



For immediate release

Green Marine ship owners announce reduction in GHG emissions

Quebec City, December 12, 2017 – Ship owners participating in the Green Marine environmental certification program have demonstrated leadership in reducing greenhouse gases (GHG). Green Marine’s first carbon dioxide equivalent (CO₂e) emissions data gathering and analysis indicate an average annual reduction in GHG intensity of 1.4%.

This initiative was undertaken to better gauge Green Marine’s impact since the environmental program’s launch 10 years ago. The ship owners that provided data for this voluntary initiative represent more than 250 vessels of various types, including: tug, passenger and cargo ferry, bulk, self-unloading, tank, container, and articulated tug barge.

“It is the first time this kind of reporting exercise has been done by such a diversified group of ship owners,” says Dr. Eleanor Kirtley, Green Marine’s West Coast program manager who spearheaded the initiative.

Participants had to provide emissions data from a baseline year and from 2016. They subsequently each calculated their average GHG emissions for a period varying from two to eight years. “We decided to aggregate the results by percentage of reduction since it was the only common metric for every type of ship owner,” Kirtley explains, adding that ship owners use different accepted methods of measurement, with some reporting emissions per unit of time, while others do so per tons of cargo or per unit of traffic work.

“This initiative demonstrates how Green Marine participants willingly go beyond regulatory compliance by all readily providing this data before it is required by any binding authority,” says David Bolduc, Green Marine’s executive director. “The results clearly illustrate that ship owners are improving their energy efficiency in keeping with Green Marine’s core tenet of continual environmental improvement.

To reach an average annual reduction of 1.4%, the shipping companies had to implement significant changes to their operations. These include hull cleaning and propeller polishing, weather routing, loading for trim optimization, voluntary speed reductions, and preventive engine maintenance. The energy performance plan that is required from each ship owner to qualify for Green Marine certification must include quantifiable reduction

targets. Many of the ship owners are investing billions of dollars in fleet renewal for vessels that are substantially more efficient.

Please refer to the Technical Annex that follows for more specifics about this data initiative.

Green Marine Overview

Established in 2007, Green Marine is a North American environmental certification program for the maritime transportation industry. The program stems from the industry's voluntary initiative to surpass regulatory requirements. There are currently more than 115 companies – ship owners, port authorities, terminal operators and shipyard managers – participating in the program throughout Canada and the United States. The Green Marine certification process is rigorous and transparent: the results are independently verified every two years, and each participant's individual results are published annually. The Green Marine program's unique character derives from the support of more than 65 environmental organizations, scientific programs, and government agencies. These supporters contribute to shaping and revising the program.

-30-

For more information:

Green Marine

Manon Lanthier

Communications manager

418.649.6004 ext. 302 | 418.569.5110

manon.lanthier@green-marine.org

Technical Annex

Reporting participants

To be eligible to participate in the data collection, ship owners had to achieve Level 3 or higher in the five-level performance indicator for greenhouse gases in their 2016 results. A total of 19 of Green Marine's 26 certified ship owners were eligible. Thirteen of them provide data, which is a two-thirds participation rate. Green Marine intends to repeat the exercise in coming years, and will strive to increase the number of reporting participants.

Methodology

The 1.4% annual average was calculated over 58 years cumulatively*, comparing 2016 to a baseline year – the year dating farthest back for which data was available (i.e. a GHG emissions inventory performed by the shipping company). The baseline year varied from 2008 (the earliest year and coinciding with the first year of reporting for the Green Marine program) to 2015 (for newer participants joining the program that year).

This data is reflective of actual cargo carried or service provided, which is in keeping with International Maritime Organization (IMO) guidelines (Energy Efficiency Operational Index) and the European Union MRV (Monitoring, Reporting, Verification) regulations.

**Total of all years comprised between each ship owner's baseline year and the year 2016.*

Existing regulations in GHG reporting

Green Marine's GHG reporting initiative is unique because there were no regulations yet in force in 2017 for existing vessels to report CO₂ emissions. The IMO's EEDI standards target new vessels only and require percent reduction below baseline, and percent reduction increases by 5% or 10% (with it varying by ship type) every five years; annualized, this is an improvement of 1% or 2% annually.

Considering that Green Marine's GHG reporting initiative involves existing vessels, the above 1% average annual reduction achieved by reporting ship owners is a testimony to the efforts being put forward to lower the industry's environmental footprint.

Green Marine GHG Performance indicator

Always true to its mission of advancing environmental excellence, Green Marine reviewed its five-level GHG performance indicator last year to keep challenging ship owners. Green Marine increased the Level 5 average reduction target to 2%. As in past years, achieving a greater than 1% annual average improvement meets Level 4 criteria. This study will be useful in future adjustments of the Green Marine program's GHG reduction targets.

In compliance with Green Marine membership rules, a ship owner cannot enter only its most efficient vessel(s) into the program. The company must benchmark the performance of its entire fleet using the program's criteria. Similarly, for the GHG reporting initiative, both older and newer vessels were evaluated.