



Green Marine: a model of collaboration

Québec, June 27 2012

*Great Lakes and St. Lawrence Cities Initiative
Alliance des villes des Grands Lacs et du Saint-Laurent*

Environmental benefits



Fuel Efficiency

Distance (km) for 1 metric ton of cargo on 1 litre of fuel

312



181



75



Greenhouse Gas Emissions

Grammes of CO₂ per metric ton of cargo transported one km

10



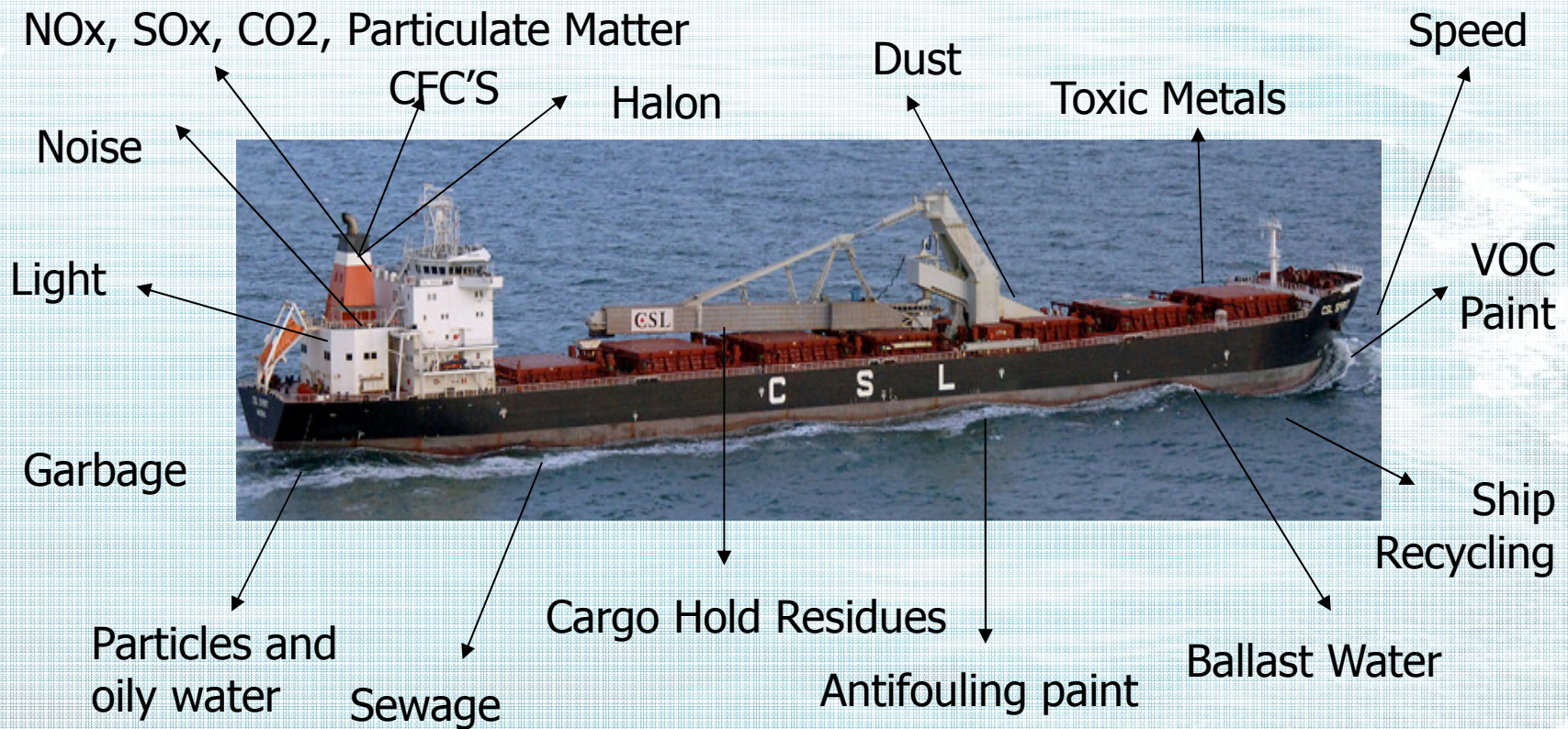
17



33



Impacts



Impacts



- Air emissions
- Cargo residues
- Dredging and sediments

- Community impacts : dust, noise, odors, light
- Waste
- Water runoff

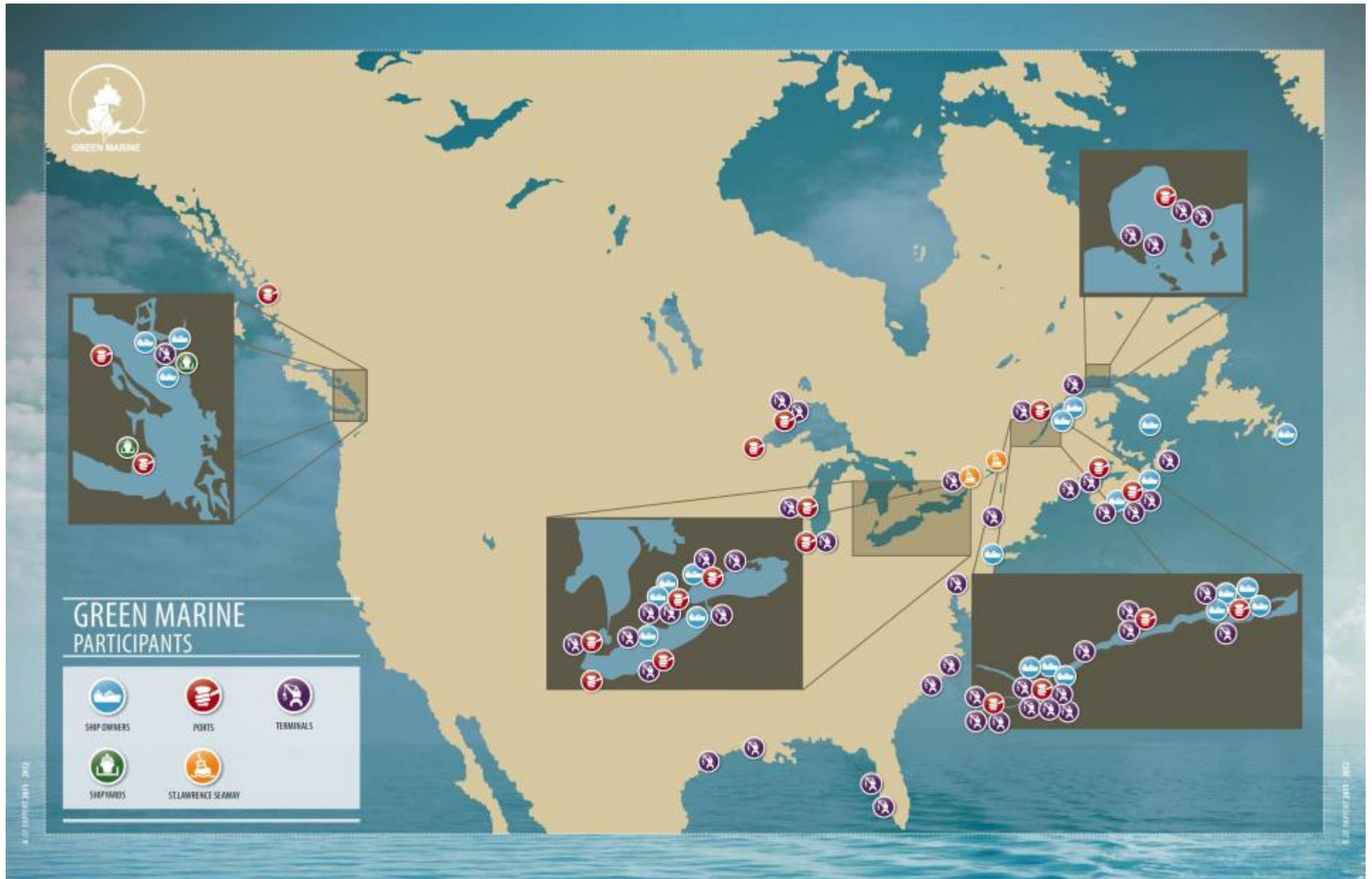


What is Green Marine?



- **Voluntary** and binational industry program to strengthen environmental performance
- Designed for shipowners, ports, terminals & shipyards, who implement concrete actions, practices and technologies **beyond regulatory compliance**
- **Results are measured, independently verified and publicly reported**
- **Engages industry stakeholders** on environmental issues and strategies

Green Marine Participants across North America





PARTICIPANTS 2012



ARMATEURS
SHIP OWNERS



PORTS
PORTS



TERMINAUX
TERMINALS



CHANTIERS
MARITIMES
SHIPYARDS



VOIE MARITIME
DU SAINT-LAURENT
ST. LAWRENCE SEAWAY



SEPT-ÎLES

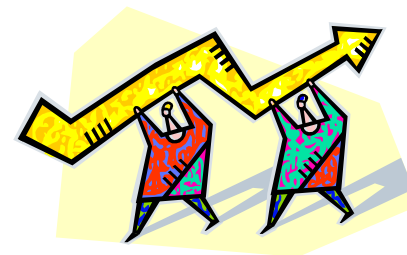
ST. LAWRENCE / SAINT-LAURENT



Reporting



LEVELS	CRITERIA
1	Regulatory compliance
2	Systematic use of best practices
3	Integrated management system & quantification of environmental impacts
4	Introduction of new technologies
5	Excellence and leadership



Reporting



Summary of the Evaluation 7

Environmental Issues	Level reached
1) AQUATIC INVASIVE SPECIES	<input type="text"/>
2A) POLLUTANT AIR EMISSIONS (SO _x)	<input type="text"/>
2B) POLLUTANT AIR EMISSIONS (NO _x)	<input type="text"/>
3) GREENHOUSE GASES	<input type="text"/>
4) CARGO RESIDUES	<input type="text"/>
5) OILY WATERS	<input type="text"/>

This confirms that the information contained in the Summary of the Evaluation matches the levels that the company has attained for the following environmental issues covered by the Environmental Program of the St. Lawrence and Great Lakes Marine Industry:

Signed on (date):

Name of the company:

Signed by the President of the Green Marine Participant Company:

Please complete the Summary of the Evaluation and return it to the Green Marine secretariat to: 277 de l'Estuaire, Québec, QC, CANADA G1K 8S9 or fax it to: (418) 848-4627

- CEO sign-off on performance self-assessments
- **Independent verification** of results
- **Public disclosure** of individual company results



Reporting



	Aquatic Invasive Species	Air Emissions (SOx)	Air Emissions (NOx)	Greenhouse Gases	Cargo Residues	Oily Water
Algoma Central Corporation	4	4	4	3	4	5
Atlantic Towing Limited	2	5	2	2	n.a.	2
Canada Steamship Lines	5	4	4	5	4	4
Canformav Inc.	4	4	3	5	5	5
COGEMA	n.a.	5	2	2	n.a.	2
Fednav Ltd.	4	3	3	5	5	4
Groupe CTMA	2	5	2	2	n.a.	1
Groupe Desgagnés Inc.	4	5	4	5	4	4
Island Tug and Barge Ltd. *	n.a.	5	2	2	n.a.	n.a.
Lower Lakes Towing Ltd.	2	2	2	2	2	2
McAsphalt Marine Transportation Ltd.	4	2	3	3	n.a.	2
McKeil Marine Ltd.	3	5	3	2	2	2
Ocean Group Inc.	n.a.	5	3	5	n.a.	n.a.
Oceanex Inc.	3	5	3	3	n.a.	3
Provmar Fuels Inc.	n.a.	5	3	2	n.a.	n.a.
Reformar	n.a.	5	2	3	n.a.	2
Seaspan Marine Corporation	n.a.	5	2	3	n.a.	n.a.
SMIT Marine Canada Inc.	n.a.	5	2	2	n.a.	n.a.
Société des Traversiers du Québec	n.a.	5	3	3	n.a.	2
Svitzer Canada Ltd. *	n.a.	2	2	2	n.a.	n.a.
TBS International / Roymar Ship Management Inc.	3	2	2	2	2	3

Progression

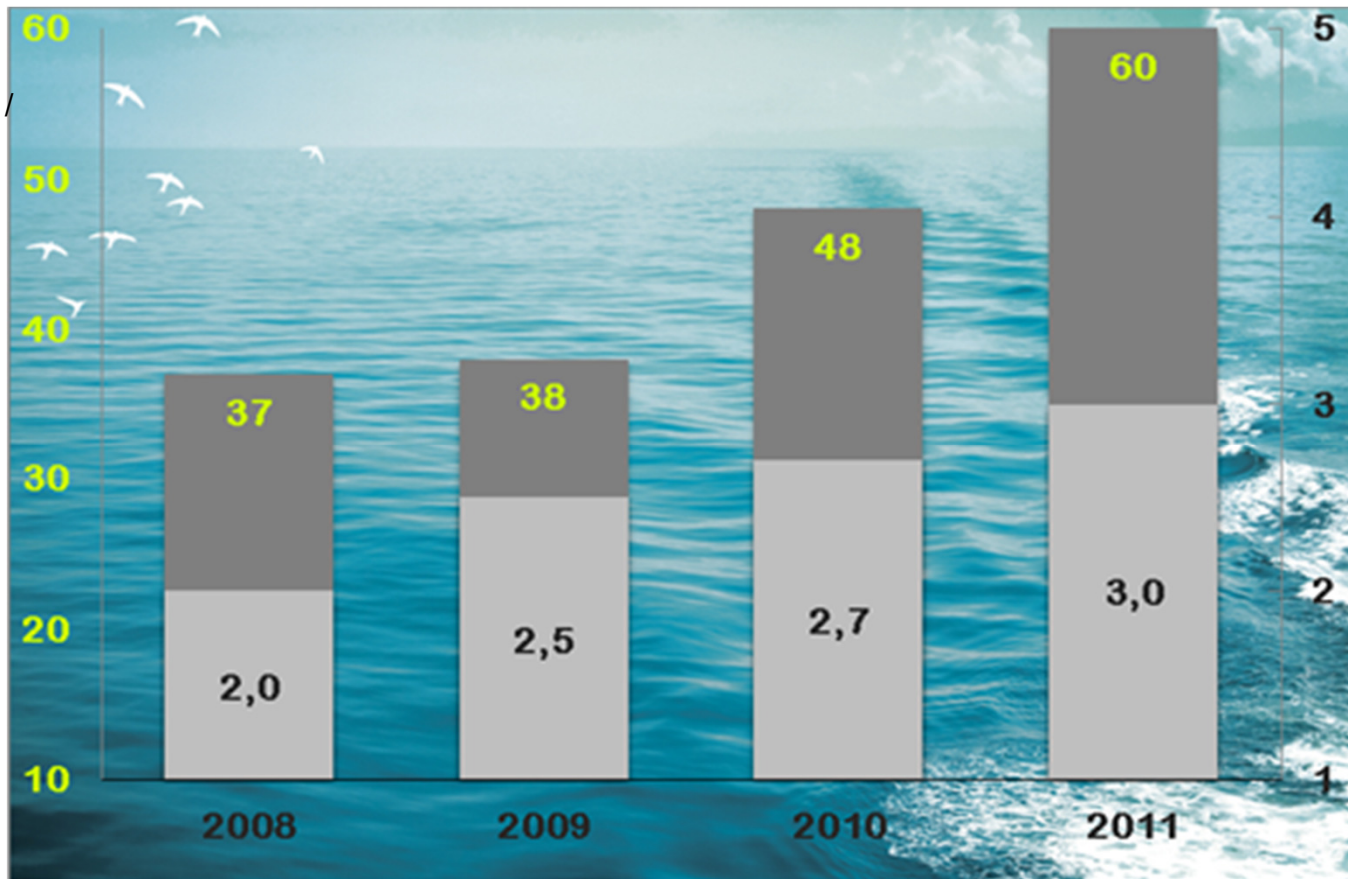


Number of
participants /

*Nombre de
participants*

Overall
results /

*Moyenne
des
résultats*



Program recognition



WINNER
GREEN SHIPPING INITIATIVE OF THE YEAR
Sustainable Shipping Awards 2011

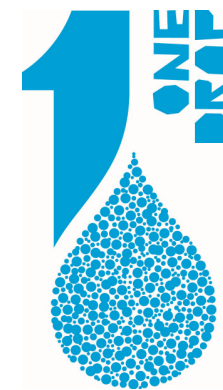
AQTR
AU CŒUR DES TRANSPORTS

ASSOCIATION
QUÉBÉCOISE
DU TRANSPORT
ET DES ROUTES



Prix Environnement 2012

Supporters



Transport
Canada

Transports
Canada

Transports
Québec



Ducks Unlimited Canada
Conserving Canada's Wetlands

Collaboration



BOARD OF DIRECTORS:

- 9 CEOs

GREEN MARINE MANAGEMENT CORPORATION:

- Not-for-profit organization
- 3 full-time staff

ENVIRONMENT COMMITTEES :

- Regional
- Advisory role
- 50% participants (environmental managers)
- 50% stakeholders

WORKING GROUPS:

- Technical expertise
- Participants (technical level)

Great Lakes Committee



➤ **Industry:**

- 3 shipowners;
- 1 port authority
- 1 terminal operator
- Seaway
- 2 associations

➤ **NGOs:**

- Great Lakes United
- World Wildlife Fund

➤ **Governments:**

- Environment Canada
- DFO/TC
- Ontario ministry of Transportation;
- US Coast Guard

➤ **Research:**

- Great Lakes Maritime Research Institute
- Minnesota Sea Grant

Broadening scope of issues addressed



Shipping Companies

- Adapting program to new regulations and new technologies available
- Added: **PM emissions**
- Added: **Waste management (2012)**

Ports, Terminals, Seaway, Shipyards

- Added: **Environmental leadership**
 - Added: **Water & land pollution prevention**
- Being developed:
- **Waste management**
 - **Shipyard-specific requirements**

Supporters / Municipalities



- Board of Harbor Commissioners of the City of Milwaukee
- Great Lakes and St. Lawrence Cities Initiative
- City of Bécancour
- City of Calixa-Lavallée
- City of Contrecoeur
- City of Longueuil
- City of Montréal
- City of Montréal-Est
- City of Matane
- City of Port-Cartier
- City of Québec
- City of Saint-Amable
- City of Sept-Îles
- City of Varennes
- Communauté métropolitaine de Québec
- MRC Marguerite-D'Youville



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