



THE BENEFITS OF AN ENVIRONMENTAL CERTIFICATION FOR FERRY OPERATORS

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green-marine.org



GREEN MARINE IS...

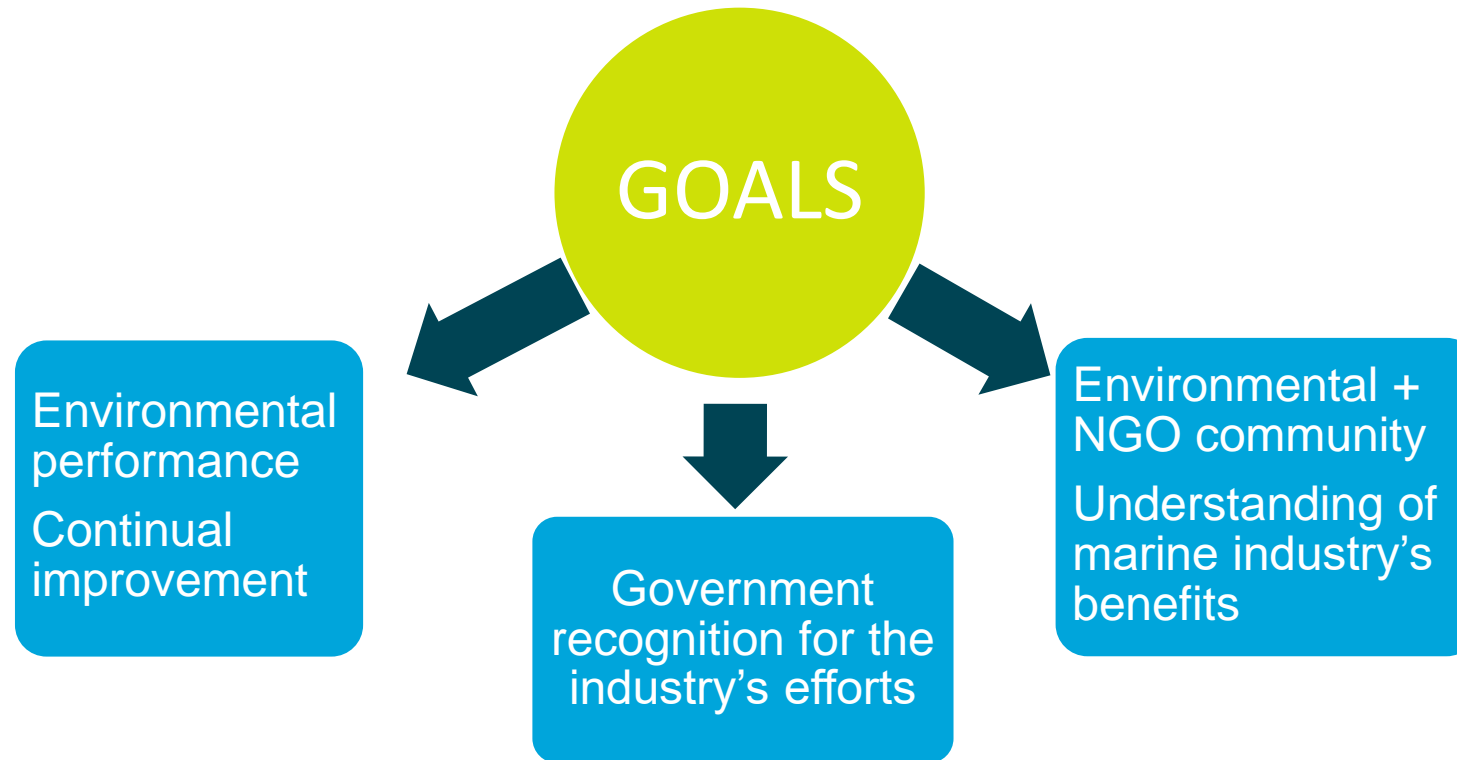
A **voluntary certification program** to reduce environmental footprint of marine operations by

- exceeding regulatory compliance
- promoting a culture of continual improvement

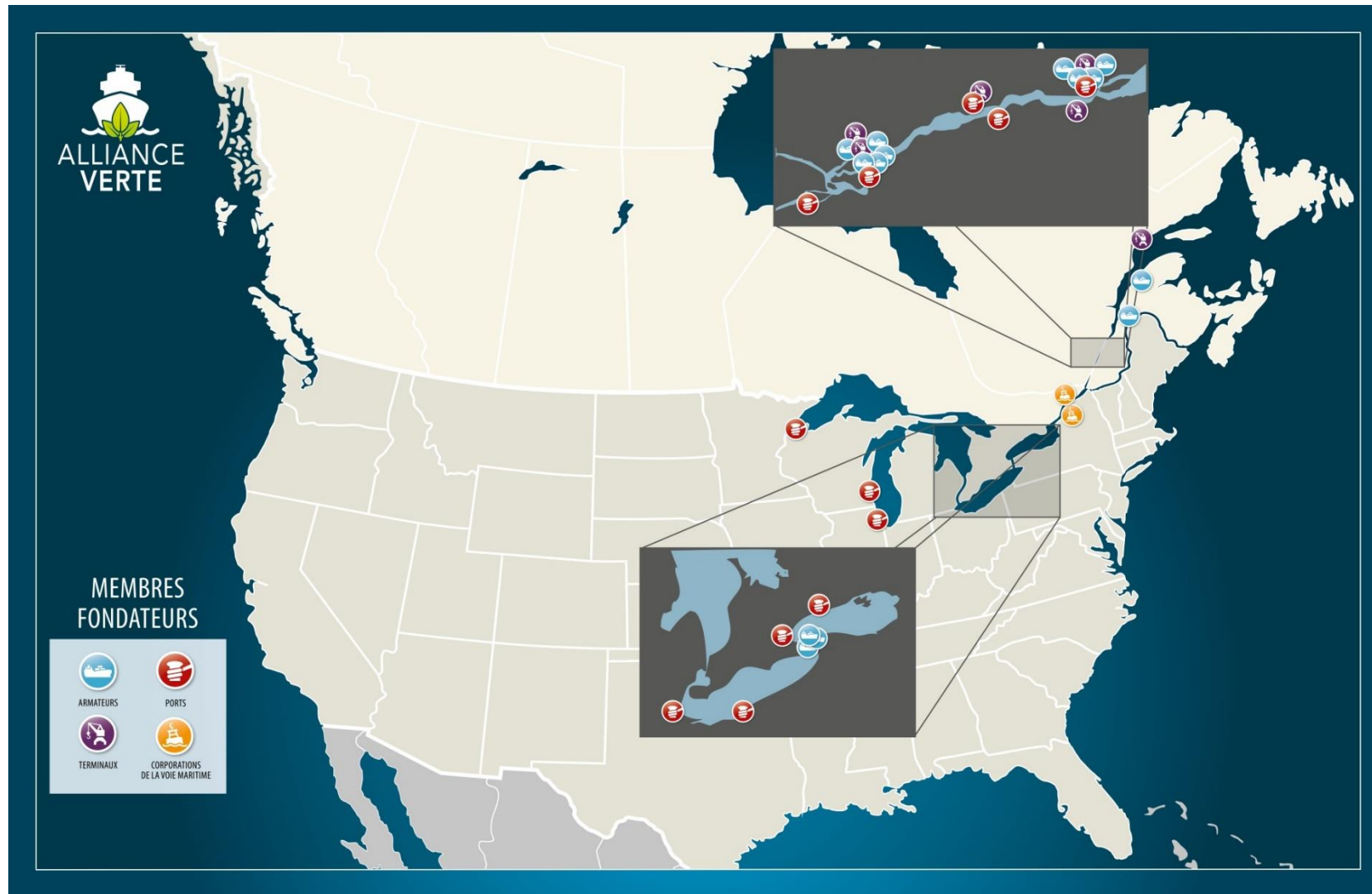
A **benchmarking tool** to measure performance

A **partnership** initiative involving stakeholders

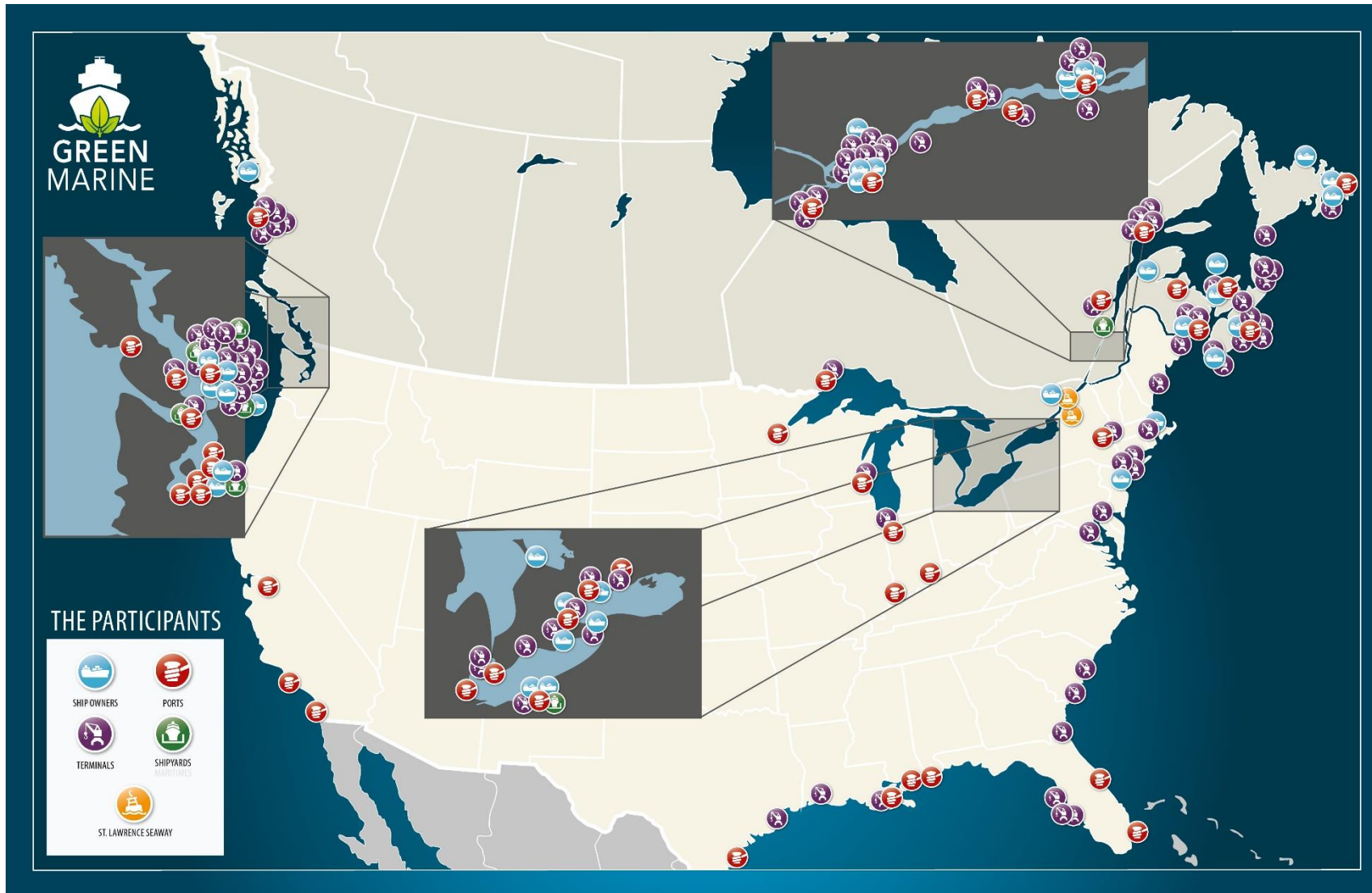
IMPROVING SOCIAL LICENSE



PARTICIPANTS IN 2008



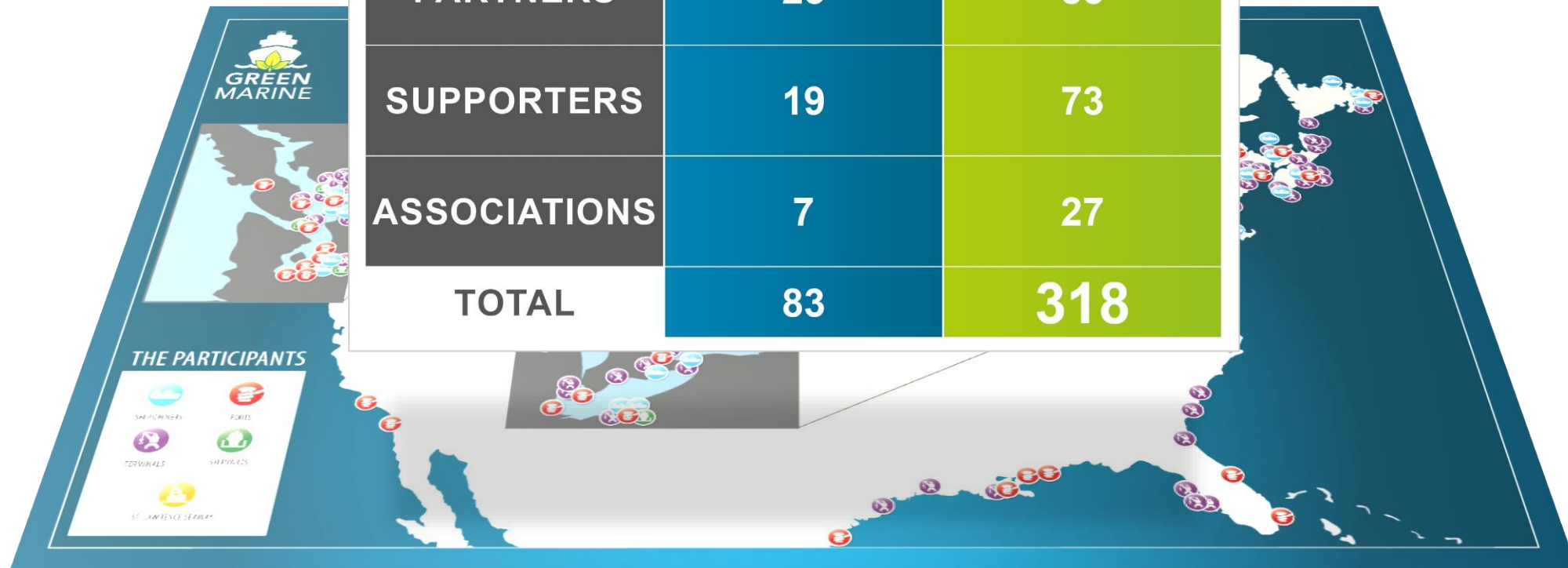
133 PARTICIPANTS IN U.S. AND CANADA



MEMBERSHIP GROWTH 2007 – 2019



	2007	2019
PARTICIPANTS	34	133
PARTNERS	23	85
SUPPORTERS	19	73
ASSOCIATIONS	7	27
TOTAL	83	318



FERRIES AND PASSENGER VESSELS



10 operators (90+ vessels)

- Alaska Marine Highway System
- Bay Ferries
- British Columbia Ferry Services
- Croisières AML
- CTMA
- Marine Atlantic
- Northumberland Ferries
- Owen Sound Transportation
- Société des traversiers du Québec
- Washington State Ferries

2 shipyards

- British Columbia Ferry Services
- Washington State Ferries



65+ terminal locations

PROGRAM CRITERIA



ENVIRONMENTAL PERFORMANCE INDICATORS

PERFORMANCE INDICATORS	SHIP OWNERS	PORTS & SEAWAY	TERMINALS & SHIPYARDS
Aquatic invasive species			
Community impacts			
Dry bulk handling and storage			
Environmental leadership			
Garbage management			
Greenhouse gas emissions			
Oily water			
Pollutant air emissions NOx			
Pollutant air emissions SOx & PM			
Prevention of spills and leakages			
Underwater noise			
Waste management			



BENCHMARKING PERFORMANCE



For each environmental issue, performance is evaluated from Level 1 to Level 5:



GHG EMISSIONS



✓ Systematic control policy for **documenting fuel**

✓ Energy efficiency **light upgrades**



✓ Annual GHG emissions **inventory**
& Energy **performance plan**

✓ Transit at **optimal engine speed** for
fuel efficiency



CERTIFICATION PROCESS



1. SELF-EVALUATION

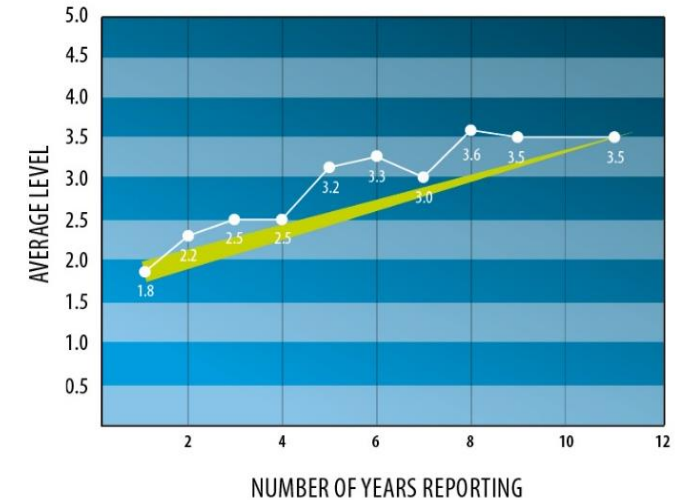


2. INDEPENDENT VERIFICATION



3. PUBLICATION OF RESULTS

CONTINUAL IMPROVEMENT



STRATEGIC BENEFITS



For individual
companies

CERTIFICATION



Tool to demonstrate
environmental performance

For the marine
industry

PUBLIC TRUST



Tool to improve long-term
relations with stakeholders

70 NGOs, government agencies and other stakeholders publicly support Green Marine



Fisheries and Oceans
Canada



Transports
Canada



Environment
Canada



Putting Water First



PUBLIC SCRUTINY



EVIDENCE FOR INDUSTRY ADVOCACY



The program communicates how the maritime industry is:

1. Beyond Compliance
2. Proactive
3. Green



MAY 29, 2018

NORTHUMBERLAND AND BAY FERRIES JOIN GREEN MARINE

Canadian East Coast ferry and terminal operators, Northumberland Ferries Limited (NFL) and Bay Ferries Limited, have signed on as the newest members of Green Marine, the largest voluntary environmental program for the maritime industry in North America.

NFL and BFL are wholly owned subsidiaries of Atlantic Ferries Holdings Limited of Charlottetown, Prince Edward Island. NFL operates two conventional ferries, the MV Confederation and the MV Holiday Island, linking Wood Islands, PEI and Caribou, Nova Scotia and servicing, approximately 475,000 passengers, 160,000 passenger vehicles, and 18,000 commercial trucks annually.

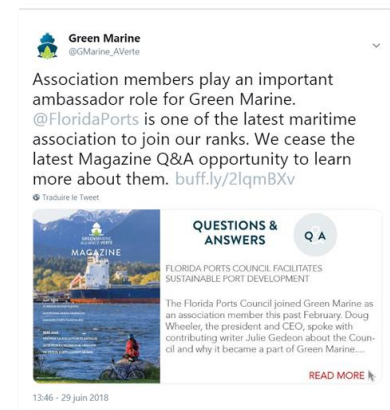
BFL operates a conventional ferry, the MV Fundy Rose, linking Saint John, New Brunswick and Digby, Nova Scotia, and a high-speed catamaran, The Cat, that travel between Portland, Maine and Yarmouth, Nova Scotia and can accommodate at least 700



APRIL 9, 2017

SEASPAN CELEBRATES DOUBLE COMMISSIONING OF NEW LNG VESSELS

Seaspan Ferries Corporation (SFC) officially welcomed two new state-of-the-art dual-fuelled/hybrid (LNG, diesel and battery) vessels to its fleet on April 9th when a double commissioning ceremony was held at SFC's Tilbury Terminal. The Seaspan Swift and the Seaspan Reliant – the first eco-ferries of their kind in North America – were formally christened by British Columbia Premier Christy Clark, and Anisa White, the wife of Doug White III, Councillor and Chief Negotiator for the Snuneymuxw First Nation. The Seaspan Swift and the Seaspan Reliant are the first of a next generation of vessels fuelled by B.C.'s clean-burning LNG. The 148.9-metre ferries can accommodate up to 59 trailers that are up to 16 metres in length. The eco-ferries are the first new vessels in the SFC's fleet since 2002. The Seaspan Swift is also shortlisted for the Nor-Shipping Awards in the Energy Efficiency category. The winners will be announced on May 30th, in London, England.



VALUE PROPOSITION

- ✓ **Roadmap and Action Plan** to benchmark and improve environmental performance
- ✓ **Cost-effective** third party verified certification
- ✓ **Communications** to engage and invest in public trust



PERFORMANCE INDICATORS

○ Shipowners ○ Ports and seaway ○ Terminals and shipyards



AQUATIC INVASIVE SPECIES



CARGO RESIDUES



COMMUNITY IMPACTS



DRY BULK HANDLING AND STORAGE



ENVIRONMENTAL LEADERSHIP



GARBAGE AND WASTE MANAGEMENT



GREENHOUSE GAS EMISSIONS



OILY WATER



POLLUTANT AIR EMISSIONS NOx



POLLUTANT AIR EMISSIONS SOx & PM



PREVENTION OF SPILLS AND LEAKAGES



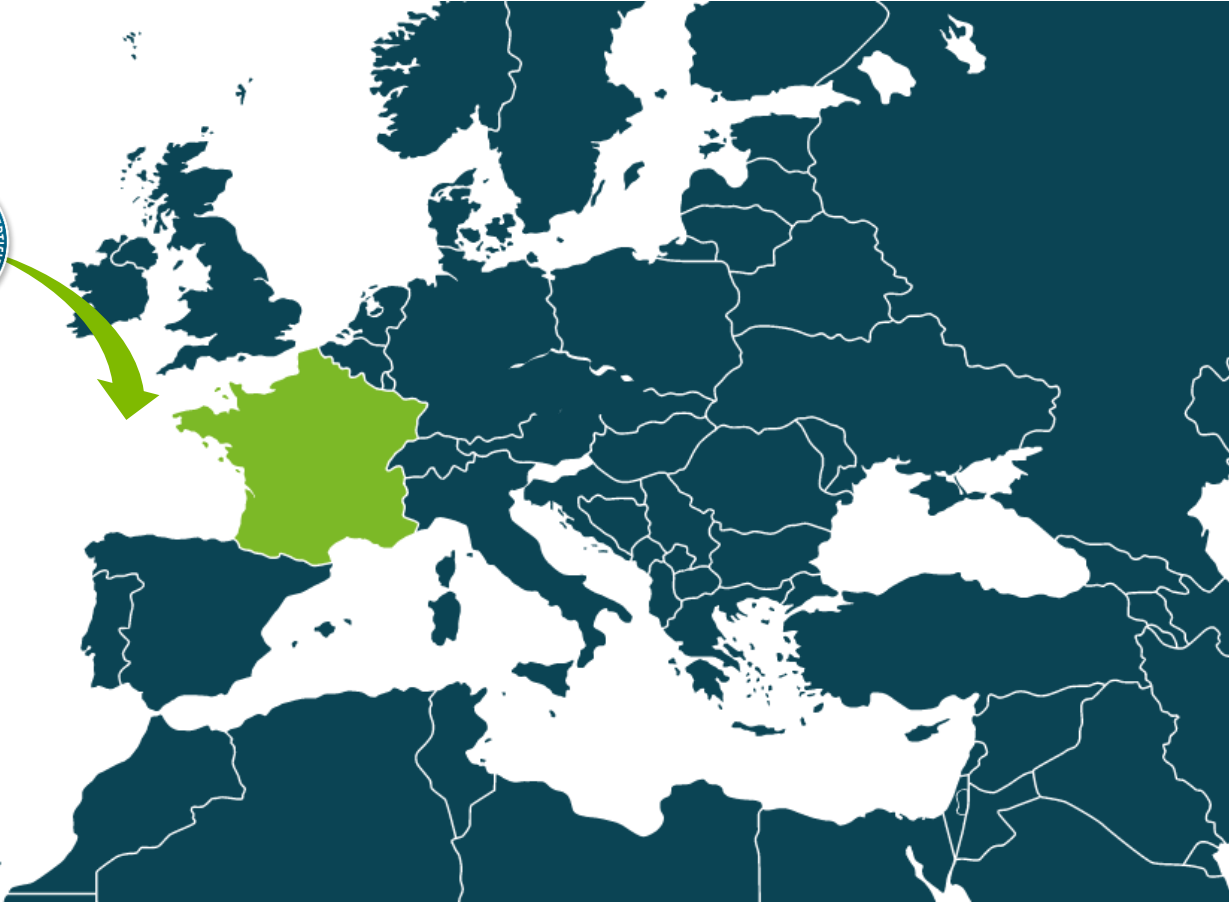
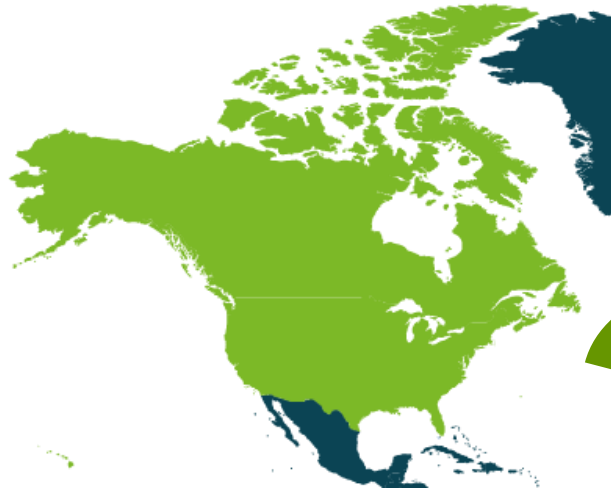
UNDERWATER NOISE

VALUE PROPOSITION

- ✓ **Recognition and visibility** for environmental efforts
- ✓ **Network** of best practices and professionals
- ✓ **Leaders** in emerging issues, without regulation, ex. Underwater noise



GREEN MARINE EUROPE





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