seaway. One tool developed for this is the Seaway's Real Estate website, which provides information to potential tenants.

Examples of successful economic develop projects in the St. Catharines Commercial Hub include Heddle Shipyards and Stubbe's Cement. In the Côte Sainte Catherine Commercial Hub, examples include Sollio Cooperative Groups, Trackworld and CertainTeed Gypsum.

# GATEWAY INCENTIVE PROGRAM 2022



## INTRODUCTION

The Gateway Incentive Program offered by The St. Lawrence Seaway Management Corporation supports shippers by allowing them to leverage the Great Lakes Seaway System to expand their supply chain options! The Gateway Incentive Program offers a percentage reduction negotiated and offered on applicable cargoes tolls.

## SAVE TIME & MONEY

- Direct Access into all of North America
- Trading in over 50 Global Markets
- Bulk, Break Bulk, Liquid & Special Cargo
- Seamless Supply Chain with a Connected Network

## SHIP WITH US TODAY

 Business Development Team  
Call: 1-905-641-0309  
Visit: [HWYH2O.COM](http://HWYH2O.COM)  
Connect: [HWYH20@SEAWAY.CA](mailto:HWYH20@SEAWAY.CA)

## RULES

To be eligible cargoes must presently be moving between a specific origin and destination via other competing gateways

## PROCESS

Shipper submits an application prior to the proposed movement including the existing routing details and volumes

## RISK

There are NO PENALTIES or RISKS for the shipper!

## REWARD

50% reduction on applicable cargo tolls

\*other conditions may apply

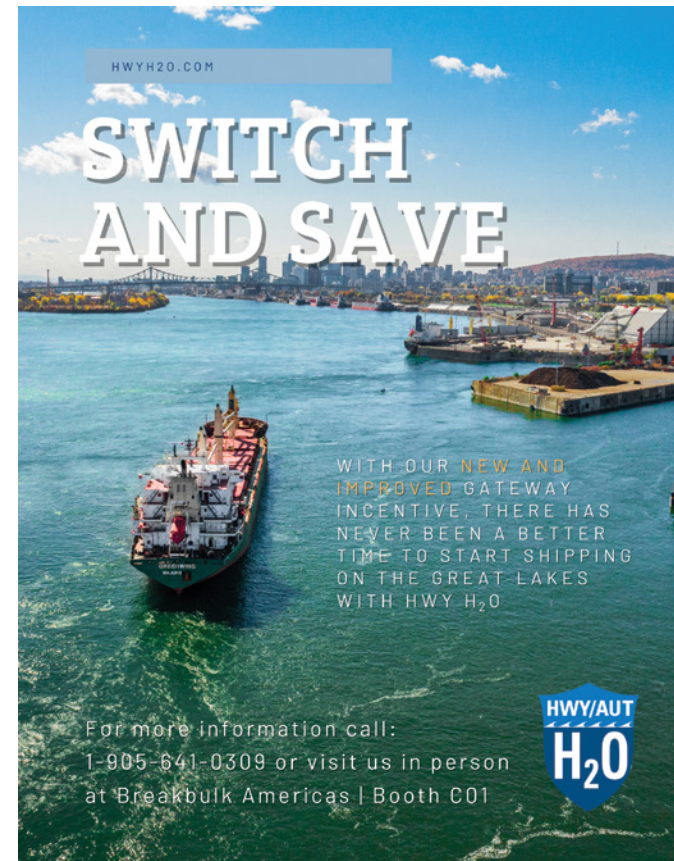
## Bi-National Marketing Initiatives

The St. Lawrence Seaway Management Corporation and the U.S. Great Lakes St. Lawrence Seaway Development Corporation continue to work together to create and implement joint strategic initiatives. These initiatives are anchored by the HWY H<sub>2</sub>O program and include the sponsorship of various marketing campaigns, hosting of the annual HWY H<sub>2</sub>O Conference and participation in trade shows and workshops.

HWY H<sub>2</sub>O members include port partners, carriers, terminal operators, stevedores, logistics providers and cruising members. Members took part in a few key events, online and in person, such as JOC Breakbulk & Project Cargo, Fields on Wheels Conference, Breakbulk America's and CleanPower 2021 (AWEA).

The team continued with online outreach through virtual stakeholder engagement meetings, conferences and webinars that allowed the HWY H<sub>2</sub>O team and stakeholders to stay connected.

The 2021 HWY H<sub>2</sub>O Conference was postponed to November 2022 to allow for an in-person event and to maximize stakeholder networking opportunities.





# OPERATIONAL EXCELLENCE

Instill a  
“Zero Harm”  
safety culture

Deliver secure,  
consistent and  
predictable service  
to Seaway  
customers

Continue to enhance  
the organization’s  
culture of continuous  
improvement and  
leverage technology



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## Navigation Season

The St. Lawrence Seaway's 63<sup>rd</sup> navigation season opened on March 19, 2021 for the Welland Canal (Niagara Section) and on March 22, 2021 for the Montreal/Lake Ontario (MLO) Section. The last commercial transit in the MLO Section occurred on December 31, 2021, providing a total of 287 days of navigation. For the Niagara Section, the last vessel transited on January 7, 2022, providing a total of 294 days of navigation for the Welland Canal.

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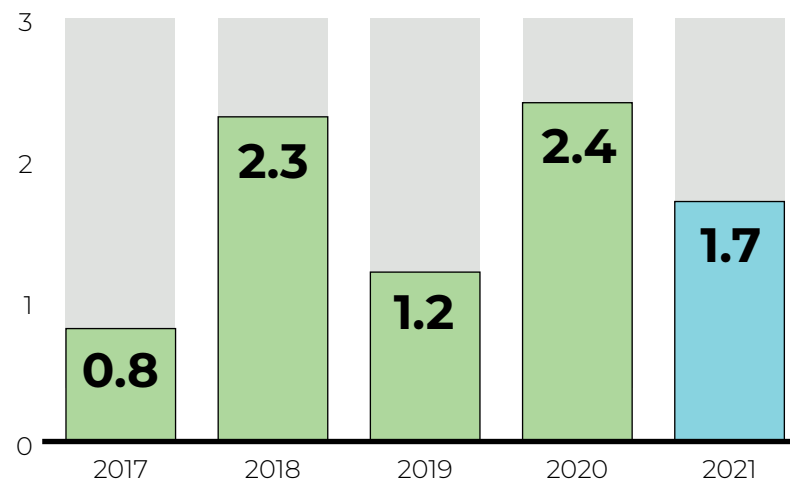
## Marine Safety and Security

The marine mode of transportation remains the safest and most reliable means of moving cargo. During the 2021/22 season, there were 10 commercial vessel incidents in which damage occurred to vessels or Seaway structures, resulting in a vessel incident rate of 1.7 per 1000 transits. Compared to last year's rate of 2.4, this represents a reduction of 29%. No injuries or pollution resulted from these events.

Over the course of the navigation season, the Corporation's Marine Security Facility Plan was approved, and its Marine Facility Security Certificate was renewed for five years. The Seaway's security infrastructure is well established, and its Operations clearly demonstrate a heightened security culture.

### VESSEL INCIDENT RATE

Number of incidents per 1,000 transits



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## Pleasure Craft Season

With the loosening of public health measures, pleasure craft services resumed in 2021. During the season, 3,700 pleasure craft were processed in the Welland Canal and 11,725 in the Maisonneuve Region. Both regions now offer pleasure craft operators an on-line self-serve platform, where they can create, modify, cancel and pay for their transits.

## Maintenance Program

Several years ago, the Corporation initiated a project to review the entire Maintenance portfolio to ensure the organization was doing “the right work, at the right time, with the right resources.”

The new maintenance structure is service-centric focused. Results to date have been positive, with system availability in excess of 99.5%, and a reduction in breakdowns and associated delays. As well, the program uses a mobility application, which enables real time work assignment, dispatching and field execution reporting.



## Ballast Water Management

This year was the 13<sup>th</sup> consecutive year that Seaway inspectors subjected every vessel bound for the Great Lakes – St. Lawrence Seaway System originating from outside the Exclusive Economic Zone (EEZ) to rigorous ballast water management tests. Although the COVID-19 Pandemic presented a challenge in achieving physical sampling of all ballast water tanks, through close cooperation between the SLSMC, GLS and Transport Canada, 100% inspection and compliance of ballast water tanks was achieved, with no non-compliant ballast water discharged in the System.

A recent study by Dr. Anthony Ricciardi, (Professor of Invasion Ecology & Aquatic Ecosystems in the Redpath Museum and Bieler School of Environment, McGill University) and co-author Hugh MacIsaac (Professor and Canada Research Chair in the Great Lakes Institute for Environmental Research, University of Windsor), validates the efforts of the SLSMC, GLS and Transport Canada in enforcing the Ballast Water Management program and reducing the risk of introducing aquatic invasive species into the Great Lakes Seaway System. “To our knowledge, the 2006/2008 regulation is the only case of a policy intervention that is linked to a massive reduction of the invasion rate of a large aquatic ecosystem.”<sup>1</sup>

<sup>1</sup> Ricciardi, A., & MacIsaac, H. J. (2022). Vector control reduces the rate of species invasion in the world’s largest freshwater ecosystem. *Conservation Letters*, e12866. <https://doi.org/10.1111/conl.12866>



## Infrastructure Management and Asset Renewal

Maintaining a safe, reliable and cost-effective transportation system is vital to the Seaway's competitive position. The Corporation uses a well-established Asset Management System to optimize value from its assets and contribute to a sound long-term planning process, ensuring that capital expenditures lead to consistently high levels of system availability.

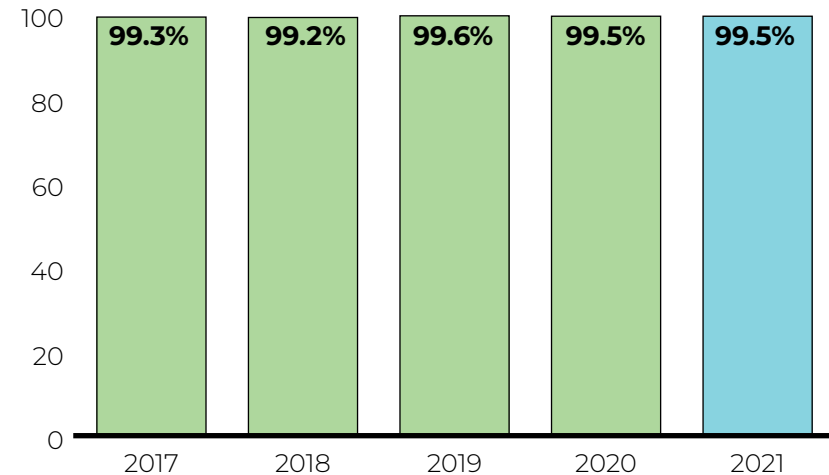
In 2021/22, the SLSMC spent some \$75.7 million on renewing and maintaining its infrastructure.

Over the course of the navigation season, the system availability rate which incorporates delays attributable to the Seaway was 99.5%, once again exceeded the 99.00% target.

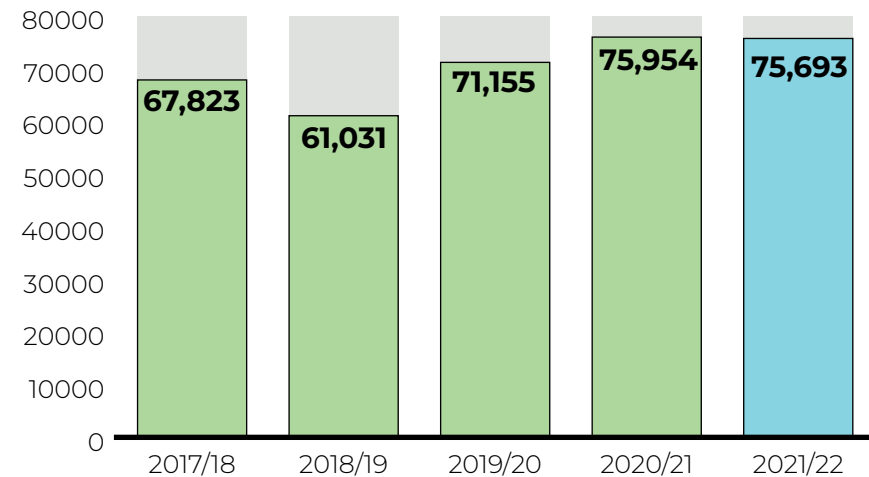
The use of technology and innovation as part of the Corporation's infrastructure program will continue to play a crucial role in helping the Seaway capture new markets and value chains by improving the flow of vessels transiting the Seaway.

### SYSTEM AVAILABILITY

Target 99.00%

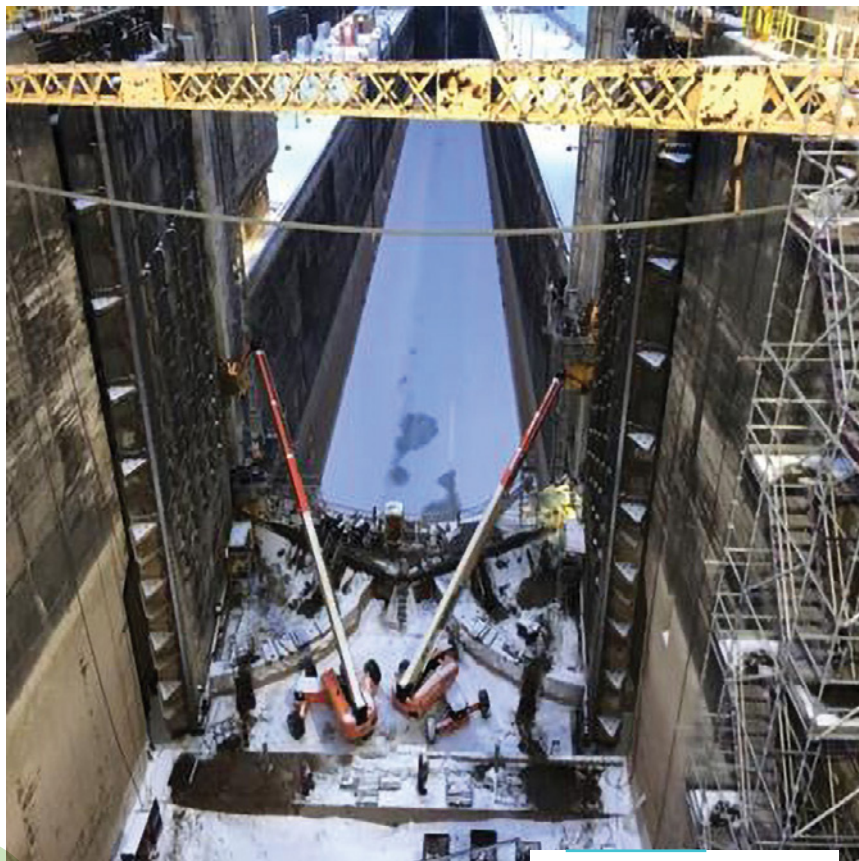


### ASSET RENEWAL SPENDING



## Examples of major projects executed over the course of the 2021/22 Fiscal Year

### Niagara Section (Welland Canal)



Welland Lock 6E, Gates 3 & 4 – Rehab Mitre Gate Quoins



Welland - Bridge 6, Major Rehabilitation

### MLO Section (Montreal/Lake Ontario)



MLO Beauharnois basin, Replace fenders (neoprene fenders)



MLO - Lock 4, Wall Concrete Repairs and replacement of Miter quoins on G3&G4



Operator Station, Human Machine Interface (HMI) Upgrades



## Safety

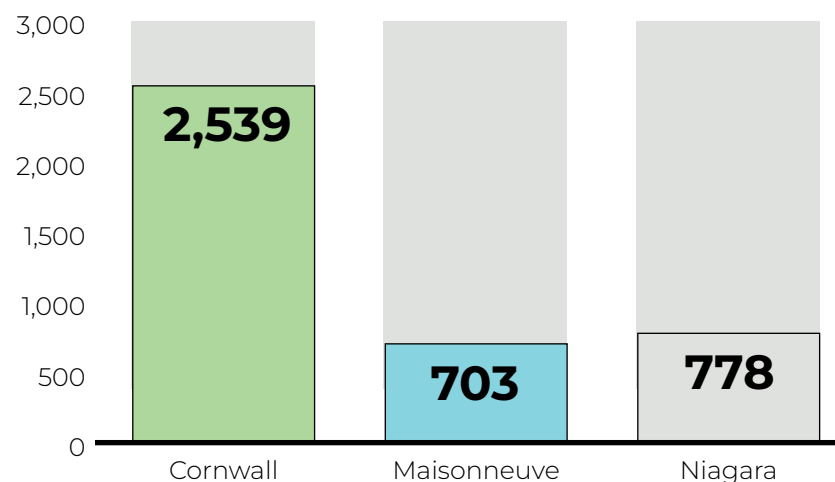
The Corporation again this year attained excellent, world-class safety performance results. The Seaway's "Making Safe Choices" campaign has been successful in influencing employee performance and safety focus. For the 2021/22 fiscal year, the Corporation achieved the important milestone of over 1 million hours worked without a lost time injury on a Seaway site.

The Corporation continues to track contractor incidents and has noted significant improvement in their performance, with zero lost time incidents and three recordable incidents. Frequent inspection, communication, and review of incidents with contractors has improved performance and prevented recurrences.

The Corporation is undertaking several safety initiatives. These include increased functionality improvements to its safety software, and an audit and improvement program for working at heights.



**DAYS SINCE LAST LOST TIME INCIDENTS**  
(RESULTS AS OF MARCH 31, 2022)





## 2020/21 President's Safety Award

On September 23, 2021, the President's Safety Award was presented to the Niagara Engineering team in recognition of their achievements in working safely. Some of the significant safety initiatives undertaken by the team include:

- ➔ Trained all Senior Engineers and certified all Inspectors with Canada OHS regulations SOR/86-304, Section 12, enabling self-inspection of personal fall arrest systems.
- ➔ Installed Fibre-reinforced plastic stairs in Townline Tunnel to prevent corrosion damage.
- ➔ Installed equipment on the locks of the Welland Canal to further enhance safety when employees working with mooring lines to perform tie-up services.



(Left to right): Sylvain St. Arneault, General Manager, Engineering; Cassie Kelly, Manager, Engineering and Terence Bowles, President and C.E.O.

# HIGH PERFORMANCE WORKFORCE

The Corporation's agile workforce was key to its success in 2021/22, especially while in the midst of the pandemic. A recently introduced Hybrid Work Program facilitated the return to the workplace for employees who worked remotely during the pandemic. The model addresses business requirements, while recognizing the changed expectations by the workforce for more flexibility. It's an important element in attracting and retaining talent.

The recruitment and development of Operations Controllers continues to be a key strategy to ensure the availability of a skilled workforce to facilitate the safe navigation of vessels. During the last year, excellent progress was made in the skill development of recently hired Operations Controllers.

Audrey Ané, Operations controller in training  
Annabelle Né, Operations controller





## Bob Swenor Award

The Corporation kept up its tradition of recognizing an employee who embodies the Seaway's corporate values, and those of Bob Swenor, the first Chair of The St. Lawrence Seaway Management Corporation. The award for 2021 was presented to Claude Fontaine, an Electrical Engineer working in Brossard, Quebec. Claude is an integral member of the Engineering team, who has been recognized for his work as a member of the Canadian Standards Association Group responsible for writing construction standards for movable bridges. Outside of work, he is active in his community coaching youth hockey and soccer. Claude used his award to support "Destination Travail Lasalle", a not-for-profit organization.



Claude Fontaine, on the right, presenting a cheque to the non-profit organization "Destination Travail Lasalle".

## United Way Campaign

Employee donations to the United Way Campaign totaled \$61, 500 which, with the Corporation's matching, meant almost \$123, 000 was donated to community organizations supported by the following United Way agencies:

- United Way of Stormont, Dundas & Glengarry
- Centraide of Greater Montreal
- United Way Niagara



SLSMC Niagara Region recipient of United Way Niagara 2021 Committee of the Year Award

## Business Improvement

Innovation is a part of the Seaway's day-to-day operating mindset. This includes using technology to improve the efficiency of the entire Great Lakes / St. Lawrence Seaway system. By working closely with carriers and other stakeholders, technology is being developed to enhance processing and data sharing. The aim is to have more accurate information available for the scheduling of transits.

The SLSMC's technology roadmap, which was developed through internal consultation and external discussions, is constantly being updated.

As part of the Corporation's efforts in business and continuous improvement, annual savings targets are established. During 2021/22, projects such as improved disability management, mobile maintenance in support of the Corporation's revamped maintenance program and correspondence management all contributed to the Corporation meeting its savings target.

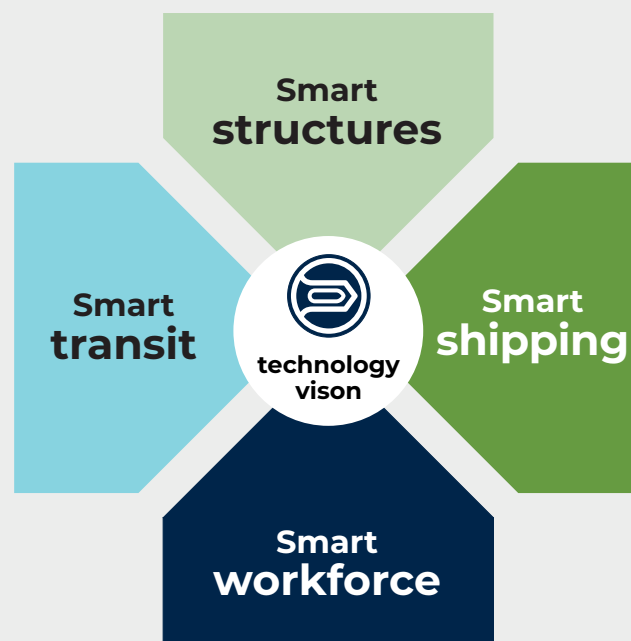
### Our technology vision focuses on four axis:

**Smart transit:** technology helping provide a consistent stable safe secure and efficient vessel transit

**Smart structures:** intimate knowledge of our structures enabling even better condition monitoring investments

**Smart shipping:** focus on improving the business environment and administrative functions for our customers

**Smart workforce:** enabling productivity improvements through technology such as mobility and our HR system "Connexions".





## Business Improvement Award

In 2021, the Pleasure Craft Reservation System Team won the business improvement award. A team was established to develop a pleasure craft reservation system that would minimize contact and risk during the COVID-19 pandemic. The main objective of their initiative was to continue providing lockage services to pleasure crafts while protecting Seaway personnel and the community. It was a joint effort by several departments that succeeding in quickly delivering results.

The team members include:

Jamie Andrews	Maria Ma
Frédéric Dubé	Sébastien Mercier
David Éthier	Mélanie Paquette
Shari Grady	Jani Pilon
Aimée Hugues	Dan Roy
Deric Hillman	Léa Bélanger (student)
Tom Kroon	Gabrielle Parent (student)



# STAKEHOLDER ENGAGEMENT

**Along the Seaway, the SLSMC touches many urban and rural communities including:**

South Shore  
Canal in  
the Greater  
Montreal Area

Welland Canal  
in the Niagara  
Region

Beauharnois  
Canal in the  
“Higher Saint-  
Laurent River”

Communities in  
the Cornwall /  
Massena areas





Over the years, the Seaway has become part of the social fabric of many communities along the waterway. Many jobs in these communities are linked to Seaway activities, and the Corporation is dedicated to making positive impacts at local, regional and national levels.

The past year culminated in a strategy to reach a greater level of stakeholder engagement, particularly in terms of protecting the rights and interests of communities adjacent to the Seaway.

## Community Outreach

Local and municipal government representatives, Provincial and Federal government members and the SLSMC, meet regularly to address concerns and issues that arise from the shared use of water resources.

This collaborative approach has helped establish a closer relationship between the SLSMC and adjacent communities; and facilitate the flow of information. Another benefit of this collaboration is the ability to resolve issues and communicate with key stakeholders prior to the execution of major projects.

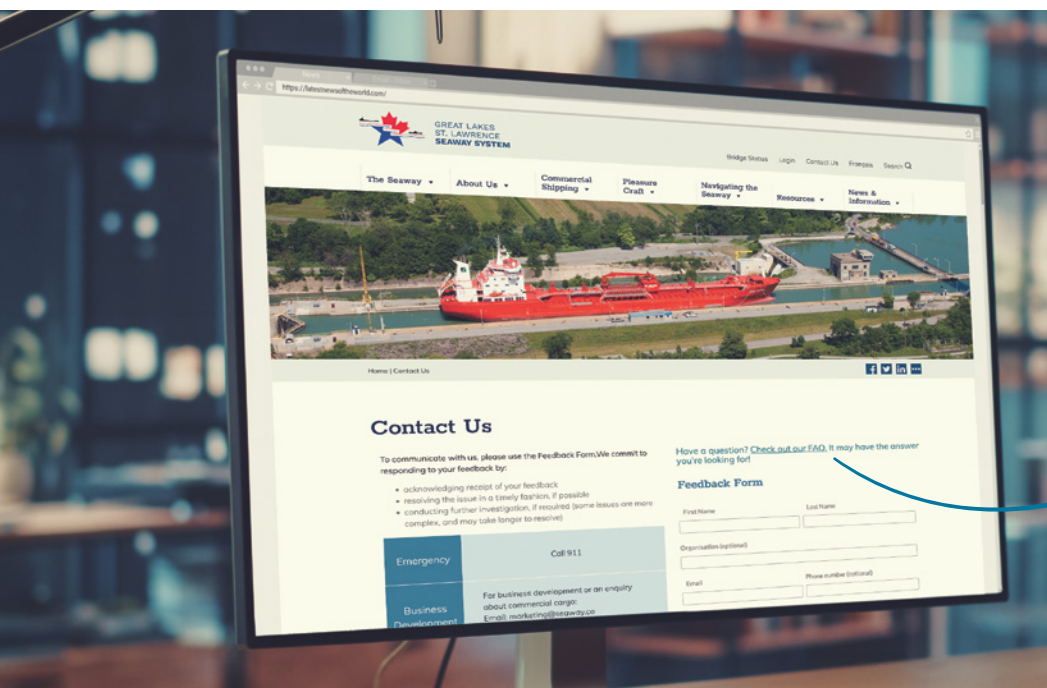
The following examples highlight some of this outreach work:

### A new way of corresponding: Engaging and Structuring Interactions

A new correspondence management system has been established using the Corporation's website to allow easier contact through a feedback form. Other improvements have been made to the website to improve access to general Seaway information on subjects such as the pleasure craft service and bridge operations.

#### Contact Us:

[Great Lakes St. Lawrence Seaway System \(greatlakes-seaway.com\)](https://greatlakes-seaway.com)







## Bridge Operations in the Beauharnois Canal: More predictable and Accurate

An ongoing issue has been bridge operations and the impact of bridge lifts on local commuters. This includes in the Beauharnois-Salaberry region, where residents and local representatives provided feedback to help improve information sharing. Recently implemented technology changes now make information on the bridge status page more accurate, allowing for easier travel planning for motorists and recreational boaters. This technology will be used for bridges in other areas of the Seaway.



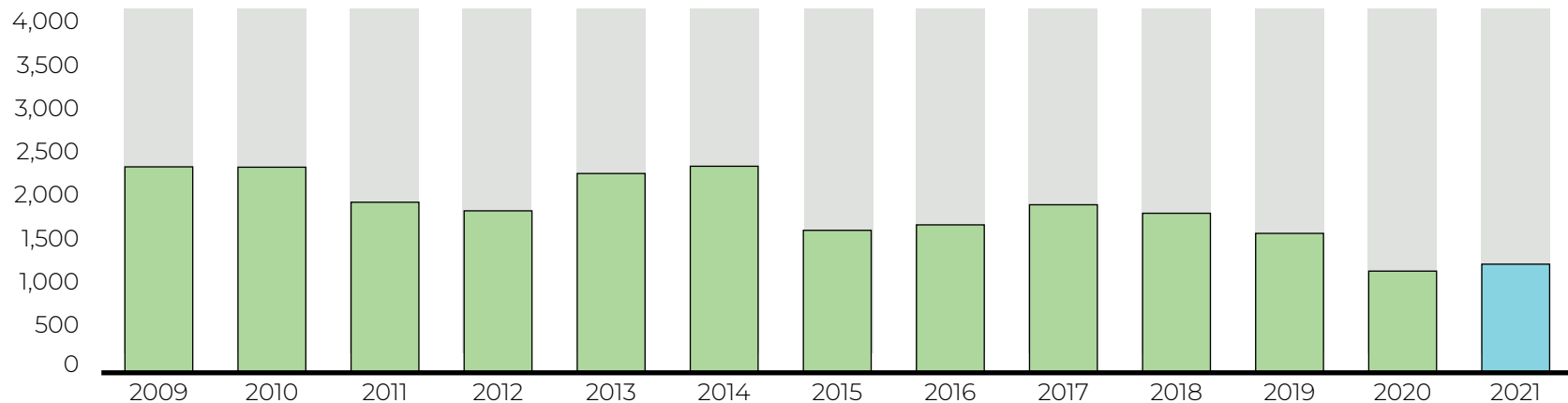
## The Use of Social Media – Creating Ambassadors of the Marine Industry

The Seaway increased its use of social media throughout 2021 to promote the importance of marine shipping and to generate awareness of the social, environmental and economic benefits of marine transportation.

In 2021, the Corporation strengthened its stakeholder outreach activities to maintain constant dialogue and collaboration with local, provincial and federal governments on a variety of projects, initiatives and issues related to marine shipping development, coexistence of the marine industry with local and First Nations communities, environmental concerns, maintenance and operations impacts, national supply chain related issues, provincial maritime strategies and more.

## SLSMC GREENHOUSE GAS EMISSIONS

Tonne equivalent CO<sub>2</sub>



## Green Marine

The Corporation is an active member and proponent of Green Marine, a world-leading environmental performance measurement program for the marine industry. The Corporation aligns its scores with those of its U.S. counterpart, the Great Lakes St. Lawrence Seaway Development Corporation and provides results on an aggregated basis. Overall for 2021, the Seaway entities achieved an aggregated score of 4.6 out of a maximum of 5. As part of its continuous improvement process, the Corporation successfully completed the alignment of its Environmental Management System with the ISO 14001:2015 Standard, and will be pursuing ISO certification in the near future.

## On the Path to Net Zero

Canada's new climate law (*Net-Zero Emissions Accountability Act*), voted by Parliament in June 2021, enshrines in legislation the Government of Canada's commitment to achieve net-zero greenhouse gas emissions by 2050. It establishes the 2030 greenhouse gas emissions target as Canada's Nationally Determined Contribution (NDC) under the Paris Agreement emissions reductions of 40-45 percent below 2005 levels by 2030.

As shown in Table 1, the SLSMC has already exceeded the GHG reduction targets set for 2030, with GHG reductions of 58.4% averaged for the 2017-2021 period, and 66.7% reductions when compared to 2021 levels. These reductions are accounted for by the replacement of fuel-powered equipment with electrical equipment, by operating more energy-efficient company vehicles, and with increased energy efficiency from SLSMC buildings.

**Table 1 : GHG Reduction Levels – SLSMC**

Year	SLSMC GHG Emissions (metric ton eq. CO <sub>2</sub> )	% Reduction (versus 2005 levels)
2005	3,751	0% – Reference year
2017–2021	Average 1,559	58.4%
2021	1,250	66.7%

## Wildlife Protection

In order to improve wildlife protection along the Welland Canal, especially the bald eagle population, a project was initiated to install electrical protection on SLSMC high voltage distribution poles. This initiative will be pursued in the upcoming years to equip a greater number of high voltage distribution assets.

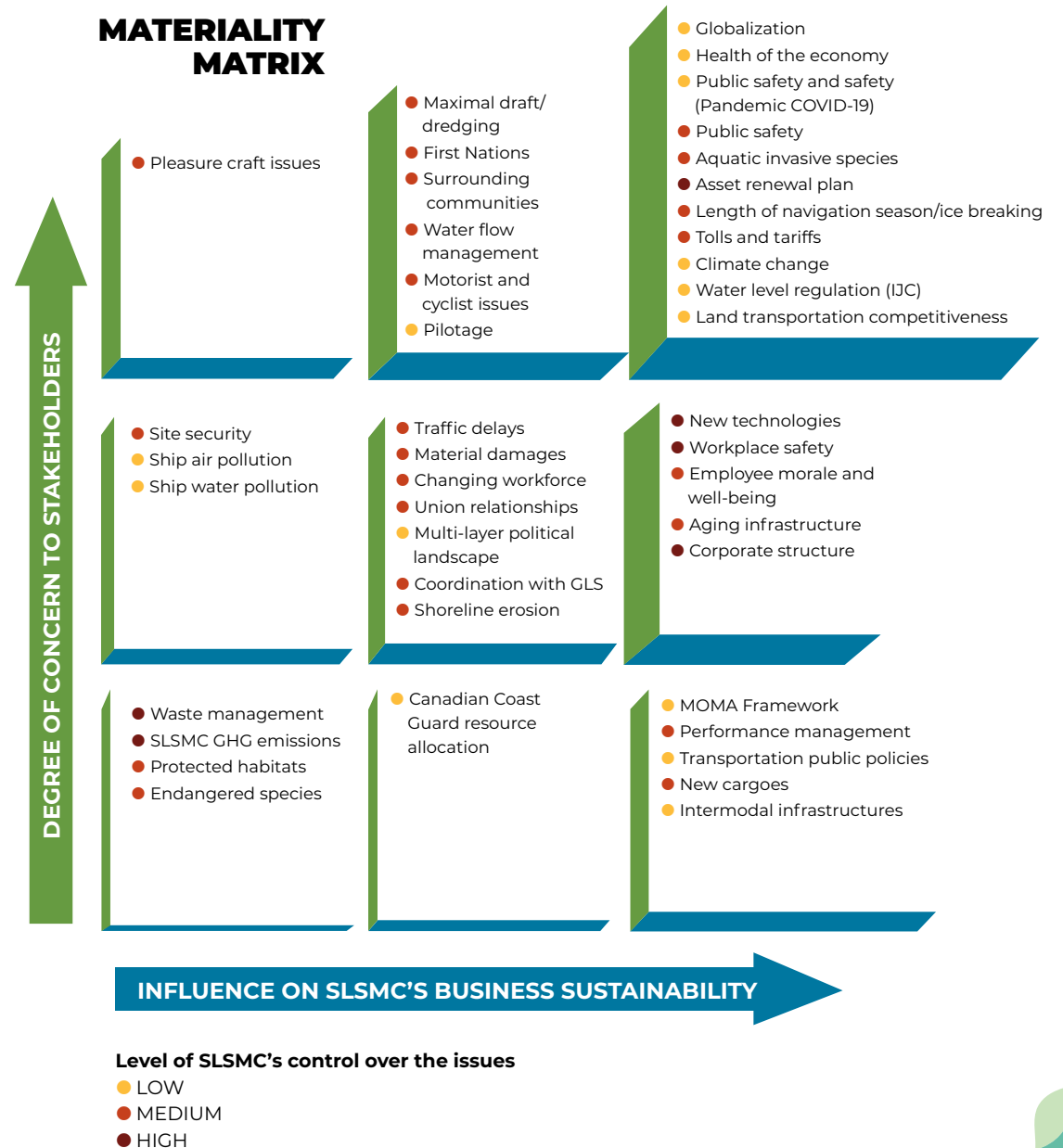




## Materiality Matrix

As an integral part of Canada's national transportation infrastructure, the SLSMC manages its operations and develops lands to generate commercial opportunities. This is done through the lens of environmental and social responsibility, in a community-conscious manner. Protecting the significant investment that the Government of Canada has made in the Seaway goes along with protecting the rights and interests of adjacent communities.

To ensure issues that have the biggest impact on the business, communities, environment and stakeholders, the SLSMC refers to its materiality assessment:



# FINANCE

The results for 2021/22 cover the period April 1, 2021 to March 31, 2022.



FINANCIAL HIGHLIGHTS	2021/2022	2020/2021	2019/2020
	('000s)		
<b>Revenue</b>			
Tolls	\$79,751	\$76,808	\$73,772
Other	3,809	3,188	4,273
Category 1 Lands Revenue remitted directly to Receiver General	7,720	7,589	5,885
<b>Total revenue</b>	<b>\$91,280</b>	<b>\$87,585</b>	<b>\$83,930</b>
<b>Manageable expenses</b>			
Salaries and benefits *	\$55,029	\$54,289	\$55,702
Other	13,059	11,316	13,948
Employee Future Benefits (Non-cash)	(15,763)	(7,196)	(15,250)
<b>Total manageable expenses</b>	<b>\$52,325</b>	<b>\$58,409</b>	<b>\$54,400</b>
<b>Excess of revenue over manageable expenses</b>	<b>\$38,955</b>	<b>\$29,176</b>	<b>\$29,530</b>
<b>Asset renewal investments</b>			
Regular maintenance	\$11,374	\$10,282	\$10,141
Major maintenance	63,567	64,440	58,907
Capital acquisitions **	752	1,232	2,107
<b>Total asset renewal investments</b>	<b>\$75,693</b>	<b>\$75,954</b>	<b>\$71,155</b>

\* Includes pension solvency deficit payments of -\$175 (2021-22), -\$185 (2020-21), and \$1,113 (2019-20).

\*\* Capital acquisitions are excluded from the Statement of Operations and included as Capital Assets on the Statement of Financial Position.



# CORPORATE GOVERNANCE

The St. Lawrence Seaway Management Corporation is governed by a nine-member board responsible for ensuring the long-term viability of the Seaway as an integral part of Canada's transportation infrastructure. The Board is composed of the Corporation's President and CEO, representatives from grain, steel and iron ore, other industry members, the domestic and international carriers, as well as one representative each from the Federal Government and the provincial governments of Québec and Ontario. Individual Board Committees include governance, human resources, audit, and asset renewal.



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## BOARD OF DIRECTORS

**Frank Hummell**

Ontario Provincial  
Government

**Raymond Johnston**

Other Members

**Terence F. Bowles**

President and Chief  
Executive Officer

**Pierre Préfontaine**

Québec Provincial  
Government

**Donald MacDonald**

Grain Members

**Greg Wight**

Domestic Carriers

**Karen Tippet**

Federal Government

**Paul A. Gourdeau  
(Chair)**

International Carriers

**Bronko Jazvac**

Steel and Iron Ore

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## OFFICERS

**Terence F. Bowles**

President and Chief  
Executive Officer

**Pauline LeBlanc**

Corporate Secretary

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## INDUSTRY MEMBERS 2021/22

### Domestic Carriers

**Algoma Central  
Corporation**

St. Catharines, Ontario

**Canada  
Steamship Lines,**

A Division of  
The CSL Group Inc.  
Montréal, Québec

**Groupe  
Desgagnés Inc.**

Québec, Québec

**Lower Lakes  
Towing Ltd.**

Port Dover, Ontario

**McAsphalt Marine  
Transportation Ltd.**

Toronto, Ontario

**McKeil Marine  
Limited**

Burlington, Ontario

**St Marys Cement Inc.  
(Canada)**

Toronto, Ontario

### Grain

**ADM Agri-Industries  
Company**

Windsor, Ontario

**G3 Canada Limited**

Winnipeg, Manitoba

**Cargill Limited**

Winnipeg, Manitoba

**Louis Dreyfus  
Company**

Canada ULC

Calgary, Alberta

**Parrish &  
Heimbecker, Limited**

Guelph, Ontario

**Richardson  
International Limited**

Winnipeg, Manitoba

**Sollio Agriculture**

Montréal, Québec

**Viterra Canada Inc.**

Regina, Saskatchewan

### International Carriers

**Colley  
Motorships Ltd.**

Montréal, Québec

**Fednav  
International Ltd.**

Montréal, Québec

**Gresco Ltée**

Montréal, Québec

**Inchcape  
Shipping Services**

Dorval, Québec

**Lower St. Lawrence  
Ocean Agencies Ltd.**

Québec, Québec

**McLean Kennedy Inc.**

Halifax, Nova Scotia

**Navitrans Shipping  
Agencies (East) Inc.**

Laval, Québec

**Ramsey Greig &  
Co. Ltd.**

Québec, Québec

**Robert Reford, div. of  
the La Perrière Group**

Montréal, Québec

### Other Members

**Windsor Salt Ltd.**

Pointe-Claire, Québec

**Lafarge Canada Inc.**

Laval, Québec

**Lehigh Hanson  
Materials Limited**

Edmonton, Alberta

**Redpath Sugar Ltd.**

Toronto, Ontario

**Suncor Energy Inc.**

Mississauga, Ontario

### Steel and Iron Ore

**ArcelorMittal  
Dofasco G.P.**

Hamilton, Ontario

**Iron Ore Company  
of Canada**

Montréal, Québec

**Stelco Inc.**

Hamilton, Ontario



# ABOUT THE ST. LAWRENCE SEAWAY





# About the St. Lawrence Seaway

With economic output estimated at \$6 trillion, the provinces and states bordering the Great Lakes – St. Lawrence Seaway System account for 30% of combined Canadian and U.S. economic activity and employment.


The region would rank as the third largest economy in the world if it were a country. Positioned at the core of this economic powerhouse, the Great Lakes – St. Lawrence Seaway System serves as a vital supply chain.




Great Lakes –  
St. Lawrence  
Seaway System


Key Supply Chain for the  
World's 3<sup>rd</sup> Largest Economy



 The Great Lakes – St. Lawrence Seaway System extends 3,700 kilometres from the Atlantic Ocean to the head of Lake Superior.

 Major Ports

 Administered by the St. Lawrence Seaway Management Corporation

 Administered by The Great Lakes St. Lawrence Seaway Development Corporation

## Great Lakes – St. Lawrence Seaway System (HWY H<sub>2</sub>O) Facts

- Distance from the Atlantic Ocean to Duluth, Minnesota on Lake Superior = 2,038 nautical miles (2,342 statute miles or 3,700 kilometres) or 8.5 sailing days. The waterway includes some 245,750 square kilometres (95,000 square miles) of navigable waters.
- In a typical year, about 25% of Seaway traffic travels to and from overseas ports, especially in Europe, the Middle East, and Africa.
- The waterway includes some of North America's largest ports, part of an excellent intermodal transportation network, and has maintained a near-perfect record of trouble-free navigation through ongoing improvements and meticulous maintenance for more than 60 years.

## The St. Lawrence Seaway—A Vital Waterway

The binational St. Lawrence Seaway's 15 locks (13 Canadian and 2 American) serve as the linchpin within the broader waterway, connecting the lower St. Lawrence River to the Great Lakes, enabling ships to transit between Montreal and Lake Erie, a difference in elevation of 168 metres. The "Soo" Locks, managed by the U.S. Army Corps of Engineers, enable ships to reach Lake Superior, which is 183 metres above sea level.

**The binational  
St. Lawrence Seaway's  
15 locks serve as the  
linchpin within the  
broader waterway.**

Cargo moving on the Great Lakes –  
St. Lawrence Seaway System supports:



**\$59 Billion**  
in Economic Activity

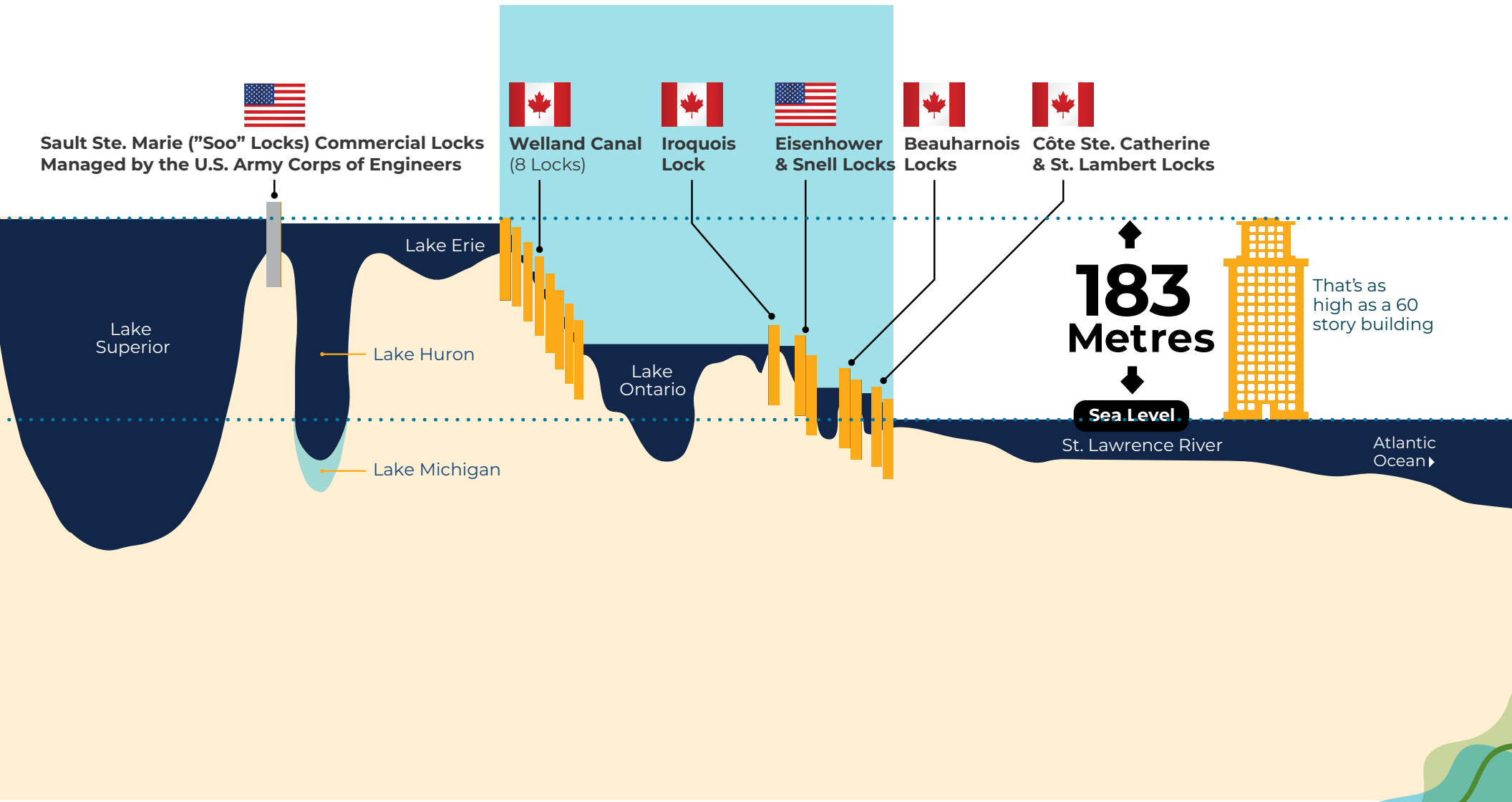


**329,000**  
Jobs



**\$23 Billion**  
in Wages

# ST. LAWRENCE SEAWAY





**Ships can be over twice as long and about half as wide as a football field.**

### Lock dimensions

**Length**  
233.5 m (766 ft.)  
**Width**  
24.4 m (80 ft.)  
**Water depth**  
9.1 m (30 ft.)

### Maximum vessel size



**Maximum beam**  
23.77 m (78 ft.)

**Capacity**  
Carries up to 30,000 MT per voyage

**Maximum length**  
225.5 m (740 ft.)

**Maximum air draft**  
35.5 m (116 ft., 6 in.)

**Maximum draft**  
8.08 m (26 ft., 6 in.)\*

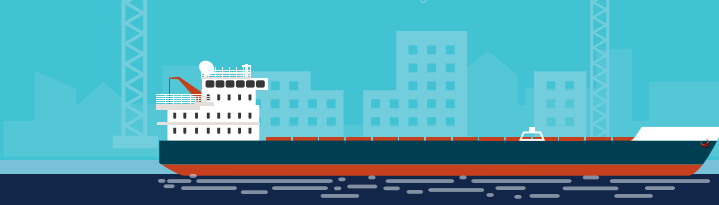
*\* Commercial vessels equipped with Draft Information System (DIS) technology are allowed to load to a maximum draft of 8.15 m (26 ft., 9 in.)*

### Seaway Locks

Each lock is 233.5 metres long (766 feet), 24.4 metres wide (80 feet) and 9.1 metres deep (30 feet) over the sill. A lock fills with approximately 91 million litres of water (24 million gallons) in just 7 to 10 minutes. Getting through a lock takes about 45 minutes.

### Seaway Ships

Ships measuring up to 225.5 metres in length (or 740 feet) and 23.8 metres (or 78 feet) in width (also known as the ship's "beam") are routinely raised more than 180 metres above sea level, as high as a 60-story building. These ships can be over twice as long and about half as wide as a football field and carry cargoes the equivalent of 30,000 metric tonnes.



## 10 Ways Seaway Shipping Impacts Your Life



### Your Meals:

Grain (including wheat, corn, soybeans, canola, peas, lentils, and barley) shipped over the Seaway is used to produce everything from bread, pasta, soy milk, and vegetable oil to beer, alcohol, ethanol and animal feed.



### Your Breaks:

Sugar brought in by ocean ships is used in many applications, from sweetening your coffee to serving as an ingredient in countless baked goods.



### Your Home:

From the steel, drywall, concrete and cement used to build a home to the steel used in the manufacturing of household appliances, Seaway ships are instrumental in the supply chain that supports all types of activity that makes your home comfortable and resilient.



### Your City:

Construction of highways, bridges, office buildings, factories, schools, and hospitals relies upon huge volumes of steel, cement, gypsum, and asphalt moved by ship.



### Your Holidays:

Double-hulled Seaway tankers move refined fuels between storage depots, enabling cars, buses and planes to whisk people away to holiday destinations.



### Your Safety:

Road salt moved over the Seaway is key to the efficient maintenance of roads in the winter, keeping motorists and pedestrians safe during their winter commutes.



### Your Ride:

Manufacturing of cars and trucks is heavily reliant upon the marine supply chain moving across Seaway waters. From high quality steel to specialized aluminum, assembly lines are fed with supplies that in many cases count upon the Seaway to facilitate part of the journey to the assembly plant.



### Your Commute:

A Seaway ship can carry almost 1,000 truckloads of cargo. Moving cargo over the Seaway eases congestion on land, enabling commuters to reach their destination every day with fewer delays and a greater degree of safety.



### Your Money:

Shipping cargo by ship is one of the most cost effective ways to move huge volumes of goods over longer distances. It is estimated that shipping goods over the Great Lakes – St. Lawrence Seaway System saves shippers billions of dollars per year compared to land alternatives, helping manufacturers, farmers, construction companies and energy providers compete effectively in a global market and provide jobs to many citizens in Canada and the United States.



### Your Future:

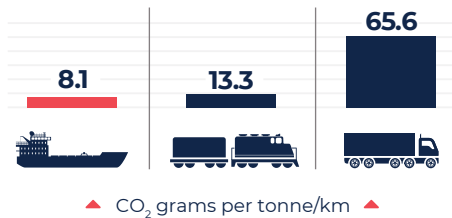
Inland shipping is part of the solution to making our economy more energy efficient and reducing our carbon footprint. Advanced new ship designs and engine technology, coupled with new types of marine fuels, will further extend marine's advantage over other modes of transportation. A more sustainable transportation system will emerge by using marine to move more cargo, and the Seaway is the critical link between the Great Lakes and the Atlantic Ocean, enabling a 3,700 km marine highway to serve the heartland of North America.

## The St. Lawrence Seaway: Ready for the Future

As the most energy efficient transportation mode, with the lowest carbon footprint, moving more cargo using the Great Lakes – St. Lawrence Seaway System is an excellent way of supporting sustainable growth, while easing congestion on land.

Moving more cargo using the Great Lakes – St. Lawrence Seaway System is an excellent way of supporting sustainable growth.

### Ships = Smallest Carbon Footprint



### Shifting Cargo from Land to Water



Lowers congestion on our highways and railways



Raises our overall fuel efficiency



Lowers total greenhouse gas emissions

### Ships = Best Fuel Efficiency

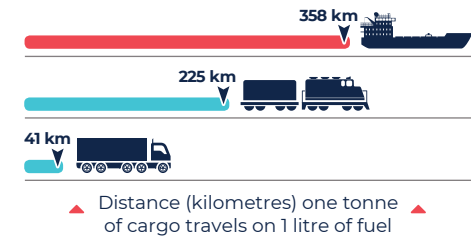


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[www.stlawrencepiks.com](http://www.stlawrencepiks.com)







The St. Lawrence  
Seaway Management  
Corporation

Corporation de Gestion  
de la Voie Maritime  
du Saint-Laurent