

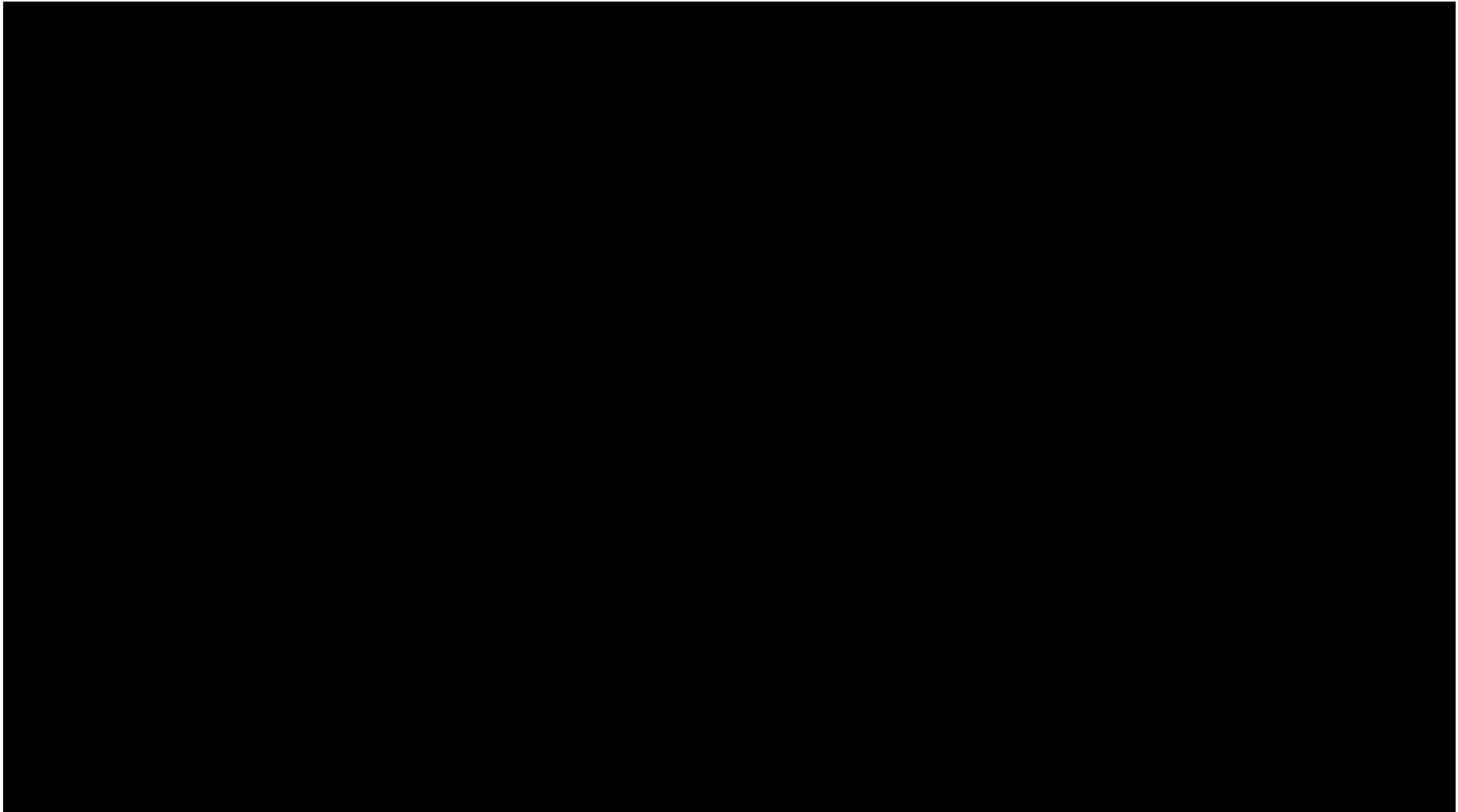


Clean Shipping Index

real-time, quantified insight into the environmental performance of ships



Presentation for IMSF May 13, 2015
Rickard Lindström
Clean Shipping Index



Mission & Vision

Mission

Enhance environmental development in the maritime industry by providing buyers of sea transport with a tool to evaluate the environmental performance of ships and shipping companies.

Vision

To include environmental considerations in day to day economic decision making of transport buyers. Achieving good environmental performance and give quality shipowners a competitive advantage, best practice and innovations will be implemented and regulatory processes speed up.





Clean Shipping Index

Environmental Index for Shipping
based on the Clean Shipping Index criteria for:

- SO_x and PM
- NO_x
- CO₂
- Chemicals
- Water and Waste

} Keeping a holistic focus



Results in

High

Medium

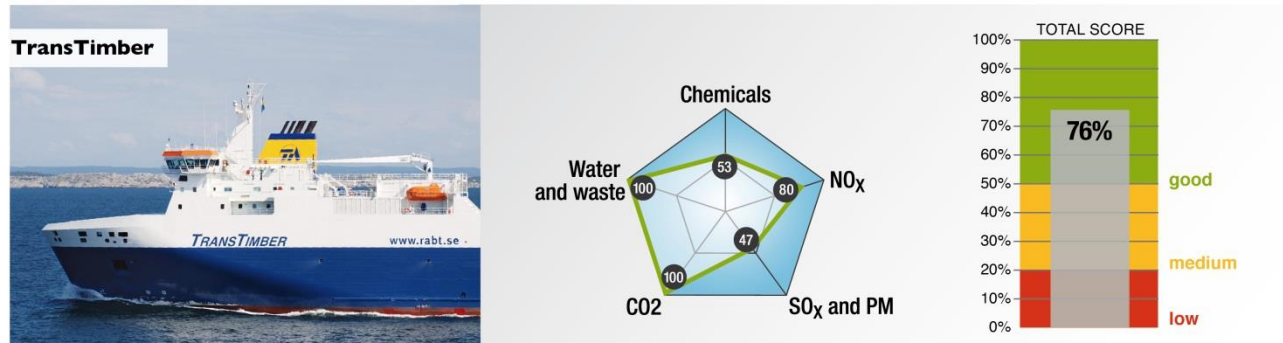
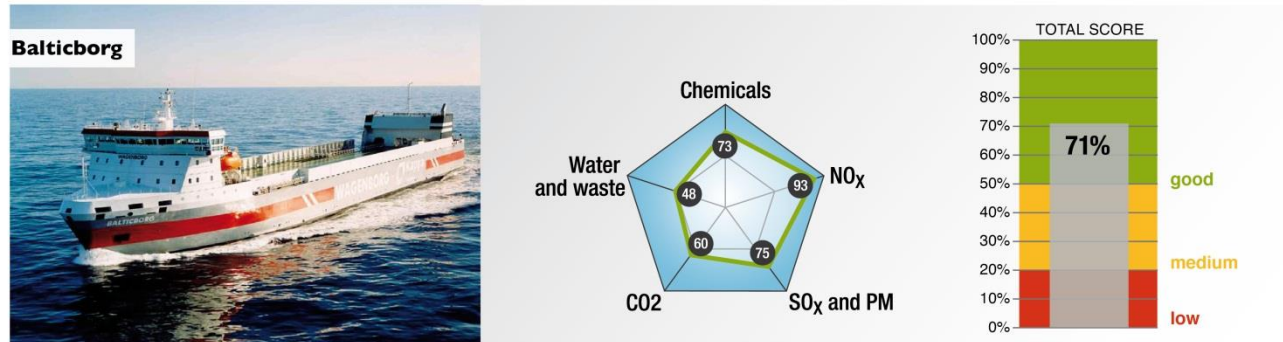
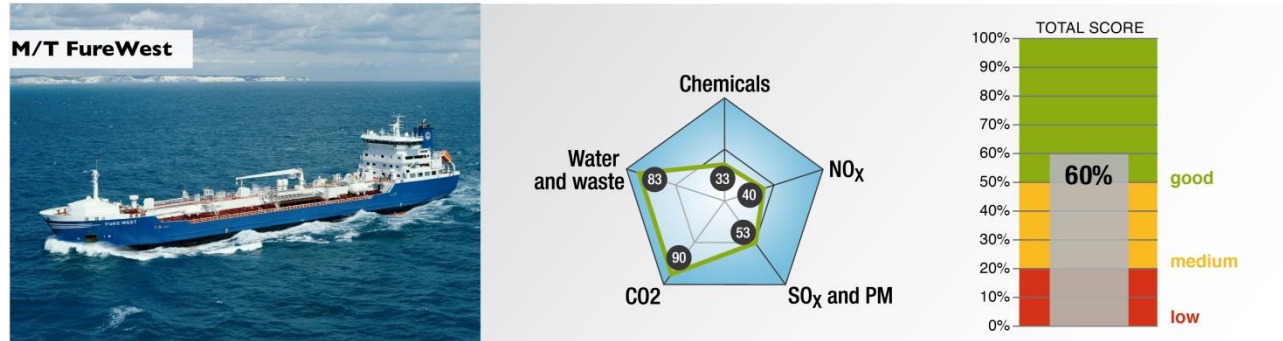
or

Low

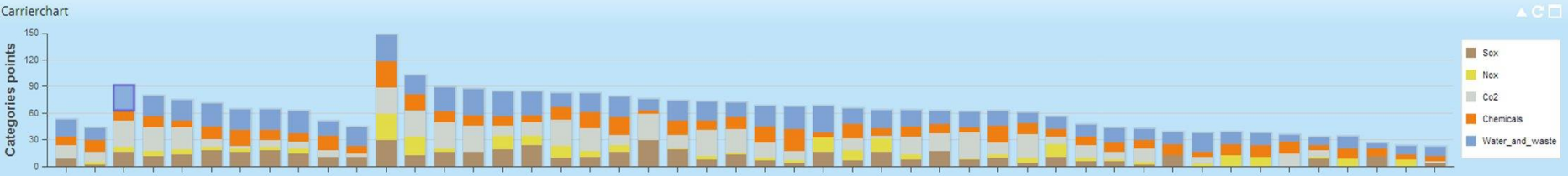
performance

Clean Shipping Index

This is example data from Clean Shipping Index based on self-assessment by the shipping companies.

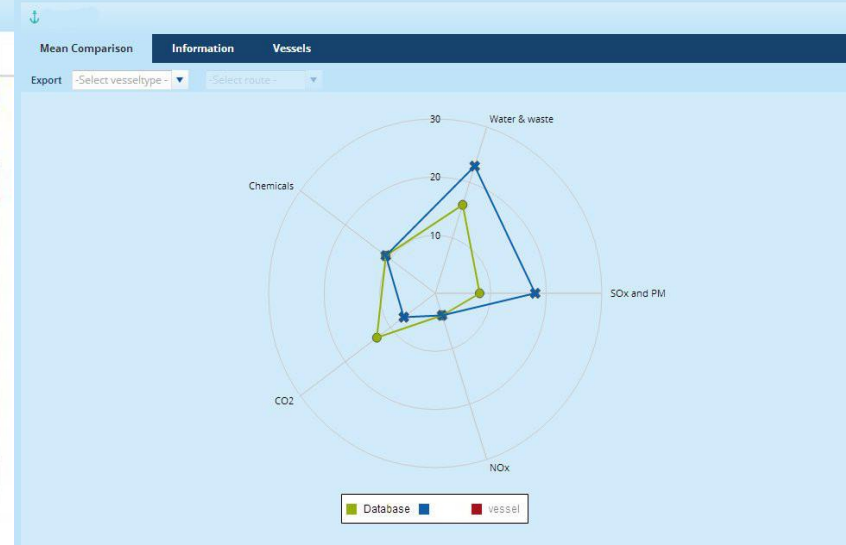


Database usage



Carrierlist

Carrier	Reported %	SOx %	NOx %	CO2 %	Chemicals %	Water and waste %	Weighted total %	Total %
Verified: 2 Carriers								
	92	29	0	51	32	64	35	35
	100	6	9	38	44	46	28	28
Partly verified: 9 Carriers								
	100	53	18	100	38	97	61	61
	77	40	18	89	41	76	53	53
	100	44	18	82	26	75	49	49
	82	59	14	29	49	85	47	47
	100	53	13	10	61	77	43	43
	N/A	60	12	24	38	77	42	42
	100	46	20	27	33	82	42	42
	71	34	1	25	53	55	33	33
	N/A	36	0	13	28	71	18	30
Not verified: 37 Carriers								
	100	100	100	100	100	100	100	100
	38	42	70	100	60	70	68	68



Verification

- Gradual verification of data
- Lloyd's Register, DNV GL, RINA, Bureau Veritas, Korean Register and Class NK offer verification according to Clean Shipping Index
- The Clean Shipping Network requires from shipowners to verify at least 2 vessels



Lloyds Register
NYHETSREVE #2
DECEMBER 2009

Med miljön i fokus

Vi arbetar
Lloyds Register erbjuder ett bre
inte bara för att hjälpa redare oc
terna val gäller miljöfrågor, s
Våra tjänster täcker allt ifrån egen
system till att certifiera enskilda pro
fessioner.
Några exempel på miljöområden LL
släpp av ballastvatten:
• Miljöcertifiering av ledningsystem
• Miljöskydd: Hjälper med passande
kyllor och brandskydd. Däremot
och avskyrningen avseende miljökä
• Certifiering av maritima tekniska
• Åtgärder kring buler och vibrationer ombord fartyg
• IATA Green Passport: Se sidan 2-3
• Oberoende typgodkännande

Clean Shipping Index Verification
How can DNV assist in verifying your Clean Shipping Index self assessment

The first version of the Clean Shipping Index was released during 2007 and has since developed over time. Currently about 1000 vessels are registered in the Clean Shipping Index database and the index has started to work as a tool for the cargo owners to differentiate between their logistics partners. To achieve the best ranking the self assessment that is done by each company needs to be verified by a third party verifier. In addition the cargo owners will require a verification of the index.

DNV has been in close discussion with the Clean Shipping Project since day one and now have the opportunity to verify a company self assessment enabling a high rating and improved business outlook.

Based on the Clean Shipping Index framework DNV has established a verification procedure, approved by the Clean Shipping Project, to accommodate the required verifications into the index. The verification process has been tested with selected operators and adjustments has been made to the verification process based on this experience as well as in the approval process with the Clean Shipping Project.

The verification is designed to be time and cost efficient separating verifications that can be done in the office and impossible to be carried out in context with periodic audits or other surveys, if convenient. The unit cost for verification of the self assessment estimates to EUR 2000 excluding VAT.

If you like to know more on how DNV can help you in verifying your Clean Shipping Index to improve your rating and business opportunities' do not hesitate to contact:

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Väggsgatan 3
41134 Gothenburg
Direct line: +46 (0)31 807 040 76
Fax: +46 (0)31 87 97 06
Email: Stefan.Borggren@dnv.com

Det Norske Veritas AS
Web: <http://www.dnv.com>
For further information please contact your local or main DNV office.



CLEAN SHIPPING INDEX

CERTIFICATE OF VERIFICATION

VESSEL

Name of vessel	TransTimber
Owner	Transatlantic
IMO number	IMO9343273

THIS IS TO CERTIFY

that the above-mentioned vessel has been verified by the undersigned according to the Clean Shipping Index Verification Guidelines, Version 2.0 and that, upon completion of the survey the undersigned is of the opinion that the vessel is in compliance with the self assessment. The overall scoring in the database for this vessel leads to a classification of **Good performance** according to the Clean Shipping Index.

2011-12-02

Date

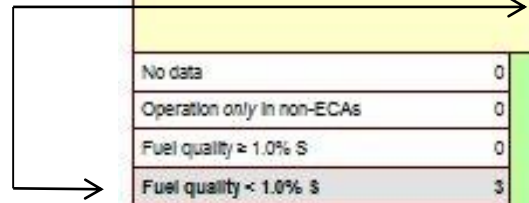
Stefan Borggren
Surveyor

DNV
Classification Society, Member of IACS

Verification method

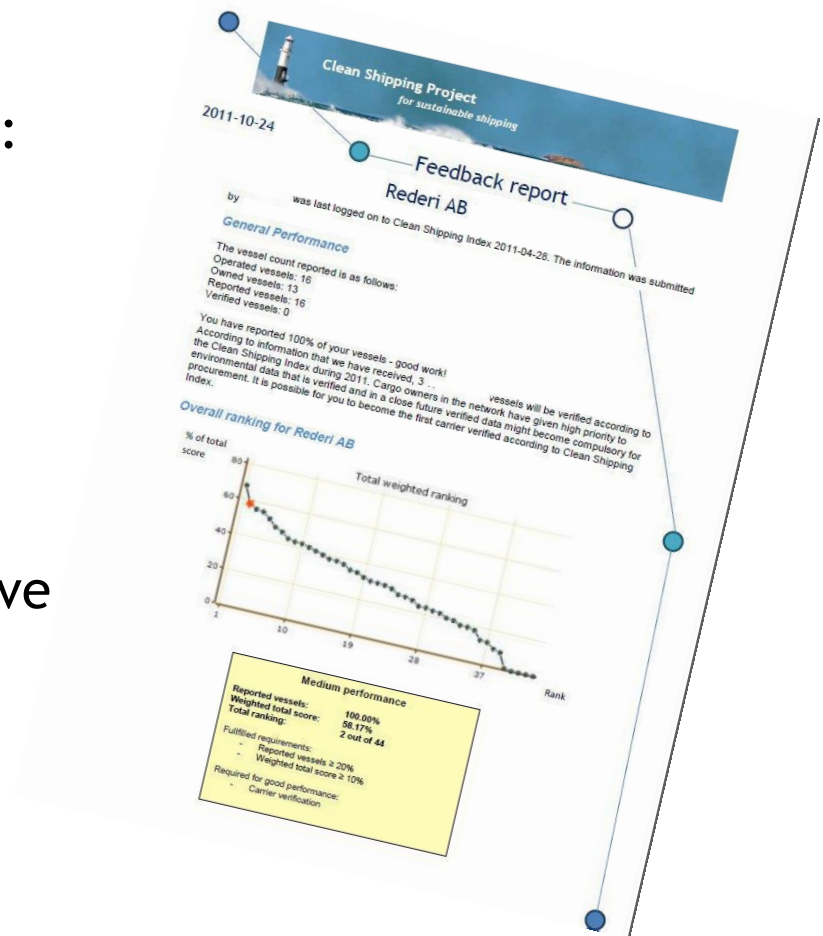
SOx and PM			
Scoring description Company assessment highlighted	Verification assessment	Verification comments	Guideline for assessment
SOx/PM main engines Operations in non-ECAs and ECAs (total yearly average)			
No data	0	Enter comments here.	Office and onboard verification Required documents: Bunker Delivery Notes, BDN summaries, Oil Record Book, International Air Pollution Prevention (IAPP) certificate
Operation only in ECAs	3		
Fuel quality ≥ 2.5% S	0		
Fuel quality < 2.5% S	1		
Fuel quality < 2.3% S	2		
Fuel quality < 2.0% S	3		
Fuel quality < 1.5% S	5		
Fuel quality < 1.0% S	7		
Fuel quality < 0.5% S	9		
LPG / LNG / Biogas	10		
SOx/PM main engines Operations in ECAs (total yearly average)			
No data	0	Enter comments here.	Office and onboard verification Required documents: Bunker Delivery Notes, BDN summaries, Oil Record Book, International Air Pollution Prevention (IAPP) certificate
Operation only in non-ECAs	0		
Fuel quality ≥ 1.0% S	0		
Fuel quality < 1.0% S	3		
Fuel quality < 0.8% S	5		
Fuel quality < 0.5% S or MDO < 1% S	7		
Fuel quality < 0.1% S	9		
LPG / LNG / Biogas	10		
Harbour bonus			
No data	0	Enter comments here.	Office and onboard verification Required documents: Bunker Delivery Notes, BDN summaries, Oil Record Book, International Air Pollution Prevention (IAPP) certificate
Fuel quality ≥ 0.1% S in main and auxiliary engines in harbour areas	3		

pre-2015
SECA
figure



Feedback reports

- Annual feedback reports to carriers:
 - General performance
 - Benchmarking info
 - Performance on specific routes
 - Improvement suggestions
- Ambition is to get carriers to improve and to verify their ships/company



Current members of the Clean Shipping Network

NILSON GROUP



GUNNEBO

SKANSKA

Tetra Laval

Ballast Nedam

VOLKSWAGEN

AKTIENGESELLSCHAFT

EVONIK
INDUSTRIES

BOREALIS

LINDE

VOLVO

Volvo Group Logistics Services

AstraZeneca

ERICSSON

PHILIPS

INDISKA

Perstorp

DSM

The Absolut Company
Pernod Ricard

New Wave
GROUP

BASF

NEC

H&M

ABB

SANDVIK



SKF



SCANIA

KappAhl

storaenso

Ports can access the index for specific carriers/ships

differentiated port dues



Clean Shipping Network requirements

Currently 31 environmentally focused companies (cargo owners and forwarders) who want to be able to evaluate the sea transports with focus on environmental performance

- In the beginning they asked for 20 % of owned fleet to be reported in the index
 - Then 80 % of owned fleet to be reported in the index
 - Now the requirement is that at least 2 vessels should be verified according to the Clean Shipping Index.
 - Future: the whole fleet is verified (carrier verification)
 - Future: The cargo owners can put specific environmental requirements on the ship operators
-

Recent focus and activities

- Ship recycling focus
 - ship breaking statement from network
 - letter to carriers with beaching activities
- MRV (Monitoring Reporting Verification) (CO2)
 - CSI promoting MRV introduction in IMO (MEPC 11-15 May)
 - invited to support IMO in method development
- Banks
 - loan interest rates for ship building affected by CSI data, for instance carrier's general performance and/or expected performance on the new ships



Ideas for the future

Developing PM criteria (done 2014/2015)

Alignment/collaboration with CCWG, ESI and others

Add social factors/criteria

Add performance of alliances in database

Increase transparency

Include Clean Tech suppliers in network

BSR's Clean Cargo Working Group and the Clean Shipping Index Agree to Explore Potential for Merger

Copenhagen/Gothenburg—May 7, 2014—BSR's [Clean Cargo Working Group](#) (CCWG) and the [Clean Shipping Index](#) (CSI)—the two leading environmental reporting initiatives for ships and ship operators—signed a memorandum of understanding to collaborate for cleaner, more efficient shipping.

Through this agreement, the groups will explore a merger to create one global initiative that provides a uniform set of environmental reporting and assessment tools for cargo owners to use during procurement of shipping services. In the short term, CCWG and CSI will align more of the environmental parameters each organization currently uses.

In the past few years, there has been a proliferation of market-oriented environmental initiatives for the maritime industry. While this has been a positive development for sustainability, the different standards have bred confusion for shippers and carriers.

Directors of CCWG and CSI believe that aligning their work could save costs, allow data to be gathered more efficiently, and help engage more companies to collaborate on sustainability through a single network.

“Alignment behind one initiative is of great importance to the industry and our members, and this will help us more quickly reach our common goal of improving the environmental performance of the transport and logistics supply chain,” said Angie Farrag-Thibault, Project Director of CCWG and Associate Director, BSR, leading its Transportation and Logistics practice.

“Having a one-stop-shop for evaluating the environmental performance of shipping would make our work more efficient,” added Merijn Hougee, Director of the Clean Shipping Index “Creating a global initiative by blending the approach of the two most widely recognized programs is an opportunity that we are proud to be cultivating.”

About Clean Cargo Working Group

Clean Cargo Working Group is a global carrier-shipper initiative dedicated to improving the environmental performance of marine container transport. The group comprises approximately 35 member companies with an equal spread of carriers and shippers, including 18 world-liner fleet operators and 18 global shippers and freight forwarders. A full list of members is available at www.bsr.org/cleancargo.

About the Clean Shipping Index

The Clean Shipping Index is a benchmarking tool to evaluate the environmental performance of all types of cargo ships and carriers and is used during procurement of sea transport by a network of 32 large cargo owners. Nineteen of the 20 largest container carriers have entered data into the Index. The Clean Shipping Index covers the major emissions from ships, such as carbon dioxide, nitrogen oxide, sulfur oxide, and also emissions to the sea by waste, on-board use of chemicals in antifouling, lubricants, refrigerants, and cleaning agents. By coordinating a demand for clean ships through the Clean Shipping Network, carriers are encouraged to change over to more environmentally adapted techniques and measures. Visit www.cleanshippingindex.com for more information.

Advantages of merging

Overall

Creating better driver for environmental improvements in the industry

- Better efficiencies
 - Cost saving from eased reporting and verification
 - Management of the initiatives
- Better recruitment and funding potential
- Improved clarity in the market
- Greater industry-wide and stakeholder support

Areas of existing Challenge between Models

Key Concerns/ Challenges	Our Assessment	Approach to Solution
Governance		
Desire to retain Shipper independence over decisions on e.g. <ul style="list-style-type: none"> - Baseline requirements - Methodology issues incl. application of scoring 	Creating own space for discussion of issues & decision making issue can be overcome	<ul style="list-style-type: none"> • Create shipper-only work streams to discuss topics • Define agreeable decision-making process by topic at Board level – cargo carriers willing to reduce role in governance model if merger achieved
Operating Model		
Differences in Scoring		<ul style="list-style-type: none"> • First year create objective scoring framework that is evolved to best practice with input from external stakeholders • Create flexibility in cargo owner use of scoring system
Differences in Verification		<ul style="list-style-type: none"> • Create one verification guideline toward CSI level coverage, over initial period to be defined
Differences in Member Commitments	There isn't significant difference	<ul style="list-style-type: none"> • Combine and strengthen
Differences in Methodology	There isn't significant difference	<ul style="list-style-type: none"> • Combine and strengthen



Tasks ahead in merger

Establish one global beyond regulatory compliance environmental rating scheme focused on monitoring and improving the environmental effects of shipping

Development of a governance structure for the new entity

Agreement on one methodology for calculating and reporting CO₂, SO_x, NO_x, Chemicals, Water and Waste emissions

Create one verification protocol to be used by third party verifiers

Setting up the new entity including staffing plan

Thank you for your attention

