



United Nations
Global Compact



**International
Chamber of Shipping**



**INTERNATIONAL
TRANSPORT
WORKERS'
FEDERATION**



Mapping a Maritime Just Transition for Seafarers

Position paper | November 2022



**Maritime
Just Transition**
TASK FORCE

About the Maritime Just Transition Task Force

The Maritime Just Transition Task Force was established during COP26 in November 2021, by the International Chamber of Shipping (ICS), the International Transport Workers' Federation (ITF), the United Nations Global Compact, the International Labour Organization (ILO) and the International Maritime Organization (IMO). The Task Force has the aim of supporting a just and human-centered decarbonization of the shipping industry. The Task Force is grateful to its primary funder, Lloyd's Register Foundation, and its programme partner, the Singapore Maritime Foundation. The Task Force is also grateful to its Phase 1 Project Supporters: Anglo-Eastern Ship Management, MSC Mediterranean Shipping Company SA, Ocean Technologies Group, Ocean Network Express, and Philippine Transmarine Carriers (PTC). More information on the Maritime Just Transition Task Force and its Global Industry Peer Learning Group can be found on the [UN Global Compact website](#), the [International Chamber of Shipping website](#) and the [International Transport Workers' Federation website](#).

How you can contribute to our work

The Maritime Just Transition Task Force will continue to engage extensively with all stakeholder groups impacted by shipping's decarbonization journey. The Task Force welcomes any feedback and requests for further engagement throughout this process.

Acknowledgements and contributors

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Executive Summary

- **Global shipping urgently needs to decarbonize.** The world is facing a climate emergency. Urgent action is needed to limit global warming to 1.5°C or we will face disastrous consequences. Responsible [for transporting 90% of global trade](#) and supplying the world with food, fuel, medicines and goods, the global shipping industry accounts for 3% of global greenhouse gas (GHG) emissions. After a long history of wind, coal and oil-fueled ships, a fourth propulsion revolution is now underway for shipping to shift away from conventional fuels and transition towards alternative low- and zero-carbon fuels and technologies. This will support the global community in reaching the Paris Agreement's 1.5°C temperature goal.
- **The world's 1.89 million seafarers are key to powering this industry through a successful transition.** Future alternative fuel technologies, such as hydrogen, ammonia, batteries, and biofuels, are expected to introduce new training for all seafarers, in addition to familiarization onboard, specific to the ship they are joining.
- **These new challenges will require a health-and-safety-first approach.** Seafarers will need adequate skills, education, training and familiarization, to operate new technology systems on board and to manage new fuels. Unless properly handled this could represent a significant health and safety risk for seafarers, ships, communities and the environment.
- **The Maritime Just Transition Task Force was formed to ensure that shipping's response to the climate emergency puts seafarers and communities at the heart of the solution.** The shipping industry has an opportunity to shift to a decarbonized future in a way that creates decent work and leaves no one behind. Governments, employers and seafarers' unions all have a role to play in shipping's Just Transition through strengthened social dialogue aligned with the globally established [Just Transition guidelines \(2015\)](#) from the International Labour Organization.
- **The Task Force Secretariat commissioned a report outlining three decarbonization scenarios to provide insights into seafarer training and skills needed to support a decarbonized shipping industry.** The three scenarios have varying decarbonization trajectories and estimate the number of seafarers who would require additional training to handle alternative fuels up to 2050, with the timing and type of training dependent on the ambition of the decarbonization trajectory and the future fuel mix.
- **Under all three of the scenarios, there is an immediate need to start putting the training infrastructure in place.** No matter which fuel or fuels are ultimately favored, transitioning to a decarbonized shipping industry will require additional training to at least hundreds of thousands of seafarers up to 2050.
- **The lack of certainty on the future fuel options for shipping is having knock-on effects for seafarer training.** A lack of clarity about viability and uptake of alternative fuel options, as well as uncertainty surrounding regulatory developments and financing, is making it difficult to plan effectively for the transition of the maritime workforce and to attract investment towards new skills programs, compatible with the industry's future needs and decarbonized future.
- **Despite uncertainty, there are things we can do today to kickstart seafarer training to support the transition.** This includes investing in and enhancing maritime training establishments, including proper facilities and equipment, as well as fostering competent maritime trainers. National governments can also urgently revise or establish standards and training requirements for alternative fuel types through amendments to the STCW Convention at the International Maritime Organization.
- **This Position Paper puts forward a 10-point action plan to achieve a Just Transition for Seafarers**

Scenario	Source	Key features	Training implications
Scenario 1 50 % reduction in GHG emissions compared to 2008	As set out in the Initial IMO GHG Strategy (2018) ¹ modelled in the DNV Maritime Forecast (2021) , assessed in DNV (2022)	● Reduce GHG tank-to-wake emissions by at least 50% by 2050 compared to 2008 ● GHG reduction trajectory from 2008 levels: 2030: 17%, 2040: 30%, 2050: 67%	300,000 seafarers would require some additional training for alternative fuels and new engines by 2050
Scenario 2 Decarbonization by 2050	Modelled in the DNV Maritime Forecast (2021) assessed in DNV(2022)	● 95% reduction in tank-to-wake GHG from 2008 levels by 2050 ● GHG reduction trajectory from 2008 levels: 2030: 17%, 2040: 47%, 2050: 95%	750,000 seafarers would require some additional training by 2050
Scenario 3 Zero carbon by 2050	Modelled by Lloyd's Register and University Maritime Advisory Services (2019) assessed in DNV (2022)	● 100% reduction in well-to-wake GHG from 2008 levels, using Intergovernmental Panel on Climate Change (IPCC) 1.5 (2018) estimates of wider energy system transition ● GHG reduction trajectory from 2008 levels: 2030: 33%, 2040: 61%, 2050: 100%	450,000 seafarers would require some kind of additional training by 2030, and 800,000 seafarers by the mid-2030s

Table 1 – [DNV \(2022\)](#) Decarbonization scenarios: impact on seafarer training

¹ The Initial [IMO GHG Strategy](#) is set to be revised and strengthened by 2023.



10-point Action Plan to Achieve a Just Transition for Seafarers



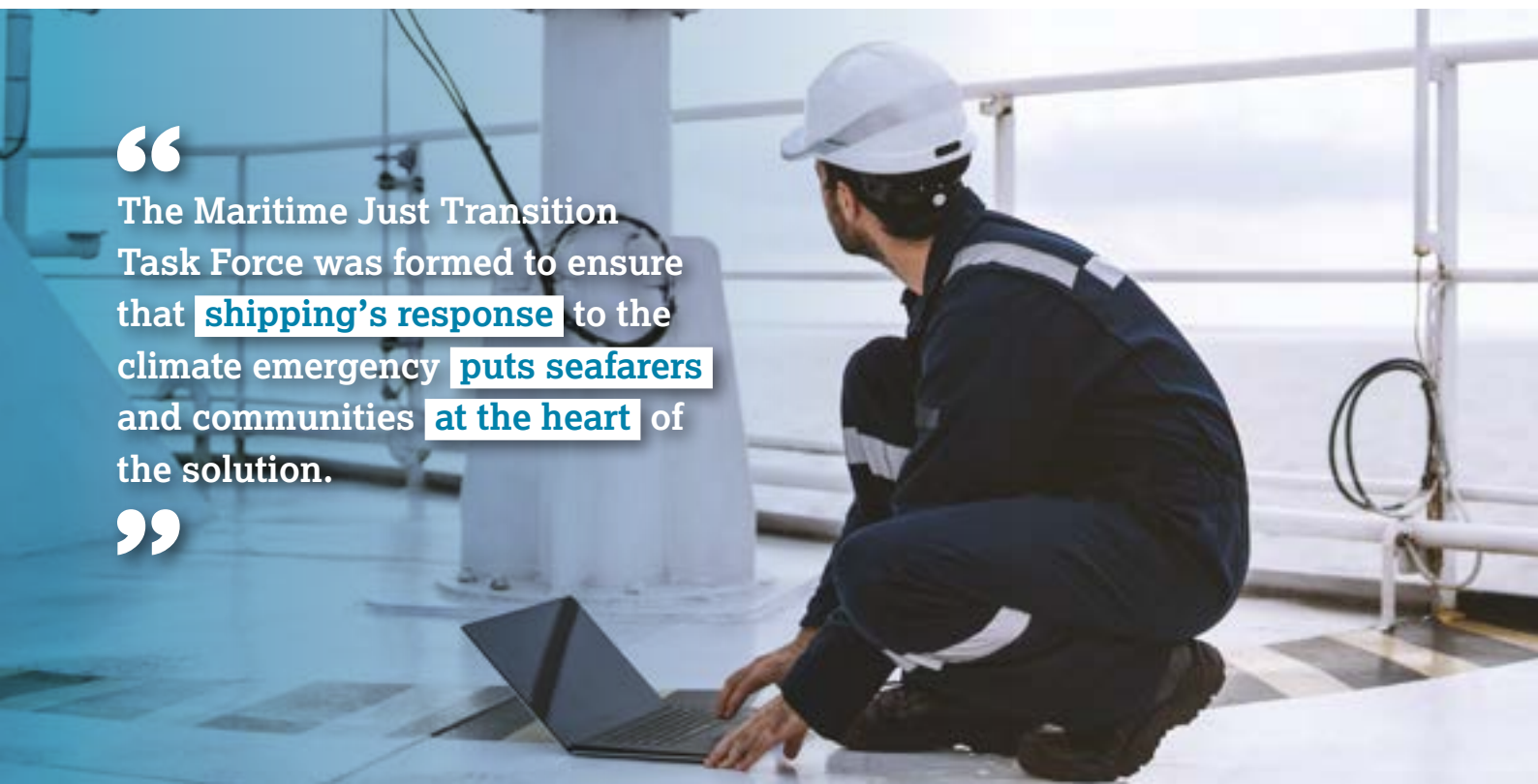
Background: Maritime Just Transition

A Just Transition is a people-centered response to addressing the climate crisis. According to the [International Labour Organization](#), this means “greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind”. The guiding principles of Just Transition are established in the International Labour Organization’s [Guidelines for a Just Transition towards environmentally sustainable economies and societies for all](#) (2015) (thereafter the ILO Just Transition guidelines).

These globally established Just Transition guidelines are just as relevant in the context of the global shipping industry, and its principles should underpin the industry’s transition as it strives to reach the Paris Agreement 1.5°C temperature goal – reinforced by the Glasgow Climate Pact – in a way that is fair and inclusive. In line with the ILO Just Transition guidelines, a Just Transition in the maritime industry should be based on social dialogue and stakeholder engagement. Stakeholders expected to be impacted by shipping’s transition include maritime employers and employees, national governments, communities, suppliers and consumers.

To support shipping’s Just Transition, the Maritime Just Transition Task Force was established during COP26 in November 2021, by the International Chamber of Shipping (ICS), the International Transport Workers’ Federation (ITF), the United Nations Global Compact, the International Labour Organization (ILO) and the International Maritime Organization (IMO).

The action plan included in this paper has been developed specifically in the context of ‘mapping a Just Transition for the global maritime workforce’, which is the focus of phase 1 of the Maritime Just Transition Task Force.



“The Maritime Just Transition Task Force was formed to ensure that **shipping’s response** to the climate emergency **puts seafarers** and communities **at the heart** of the solution.”



Mapping a Just Transition for Seafarers

Policy aims: To explore how best to support the maritime workforce as shipping transitions towards a decarbonized future.

The Maritime Just Transition Task Force commissioned a report, prepared by classification society DNV, to provide insights into seafarer training and skills needs to support a decarbonized shipping industry. The full DNV Report – *Insights into seafarer training and skills needs to support a decarbonized shipping industry* (2022) – can be accessed through the [DNV website](#), [ICS website](#) and [ITF website](#). The key research findings and conclusions drawn from the DNV report are outlined below.

Disclaimer

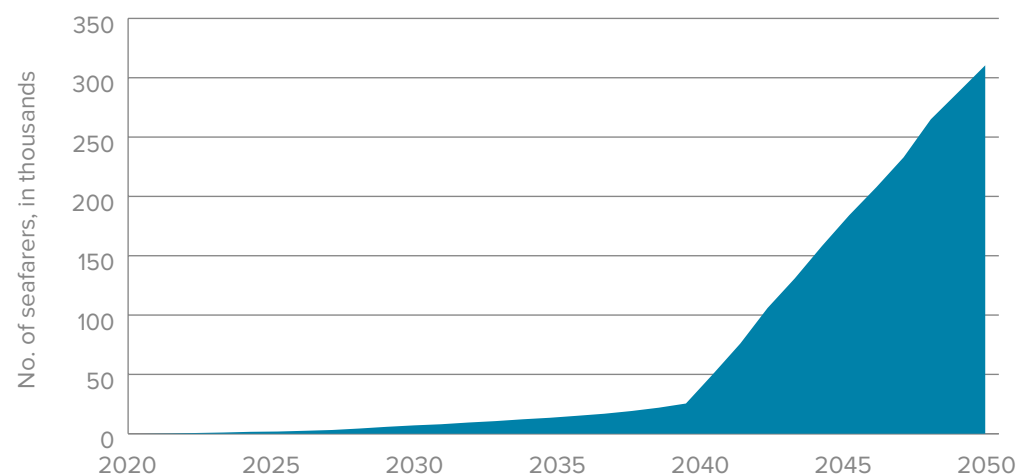
The information and views contained in the DNV report do not necessarily represent the views or opinions of the Maritime Just Transition Task Force or those of the Global Industry Peer Learning Group. The report has been made available for informational and educational purposes only and to inform, where relevant, the positions contained within this paper.

DNV Report: Key Findings

Key Finding 1: Based on the research conducted by DNV which models three potential decarbonization scenarios, as far as training for the transition is concerned, all three scenarios point towards an immediate need to start putting the infrastructure in place to provide additional training for at least hundreds of thousands of seafarers up to 2050. However, the timing and type of training received will depend on the ambition of decarbonization trajectories and the future fuel mix.

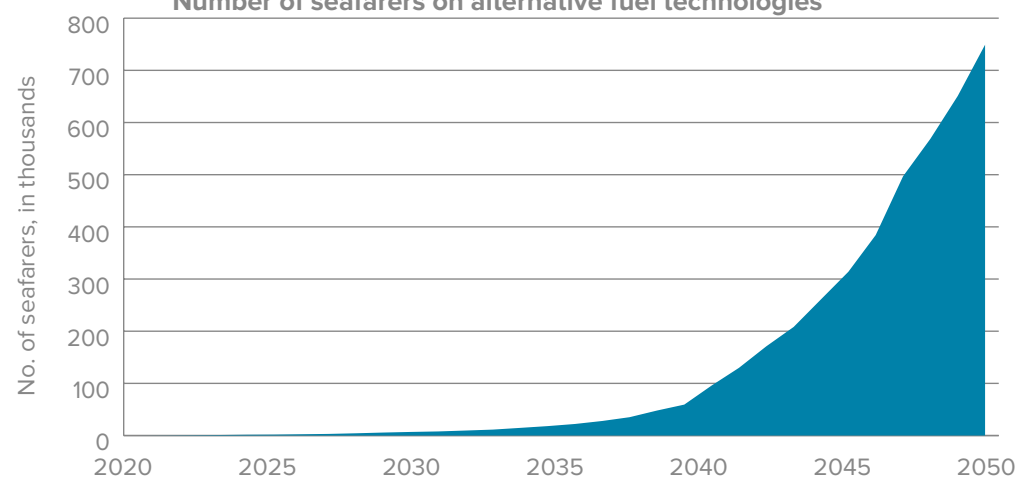
Key finding 1a: In the ‘at least 50% GHG reduction’ scenario by 2050 (scenario 1), compared to 2008, the number of seafarers requiring some additional training on alternative fuels would peak at 310,000 by 2050.

IMO 2018 scenario – Number of seafarers on alternative fuel technologies

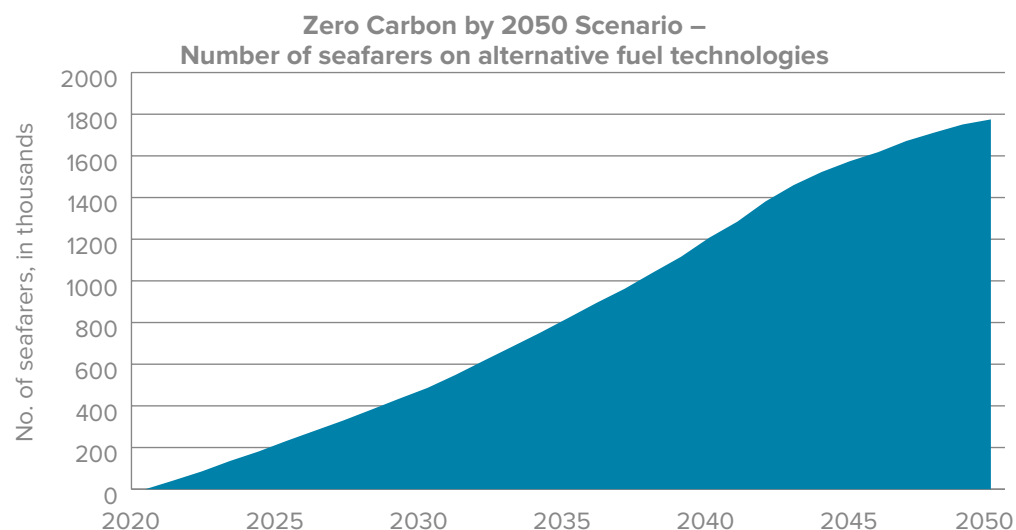


Key finding 1b: In a ‘decarbonization by 2050’ scenario (scenario 2), which assumes a slower uptake of alternative fuels in the 2030s, 750,000 seafarers would require some additional training to handle alternative fuels by 2050.

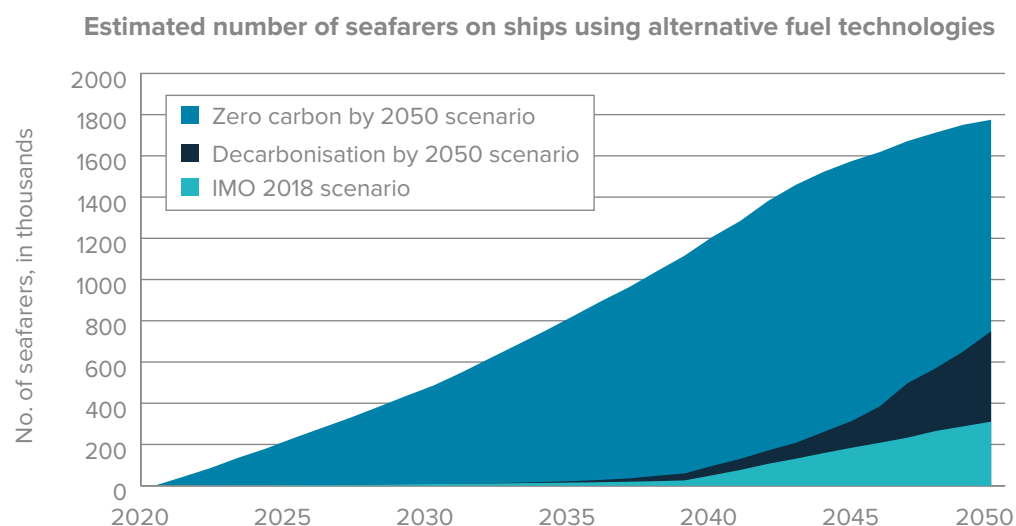
Decarbonization by 2050 scenario –
Number of seafarers on alternative fuel technologies



Key finding 1c: In the ‘zero carbon by 2050’ scenario (scenario 3) 450,000 seafarers would require some kind of additional training by 2030, and 800,000 seafarers would require some kind of additional training by the mid-2030s, with the scenario assuming an immediate ramp-up of alternative fuels in the 2030s.



Key Finding 2: In both the 50% GHG reduction (scenario 1) and decarbonization by 2050 (scenario 2) scenarios, industry, seafarers, maritime education and training providers would expect to see a significant rise in the number of seafarers needing training on alternative fuels in the 2040s. In a zero-carbon emission scenario (scenario 3) the number of seafarers that will require some kind of additional training rises steeply from the 2020s up to 2050.



Key Finding 3: There are a number of safety challenges related to alternative fuels in shipping. These include pressurized storage, low flashpoint and toxicity. Hydrogen, for example, is substantially more flammable than diesel. Ammonia, a method of chemically storing hydrogen for propulsion, is toxic to humans and the marine environment. With the exception of hydrogen, which was until recently only transported in packaged form, most of the alternative fuels are currently carried as bulk marine cargo. The shipping industry is therefore both knowledgeable and experienced with regard to their handling. However, seafarers will need additional training concerning the particular risks associated with using these fuels for propulsion in order to ensure not only their safety but the safety of the environment and local communities.

Key Finding 4: Training seafarers to support shipping's decarbonization is already subject to several constraints. These include: slow pace of regulatory development and lack of clarity surrounding the viability and uptake of alternative fuel options and decarbonization trajectories, which makes investment in seafarer training challenging; a need to increase investment in training centres and up-to-date equipment; a lack of competent trainers; and a shortage of experienced seafarers.

A seafarer in an orange uniform is working on a laptop in a ship's control room. The background shows various electronic equipment and control panels. The seafarer is looking towards the camera while typing on the laptop.

“Moving to a more **diverse workforce** represents a **major opportunity** for the sector to **harness skills** of individuals who may not have been considered previously.

”

Action Plan for a Maritime Just Transition for Seafarers

Informed by the findings of the [DNV report \(2022\)](#), this Position Paper puts forward a 10-point action plan for international organizations, industry, workers and academia (including training providers).

10-point action plan



Establish consensus to unlock training

To unlock the investments needed to equip the maritime workforce with essential skills necessary for a decarbonized shipping industry, urgently establish global consensus on an ambitious decarbonization goal for shipping, that is more explicitly aligned with the 1.5°C temperature goal of the Paris Agreement. This will provide the certainty needed to stimulate the uptake of alternative fuels and clean energy technologies for shipping.

International Organisations (IMO)
National Governments

A lack of clarity surrounding the viability and uptake of alternative fuel options and decarbonization trajectories, coupled with uncertainty around regulatory developments and financing, is making it difficult to plan effectively for the transformation of the maritime workforce and to attract investment towards skills programs compatible with the industry's future needs. According to the [World Maritime University \(2019\)](#), the lack of clarity and subsequent investment is also widening the gap in new and emerging technology readiness between developing and developed economies. This has repercussions for an equitable transition between nations and knock-on effects for skills development, especially in developing countries, particularly Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

Recommendation:

IMO Member States – During the ongoing revision of the Initial IMO Strategy on Reduction of GHG Emissions from Ships, to be adopted in 2023, particular attention should be given to aligning more explicitly the levels of ambition of the Revised IMO GHG Strategy with the temperature goals of the Paris Agreement, helping to provide market certainty and in turn stimulate the training investments needed for the maritime workforce. The Revised Strategy could consider reflecting Maritime Just Transition principles and measures aligned with the [ILO Just Transition guidelines \(2015\)](#).



Global labour standards

Ensure that Just Transition planning, as part of wider decarbonization plans in the maritime industry, is aligned with globally established labor standards under the [Maritime Labour Convention, as amended \(MLC, 2006\)](#), underpinned by social dialogue and stakeholder engagement.

International Organizations (ILO)
National Governments
Industry
Seafarers' Unions

The Preamble to the [Paris Agreement \(2015\)](#) calls on countries to “respect, promote and consider their respective obligations on human rights”, when taking action to address climate change. It also highlights the need to take into account the imperatives of a Just Transition and the creation of decent work and quality jobs in accordance with nationally defined development priorities. Alongside governments, employers and workers also have a role to play, including through reflecting Just Transition planning in decarbonization plans.² As such, the green transition in the shipping industry should be in accordance with global obligations under the [Maritime Labour Convention, 2006 \(MLC, 2006\)](#), as well as international principles defined by the International Labour Organization (ILO), including the [ILO Just Transition guidelines](#) and the [ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy](#) (MNE Declaration).³ Social dialogue and stakeholder engagement lie at the core of securing a Just Transition and international human and labor rights standards.

Recommendations:

Tripartite stakeholders (governments, industry and seafarers' unions) – Just Transition planning in the maritime industry should be underpinned by strengthened social dialogue between the maritime industry and seafarers' unions, including by collective bargaining where appropriate, supported by international organizations and national governments.

Industry – Engage workers around decarbonization strategies, plans around restructuring, and any other net zero-related strategy with large employment impacts.

National Governments – In line with the ILO MLC, national policies should facilitate the strengthening of seafarers' competencies, qualifications and employment opportunities. Such national policies should be adopted “after consulting the shipowners' and seafarers' organizations concerned”.⁴ These aspects may also be included in a country's National Action Plan (NAP) to address GHG emissions from ships, as encouraged in [IMO resolution MEPC.327\(75\)](#).

² For additional information on what role employers can play in securing a Just Transition, please see the [UN Global Compact Just Transition Think Lab Business Brief](#) (2022). The [International Labour Organization](#) website also provides resources to help governments and enterprises to practically support a Just Transition. Some companies, including from the energy sector, have also developed Just Transition plans; for example, [Scottish energy company SSE](#) (2020)

³ Additional internationally recognized principles include the [Ten Principles of the UN Global Compact](#) and the [UN Guiding Principles on Business and Human Rights](#) (UNGP)

⁴ See [MLC, 2006, Standard A2.8](#).



Gender and diversity

Champion ‘Diversity, Equity and Inclusion’ on board ships as a driver for better performance and risk management in the transition and beyond.

National Governments
Industry
Seafarers’ Unions

Diversifying the maritime workforce is not only a question of equity and a key dimension of Just Transition according to the [ILO Just Transition guidelines \(2015\)](#). It also allows the sector to draw from a wider and deeper talent pool of experienced and well-trained individuals that the industry needs to access the human capital required to achieve the green transition. Moving to a more diverse workforce represents a major opportunity for the sector to harness skills of individuals who may not have been considered previously, and those that may themselves not have considered a career in maritime, from a broader range of countries, geographical locations, ethnic backgrounds, gender and physical ability. Opportunities to actively promote inclusion, such as targeted education and training should be factored into transition strategies.

Recommendations:

Industry, Seafarers’ Unions and National Governments – Support efforts and initiatives that challenge/break both conscious and unconscious biases, stereotypes and discrimination in shipping, by promoting a safe company culture in which equality, fairness, and respect are incorporated into policies and behaviors.

Industry – Make use of established frameworks to review and strengthen diversity and inclusion practices and create opportunities for all, irrespective of gender, race, ethnic origin, nationality, disability, age, sexual orientation, gender identity or religion. These initiatives could be complemented by concrete actions and pledges, alongside monitoring and reporting metrics to track progress.



Investing in skills

Ensure decarbonization plans, including spending and investment, are aligned with the globally established ILO Just Transition guidelines, taking full account of the maritime industry’s growing need for skills to support its green transition.

National Governments
Industry

Skills gaps and shortages are increasingly posing a challenge to the green transition. Investment towards skills for a decarbonized shipping industry is still lacking due to a lack of clarity surrounding the viability and uptake of alternative fuel options and decarbonization trajectories. As seafarers’ future education will increasingly rely on Science, Technology, Engineering, Math (STEM) skillsets, special attention should be placed on strengthening and investing in national education systems to support the future generation of seafarers. Some countries have also established green jobs initiatives to foster and support job creation and skills development. Where existing, such frameworks could support skills development for decarbonized shipping. For example, the [Philippine Green Jobs Act of 2016](#) provides fiscal incentives for skills training, which could be made available for maritime training institutions.

Recommendations:

Industry and National Governments – Maritime decarbonization plans, such as [National Action Plans \(NAPs\)](#) to address GHG emissions from ships, should (where relevant) factor in investments towards the necessary skills development for shipping's transition, including for the use of alternative fuels.

Industry and National Governments – Investment towards skills development for decarbonizing shipping should include enhancement of maritime training establishments (e.g. proper facilities and equipment), including the competency of trainers, as well as incentives to obtain licensing and necessary sea time.



Strengthening global training standards

Strengthen global training standards for seafarers, in the ongoing comprehensive review of the IMO STCW Convention and Code, identifying areas for revision. This includes by replacing or updating obsolete competencies and knowledge, understanding and proficiency (KUP) in line with shipping's digitalization evolution and decarbonization trajectory.

International
Organizations (IMO)
National Governments

IMO Member States – Urgently revise or establish standards and training requirements for alternative fuel types through amendments to the STCW Convention, as necessary, in consultation with the industry and social partners, to help ensure that training centers are able to invest in new skills programs, simulators and engine replicas, etc.

IMO Member States – Existing IMO STCW methodology and requirements employed for competency on gas and tanker segments may serve as a model for seafarer training and familiarization on board ships to handle new fuel types.

IMO Member States – During the ongoing comprehensive review and revision of the IMO STCW Convention, close attention should be paid to the relevant skills required at present, as well as those that will be required for seafarers in 2050. Obsolete competencies should be updated or removed in order to mitigate and manage the training burden on seafarers, and new competencies or KUPs may need to be developed.

IMO Member States – The new global training standards, such as an updated STCW Convention, should not be overly prescriptive, given the rapidly changing technological landscape, and should be flexible to accommodate technological advancements.



Delivering fair training

Deliver equitable training models for all seafarers to keep up with technological advances needed to support the industry's decarbonization and avoid a widening skills and training gap which disadvantages seafarers, in particular from developing countries, SIDS and LDCs.

International Organizations (IMO)

Industry

Seafarers' Unions

Providers of maritime education and training (MET)

The STCW Convention sets the standards for competency and training for seafarers. In light of shipping's decarbonization trajectory, these global standards are currently under review, to ensure that seafarers are equipped with the skills necessary to support the industry's decarbonization transition. New training standards relevant to ships using certain fuels can also be introduced separately from the comprehensive review process.

Recommendations prior to STCW review:

Industry – In the interim phase, as it relates to additional training, the industry should invest in the reskilling or upskilling of staff according to their roles.

National Governments and providers of maritime education and training – To the extent possible, a more proactive approach to developing structured training programs for skills development, including on-board training for cadets and trainees, should be pursued in collaboration with the social partners and national administrations.

Industry – Build access to mentoring and training programs for cadets and trainees. On-board training programs, including the use of approved Training Record Books, provide a structured approach to skills development provided in the IMO STCW Convention.

IMO Member States – Continue to develop alternative fuel guidelines, which could form the basis of new training standards relevant to ships using certain fuels. These could be introduced before the comprehensive STCW review process is completed and accelerate seafarer training.

Recommendations post STCW review:

National Governments and providers of maritime education and training – A training system should be developed, with the role of maritime universities strengthened to provide an upskilled education as per STCW-related competencies (basic and advanced) and of industry to provide specialized fuel-specific training, as per new global requirements and goals.

IMO and National Governments – Explore the establishment of technical cooperation partnerships on training with seafarer supply countries e.g., train the trainer between national maritime authorities.

Shipowners and providers of maritime education and training – Could consider utilizing seafarers who have been trained with STCW methodologies employed for competency and gas and tanker segments as trainers.

Providers of maritime education and training – Explore ways for seafarers to conduct courses and education online and at their own pace, to lessen the burden on them in their free time

Industry and Representatives – Collaborate with training centers and institutions in emerging seafarer labor markets, to share training-related best practices and support capacity building.



Monitoring skills

Develop national maritime skills councils, as advisory bodies, to complement the STCW training framework, including giving special attention to the additional skills that the maritime workforce will need to handle alternative fuels.

National Governments
International organizations (IMO)
Industry
Seafarers' Unions

According to the [International Labour Organization \(2019\)](#), sector skills councils have the core function of specifying the nature of the skills that an industry sector needs, with the responsibility of monitoring skills shortages and advising on the quantity of training needed overall and in particular locations. The active participation of social partners is useful in identifying skills gaps, implementing training provisions, and recognizing skills acquired on the job. Effective monitoring and anticipation of skills needed is fundamental to a Just Transition, as increased monitoring is key to ensure that skills gaps do not widen exponentially between labor supply nations and seafarers. Such national strategies may form part of a National Action Plan (NAP) to address GHG emissions from ships.

Recommendations:

National Governments, Industry and Seafarers' Unions – Establish 'national skills councils' (and strategies) in major and emerging seafarer supply countries. These should involve national governments, industry representatives, training providers, and seafarer representatives, amongst others, to establish a clear collective vision, and roadmap at national level. This could also include undertaking national skills gap analyses for seafarer training.

IMO – Consider introducing capacity building measures and programs to assist in the development of maritime skills councils in developing countries, particularly Least Developed Countries (LDCs) and Small Island Developing States (SIDS).



Effective **monitoring and anticipation** of skills needed is **fundamental** to a Just Transition.





Support seafarer career pathways

Support seafaring careers both at sea and ashore, by establishing mobility frameworks for them to develop transferable skills over their time on board, preparing them for a career ashore, beyond seafaring.

International Organizations (IMO and ILO)

National Governments

Industry

Seafarers' Unions

Providers of maritime education and training (MET)

New skills and new types of green jobs will emerge, both on board and ashore, as shipping transitions to a green pathway with low- and zero-carbon fuels and technologies. Some conventional seafaring roles will potentially shift into shore-based roles in the future, as a result of the industry's digitalization and decarbonization evolution. With maritime digitalization creating shore-based job opportunities, seafarers' sea careers may become even shorter, making it even more important to use a holistic, career pathway approach when developing training for today's seafarers. Transferable skills should include both soft skills and specific technical skills, including the handling of alternative fuels.

Recommendations:

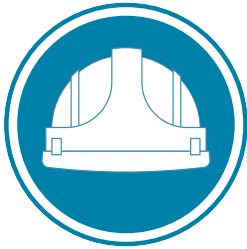
Providers of maritime education and training (MET) and Industry – Improve seafarers' skills relevant to both officers and ratings, including soft skills in leadership and management, through the creation of new training programs aimed at furthering transferability within the industry and supporting the transition to an onshore career.

National skills councils – Develop career pathway frameworks for the maritime industry to promote lifelong learning and highlight sub-sector employment opportunities. An example of this could be the [Skills Framework \(SFw\)](#) developed by SkillsFuture Singapore (SSG), Workforce Singapore (WSG), and the Maritime and Port Authority of Singapore (MPA).

“

Continuous emphasis on a 'health-and-safety first' culture **is key to protecting** all seafarers on board ships, the **communities** in which shipping operates, as well as the operation of the ship itself.

”



Health and safety

Ensure a health-and-safety-first approach to de-risk shipping's green transition with fit-for-purpose training and familiarization on board ships.

International Organizations (ILO)
National Governments
Industry

Seafarers will need to be equipped with adequate skills, education, and training to operate new technology systems on board more technologically advanced ships, and to handle new fuels which could represent a significant health and safety risk that could be taken into account in Safety Management Systems. Continuous emphasis on a 'health-and-safety first' culture is key to protecting all seafarers on board ships, the communities in which shipping operates, as well as the operation of the ship itself. A health and safety approach should also consider mental wellbeing.

Recommendations:

ILO – Consider the prospect of updating guidelines associated with [implementing the occupational safety and health provisions](#) of the MLC (2006), as necessary, taking into account any potential new occupational health and safety risks related to technologies, including alternative fuels.

Industry – In addition to training, enable sufficient seafarer 'familiarization' periods with new technologies on board ships.



Address attrition and recruitment

Take active steps to address seafarer attrition, which represents a significant challenge to attract and retain seafarers (including women) for shipping's green transition.

National Governments
Industry
Seafarers' unions

Some emerging green industries are already leveraging the green transition in their recruitment strategies. The green economy presents opportunities to attract new workers into the maritime sector and to develop new skills-sets. Creating transferable skills frameworks, identifying career pathways and company-led maritime career support could also address seafarer attrition.

Recommendations:

Industry – Implement early career programs e.g., apprenticeships to attract people at the beginning of their careers, integrating with academic training facilities and other education institutions to foster and recruit cadets and trainees for apprenticeships.

National Governments – In coordination with sector skills councils (where existing) and industry partners, establish nation-wide apprenticeship programs for the maritime industry.

Seafarers' Unions – Work with industry and governments to create conditions to retain existing seafarers and to attract new seafarers, particularly women and youth.

Glossary of terms and definitions

Competence: in a maritime context, ‘competence’ is a demonstrable attribute including (but not limited to) a person’s knowledge, ability to perform specific tasks, decision-making, analytical ability, problem-solving etc.

Skills: specific learned abilities which enable you to carry out the tasks and duties of a given job ([International Labour Organization](#)).

Skills for green jobs: skills that are necessary for the successful performance of tasks for green jobs (see the definition below) and to make any job greener. This includes both core and technical skills and covers all types of occupations that contribute to the process of greening products, services and processes, not only in environmental activities but also in brown sectors ([International Labour Organization](#)).

Transferable skills: skills used in one job or career that can also be used in another ([Cambridge Dictionary](#)).

Training: the process of learning or enhancing the skills you need to do a particular job or activity ([Cambridge Dictionary](#)).

Upskilling: the process of learning new skills or of teaching workers new skills ([Cambridge Dictionary](#)).

Re-skilling: the process of learning new skills so you can do a different job, or of training people to do a different job ([Cambridge Dictionary](#)).

Providers of maritime education and training (MET) – institutions, centers or specialized establishments providing STCW-related training.

Just Transition: a Just Transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind ([International Labour Organization](#)).

Decent work: decent work has four pillars: employment creation; rights at work; social protection; and social dialogue ([International Labour Organization](#)).

Green jobs: jobs that reduce the environmental impact of enterprises and economic sectors, ultimately to levels that are sustainable ([International Labour Organization](#)).

STCW Convention: the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) establishes basic requirements on training, certification and watchkeeping for seafarers on an international level ([International Maritime Organization](#)).

About the partners



United Nations
Global Compact

About the UN Global Compact: As a special initiative of the UN Secretary-General, the United Nations Global Compact is a call to companies everywhere to align their operations and strategies with 10 universal principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals. With more than 15,000 companies and 3,000 non-business signatories based in over 160 countries, and 69 Local Networks, it is the largest corporate sustainability initiative in the world.



**INTERNATIONAL
TRANSPORT
WORKERS'
FEDERATION**

About the ITF: The International Transport Workers' Federation (ITF) is a democratic, affiliate-led federation of transport workers' unions recognised as the world's leading transport authority. We fight passionately to improve working lives; connecting trade unions and workers' networks from 147 countries to secure rights, equality and justice for their members. We are the voice of the almost-20 million women and men who move the world, including over a million seafarers working in domestic trade and international shipping.



**International
Chamber of Shipping**

About ICS: The International Chamber of Shipping (ICS) is the principal international trade association for merchant shipowners and operators, representing all sectors and trades and over 80% of the world merchant fleet.

The Maritime Just Transition Task Force is grateful to its primary funder, Lloyd's Register Foundation.



Lloyd's Register Foundation

Lloyd's Register Foundation is an independent global charity with a unique structure and an important mission: engineering a safer world. It focuses on the most pressing global safety challenges and enhances the safety of life and property at sea, on land, and in the air. It does this by supporting high-quality research, accelerating technology to application, and through education and public outreach. Its unique structure comes from the fact that it owns a significant trading company, Lloyd's Register Group. They share the same mission and work together to make the world a safer place.



Maritime Just Transition

TASK FORCE

