# Call to Action for Shipping Decarbonization

The Call to Action was developed by a multi-stakeholder task force convened by the Getting to Zero Coalition with members from the entire maritime ecosystem including shipping, chartering, finance, ports, and fuel production. The Call to Action was delivered to world Governments in November 2021, in advance of COP26.

We are seeking supporters for the Call to Action from all parts of the maritime value chain, and all companies committed to decarbonization that use shipping in their supply chains. Supporters should be committed to taking concrete actions to make zero emission vessels and fuels the default choice by 2030, and supporters are requested to share their company commitments in support of the Call to Action.

For more information, please contact fs@globalmaritimeforum.org

# Call to Action for Shipping Decarbonization

Shipping must align with the Paris Agreement temperature goal and be run entirely on net-zero energy sources by 2050. The signatories to this call to action firmly believe an urgent and equitable decarbonization of the maritime supply chain by 2050 is possible and necessary. The private sector is leading the way and taking concrete actions to make zero emission vessels and fuels the default choice by 2030, and decisive government action and enabling policy frameworks are needed now to reach our 2030 and 2050 ambitions.

# Set a target for zero emission shipping by 2050

Shipping and the maritime ecosystem need to align our climate ambitions and actions with science<sup>1</sup> and the Paris Agreement's temperature goal. Countries representing more than 65 percent of global GHG emissions and more than 70 percent of the world economy<sup>2</sup> as well as many companies have already committed to achieving carbon neutrality by or around mid-century.<sup>3</sup> This creates a strong and growing imperative for all industries to decarbonize or face existential business risk.

Ships transport 80 percent of global trade and the maritime supply chain delivers the services needed to run our societies. Whilst this is done with the lowest carbon footprint of any mode of transport per ton transported, shipping still accounts for about three percent of global GHG emissions.<sup>4</sup>

In 2018, the International Maritime Organization (IMO) set an ambition for shipping to reduce its GHG emissions by at least 50 percent by 2050 compared to 2008. This was an important first step, but given technological developments and the latest climate science, it is now time to set a clear target for the shipping industry to be run entirely on net-zero energy sources by 2050.<sup>5</sup>

# Deploy commercially viable zero emission vessels by 2030

Raising our long-term climate ambition is not enough. Urgent action starting now is fundamental to achieving the transition to zero emission shipping by 2050.

By 2030, we must reach at least five percent zero emission fuels in international shipping<sup>6</sup> and have commercially viable zero emission vessels operating along deep-sea trade routes, supported by the necessary infrastructure for scalable zero emission fuels and energy sources<sup>7</sup> including production, distribution, storage, and bunkering.<sup>8</sup>

Achieving these 2030 targets will require collaboration across the maritime ecosystem and with governments on the following:

# Refining zero emission technologies to ensure safety, reliability, and sustainability

While the technologies needed to build zero emission vessels and produce zero emission fuels and propulsion systems exist, they need to be further developed to ensure that they are safe, clean, and reliable. This will require further refining both the vessel and fuel production technologies and creating clarity around safety, sustainability, regulation, training, fuel and vessel life-cycle analyses, and fuel availability, thereby reducing the risks associated with investing in zero emission vessels, infrastructure, and fuel production.

# Implementing industrial scale demonstration projects involving the full value chain

We must implement industrial scale demonstration projects involving the full value chain. Such demonstration projects will show that zero emission shipping is viable at scale, while driving down costs and scaling up demand to enable broader deployment. Demonstration projects will entail higher risks and higher costs and will need to be de-risked through private sector collaboration, innovative business models, and government incentives.<sup>11</sup>

# Closing the competitiveness gap through policy action

Despite the potential to significantly reduce the cost of zero emission fuels over the coming decade, it will not be enough to close the competitiveness gap with fossil fuels. This means that the market alone will not be able to make zero emission shipping commercially viable at the required scale. By 2025, policy makers must therefore put in place clear, effective, and equitable policy frameworks, such as meaningful market-based measures, 12 to make zero emission shipping commercially viable.

# Unlocking global growth opportunities and synergies with other harder-to-abate sectors

Meeting the future demand for zero emission shipping will require massive investments,<sup>13</sup> especially in the production of zero emission fuels. This creates new growth and job opportunities<sup>14</sup> – not least in developing countries and emerging economies – that must be unlocked to achieve an equitable transition. As shipping decarbonization is part of the global energy transition, we must also work with other harder-to-abate sectors to reap synergies that can accelerate the transition by creating economies of scale and reducing risk.<sup>15</sup>

# Private sector action must go hand-in-hand with government action

We, the signatories, are already taking concrete actions to support the decarbonization of shipping and help us achieve our goals this decade and by 2050. This includes investing in RD&D and pilot projects, ordering and building zero emission ready vessels, buying zero emission shipping services, investing in the production of net-zero emission fuels, investing in port and bunkering infrastructure, assessing and disclosing the climate alignment of shipping related activities, and much more. The signature of the

The private sector is leading the way. However, the decarbonization of shipping can only happen with the urgency and scale needed if national governments and international regulators establish policy frameworks that make zero emission shipping and fuel production commercially viable, investable, equitable, and inclusive.

We therefore call on governments to:

- Commit to decarbonizing international shipping by 2050
   Set an unambiguous target to decarbonize international shipping<sup>18</sup> by 2050 and deliver a clear, achievable, and equitable implementation plan to achieve this when adopting the IMO GHG Strategy in 2023.
- 2. **Support industrial scale zero emission shipping projects through national action**Support industrial scale demonstration projects addressing vessels, port infrastructure, and fuel production to de-risk first movers and accelerate innovation starting now, for instance by setting clear decarbonization targets for domestic shipping and providing incentives and support to first movers and the broader deployment of zero emissions fuels and vessels.<sup>19</sup>
- 3. Deliver policy measures that will make zero emission shipping the default choice by 2030 Adopt policy measures, including meaningful market-based measures, taking effect by 2025 that will support the commercial deployment of zero emission vessels and fuels in international shipping and make ordering zero emission vessels the default choice no later than 2030.

Together, we are taking critical steps to deliver commercially viable zero emission vessels with the necessary supporting infrastructure and fuel production by 2030. We are encouraging others to join us. To deliver decarbonized shipping by 2050, without which it will be impossible to decarbonize global supply chains and the global economy, we call upon world leaders to work together with the private sector to deliver the right enabling environment with clear and unambiguous timelines and regulations. With this, we can commit to an equitable decarbonization of the maritime supply chain by 2050.

# **Signatories**

# **Companies**

A

A.P. Moller-Maersk

ABB

Alfa Laval

Anglo American

Algeciras Bay Port Authority

Anemoi Marine Technologies

Anglo-Eastern Univan Group

Atlantic Bulk Carriers

Management

**Auramarine** 

Autoridad Portuaria de Valencia

B

Berge Bulk

Bernhard Schulte

Shipmanagement

ВНР

**Bibby Marine** 

Blue Star Group

**Bolloré Logistics** 

**BP Shipping** 

**Britoil Offshore Services** 

Bunge

Bunker Holding Group

Bureau Veritas

BW LPG

C

Cargill Ocean Transportation

Caribbean Feeder Services

Carnival Corporation

CIMAC

Citi

ClassNK

CMB

**COACH Solutions** 

Companhia de Navegação

Norsul

Copenhagen Malmö Port

Credit Agricole CIB

D

Daewoo Shipbuilding & Marine

Engineering

Danaos Shipping

Danish Ship Finance

DB Schenker

DFDS

Diana Shipping

**DNB** Bank

Dorian LPG

Dow

**Drewry Shipping Consultants** 

Ε

Eagle Bulk

Echandia Marine

Eneti

**ENGIE** 

Essberger & Stolt Tankers

Euronav

**EV** Maritime

F

Fleet Management Limited

Fortescue Metals Group & Fortescue Future Industries

Forward Ships

Fürstenberg Maritime Advisory

G

**GAC Group** 

Gard

GasLog

Genco Shipping & Trading

Global Ship Lease

Grimaldi Group

Н

Hamburg Port Authority

Hapag-Lloyd

Harren & Parter Group
Heerema Marine Contractors

Höegh Autoliners

Höegh LNG

п

Iberdrola

ICE Marine Design

ING

K

Kawasaki Kisen Kaisha

Kirby Corporation

Kuehne+Nagel International

L

Latsco Marine Management

Lauritzen Bulkers

Liberty Pier Maritime Projects

Linsen Nambi Bunker Services

Liquid Wind

Lloyd's Register

Louis Dreyfus Company

M

Mabanaft

Maersk Broker

Maersk Tankers

MAN Energy Solutions

Marine Capital

Maritime Strategies

International (MSI)

MISC Group of Companies

Mitsui & Co.

Mitsui O.S.K. Lines

Montreal Port Authority

MPC Container Ships

**MSC Cruises** 

MSC Mediterranean Shipping

Company

# N

NAPA

**Newport Shipping** 

Norden

Norsepower

Northwest Seaport Alliance

Nova Marine Carriers

NYK Line (Nippon Yusen

Kabushiki Kaisha)

# 0

Occidental

Ocean Conservancy

Ocean Network Express

Oceanic Investment

Management

Odfjell

Olympic Shipping and

Management

OrbitMI

# P

Pacific Basin Shipping

Panama Canal Authority

Peninsula

Pole Star

Port Esbjerg

Port of Amsterdam

Port of Antwerp

Port of Barcelona

Port of Gothenburg

Port of Kiel

Port of London Authority

Port of Rotterdam Authority

Port of Seattle

Port of Aarhus

Ports of Bremen / Bremerhaven

**Precious Shipping** 

**Probunkers** 

PSA International

Purus Marine

# 0

Quincannon Associates

# R

Renewable Hydrogen

RightShip

Rio Tinto

Robert Bosch

Royal Belgian Shipowners'

Association

Royal Caribbean Group

# S

Saga Shipholding (Norway)

Scorpio Tankers

SDTR Marine

Seaber.io

Seabulk

Seanergy

Shell

Shift Clean Energy

Siemens Energy

Siemens Gamesa Renewable

Energy

Skuld

Société Générale

Solomon Islands Ports

Authority

Solstad Offshore

Sovcomflot

Sparebanken Vest

Star Bulk Carriers

Stena Bulk

Stephenson Harwood

Storebrand Asset Management

Sumitomo Mitsui Trust Bank

Swire Bulk

Swire Shipping

Swiss Re

Synergy Marine Group

# T

Taylor Maritime

TB Marine Shipmanagement

TCI GECOMP

The Caravel Group

THRUST (a program by Enviu)

# **TORM**

Torvald Klaveness

Trafigura

Transport Transformation

Tufton Investment Management

# U

Ultranav

Unifeeder

Unilever

# V

V. Group

Vancouver Fraser Port Authority

Viterra Chartering

Volvo Car Corporation

# W

Wallenius Wilhelmsen

Wilhelmsen Ahrenkiel Ship

Management

Wilhelmsen Ship Management

WinGD

Wärtsilä

# X

X-Press Feeders

# Υ

Yara

# Z

Zeaborn Ship Management

ZeroNorth

ZIM Integrated Shipping

Services

# Ø

Ørsted

# **Supporting organizations**

# A

African Hydrogen Partnership Amalgamated Union of Seafarers, Hong Kong Aspen Institute Energy & Environment Program Australian Institute of Marine & Power Engineers

# B

Bangladesh Merchant Marine Officers' Association Blue Sky Maritime Coalition Bulgarian Seafarers' Trade Union

# C

Carbon Trust
Cruise Lines International
Association (CLIA)

# D

Danish Shipping
Deniz Çalisanlari Dayanisma
Dernegi (DAD-DER) Marine
Employees' Solidarity
Association (MESA)

# Ε

**Environmental Defense Fund** 

# F

Fédération Nationale des Travailleurs des Transports -Union Générale des Travailleurs Algériens

Friends of Ocean Action

# G

Gambia Maritime and Seafarers Workers Unions (The) German Nautical Association founded 1868 Global Maritime Forum

# н

H2 Chile Hellenic Marine Environment Protection Association (HELMEPA)

International Association of Ports and Harbors (IAPH) International Longshore and Warehouse Union Canada International Transport Workers' Federation Iranian Merchant Mariners Syndicate IRENA

# L

Lebanese Seaman's Syndicate Leif Høegh Stiftelse

# M

Maersk Mc-Kinney Møller Center for Zero Emission Shipping Maritime Union of India Micronesian Center for

Sustainable Transport

# N

Nautilus International (UK) North American Marine Environment Protection Association (NAMEPA) Norwegian Union of Marine Engineers (NUME)

# 0

Orden Mexicana de Profesionales Marítimos y Portuarios, Similares y Conexos

# P

Pakistan Merchant Navy Officers' Association Pakistan Seamen's Union Pan-Hellenic Seamen's Federation (PNO)

# R

Royal Belgian Shipowners' Association

# S

Seafarers' International Union of Canada Seamen's Union of Slovenia Seko, Seafarers' Branch Sindicato de Capitães e Oficiais da Marinha Mercante, Sincomar Sindicato Interempresa de Oficiales de Marina Mercante Smart Freight Centre South African Association of Ship Builders & Repairers Sustainable Shipping Initiative Syndicat des Travailleurs des Compagnies de Navigation Maritimes, Aériennes et de Transit du Togo Syndicat National des Inscrits Maritimes et Assimiles du Cameroun (SYNIMAC) Syndicat National des Marins du Bénin (SYNAMAB) Syndicat National des Travailleurs de la Marine Marchande (SNTMM)

# Т

The Norwegian Shipowners Association

# U

UK Chamber of Shipping
Unión de Marinos Mercantes y
de Pesca Colombianos
Unite The Union
Universidad Austral de Chile

# V

Vereinte Dienstleistungsgewerkschaft (ver.di)

# W

World Economic Forum
World Wide Fund for Nature

# **Endnotes**

- 1 IPCC 1.5 report; 2020 UNEP Gap report; 4th IMO GHG Study.
- 2 UN Secretary General, António Gutteres https://www.un.org/sg/en/content/sg/articles/2020-12-11/carbon-neutrality-2050-theworld%E2%80%99s-most-urgent-mission
- Race to Zero represents 733 cities, 3,067 companies, and 173 investors as of 24th June 2021. https://racetozero.unfccc.int/join-the-race/
- 4 4th IMO GHG Study https://www.cdn.imo.org/localresources/en/OurWork/Environment/Documents/Fourth IMO GHG Study 2020 Full report and annexes.pdf
- Net-zero energy sources include fuels such as green and blue hydrogen, ammonia, methanol as well as sustainable biofuels, wind propulsion, batteries etc. See definition of zero carbon energy sources: https://www.globalmaritimeforum.org/content/2019/09/Getting-to-Zero-Coalition\_Zero-carbon-energy-sources.pdf
- 6 Getting-to-Zero-Coalition\_Five-percent-zero-emission-fuels-by-2030.pdf (globalmaritimeforum. org)
- 7 The terms zero carbon or zero emission energy sources should be understood as including zero carbon and net zero carbon energy sources. See definition of zero carbon energy sources: https://www.globalmaritimeforum.org/content/2019/09/Getting-to-Zero-Coalition\_Zero-carbon-energy-sources.pdf
- 8 Getting to Zero Coalition Ambition Statement https://www.globalmaritimeforum.org/getting-to-zero-coalition/ambition-statement
- There is a number of potential net-zero emission fuels that can be used by shipping, including sustainable biofuels, synthetic or bio methanol, synthetic or bio LNG, ammonia and hydrogen. While biofuels, LNG and methanol are already being used in existing vessels, more development needs to take place before deep-sea vessels using hydrogen or ammonia can be deployed. The technologies to produce synthetic net-zero fuels also exist but the production volumes remain low and will need to be rapidly scaled to support uptake.
- The lifecycle refers to the assessment of greenhouse gas emissions from the fuel production to the ship's propeller, also known as "Well-to-Wake".
- 11 The First Wave A blueprint for commercial-scale zero-emission shipping pilots
- 12 Market Based measures relevant for shipping decarbonization include carbon levies, emissions taxes and emissions trading schemes (ETSs).
- At least USD 1 trillion in investments needed to decarbonize shipping. Getting-to-Zero-Coalition\_ Insight-brief\_Scale-of-investment.pdf (globalmaritimeforum.org)
- 14 https://www.worldbank.org/en/news/feature/2021/04/15/charting-a-course-for-decarbonizing-maritime-transport
- Seven industry working groups representing harder to abate sectors are working together through the Mission Possible Partnership to supercharge efforts to decarbonize some of the world's highest emitting industries.
- 16 Company commitments will be listed in an Annex.
- 17 This report outlines the collective actions of the signatories to accelerate the deployment of zero emission vessels and fuels. [Link to report containing all the signatory actions to be added before launch]
- Decarbonizing international shipping should be understood as having a shipping industry run entirely on net-zero energy sources by 2050.
- 19 Examples of ambitious international public-private demonstration and deployment projects include Mission Innovation's shipping mission.