

AUGUST 2015

# Collaborative Progress

Clean Cargo Working Group (CCWG)

2015 Progress Report



## About This Report

Published in August 2015, this report references Clean Cargo Working Group's (CCWG) activities and developments over its 12-year history, with a focus on achievements accomplished in the two years since our most recent [CCWG Progress Report](#).

The information reported is limited to the activities of the current group membership, and the environmental data presented in the report is limited to the carrier membership reporting in the year stated. This report is written with a range of readers in mind, including shipping customers, transportation providers, freight forwarders, industry associations, regulatory bodies, NGOs, academics, and the general public.

This report was drafted by BSR, the secretariat and facilitator of the Clean Cargo Working Group. Please direct all comments to [ccwg@bsr.org](mailto:ccwg@bsr.org).

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## About Clean Cargo Working Group (CCWG)

Customers, investors, regulators, and other stakeholders are increasing the pressure on cargo-transport providers to report and reduce CO<sub>2</sub> emissions, as well as other environmental impacts. The need for standardized, industry-approved calculation methodologies is crucial in order to begin fulfilling these demands. CCWG is a global business-to-business platform where such developments are realized.

CCWG is dedicated to improving the environmental performance of ocean container transport. We do this through standardized methodologies to measure key environmental performance indicators and easy-to-use tools that meet both shipping customers' and cargo carriers' needs to reduce environmental impacts. Container carriers have been reporting their CO<sub>2</sub> performance to their customers in a credible and comparable format based on the CCWG CO<sub>2</sub> methodology—the only existing and broadly recognized industry standard for container shipping—for the past six years.

This reporting and dialogue enables shipping customers to calculate the environmental impacts of transporting goods around the world and to benchmark carriers' performance. Having this information helps shipping customers make informed buying decisions in their supply chains. CCWG also consistently engages in dialogue with other initiatives and experts working on these issues in the global transport industry to align approaches that can improve information-sharing and performance for shipping customers and cargo carriers across the full transport supply chain.

Through this brief report, we invite you to learn more about the group's objectives, impact, and next steps—we want to be held accountable annually for our progress. This report also publicly provides the CCWG annual aggregated global CO<sub>2</sub> emissions by trade lane for 2012 through 2014.

# 2014 – 2015 Highlights

CCWG's data-collection process for 2014 show:<sup>1</sup>

CCWG gathers environmental data for nearly

## 3,000

container vessels

## 21 of 25

trade lanes show annual CO<sub>2</sub> emissions improvements

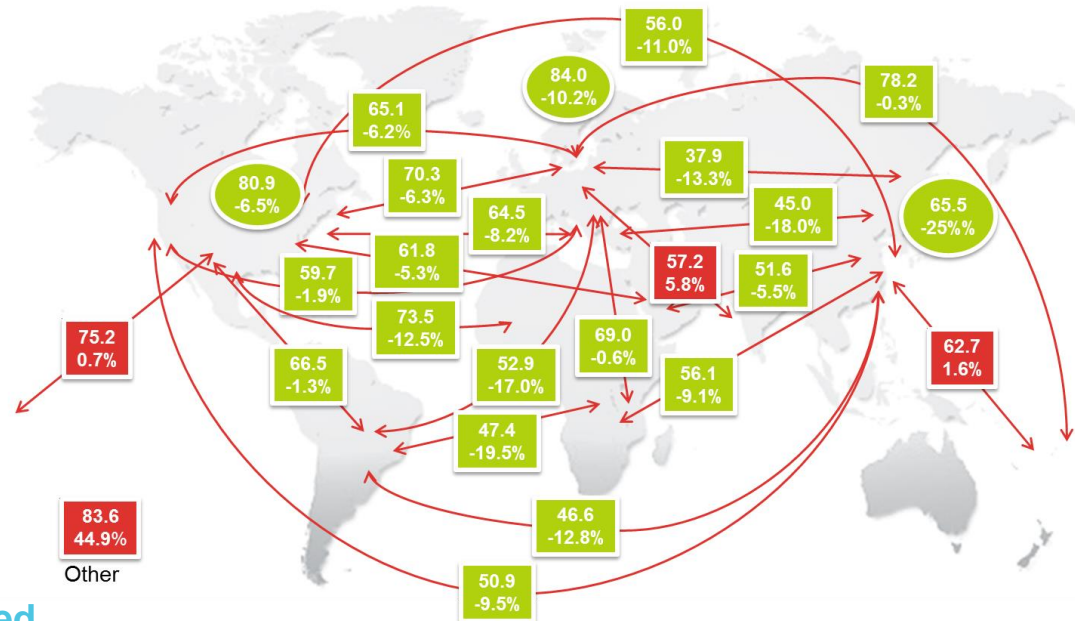
CCWG carriers represent about

## 80%

of global ocean container capacity\*

## 10 of 22

CCWG carriers verified CO<sub>2</sub> and SO<sub>x</sub> data in 2014



## 14.5 million

TEU (twenty-foot equivalent unit) container capacity carried

## 29%

CO<sub>2</sub> emissions decrease on average since 2009

<sup>1</sup> Chart orientation: Green indicates performance improvement on a trade lane, red indicates decline in performance from previous year reported. Square is an intercontinental trade lane, circle is an intra-continental trade lane. Top number is an emissions factor, bottom number is a percent change. Full list of trade lanes and emission factors on following page.

## Annual Trade Lane CO<sub>2</sub> Emissions Factors

Every year, CCWG carriers report vessel-specific environmental performance data to BSR through a standard template and based on the CCWG CO<sub>2</sub> methodology. BSR provides the aggregated data to shipping customers with individualized carrier scorecards.

Our 2015 annual reporting indicates that average CO<sub>2</sub> emissions per container per kilometer for global ocean transportation routes have declined by 8.4 percent from 2013 to 2014 and by more than 29 percent since 2009. While changes in carrier representation or global trade conditions likely explain a portion of these results, the continued performance improvement is also attributable to carrier fleet efficiency and data quality, both of which have direct benefits for shipping customers. The following results are from the previous three years.<sup>2</sup>

CO <sub>2</sub> Emissions by Trade Lane (grams of CO <sub>2</sub> per TEU kilometer)	2014 (2,989 vessels)		2013 (2,900-plus vessels)		2012 (2,300-plus vessels)	
	Dry	Reefer	Dry	Reefer	Dry	Reefer
Asia to Africa	56.1	93.3	61.8	96.0	63.1	99.8
Asia to the Mediterranean	45.0	79.5	54.9	89.6	54.0	85.7
Asia to the Middle East and India	51.6	85.9	54.6	87.8	64.5	96.1
Asia to North America (East Coast)	56.0	85.4	62.9	92.7	68.1	95.3
Asia to North America (West Coast)	50.9	82.3	56.2	87.1	59.1	87.9
Asia to North Europe	37.9	69.6	43.8	76.6	47.1	75.9
Asia to Oceania	62.7	97.3	61.7	94.8	73.8	106.4
Asia to South America (East and West Coasts)	46.6	78.5	53.5	83.6	60.5	90.7
Europe (North and Mediterranean) to Africa	69.0	119.4	69.5	113.7	77.0	120.2
Europe (North and Mediterranean) to Latin America and South America	52.9	88.0	63.7	94.8	68.2	99.6
Europe (North and Mediterranean) to Middle East and India	57.2	96.8	54.0	87.6	66.6	99.2
Europe (North and Mediterranean) to Oceania (via Suez or Panama)	78.2	105.8	78.4	109.7	81.5	113.1
Intra-Americas (Caribbean)	80.9	123.8	86.5	122.8	103.4	147.2
Intra-Asia	65.6	104.0	87.5	129.8	75.0	105.5
Intra-Europe	84.0	130.1	93.6	143.1	92.2	138.1
Mediterranean to North America (East Coast, including the Gulf)	64.5	102.1	70.3	100.7	79.6	113.9
Mediterranean to North America (West Coast)	59.7	95.6	60.8	90.4	76.8	112.4
North America to Africa	73.5	113.2	84.0	118.1	89.5	127.1
North America to Oceania	75.2	104.6	74.7	101.6	81.3	109.2
North America to South America (East Coast and West Coast)	66.5	104.3	67.4	100.1	68.6	102.1
North America (East Coast) to Middle East and India	61.8	93.7	65.2	90.9	77.0	101.0
North Europe to North America (East Coast, including the Gulf)	70.3	105.6	75.0	101.7	78.2	107.6
North Europe to North America (West Coast)	65.1	102.1	69.4	97.9	69.6	98.2
South America (East Coast and West Coast) to Africa	47.4	79.7	58.8	92.3	69.5	94.1
Other	83.6	143.6	57.7	103.3	79.6	114.3
Fleet-Wide Average CO <sub>2</sub> Performance	53.4	87.6	58.3	91.8	63.1	94.1

Notes: "Dry" = non-refrigerated cargo;  
 "Reefer" = refrigerated cargo;  
 "TEU" = twenty-foot equivalent unit, used to describe capacity of container vessels.

<sup>2</sup> Data from 2009-2013 can be found at: [www.bsr.org/en/our-insights/report-view/global-maritime-trade-lane-emissions-factors](http://www.bsr.org/en/our-insights/report-view/global-maritime-trade-lane-emissions-factors)

## What We Do and How We Work

The work of CCWG enables the ocean container freight industry to credibly measure and report on its environmental performance. As more global companies that ship goods around the world consider how to reduce the environmental impact of their transport and logistics networks, the availability of credible data and easy-to-use tools are increasingly important.

CCWG members know that measuring and reporting is only the beginning. Business partners need to engage in meaningful dialogue about how the environmental performance of moving cargo can improve over time. That is why CCWG provides a network where:

- » Peer-group companies can share best practices for integrating environmental criteria into business decision-making processes and supplier-selection procedures.
- » Shipping customers can directly engage with their transportation providers to build appropriate environmental expectations into supplier relationships.
- » Shipping customers use CCWG as a one-stop shop to understand and influence developments in methodology across the transport supply chain, enabling them to use resources more effectively.
- » Members work together to refine the methodology and improve our performance-management tools collaboratively.

Furthermore, CCWG continues to play an important role engaging with experts and influencers about methodology, reporting, and verification (MRV) developments at regional and global levels as the European Union and other MRV systems come into place in the maritime industry.

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Members meet twice yearly for in-person meetings at a location in Europe, the United States, or Asia to address specific issues of interest to the membership, and move forward on work toward annual goals. Best practice and environmental performance webinars are held between meetings.

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## What We Provide

### MEASUREMENT AND REPORTING TOOLS

- » **CCWG Environmental Performance Survey (EPS):** The EPS covers a series of qualitative questions on carriers' environmental focus areas.
- » **CCWG Intermodal Carbon Calculator:** This CO<sub>2</sub> emissions-calculation tool covers the whole transportation supply chain. Updated versions are issued annually, and we offer training to members.
- » **CCWG Scorecard:** The Scorecard is a tool that enables container shipping customers to benchmark carriers' performance on a broad range of environmental impacts (e.g., CO<sub>2</sub>, SO<sub>x</sub>, and NO<sub>x</sub>; chemical use; and wastes) of the carriers' operated fleets, including charter vessels. The scorecard is updated every year with the latest performance data for each CCWG carrier.
- » **CCWG Verification Protocol:** Carriers can independently verify CO<sub>2</sub> and SO<sub>x</sub> performance data based on a standardized framework. Audits are conducted to a limited level of assurance.

### STANDARDIZED, INDUSTRY-APPROVED METHODOLOGIES

The CCWG CO<sub>2</sub> methodology is tailor-made for container shipping. Based on actual fuel consumed, actual distance traveled, and the maximum capacity of the vessel, the CCWG CO<sub>2</sub> methodology provides emissions data in grams of CO<sub>2</sub> per container per kilometer. In 2015, CCWG released a [new report](#) detailing the CO<sub>2</sub> Emission Accounting Methodology that has been used by the group to standardize emissions reporting with a majority of the industry for years.

### ACCESS TO INDUSTRY BEST PRACTICES

Through in-person meetings, webinars, case studies, and other means of interaction, CCWG facilitates sharing best practices among shipping customers, freight forwarders, and ocean transport providers. In 2013, CCWG published a report entitled "[How CCWG Shippers Use, Integrate, and Benefit from Ocean Transport Emissions Data](#)" and in 2015 we published a guide "[How to Calculate and Manage CO<sub>2</sub> Emissions from Ocean Transport](#)." Both are based on leading practices from our members.

The group regularly reports on other outputs for the general public to raise awareness and encourage more companies to consider how to reduce the environmental impact of their transport and logistics networks.



# Our Commitments

## Mission Statement

The Clean Cargo Working Group (CCWG) is a global, business-to-business initiative dedicated to improving the environmental performance of marine container transport. CCWG creates practical tools for measuring, evaluating, and reporting the environmental impacts of global goods transportation.

- » Helping ocean freight carriers track and benchmark their performance and easily report to customers in a standardized format.
- » Helping shipping customers review and compare carriers' environmental performance when reporting and making informed buying decisions.

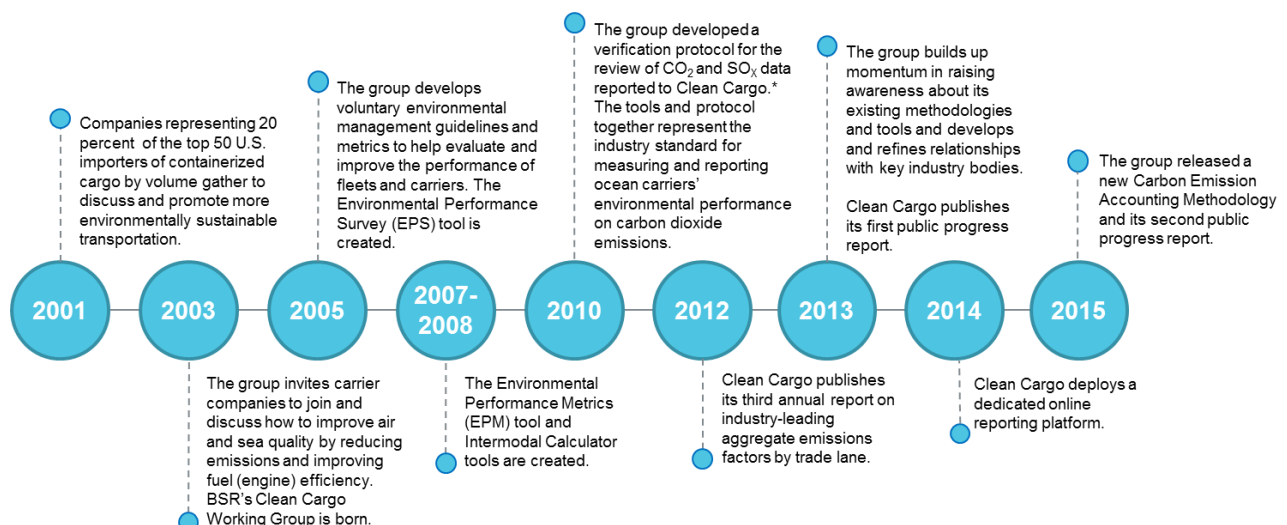
## Individual Member Commitments

Upon joining CCWG, members commit to a set of shared principles, which includes endorsing the group's mission, methodologies, and tools. Members also agree to the following:

- » Carrier members commit to compiling annual vessel-level data for owned and chartered vessels, as well as completing the annual environmental performance survey.
- » Shipper and freight-forwarder members commit to integrating the CCWG tools, data, and scorecards into their procurement process; to training relevant staff on using these resources; and to disclosing to their carrier business partners how CCWG data informs their decision making.

## Where We Come From

CCWG has met several major milestones during its 12-year history:



\*Developed in collaboration with Lloyd's Register and reviewed by other classification societies.

## Progress on Group Objectives

The CCWG works toward shared objectives to advance its mission through a number of dedicated task forces composed of member companies who conduct regular teleconference meetings to address specific topics. The full group meets in person twice each year to make decisions on actions presented by the task forces and to set further objectives. The following table summarizes our current activities and seeks to ensure our accountability for progress going forward.

### Progress Summary

Objectives	Progress Made	2016 - 2017 Objectives
<b>Strategic Engagement and Alignment</b>		
<ul style="list-style-type: none"> <li>» Work to create simplicity and impact in the Ocean Segment through a proposed merger with the Clean Shipping Index (CSI)</li> <li>» Continue engagements with targeted industry groups</li> </ul>	<ul style="list-style-type: none"> <li>» Discussions underway between governing bodies of CCWG and CSI with support from members</li> <li>» Ongoing engagement with priority groups (e.g., Smart Freight Center, Green Freight Asia, U.S. EPA SmartWay)</li> </ul>	<ul style="list-style-type: none"> <li>» Continue pursuing aspiration to create “one global initiative” for ocean with CSI</li> <li>» Support development and alignment of methodology across transport modes with Global Logistics Emissions Council (GLEC)</li> <li>» Continue engagement with targeted industry groups</li> </ul>
<b>Membership and Recruitment</b>		
<ul style="list-style-type: none"> <li>» Develop mechanism to track progress on implementation of membership commitments</li> <li>» Define and engage collectively on an environmental leadership initiative</li> <li>» Increase industry and customer representation</li> </ul>	<ul style="list-style-type: none"> <li>» Annual commitments review implemented</li> <li>» Engaged with CSI, GLEC, and U.N. to standardize methodologies and address short-lived climate pollutants</li> <li>» Increased membership to 80 percent of industry</li> </ul>	<ul style="list-style-type: none"> <li>» Publish “Vision 2020” for environmental performance in the industry by 2020</li> <li>» Produce additional tools, trainings, and dialogue to support procurement integration</li> <li>» Increase shipper membership</li> </ul>
<b>Data Collection, Analysis, Reporting</b>		
<ul style="list-style-type: none"> <li>» Develop online reporting system</li> <li>» Deliver more detailed performance analysis</li> </ul>	<ul style="list-style-type: none"> <li>» Online system via Turnkey Solutions implemented</li> <li>» New analysis performed in partnership with Kühne Logistics University (KLU)</li> </ul>	<ul style="list-style-type: none"> <li>» Align further with external data sets and shipper procurement processes</li> <li>» Publish peer-reviewed papers on results of analysis</li> </ul>
<b>CCWG Methodology</b>		
<ul style="list-style-type: none"> <li>» Publish report on methodology</li> <li>» Endorse technical advisory board</li> <li>» Include feeder operators</li> </ul>	<ul style="list-style-type: none"> <li>» <a href="#">Methodology report</a> completed and published</li> <li>» Technical partners engaged in data analysis and methodology review</li> <li>» Reviewing trade lanes to incorporate feeders</li> </ul>	<ul style="list-style-type: none"> <li>» Implement 2-3 priority methodology changes</li> <li>» Engage with regulatory standard-setting bodies (e.g., EU MRV)</li> <li>» Support methodologies across other transport modes</li> </ul>

# CCWG Members 2015

## Cargo Carriers



## Cargo Owners (Shippers) and Freight Forwarders



## For more information

On behalf of the Clean Cargo Working Group, we hope this report has expanded your understanding of CCWG and our goals and objectives.

CCWG membership is open to any carrier, freight forwarder, or shipping customer in the maritime shipping supply chain. CCWG encourages all companies who operate or purchase ocean transportation services to adopt and use the CCWG Scorecard as the most accurate measure of ocean container carrier environmental performance.

If you are interested in joining our work and benefiting from our ready-made tools and data, we encourage you to contact BSR, the CCWG secretariat: [ccwg@bsr.org](mailto:ccwg@bsr.org).

For a list of current members and information on how to join, visit the CCWG website at [www.bsr.org/en/collaboration/groups/clean-cargo-working-group](http://www.bsr.org/en/collaboration/groups/clean-cargo-working-group).

## About CCWG

BSR's Clean Cargo Working Group (CCWG) is a leading global carrier-shipper initiative dedicated to environmental performance improvement in marine container transport through measurement, evaluation, and reporting. BSR is the secretariat and lead facilitator of CCWG.

## About BSR

BSR is a global nonprofit organization that works with its network of more than 250 member companies to build a just and sustainable world. From its offices in Asia, Europe, and North America, BSR develops sustainable business strategies and solutions through consulting, research, and cross-sector collaboration. Visit [www.bsr.org](http://www.bsr.org) for more information about BSR's more than 20 years of leadership in sustainability.