



GREEN MARINE

PERFORMANCE
REPORT

2020

CHAIR'S ADDRESS



What a year 2020 turned out to be! Our industry is to be commended for how quickly it responded to new global circumstances unleashed by COVID-19 to keep cargo moving and take people home or to essential jobs during this pandemic. It hasn't been easy – personally or professionally – for anyone. Green Marine is grateful to all its members for their continued loyal support.

I also sincerely thank all of the members of the board and many others who volunteered significant time and energy in advisory committees and workgroups during this particularly challenging past year. It's thanks to your efforts that Green Marine has stayed the course in advancing environmental excellence.

All of us have learnt a lot about how to communicate effectively online rather than in person. These are experiences that I believe many of us will continue to practice in order to save time, minimize travel's cost, and reduce environmental impacts, as we also establish greater workplace flexibility.

The response to Green Marine's online pivot has been overwhelmingly positive. When it became evident that our 2020 annual conference would not be held in person, key speakers adapted their presentations for an engaging webinar series last summer and fall. Both series were well attended. Interestingly,

as everyone became at ease with online platforms, attendance and engagement increased at virtual meetings as compared to pre-pandemic conference calls.

None of this replaces the industry spark that happens when many of us gather in person at GreenTech and other meetings to share insights. Although I am delighted that Green Marine was able to organize such a dynamic and well-attended online conference this year with the help of sponsors, I look forward to seeing many of you in person again in Montreal at GreenTech 2022 next June.

There's a lot to do leading up to that date as the world returns to what many are calling 'a new normal.' There's no doubt that the many lessons derived from this pandemic will be used to build back stronger with green and blue economies based on true sustainability. Green Marine's participants are well positioned to deal with the challenges ahead that include huge steps towards decarbonization.

With the help of our supporters and partners, Green Marine participants are continually striving to do better in terms of their environmental performance as evidenced by the results outlined for each participant in this report. I hope you will take the time to read and appreciate what all of Green Marine's participants managed to achieve in no less than pandemic circumstances and what's on the horizon for North America's leading certification program for the maritime industry.

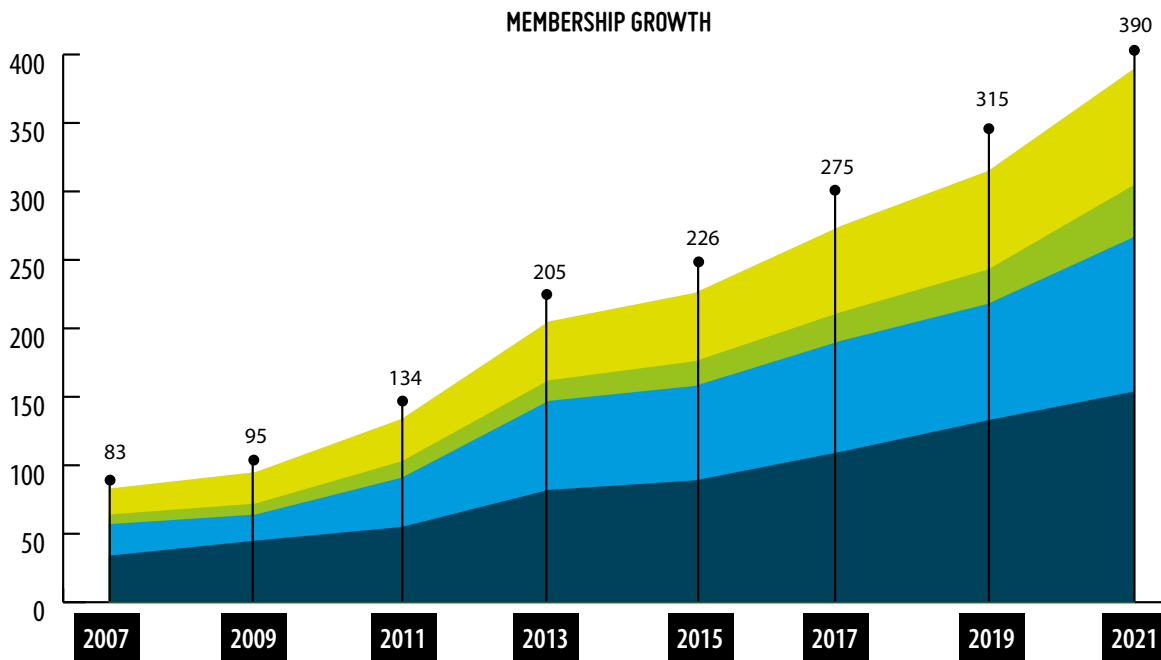
Huge congratulations to all the participants on their certification and performance during this difficult year! You are true industry leaders!

A handwritten signature in black ink that reads "M. Fratianni". The signature is fluid and cursive.

Michael Fratianni

MEMBERSHIP: STEADY GROWTH

Despite the unprecedented challenges faced by Green Marine and its membership last year caused by the COVID-19 pandemic, the organization continued to ply forward on all fronts that included a broadening of the program’s membership.



Green Marine’s membership has significantly increased in all categories over the past two years to stand at 390 members as of May 28, 2021.



PARTICIPANTS

Green Marine’s **154 participants** are ship owners, port authorities, terminal operators, shipyard managers and the Seaway Corporations.



ASSOCIATIONS

The **38 association members** serve as ambassadors by encouraging their members to join and by promoting Green Marine’s efforts and successes.



PARTNERS

The **113 partners** are businesses that assist participants in improving their environmental performance through maritime-related expertise, innovative technologies, equipment and services.



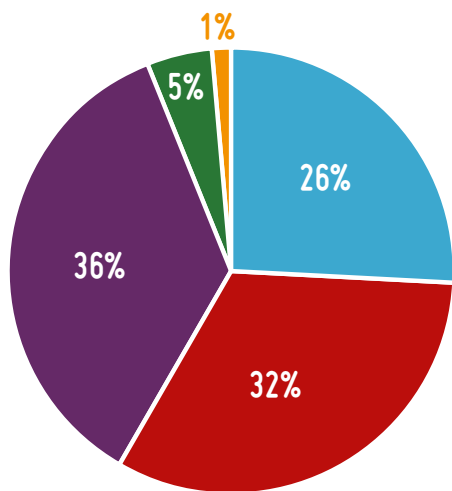
SUPPORTERS

Green Marine’s **85 supporters** encourage and bolster the sustainable development initiatives undertaken by the industry. They help to review and shape the program.

PARTICIPANTS

The new participating membership includes an exciting first for Green Marine: Fishermen’s Finest is the inaugural fishing fleet to be certified within the program. The company’s environmental performance will be assessed in terms of Green Marine’s applicable ship owner criteria. As Green Marine’s framework does not encompass actual fishing activities, such companies must already be independently certified by a recognized standard for sustainable harvesting practices before they can join Green Marine and earn its certification. It is hoped that the leadership shown by Fishermen’s Finest will prompt other fishing fleets to embrace Green Marine’s framework to address the environmental priorities common to the entire maritime industry but particularly affecting the sustainability and livelihoods of the blue economy. Other exciting firsts include TraPac, the first California-based terminal operator to join Green Marine.

Of course, Green Marine is equally delighted by all the new participants as each represents an official and ongoing commitment to advancing environmental excellence within maritime commerce.



Here is the list of new participants that joined since our last Annual Performance Report in June 2020, as of the end of May 2021:

- Bold Ocean (ship owner, Maryland, U.S.)
- Develop Nova Scotia (COVE) (terminal, Nova Scotia, Canada)
- Heddle Shipyards (two shipyard locations, Ontario, Canada)
- Integrated Logistics (terminal, Newfoundland and Labrador, Canada)
- McInnis Cement (terminal, Québec, Canada)
- Ontario Ministry of Transportation (ship owner, Ontario, Canada)
- Patriot Stevedoring + Logistics, LLC (terminal, Massachusetts, U.S.)
- Picton Terminals (terminal, Ontario, Canada)
- Port of Pensacola (port, Florida, U.S.)
- Port of Redwood City (port, California, U.S.)
- TraPac (terminal, California, U.S.)

While membership has increased significantly in terms of landside participants, it should be noted that ship owners account for more than a quarter of the participating membership (26%) and each shipping firm certifies its fleet(s) of vessels. As a result, there are some **535 ships** operated by Green Marine certified ship owners.

ASSOCIATIONS

Green Marine has welcomed several new association members over the past year as lead ambassadors for the environmental certification program. Their role in relating to their respective membership how the Green Marine framework can be of benefit to clearly focus, measure and communicate their sustainability efforts. Welcoming new associations is key to the program's steadily increasing number and diversity of participants as well as global recognition.

The associations joining since last June are:

- American Waterways Operators (AWO)
- American Maritime Partnership (AMP)
- CargoM (Logistics and Transportation Metropolitan Cluster of Montréal)
- Council of Marine Professional Associates (COMPASS)
- Ontario Environment Industry Association
- Washington Maritime Blue

SUPPORTERS

The addition of eight new supporters is so appreciated because it reflects the increasing willingness of such organizations to collaborate with Green Marine. Supporters enhance the program's credibility by recognizing the industry's efforts and by influencing Green Marine's direction. They help Green Marine to clarify emerging issues and identify feasible solutions and/or mitigation measures based on science, professional expertise, specific community and other key stakeholder knowledge and experience.

The newest supporters are:

- Canada's Ocean Supercluster
- Canadian Wildlife Federation
- Nets for Net Zero
- Ocean Frontier Institute
- Ohio Clean Marinas
- Réseau Québec Maritime
- Royal Canadian Marine Search & Rescue
- Save the Bay

PARTNERS

Green Marine has also welcomed more than 20 new partners since June 2020, an indication of the program's strong focus on innovative, feasible solutions to prioritized environmental challenges. The increase in partners also reflects the response by innovators – whether in longstanding marine-related companies or brand-new start-ups – to the clearly defined sustainability goals of Green Marine's participating membership. We thank Green Marine partners for their steadfast support of the program and the products and services they supply.

FOSTERING COLLABORATION AND ENGAGEMENT

As North America's first and foremost environmental certification program for the maritime industry, Green Marine has pursued its expansion not only from coast to coast but with attention to regional priorities in terms of specific environmental concerns. It's as a result of the steady rise in membership within Canada's Atlantic provinces and the U.S. Northeast Seacoast that Green Marine had the basis for which to establish a **North Atlantic Advisory Committee** earlier this year.

The participants and supporters volunteering as members of the North Atlantic Advisory Committee learnt more about how

to protect the endangered North Atlantic right whale and other issues at their first meeting in early March. The North Atlantic Advisory Committee is now one of four such committees with the others representing the St. Lawrence, Great Lakes and West Coast regions respectively. These committees are each a beacon of Green Marine's collaborative approach to identifying and addressing the most urgent of environmental issues. Their diverse composition of relevant industry, governmental, academic, environmental and community stakeholders leads to informed decisions being reached through consensus.



EUROPEAN FIRSTS



The fortitude and flexibility of the Green Marine environmental certification program are evidenced by the licensing of its framework to Surfrider Foundation Europe for the creation of the Green Marine Europe program launched in April 2020. Green Marine Europe's first laureates were recognized last October with other candidates to receive the label later this June.

Witnessing the adaptation of the program's framework to European standards and expectations is a source of great pride for Green Marine's founders. It demonstrates how the program lends itself to priorities established by the membership based on expert consultations.

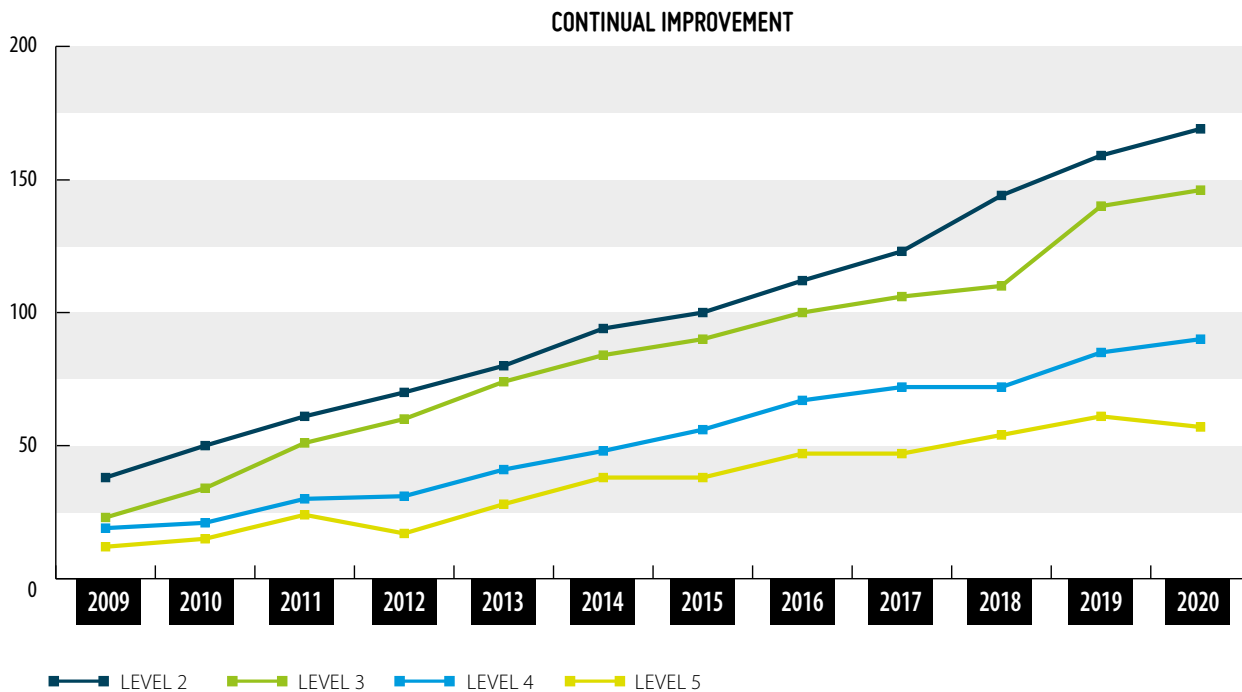
Having a Green Marine program on both sides of the Atlantic is a true milestone. It broadens the global recognition of the program's participants for achieving environmental progress beyond regulations in a transparent and straightforward manner with results independently verified on a regular basis. It also creates the opportunity for synergies as both programs expand their membership reach and evolve their environmental priorities based on the membership consultation that is always at the heart of Green Marine.



PERFORMANCE STEADILY BEYOND COMPLIANCE

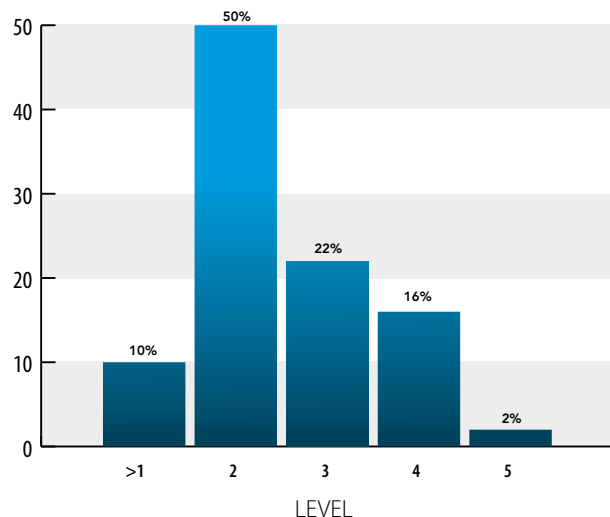
With a significant number of performance indicators to address and subsequently evaluate in terms of progress, it definitely requires some time for new participants to become familiar with the program's criteria before they can initiate the resources and actions to bring about greater sustainability through new

management policies and practices, specific benchmarking through monitoring/reporting, and investments in new equipment and innovative technologies. Fortunately, Green Marine participants overwhelmingly commit to the program's continual improvement over time.



To instill this culture of steady improvement within new participants, the program requires them to achieve at least one Level 2 as part of their first year of results, and at least one additional level in another category each year thereafter until all applicable indicators are at Level 2 or higher. As a result of this approach, **more than 90% of participants have a Level 2 or higher average** despite a number of them joining in recent years.

PERCENTAGE OF PARTICIPANTS WITH AN AVERAGE AT OR ABOVE LEVELS 1, 2, 3, 4 AND 5



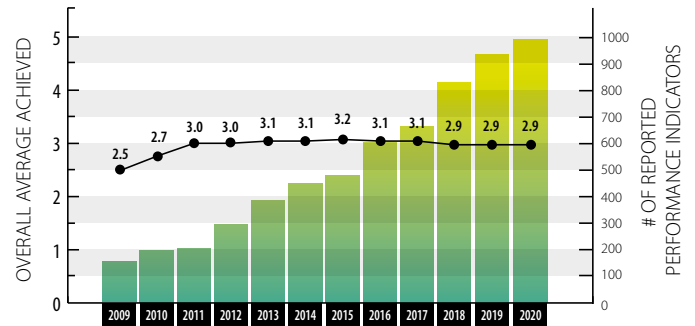
LARGER PARTICIPATION AND SCOPE

This year Green Marine received 15 self-evaluation reports from participants reporting for the first time, the same number as for 2019 reporting. Overall, reporting increased by >5% with 169 self-evaluation reports submitted for 2020 operations.

Holding course during a year of such global upheaval reaffirms the enduring commitment of the existing participants and the program's rising appeal to new membership. It is anticipated that participation will increase to a greater extent as the post-pandemic economic recovery focuses more specifically on environmental stewardship to mediate climate change.

Participants maintained an overall average of 2.9 out of the possible five levels even though the program has been made more demanding, and a higher number of performance indicator results were related – 982 up from 924 for 2019.

PARTICIPATION / PERFORMANCE



Almost 1,000 reported performance indicators and steady performance!

MOST IMPROVED!

The biggest overall improvement by Green Marine's participants is in the realm of curbing greenhouse gases (GHG). The significant improvements made by ship owners, ports, and terminals led to a net 14 level increase in performance. Two-thirds (66%) of all participants completed a GHG inventory.

Progress regarding Underwater Noise is exemplified by a third (31%) of applicable ship owners achieving Level 4 for this indicator that only became compulsory in 2018. These ship owners have incorporated applicable vessel quieting technologies to their new-builds and retrofits, as well as meeting other criteria to achieve this level.

Shipyard operators – a more recent Green Marine addition – were the most improved participant type in 2020 with nearly all shipyards moving up a level.

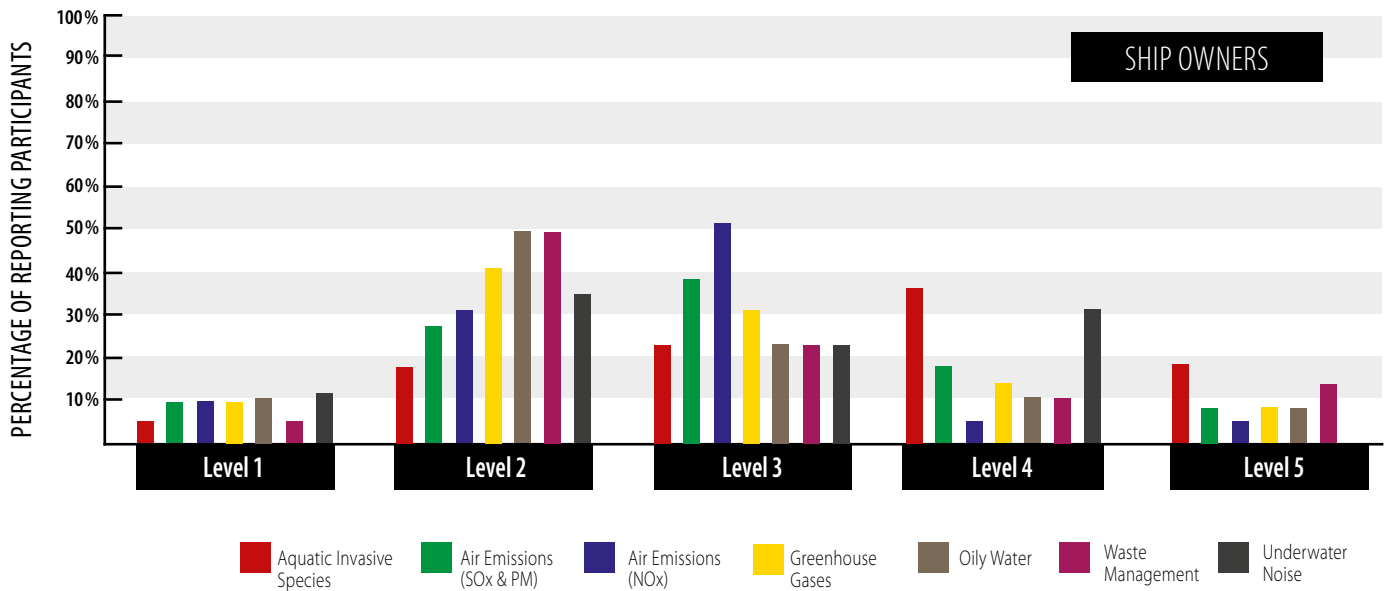
Over a quarter (28%) of the ports and terminals in the program achieved Level 5 in Spill Prevention and Stormwater Management – the highest percentage at Level 5 of any of the performance indicators. Their achievement and a thorough regulatory review led to an update of the performance indicator for the 2021 program to ensure that the criteria remain applicable, sufficiently challenging beyond compliance at Level 2 onwards while still economically and otherwise feasible, and environmentally beneficial in keeping with Green Marine's commitment to continual improvement.

The Canadian and U.S. St. Lawrence Seaway corporations continue to be environmental stewards with investments in innovative technologies such as the hands-free mooring (HFM) that was fully deployed throughout the system's locks by late October 2019. While primarily installed for safety reasons, the HFM has both simplified and sped up vessel transits, resulting in less fuel use and lower ship emissions during Seaway transits.

RESULTS BY TYPE OF PARTICIPANT FOR EACH PERFORMANCE INDICATOR

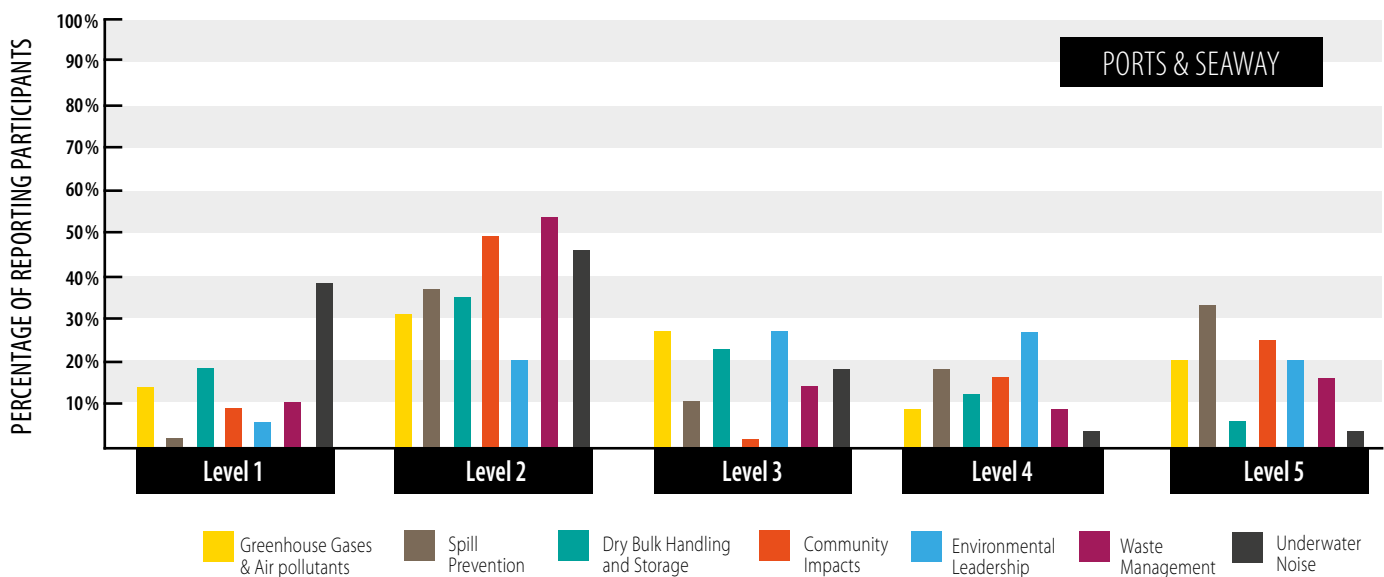
SHIP OWNERS:

Every applicable certified ship owner achieved Level 2 or higher for the Aquatic Invasive Species (AIS) performance indicator. Over half of the ship owners achieved at least Level 3 for the three air emissions indicators: GHG (53%), NOx (63%), and SOx and PM (66%). Underwater Noise is the second most improved performance indicator (after GHG) in terms of higher levels reported. There were 11 ship owners at Level 4, which is up from seven in 2019.



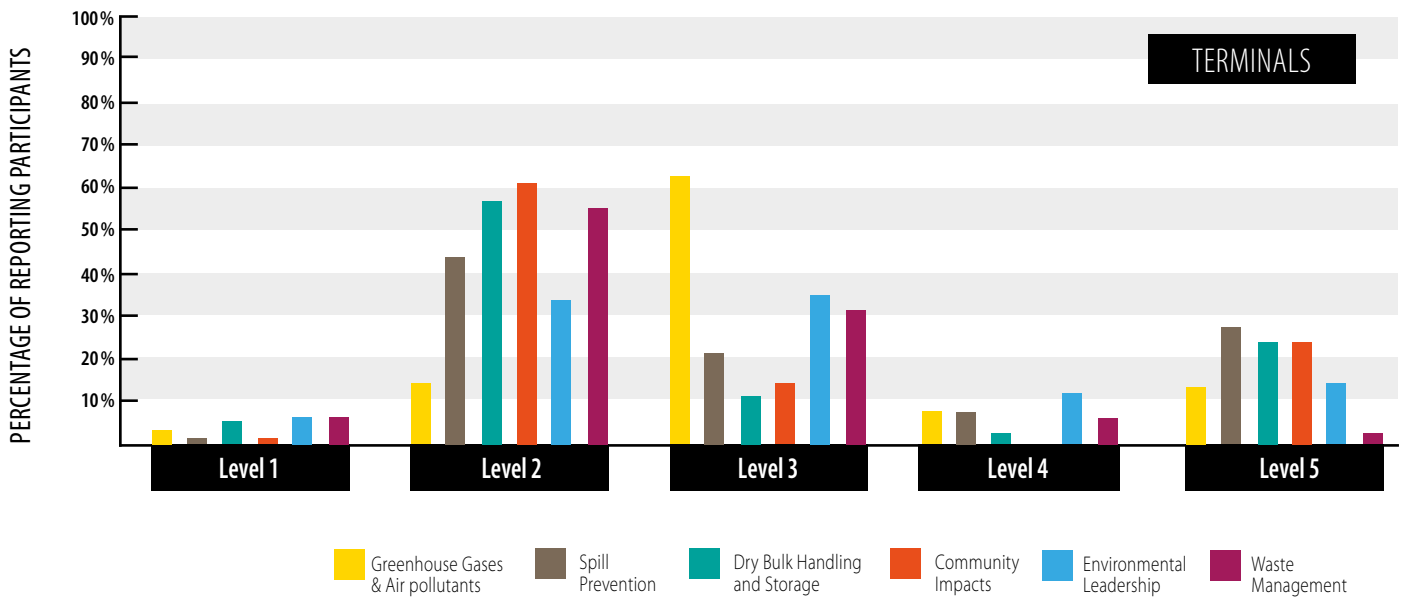
PORTS & SEAWAY:

The best overall performance by ports in terms of improved net levels was in the Community Impacts performance indicator, which is six net levels higher, followed by a net five levels improvement for both Dry Bulk Handling & Storage and for Underwater Noise. With the exception of the Seaway corporations, ports and terminals garnered the highest overall average at 2.90.



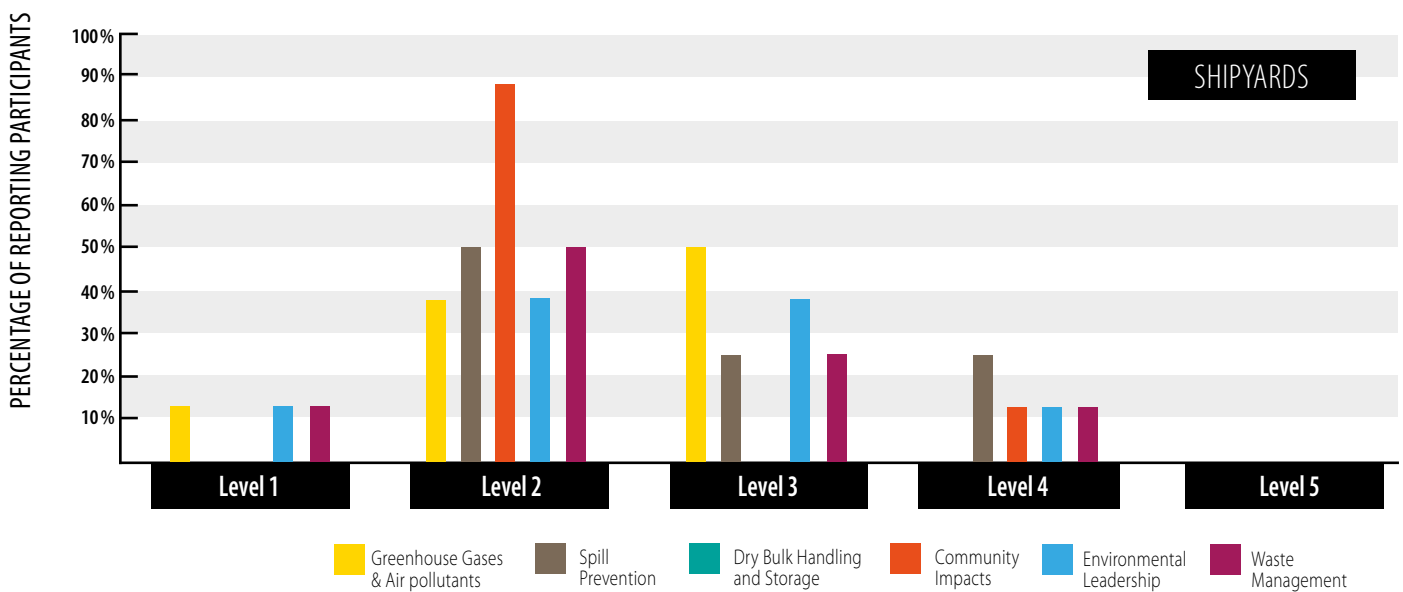
TERMINALS:

Terminal operators improved their overall performance, moving up 10 net levels for Environmental Leadership and six net levels for GHG reduction. They also improved in Waste Management overall by five net levels while remaining consistent in terms of Spill Prevention and Community Impacts. More than half of the terminals achieved at least Level 3 for the GHG and Air Pollutants (83%), Environmental Leadership (61%), and Spill Prevention (55%) indicators respectively.

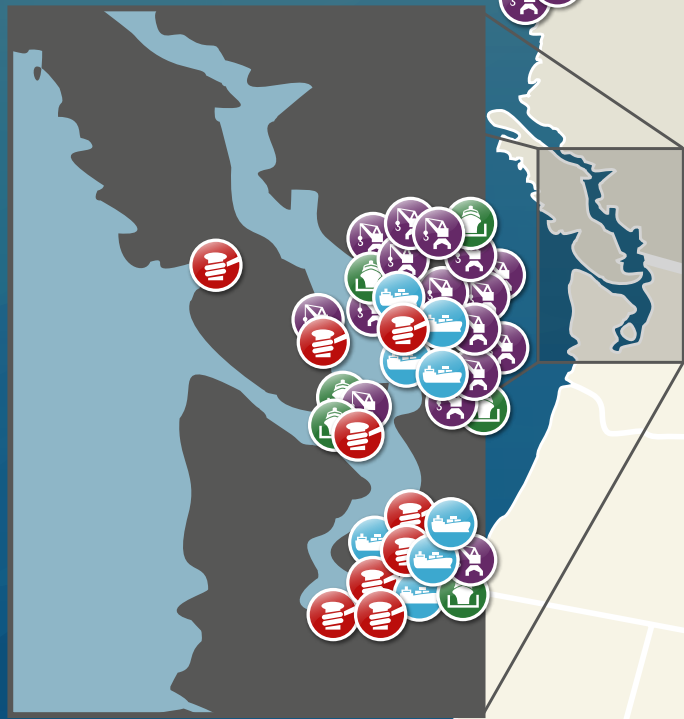


SHIPYARDS:

More recent to the program, shipyards posted an overall average of 2.45 for all their applicable indicators. All of the shipyards have progressed beyond Level 1 for both Spill Prevention and Community Impacts.

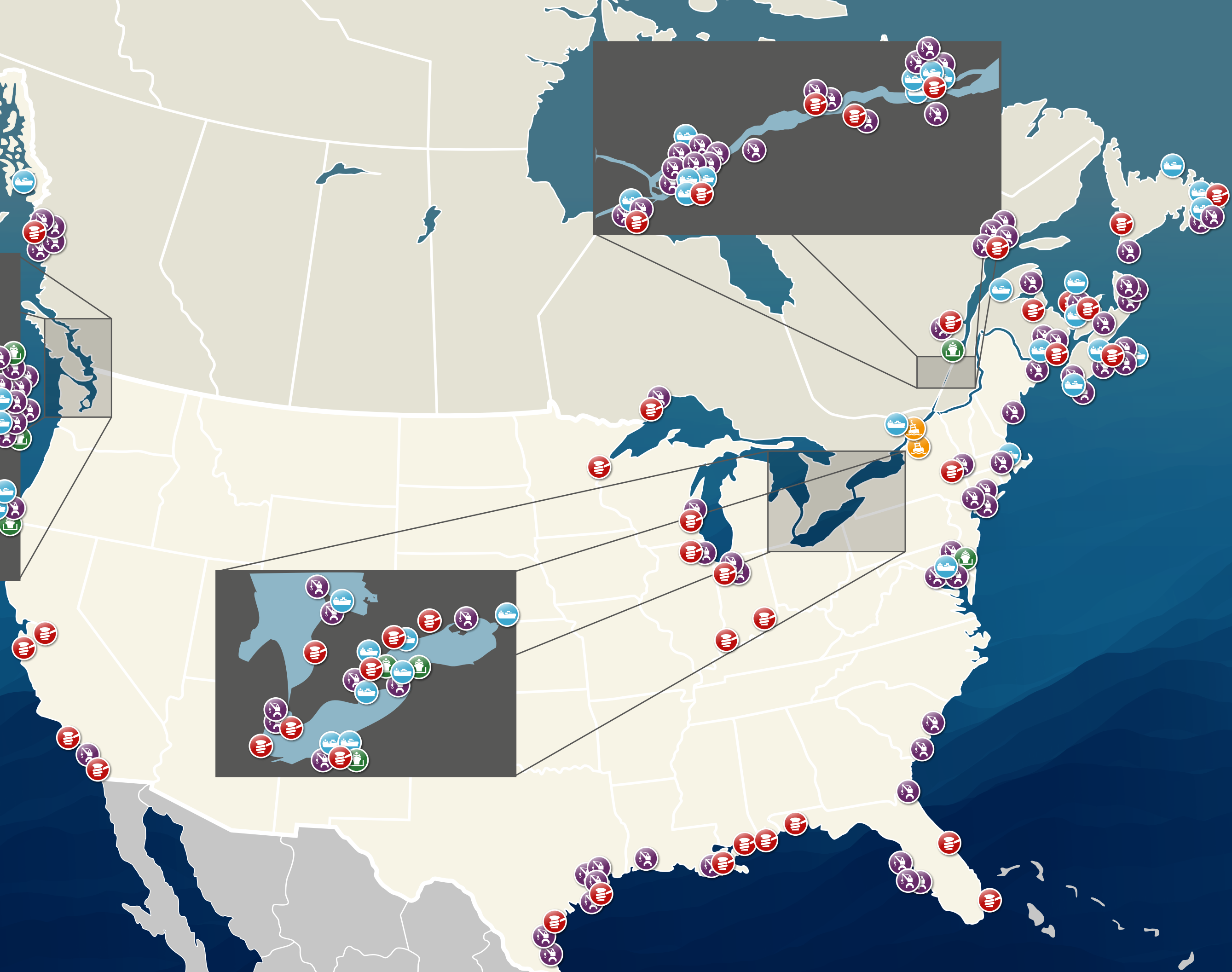


All the graphs shown in this report are based on the results as of May 28, 2021.



THE PARTICIPANTS

-  SHIP OWNERS
-  PORTS
-  TERMINALS
-  SHIPYARDS
-  ST. LAWRENCE SEAWAY



A STEADILY MORE STRINGENT PROGRAM

Green Marine launched its first reporting year (2008) with six performance indicators but has continually broadened the scope of the environmental issues that it addresses based on the necessity presented by environmental, academic, and governmental experts as well as Green Marine's own research and consultations with key stakeholders.

The program has also steadily raised the bar for many indicators so that Level 1 reflects the baseline of new or imminent regulations, and the four higher levels are sufficiently challenging given the availability of innovative technologies, evolving best practices substantiated by evidence, and other membership insights. **The steady overall average of 2.9 is a true accomplishment with quite a lot of the criteria being new and/or more stringent than in previous years.**

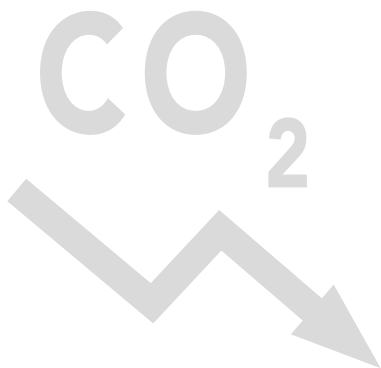
In 2020, a $\geq 1\%$ annual average reduction for GHG intensity was added for landside participants at Level 5 (optional for this first reporting year), based on the inventory necessary at Level 4. The scope of the inventory completed within the past five years for Level 3 has been expanded at Level 4 so that it must include data on air pollutants.

For ports, the Level 4 inventory scope is now port-wide and includes main sector activities involving oceangoing vessels, harbour craft, cargo handling equipment, rail, trucks and administrative functions.

The inventory scope for terminals and shipyards is delineated as the pollutants within their physical boundary. In addition to meeting the aforementioned $\geq 1\%$ GHG-intensity reduction target at Level 5, ports and the Seaway corporations must each also set and publicly disclose their reduction target at Level 5 of the **GHG & Air Pollutants** indicator, whereas terminals and shipyards can do so as one of the optional criteria towards achieving Level 4 within the **Environmental Leadership** indicator.

The International Maritime Organization's regulations limiting fuel sulphur content globally to 0.50% (from 3.50%) as of 2020 prompted a reassessment of all the criteria beyond Level 1's monitoring of regulations for the **SOx and Particulate Matter (PM)** performance indicator to ensure all levels are sufficiently demanding.

Increasingly demanding criteria was also implemented to the performance indicators for **Oily Discharge, Underwater Noise, and Aquatic Invasive Species (AIS)**. The most significant changes relate to the AIS indicator, both for international and domestic ship owners. They must now meet new criteria on contingency plans for their ballast water treatment systems (BWTS), and either conduct commissioning tests or annual compliance monitoring. A new additional Underwater Noise criterion encourages ship owners to participate in voluntary traffic measures, such as a slowdown or lateral displacement in specific zones.



ADDRESSING NEW EMERGING ISSUES

Green Marine has at its core the mission to set the course through consensus for the ambitious yet feasible step-by-step improvement of its participants in terms of prioritized environmental maritime-related issues. Consultations are held regarding any proposed changes to the program with specific workgroups, through participant information sessions, as well as with the four regional advisory committees. Comments are gathered and necessary additions or improvements made before any new or revised criteria is submitted to the board of directors for approval.

While not exhaustive, **Green Marine is the most comprehensive environmental initiative for the North American maritime industry** to date based on the membership and scope of environmental issues addressed. Environmental issues are prioritized after consultations with the membership to assess both the urgency and the feasible means to achieve improvements beyond compliance.

Ship Recycling was added to the program for 2020 after 18 months of extensive consultation among the industry, environmental organizations, the scientific community, and government representatives. The indicator has two components. The first set of criteria is applicable to all ship owners and focuses on an inventory of hazardous materials (IHM) for their fleet, while the second applies only to ship owners dismantling/recycling one or more vessels in a given year. **More than half of the ship owners (55%) voluntarily reported on this new performance indicator for 2020.** As with all new indicators, the first year is optional to give participants a chance to familiarize themselves with all the new criteria.

A new performance indicator for **Community Relations** was added to the 2021 program for all landside participants with optional reporting for the first year and mandatory assessment thereafter. Participants asked for this new performance indicator to set criteria for specifically assessing their efforts at effective dialogue with neighbours and local stakeholders. They wanted it to be separate from the **Community Impacts** indicator which encompasses measures for limiting airborne noise, dust, odour, light and other potential nuisances to neighbouring areas.

The development of the Community Relations indicator is a first for Green Marine as it involved Social Science expertise as well as the parallel input of two workgroups – one conducted in English and the other in French. Bilingual input was essential because this performance indicator is so **focused on effective communications with community stakeholders to foster dialogue and social acceptability** regarding daily operations as well as any expansion plans. Unlike the criteria for the other performance indicators that measure the actual results/outcome of efforts, the Community Relations criteria focuses on the actions taken to effectively engage with neighbouring communities, as it is more difficult to quantify human behaviour.



2021 PROGRAM

○ Shipowners
 ○ Ports and Seaway
 ○ Terminals and shipyards



AQUATIC
INVASIVE SPECIES



CARGO
RESIDUES



COMMUNITY
IMPACTS



COMMUNITY
RELATIONS



DRY BULK HANDLING
AND STORAGE



ENVIRONMENTAL
LEADERSHIP



GREENHOUSE
GAS EMISSIONS



OILY
DISCHARGE



POLLUTANT AIR
EMISSIONS NOX



POLLUTANT AIR
EMISSIONS SOX & PM



SHIP
RECYCLING



SPILL PREVENTION /
STORMWATER MANAGEMENT



UNDERWATER
NOISE



WASTE
MANAGEMENT

2020 RESULTS



REMOTE VERIFICATION GUIDELINES

The safety precautions and travel restrictions necessitated by the lengthy COVID-19 pandemic required temporary changes to the way Green Marine's verification process can be done. Green Marine developed new guidelines for its accredited verifiers to conduct a verification remotely with the compulsory face-to-face discussion taking place through videoconferencing if an in-person or on-site visit by the verifier was not deemed feasible. The revised guidelines ensure that the verification process is done in the same thorough and rigorous manner using an online platform as required.

COVID-19's North American spread began last year in the midst of the Green Marine's standard verification timeframe. Given the sudden travel restrictions and social distancing requirements, as well as the need by most of the membership and verifiers to shift to home-based operations, Green Marine granted an extension as well as a one-year postponement to all participants from their required verification date. The staggered postponement will prevent an excess of verifications having to be done for the exact same date, while still ensuring that all are duly completed within a reasonable established timeframe.


External verification remains a condition for Green Marine certification. New participants are only certified after their initial verification is completed.

INTERPRETATION NOTES

The term n.a. (non applicable) appears several times in the report's tables because the environmental issues addressed by the program do not necessarily apply to all participants. For example, a container terminal doesn't handle dry bulk commodities. An n.a. denotation could also refer to a situation in which a participant does not have full control over the operations on its premises. For example, a port cannot apply the Green Marine criteria where a terminal operator is in charge of facilities. Many port authorities oversee the leasing of port property and do not themselves operate terminals.


The published results indicate each participant's self-reported and verified performance within the Green Marine program's indicators. While the program's self-evaluation is comprehensive, it is not an exhaustive assessment of all environmental matters related to a participant's maritime operations. Green Marine has not itself evaluated the environmental performance of the participating enterprises. Each participant is required to submit all of the documentation for the performance level claimed for each indicator to an external verifier typically every two years for verification.




| SHIP OWNERS  | AQUATIC INVASIVE SPECIES | AIR EMISSIONS (SOX & PM) | AIR EMISSIONS (NOX) | GREENHOUSE GASES | OILY DISCHARGE | WASTE MANAGEMENT | UNDERWATER NOISE |
|---|--------------------------|--------------------------|---------------------|------------------|----------------|------------------|------------------|
| Alaska Marine Highway System | 4 | 2 | 2 | 2 | 2 | 4 | 4 |
| Algoma Central Corporation | 4 | 4 | 3 | 4 | 5 | 4 | 4 |
| Atlantic Towing Limited | 3 | 4 | 3 | 5 | 3 | 4 | 4 |
| Bay Ferries | n.a. | 2 | 2 | 2 | 2 | 2 | 2 |
| Bold Ocean* | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| British Columbia Ferry Services Inc. | n.a. | 3 | 3 | 3 | 2 | 2 | 3 |
| Canada Steamship Lines | 4 | 4 | 4 | 4 | 4 | 5 | 4 |
| Canfornav | 5 | 3 | 3 | 4 | 5 | 5 | 3 |
| Clipper Vacations* | n.a. | 3 | 2 | 2 | 2 | 2 | 1 |
| Coastal Shipping Limited | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Croisières AML | n.a. | 4 | 3 | 3 | 3 | 2 | 3 |
| CSL International | 4 | 3 | 3 | 5 | 4 | 5 | 4 |
| CTMA Group | 2 | 3 | 3 | 2 | 2 | 3 | 3 |
| Federal Fleet Services | 3 | 2 | 2 | 2 | 2 | 3 | 2 |
| Fednav Limited | 5 | 3 | 3 | 4 | 3 | 5 | 4 |
| Fishermen's Finest, Inc. | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Great Lakes Towing Company | n.a. | 2 | 2 | 2 | 3 | 2 | n.a. |
| Groupe Desgagnés | 5 | 5 | 5 | 5 | 4 | 5 | 4 |
| Horizon Maritime | 4 | 3 | 3 | 3 | 2 | 3 | 4 |
| Interlake Steamship Company | 4 | 2 | 2 | 2 | 2 | 2 | n.a. |
| Laurentian Pilotage Authority | n.a. | 2 | 2 | 2 | 3 | 2 | 4 |
| Lower Lakes Towing Ltd | 3 | 3 | 3 | 2 | 2 | 2 | 1 |
| Marine Atlantic Inc. | n.a. | 3 | 3 | 3 | 3 | 3 | 3 |
| McAsphalt Marine Transportation Ltd. | 5 | 5 | 3 | 3 | 3 | 3 | 2 |
| McKeil Marine Limited | 4 | 3 | 3 | 2 | 2 | 2 | 2 |
| NEAS Inc. | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| North Arm Transportation | n.a. | 4 | 3 | 3 | 4 | 3 | 3 |
| Northumberland Ferries | n.a. | 2 | 2 | 2 | 2 | 2 | 2 |
| Ocean Remorquage Québec Inc. | n.a. | 4 | 3 | 2 | 2 | 2 | 2 |
| Oceanex | 3 | 4 | 4 | 3 | 5 | 3 | 4 |
| Ontario Ministry of Transportation (MTO)* | n.a. | 1 | 1 | 1 | 1 | 2 | n.a. |
| Owen Sound Transportation Company | n.a. | 2 | 2 | 2 | 2 | 2 | n.a. |
| Puget Sound Pilots | n.a. | 2 | 2 | 2 | 2 | 1 | 3 |
| Reformar | 3 | 3 | 3 | 3 | 2 | 3 | 2 |
| Saam Towage Canada Inc. | n.a. | 3 | 3 | 3 | 2 | 2 | 2 |
| Seaspan Marine Transportation | n.a. | 5 | 5 | 4 | 3 | 4 | 4 |
| Secunda Canada LP | 2 | 2 | 2 | 2 | 1 | 2 | 2 |
| Société des traversiers du Québec | n.a. | 3 | 3 | 3 | 2 | 2 | 2 |
| Washington State Ferries | n.a. | 3 | 3 | 3 | 2 | 2 | 2 |

n.a.: non applicable


* New participant whose results have not yet been verified.

| TERMINALS AND STEVEDORING COMPANIES  | GHG AND AIR POLLUTANTS | SPILL PREVENTION | DRY BULK HANDLING AND STORAGE | COMMUNITY IMPACTS | ENVIRONMENTAL LEADERSHIP | WASTE MANAGEMENT |
|---|------------------------|------------------|-------------------------------|-------------------|--------------------------|------------------|
| ABC Recycling Ltd. | 2 | 2 | n.a. | 2 | 3 | 2 |
| AltaGas | 3 | 4 | n.a. | 2 | 2 | 2 |
| Bay Ferries | 2 | 2 | n.a. | 2 | 3 | 2 |
| British Columbia Ferry Services Inc. | 3 | 3 | n.a. | 2 | 3 | 2 |
| Ceres Terminals Inc. (Baltimore, Hampton Roads, Charleston, Savannah, Jacksonville, Port Canaveral, Tampa, Houston, Port Hueneme, Vancouver BC) | 3 | 5 | n.a. | 3 | 5 | 3 |
| COVE | 1 | 1 | n.a. | 2 | 1 | 1 |
| DP World Prince Rupert Inc. | 5 | 5 | n.a. | 5 | 5 | 3 |
| Empire Stevedoring Co. Ltd (Montréal) | 3 | 3 | n.a. | 5 | 2 | 2 |
| Federal Marine Terminals Inc. (Burns Harbor, Hamilton, Milwaukee, Thorold, Albany, Eastport, Port Manatee, Tampa, Lake Charles) | 3 | 2 | 3 | 2 | 3 | 2 |
| G3 Canada Limited (Hamilton) | 4 | 5 | 5 | 3 | 3 | 2 |
| G3 Canada Limited (Québec) | 3 | 2 | 2 | 2 | 3 | 2 |
| G3 Canada Limited (Thunder Bay) | 3 | 2 | 5 | 2 | 3 | 2 |
| G3 Canada Limited (Trois-Rivières) | 3 | 4 | 4 | 2 | 3 | 3 |
| G3 Terminal Vancouver | 5 | 4 | 5 | 5 | 4 | 3 |
| GCT Global Container Terminals Inc. (GCT Bayonne, GCT Deltaport, GCT New York, GCT Vanterm) | 5 | 5 | n.a. | 5 | 5 | 3 |
| Glencore (Québec) | 4 | 5 | 5 | 5 | 5 | 4 |
| Great Lakes Stevedoring DBA Metro Ports | 2 | 2 | 1 | 1 | 1 | 1 |
| Groupe Desgagnés (Relais Nordik Sept-Îles) | 3 | 3 | n.a. | 2 | 3 | 5 |
| Groupe Somavrac - Porlier Express (Sept-Îles) | 3 | 3 | n.a. | 3 | 3 | 3 |
| Groupe Somavrac - Servitank Inc. (Bécancour) | 3 | 3 | n.a. | 2 | 2 | 2 |
| Gulf Stream Marine, Inc. (Corpus Christi, Manchester, Care, Freeport, Brownsville) | 3 | 2 | n.a. | 2 | 2 | 1 |
| IOC (Iron Ore Company, Sept-Îles) | 3 | 5 | 5 | 5 | 4 | 3 |
| Kildair Service ULC | 3 | 5 | n.a. | 2 | 3 | 3 |
| Logistec Corporation (Montréal, Contrecoeur, Halifax, Saint John, Trois-Rivières, Rideau Bulk, Sept-Îles, Thunder Bay, Toronto) | 3 | 2 | 2 | 2 | 2 | 2 |
| Logistec USA Inc. (Balterm, Brunswick, Crossglobe, Port Manatee) | 3 | 3 | 3 | 2 | 3 | 2 |
| Marine Atlantic Inc. | 3 | 3 | n.a. | 5 | 4 | 3 |
| McInnis Cement Inc. | 3 | 3 | 3 | 3 | 3 | 3 |
| Montreal Gateway Terminals Partnership | 5 | 4 | n.a. | 5 | 5 | 3 |
| Neptune Bulk Terminals (Canada) Ltd. | 5 | 5 | 5 | 5 | 5 | 5 |
| New Orleans Terminal LLC | 3 | 5 | n.a. | 5 | 4 | 4 |
| Norcan Petroleum Group Inc. | 3 | 3 | n.a. | 3 | 3 | 3 |
| Northumberland Ferries | 2 | 2 | n.a. | 2 | 3 | 2 |
| Owen Sound Transportation Company | 2 | 2 | n.a. | 2 | 2 | 2 |
| Pacific Coast Terminals Co. Ltd. | 3 | 4 | 5 | 5 | 4 | 3 |
| Patriot Stevedoring + Logistics | 1 | 5 | 1 | 2 | 1 | 1 |
| Picton Terminals | 2 | 2 | 2 | 2 | 1 | 3 |
| PSA Halifax | 4 | 5 | n.a. | 2 | 3 | 3 |
| QSL - Integrated Logistics | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL America - Nasco | 2 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Anse au foulon | 3 | 2 | 2 | 2 | 3 | 2 |
| QSL Canada inc. - Baie Comeau | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Bas St-Laurent (Matane, Cacouna) | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Beauport | 3 | 2 | 2 | 2 | 3 | 2 |
| QSL Canada inc. - Bécancour | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Belledune | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Côte Ste-Catherine | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Grande-Anse | 3 | 2 | 2 | 2 | 3 | 2 |
| QSL Canada inc. - Hamilton | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Oshawa | 3 | 2 | 2 | 2 | 2 | 2 |
| QSL Canada inc. - Sept-Îles | 3 | 2 | 2 | 2 | 3 | 2 |
| QSL Canada inc. - Sorel-Tracy | 3 | 2 | 2 | 2 | 2 | 2 |


n.a.: non applicable


| TERMINALS AND STEVEDORING COMPANIES  | GHG AND AIR POLLUTANTS | SPILL PREVENTION | DRY BULK HANDLING AND STORAGE | COMMUNITY IMPACTS | ENVIRONMENTAL LEADERSHIP | WASTE MANAGEMENT |
|--|-------------------------------|-------------------------|--------------------------------------|--------------------------|---------------------------------|-------------------------|
| Ridley Terminals Inc. | 5 | 5 | 5 | 5 | 5 | 4 |
| Rio Tinto (Port-Alfred) | 5 | 5 | 5 | 5 | 5 | 3 |
| Squamish Terminals Ltd (Member of The Western Group) | 5 | 3 | n.a. | 5 | 5 | 4 |
| Sterling Fuels Limited | 2 | 5 | n.a. | 3 | 3 | 3 |
| Termontr Montréal | 3 | 2 | n.a. | 2 | 3 | 2 |
| Tidal Coast Terminals Ltd. | 3 | 2 | 2 | 3 | 2 | 2 |
| Trans Mountain (Westridge terminal) | 3 | 3 | n.a. | 3 | 4 | 3 |
| TraPac (Los Angeles) | 5 | 5 | n.a. | 2 | 2 | 3 |
| Tymac Launch Service Ltd. | 3 | 2 | n.a. | 3 | 2 | 2 |
| Valero Energy (Jean-Gaulin Refinery) | 4 | 5 | n.a. | 5 | 5 | 3 |
| Valero Energy (Montreal-East Terminal) | 3 | 3 | n.a. | 3 | 4 | 3 |
| Valleytank | 3 | 5 | n.a. | 2 | 2 | 2 |
| Valport Maritime Services Inc. | 3 | 2 | 2 | 2 | 2 | 2 |
| Washington State Ferries | 3 | 3 | n.a. | 2 | 3 | 2 |
| Waterfront Petroleum Terminal Company | 2 | 3 | 2 | 2 | 3 | 2 |
| Waterson Terminal Services LLC | 3 | 3 | 3 | 2 | 2 | 2 |
| West Coast Reduction Ltd. | 4 | 5 | n.a. | 5 | 4 | 3 |
| Western Stevedoring Co. Ltd. (Lynnterm) | 3 | 2 | n.a. | 2 | 3 | 2 |
| Westshore Terminals | 3 | 2 | 2 | 5 | 2 | 2 |
| Yellowline Asphalt Products Ltd. | 2 | 5 | n.a. | 2 | 2 | 2 |

n.a.: non applicable

| SAINT LAWRENCE SEAWAY  | GHG AND AIR POLLUTANTS | SPILL PREVENTION | COMMUNITY IMPACTS | ENVIRONMENTAL LEADERSHIP | WASTE MANAGEMENT |
|--|-------------------------------|-------------------------|--------------------------|---------------------------------|-------------------------|
| Great Lakes St. Lawrence Seaway Development Corporation / Saint Lawrence Seaway Management Corporation † | 4,1 | 5 | 5 | 5 | 4,1 |

† Each Seaway corporation filed an individual evaluation to Green Marine and had its results separately verified, but they both opted to publish their results jointly to reflect their allied efforts in achieving environmental excellence. The published results are the weighted average of the individual results based on the number of locks managed by each Seaway corporation.

| SHIPYARDS  | GHG AND AIR POLLUTANTS | SPILL PREVENTION | COMMUNITY IMPACTS | ENVIRONMENTAL LEADERSHIP | WASTE MANAGEMENT |
|--|-------------------------------|-------------------------|--------------------------|---------------------------------|-------------------------|
| Blount Boats | 1 | 2 | 2 | 1 | 1 |
| British Columbia Ferry Services Inc. | 3 | 3 | 2 | 3 | 3 |
| Great Lakes Shipyard | 2 | 2 | 2 | 2 | 2 |
| Motive Power Marine | 2 | 2 | 2 | 2 | 2 |
| Ocean Industries Inc. | 3 | 2 | 2 | 2 | 2 |
| Point Hope Maritime Ltd. | 2 | 4 | 2 | 3 | 3 |
| Seaspan Shipyards | 3 | 4 | 4 | 4 | 4 |
| Washington State Ferries | 3 | 3 | 2 | 3 | 2 |

| PORT AUTHORITIES  | GHG & AIR POLLUTANTS | SPILL PREVENTION | DRY BULK HANDLING AND STORAGE | COMMUNITY IMPACTS | ENVIRONMENTAL LEADERSHIP | WASTE MANAGEMENT | UNDERWATER NOISE |
|--|----------------------|------------------|-------------------------------|-------------------|--------------------------|------------------|------------------|
| Alabama State Port Authority | 4 | 2 | 2 | 2 | 3 | 2 | n.a. |
| Bécancour Waterfront Industrial Park | 3 | 2 | n.a. | 2 | 4 | 2 | n.a. |
| Belledune Port Authority | 1 | 2 | n.a. | 1 | 2 | 2 | 1 |
| Canaveral Port Authority | 2 | 5 | n.a. | 2 | 3 | 2 | 2 |
| Duluth Seaway Port Authority | 3 | 5 | 5 | 5 | 4 | 2 | n.a. |
| Greater Victoria Harbour Authority | 5 | 5 | n.a. | 4 | 4 | 3 | 3 |
| Halifax Port Authority | 5 | 5 | n.a. | 4 | 5 | 5 | 2 |
| Hamilton-Oshawa Port Authority (Hamilton) | 3 | 4 | n.a. | 4 | 4 | 4 | n.a. |
| Hamilton-Oshawa Port Authority (Oshawa) | 3 | 2 | n.a. | 4 | 3 | 3 | n.a. |
| Illinois International Port Authority | 1 | 2 | n.a. | 2 | 2 | 2 | n.a. |
| Montréal Port Authority | 5 | 5 | n.a. | 5 | 5 | 5 | n.a. |
| Nanaimo Port Authority | 3 | 2 | n.a. | 2 | 4 | 2 | 2 |
| Northwest Seaport Alliance | 5 | 3 | n.a. | 2 | 4 | 3 | 2 |
| Port Alberni Port Authority | 2 | 2 | n.a. | 2 | 2 | 3 | 1 |
| Port Everglades | 5 | 5 | n.a. | 5 | 5 | 4 | 4 |
| Port Milwaukee | 3 | 2 | n.a. | 2 | 3 | 2 | n.a. |
| Port of Albany | 3 | 2 | n.a. | 2 | 3 | 2 | n.a. |
| Port of Anacortes | 1 | 2 | 2 | 2 | 3 | 2 | 1 |
| Port of Cleveland | 3 | 3 | 3 | 2 | 4 | 2 | n.a. |
| Port of Corpus Christi | 4 | 4 | 4 | 2 | 4 | 3 | 1 |
| Port of Everett | 1 | 4 | 2 | 2 | 3 | 2 | 1 |
| Port of Galveston | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| Port of Goderich | 2 | 2 | 1 | 1 | 1 | 1 | n.a. |
| Port of Gulfport (Mississippi State Port Authority) | 2 | 5 | 3 | 2 | 2 | 2 | 1 |
| Port of Hueneme | 3 | 5 | n.a. | 5 | 5 | 5 | 2 |
| Port of Indiana - Burns Harbor | 2 | 4 | n.a. | 4 | 3 | 2 | n.a. |
| Port of Indiana - Jeffersonville | 2 | 2 | n.a. | 2 | 2 | 1 | n.a. |
| Port of Indiana - Mount Vernon | 2 | 3 | n.a. | 2 | 2 | 2 | n.a. |
| Port of Monroe | 2 | 2 | 4 | 2 | 4 | 2 | n.a. |
| Port of New Orleans | 2 | 4 | n.a. | 4 | 4 | 3 | n.a. |
| Port of Olympia | 1 | 4 | 3 | 1 | 2 | 1 | 2 |
| Port of Pensacola | 1 | 4 | 1 | 2 | 1 | 1 | 1 |
| Port of San Diego | 5 | 5 | n.a. | 5 | 2 | 5 | 1 |
| Port of Seattle | 5 | 5 | n.a. | 5 | 5 | 5 | 2 |
| Port of Stephenville | 2 | 2 | 1 | 1 | 1 | 2 | 1 |
| Port of Stockton | 3 | 5 | 3 | 2 | 4 | 2 | n.a. |
| Port of Valleyfield | 2 | 2 | n.a. | 2 | 3 | 2 | n.a. |
| Port Saint John | 1 | 4 | n.a. | 2 | 3 | 5 | 2 |
| PortsToronto | 2 | 2 | 2 | 2 | 4 | 2 | n.a. |
| Prince Rupert Port Authority | 4 | 5 | n.a. | 5 | 5 | 4 | 3 |
| Québec Port Authority | 5 | 5 | n.a. | 5 | 5 | 5 | n.a. |
| Saguenay Port Authority | 3 | 5 | n.a. | 5 | 3 | 2 | 2 |
| Sept-Îles Port Authority | 3 | 3 | 3 | 3 | 4 | 2 | 2 |
| St. John's Port Authority, NL | 2 | 2 | n.a. | 4 | 3 | 2 | 2 |
| Summerside Port Corporation | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Thunder Bay Port Authority | 3 | 2 | n.a. | 2 | 3 | 2 | n.a. |
| Trois-Rivières Port Authority | 3 | 5 | n.a. | 4 | 4 | 2 | n.a. |
| Vancouver Fraser Port Authority | 5 | 4 | n.a. | 5 | 5 | 3 | 5 |
| Windsor Port Authority | 2 | 3 | n.a. | 5 | 3 | 2 | n.a. |

n.a.: non applicable

SMART GUIDE'S FULL INTEGRATION

Green Marine's Smart Guide is now fully implemented as an online tool for all participants to use to relate their annual performance results.

The web application took well over a year to develop. It was introduced last year on a trial basis with 50 brave participants volunteering to use it to help Green Marine identify and resolve the tool's bugs, as well as other elements that required improvement.

All of the features were reviewed, adjusted and updated as required for performance reporting by all participants. A fully functional verifier module was also introduced to assist with distanced verifications so that participants can share their self-assessment information, including comments, proof and justifications with their selected verifier using this online tool.

MINIMIZING GREEN MARINE'S OPERATIONAL FOOTPRINT

For the third consecutive year, the Green Marine staff arranged for the carbon neutrality of its operational impacts. A total of 5.4 tonnes of CO2 equivalent was offset for all work-related travel (including daily commutes), infrastructure operations, waste management, electricity consumption and paper use. The offset was achieved by purchasing high-quality carbon offset credits through the reputable Planetair organization that will go toward reforestation efforts.

The COVID-19 pandemic brought an abrupt halt to business travel by mid-March of last year. However, all of the electrical power required for videoconferences and other virtual meetings (with or without a camera) were factored into Green Marine's carbon footprint and compensated accordingly.

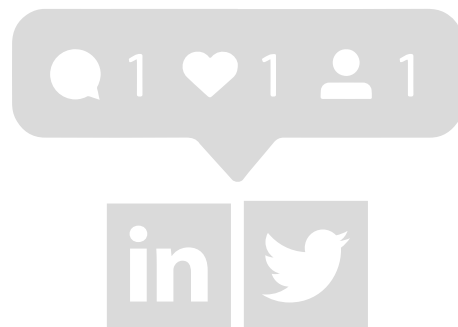
NEW CREW MATE

Green Marine welcomed Julie Turmel as the new Communications officer last October. She joined the Green Marine team already familiar with the maritime industry from her previous role in communications at the Port of Quebec.

Her arrival has significantly helped to handle the increased volume and frequency of communications as part of the organization's pledge to keep the steadily increasing membership as well as all relevant stakeholders and the public informed. Among the several new projects that Julie has already piloted is the newsletter's revamped design. She's also skipping Green Marine's tweets and other timely posts on social media.

She is of great assistance to Communications Manager Manon Lanthier whose duties have significantly expanded during her now 10 years with Green Marine – including the quick major adjustments necessary in response to a pandemic

IMPROVED COMMUNICATIONS



- **A new look for the magazine and two distinctly themed newsletters!**
- **A surging online reach with 1,565 Twitter & 1,610 LinkedIn followers!**

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