WORKING DOCUMENT

PRACTICAL GUIDANCE FOR THE UN GLOBAL COMPACT **SUSTAINABLE OCEAN PRINCIPLES**

SHIPPING

Sustainable Ocean Business Action Platform

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Note: The Practical Guidance maps current regulations, business standards and best and emerging practices for a particular sector. Under the auspices of the UN Global Compact Sustainable Ocean Business Action Platform, the guidance has been mainly developed by companies operating within the sector.

The guidance is a dynamic working document. It will be reviewed on a regular basis to follow new legislation, best business practices, higher standards and market innovations. Input, feedback and comments from all stakeholders are welcome. If you would like to contribute, please contact: ocean@unglobalcompact.org

GENERAL INTRODUCTION TO THE GUIDANCE DOCUMENT

1. THE UN GLOBAL COMPACT SUSTAINABLE OCEAN PRINCIPLES

The UN Global Compact has, in consultation with more than 300 stakeholders worldwide, developed the Sustainable Ocean Principles. The purpose is to promote the well-being of the ocean for current and future generations, as well as to emphasize the shared responsibility of businesses to take necessary actions to secure a healthy and productive ocean.

The nine principles cover three areas: ocean health and productivity; governance and engagement; and data and transparency. Signatories confirm their endorsement of the principles, setting out a framework for responsible business practices across relevant sectors and geographies. The principles build upon and supplement the overarching Ten Principles of the UN Global Compact, including the fundamental responsibilities in the areas of human rights, labour, environment and anti-corruption.

The principles are relevant for companies with activities that may impact ocean health and companies that are part of an ocean productivity value chain. The principles are, therefore, also relevant for land-based industries, including the financial sector. The principles are directed at company boards and executive management. They are designed as a tool for moving beyond minimum standards and towards excellence in sustainability. They can be used as basis for due diligence assessments and serve as a reference point for interaction between companies on sustainable uses of the ocean.

Companies should understand the broader environmental and social consequences of their activities. Companies should ensure that material ocean-related risks and opportunities are integrated in corporate strategy, risk management and reporting. They should ascertain that the ensuing responsibilities are clearly defined within the organization. The company board should effectively guide, monitor and review company management in these efforts.

The principles are not introducing a new set of reporting measures, but rather encourage companies to use existing mechanisms to disclose their practices.

*DISCLAIMER : This guidance and the information contained therein are intended as a general guide to the issues addressed. They must not be considered a substitute for legal advice and questions regarding the legal interpretation and application of the information should be directed to appropriate legal counsel. Any actions taken or omissions or alterations made on the basis of this information are done at the user's risk.

The guidance was issued in May 2021 and will be updated on a regular basis to ensure that relevant developments, expectations, standards and requirements are properly reflected.

2. THE GUIDANCE

WHAT?

This guidance document is complementary to the UN Global Compact Sustainable Ocean Principles and is intended to broadly outline ways to operationalize these nine principles to specific industry sectors. The guidance aims at guiding signatories on how they can deliver on the principles in practical terms.

WHO?

First and foremost, the audience is the set of companies operating in the sector targeted by the guidance. The guidance may also be used by financial institutions and insurers as a due diligence tool and to inform their decisions. The guidance may also support policymakers and civil society organizations to better understand the challenges, opportunities, regulations and standards of the sector.

WHY?

The guidance aims at identifying shared challenges, common solutions, risks, opportunities, relevant partnerships and reporting frameworks needed to help operationalize the principles.

HOW?

The document starts with an introduction presenting the authors and contributors, defining the scope of the document and general considerations for the sector, in line with the preamble of the Sustainable Ocean Principles.

The guidance is organized in three sections: following the Sustainable Ocean Principles

- **OCEAN HEALTH AND PRODUCTIVITY**
- **GOVERNANCE AND ENGAGEMENT**
- **DATA AND TRANSPARENCY**

For each of these sections, the guidance describes the main challenges and opportunities of the sector.

Under each principle, the document seeks to provide clear guidance and practical tools of what companies can do to implement the principle in operations.

In order to inspire companies, the document identifies best practice from companies or initiatives. These are provided by those companies listed as co-authors or engaged in consultation.

Sustainable Ocean Principles

The ocean is vital to the wellbeing and prosperity of humankind. To achieve the world community's ambitions as laid out in the Sustainable Development Goals, there is a need to expand our use of the ocean to produce food, energy, raw materials and transportation. Carrying out these activities in a sustainable manner will contribute to reducing global warming and environmental degradation. Ensuring a healthy ocean provides significant opportunities for business and global economic growth.

As described in Sustainable Development Goal 14 on Life Below Water, there is an urgent need to protect and restore the health of the ocean, which is rapidly deteriorating due to increasing temperatures, acidification, depletion of natural resources and pollution from land and sea. Businesses have a shared responsibility, alongside Government and civil society, to take necessary actions to secure a healthy ocean.

These Sustainable Ocean Principles provide a framework for responsible business practices across sectors and geographies. They build upon and supplement the Ten Principles of the United Nations Global Compact on human rights, labour, environment and anti-corruption. We, as signatories of these principles, recognize the urgency and global importance of a healthy ocean, and will take action to promote the well-being of the ocean for current and future generations. As relevant to their business, we believe that companies should:

OCEAN HEALTH AND PRODUCTIVITY

Principle 1: Assess the short- and long-term impact of their activities on ocean health and incorporate such impacts into their strategy and policies.

Principle 2: Consider sustainable business opportunities that promote or contribute to restoring, protecting or maintaining ocean health and productivity and livelihoods dependent on the ocean.

Principle 3: Take action to prevent pollution affecting the ocean, reduce greenhouse gas emissions in their operations to prevent ocean warming and acidification, and work towards a circular economy.

Principle 4: Plan and manage their use of and impact on marine resources and space in a manner that ensures long-term sustainability and take precautionary measures where their activities may impact vulnerable marine and coastal areas and the communities that are dependent upon them.

GOVERNANCE AND ENGAGEMENT

Principle 5: Engage responsibly with relevant regulatory or enforcement bodies on ocean-related laws, regulations and other frameworks.

Principle 6: Follow and support the development of standards and best practices that are recognized in the relevant sector or market contributing to a healthy and productive ocean and secure livelihoods.

Principle 7: Respect human-, labour- and indigenous peoples' rights in the company's ocean related activities, including exercise appropriate due diligence in their supply-chain, consult and engage with relevant stakeholders and communities in a timely, transparent and inclusive manner, and address identified impacts.

DATA AND TRANSPARENCY

Principle 8: Where appropriate, share relevant scientific data to support research on and mapping of relevance to the ocean.

Principle 9: Be transparent about their ocean-related activities, impacts and dependencies in line with relevant reporting frameworks.

SHIPPING GUIDANCE

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SCOPE OF THE GUIDANCE:

The shipping value chain supports world trade and facilitates the global economy by transporting lawful merchandise on specific trading ships on a worldwide scale across the ocean and adjoining seas of nations and inland waterways.

The value chain — shipping and ports — is interlinked with business entities ashore, such as cargo interests, charterers, investors, financiers, legal, insurance, technology providers and ship builders and designers.

The shipping industry is overseen by regulators (international, regional and national) and certifying authorities to ensure the safe and sustainable carriage of goods at sea.

The scope of this guidance primarily applies to ship owners, ship operators, ship managers and charterers whose interests lie in operating, owning and managing ships for the transportation of goods.

Elements of this guidance may also be applicable to the ship-shore interface linking shipping to ports, terminals and harbours and onshore business entities.

GENERAL CONSIDERATIONS FOR SIGNATORIES IN THE SHIPPING INDUSTRY:

The shipping industry is highly regulated foremost by the International Maritime Organization (IMO) and governed by a complex legal and contractual landscape beyond just national levels. The list of IMO Conventions is available here. Additional resources can also be found in the report Mapping of Ocean Governance and Regulation.

The UN Global Compact Sustainable Ocean Principles are designed to encourage best practices and drive performance beyond mandatory compliance.

While transporting more than 80 per cent of the world's goods (UN Sustainable Development Goal 2[1]), shipping recognizes its responsibility to minimize its negative impacts on sea and land. International conventions regulate discharges of pollutants and waste from ships and help to lower the risk of vessels moving invasive aquatic species over long distances. (Goal 14).

The Initial IMO Greenhouse Gas (GHG) strategy adopted in April 2018 set a level of ambition to reduce GHG emissions from international shipping by at least 50 per cent by 2050 compared with 2008. A revised GHG strategy will be adopted at MEPC 80 in July 2023. IMO requirements and public-private partnerships are driving improvements in energy efficiency and contributing to decarbonizing shipping chains (Goal 12).

1. https://sdgs.un.org/goals

VOLUNTARY REPORTING FRAMEWORKS

VOLUNTARY REPORTING MECHANISMS PROVIDE A FRAMEWORK FOR TRANSPARENCY AND DISCLOSURE OF SOCIAL AND ENVIRONMENTAL IMPACTS. COMPANIES CAN REPORT AND DISCLOSE ENVIRONMENTAL AND SOCIAL PERFORMANCE DATA ALIGNED TO THESE FRAMEWORKS TO DEMONSTRATE CONTINUOUS IMPROVEMENT TO THEIR STAKEHOLDERS.

EXAMPLES OF RELEVANT REPORTING SCHEMES

REPORTING REGIME / STANDARD / CERTIFICATION	BRIEF DESCRIPTION	APPLICABILITY	PRINCIPLES								
			1	2	3	4	5	6	7	8	9
UN Global Compact Communication on Progress	Sets out signatories' commitment to the UN Global Compact and describes progress against the overarching Ten Principles of the UN Global Compact	UN Global Compact signatories	●	●	●	●	●	●	●	●	●
Global Reporting Initiative (GRI)	Sets out signatories' commitment to the UN Global Compact and describes progress against the overarching Ten Principles of the UN Global Compact	UN Global Compact signatories	●	●	●	●	●	●	●	●	●
Science Based Targets Initiative (SBTi) - Science Based target setting for the maritime transport sector	Provides detailed information on how maritime companies should set targets and account for greenhouse gas emissions	Companies that own and operate ocean-going vessels and those setting targets for supply chain emissions associated with maritime trade	●		●						
Sustainability Accounting Standards Board (SASB)	SASB Standards enable businesses around the world to identify, manage and communicate financially material sustainability information to their investors	All companies	●	●	●	●	●	●	●	●	●
Clean Cargo	A business-to-business leadership initiative dedicated to reducing the environmental impacts of global goods transportation and promoting responsible shipping	Shippers, carriers and forwarders	●		●			●			●
Clean Shipping Index (CSI)	An independent and holistic labelling system of vessels' environmental performance	A broad range of maritime stakeholders, including cargo owners, shipping companies, ports and investors	●		●			●			●
Poseidon Principles	A framework for integrating climate considerations into lending decisions to promote the decarbonization of international shipping	Lenders, lessors and financial guarantors — including export credit agencies — with shipping portfolios can become signatories of the Poseidon Principles	●		●			●			●
Posiedon Principles for Insurers	The Poseidon Principles for Marine Insurance create a common global baseline that is consistent with and supportive of society's goals to better enable insurers to assess and disclose their portfolio alignment.										
Sea Cargo Charter	A global framework for aligning chartering activities with responsible environmental behaviour to promote international shipping's decarbonization	All bulk charterers can become signatories of the Sea Cargo Charter: those with interest in the cargo on board; those who simply charter out the vessels they charter in; as well as the disponent owners and all charterers in a charter party chain	●		●			●			●
Global Logistics Emissions Council (GLEC) framework	GLEC method for calculation and reporting of logistics emissions	Shippers and carriers of freight transport and logistics services	●		●			●			●
Carbon Disclosure Project (CDP)	A global environmental disclosure system	All companies	●		●			●			●
Task Force on Climate-related Financial Disclosures (TCFD)	TCFD provides a set of recommendations for reporting on climate-related financial information	Organizations with public debt or equity and asset managers and owners — the preparers and users of financial disclosures	●		●			●			●
Greenhouse Gas Protocol (GHG Protocol)	A comprehensive global standardized framework to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions	All companies	●		●			●			●
Science Based Targets initiative (SBTi)	Science-based targets provide a clearly defined pathway for companies to reduce GHG emissions	All companies	●		●			●			●
Ship Recycling Transparency Initiative (SRTI)	The SRTI is a 'one-stop shop' online platform to report information on ship recycling against a set of pre-defined disclosure criteria	Shipowners, cargo owners and financial stakeholders	●		●			●	●		●
The Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises	The OECD Guidelines for Multinational Enterprises provide non-binding principles and standards for responsible business conduct in a global context consistent with applicable laws and internationally recognized standards	All companies	●	●	●	●	●	●	●	●	●

Table 1: Examples of relevant reporting regimes.

PARTNERSHIPS TO BE CONSIDERED

GLOBAL ENVIRONMENTAL AND SOCIAL CHALLENGES ARE NOT UNIQUE TO THE SHIPPING INDUSTRY AND CANNOT BE SOLVED ALONE. SOLUTIONS REQUIRE MULTI-STAKEHOLDER DIALOGUE AND ACTION AND FOR THIS REASON, A NON-EXHAUSTIVE NUMBER OF PARTNERSHIPS OF RELEVANCE ARE IDENTIFIED BELOW TO ASSIST COMPANIES IN ADDRESSING ENVIRONMENTAL AND SOCIAL ISSUES THAT ARE MATERIAL TO THEIR BUSINESS. IN THIS GUIDANCE, A PARTNERSHIP OCCURS WHEN COMPANIES TEAM UP TO ACCELERATE ACTIONS AND/OR DEVELOP TOOLS IN CERTAIN AREAS; THEREFORE, TRADE AND INDUSTRY ASSOCIATIONS ARE NOT LISTED.

REPORTING REGIME / STANDARD / CERTIFICATION	BRIEF DESCRIPTION	APPLICABILITY	PRINCIPLES								
			1	2	3	4	5	6	7	8	9
Getting to Zero Coalition	The Coalition is committed to getting commercially viable deep sea zero emission vessels powered by zero emission fuels into operation by 2030	Stakeholders across the maritime value chain	●		●		●	●			●
Sustainable Shipping Initiative (SSI)	The SSI is a multi-stakeholder collective of ambitious and like-minded leaders, driving change through cross-sectoral collaboration to contribute to — and thrive in — a more sustainable maritime industry	Stakeholders across the maritime value chain	●	●	●	●	●	●	●	●	●
Clean Cargo	A business-to-business leadership initiative that involves major brands, cargo carriers and freight forwarders dedicated to reducing the environmental impacts of global goods transportation and promoting responsible shipping	Shippers, carriers and forwarders	●		●			●			●
World Ocean Council	A global cross-sectoral ocean industry leadership alliance committed to "Corporate Ocean Responsibility", developed by and for the private sector, with a unique and multi-sectoral approach to address cross-cutting issues affecting ocean sustainable development, science and stewardship of the seas	All organizations willing to work toward ocean sustainability	●	●	●	●	●	●	●	●	●
Green Voyage 2050	A public-private partnership initiative of the IMO under the framework of the GEF-UNDP-IMO GloMEEP project that aims to bring together maritime industry leaders to support an energy-efficienct and low-carbon maritime transport system	All stakeholders across the maritime value chain	●		●		●	●			
Global Industry Alliance for Marine Biosafety	An alliance that brings together committed leaders from maritime, shipping, ocean energy, aquaculture and other ocean-based industries to support two key IMO environmental objectives via improved biofouling management: protect marine biodiversity and decarbonize shipping	All ocean industry sectors and stakeholders	●	●	●	●	●	●	●		
Global Industry Alliance – GloLitter Partnership	The GloLitter Partnerships (GLP) is a project between Norway, IMO, Food and Agriculture Organization of the United Nations (FAO) and the UN Global Compact that aims to reduce marine litter. The global project will support developing countries, including Small Island Developing States (SIDS) and Least developed countries (LDCs), in identifying opportunities for the prevention and reduction of marine litter. The UN Global Compact is coordinating the GIA.	Private sector participation from major maritime and fisheries companies	●	●	●	●	●	●	●		
Responsible Ship Recycling Standards (RSRS)	RSRS aim to take accountability in ship recycling and minimize the dangers associated with hazardous materials on board ships	Financial Institutions	●		●			●			●
Ship recycling transparency initiative (SRTI)	The SRTI is a 'one-stop shop' online platform to report information on ship recycling against a set of pre-defined disclosure criteria	Shipowners, cargo owners and financial stakeholders	●		●			●	●		●
United Nations Environment Programme (UNEP) Finance Initiative	Works with banks, insurers and investors to create a Sustainable Finance Sector	Banks, insurers and investors	●	●	●	●	●	●	●	●	●
Global MTCC Network	Funded by the European Union and implemented by the IMO, the Global MTCC Network (GMN) initiative unites technology centres — Maritime Technology Cooperation Centres (MTCCs) — in targeted regions into a global network. Together, they are promoting technologies and operations to improve energy efficiency in the maritime sector and help navigate shipping into a low-carbon future.	Academic institutions, commercial and shipping companies, Government departments and authorities	●		●		●	●			

Human Rights at Sea	A not-for-profit organization to raise global awareness of human rights abuses at sea and deliver positive change through legal and policy development	Direct engagement with international stakeholders and like-minded organizations known as 'Supporting Entities'.	●						●		
Maritime Anti-Corruption Network	A global business network working towards the vision of a maritime industry free of corruption that enables fair trade to the benefit of society at large	All maritime stakeholders	●				●		●		●
Ocean Data Platform	A global initiative connecting data, people and technology for a healthy and productive ocean	All maritime stakeholders, with a focus on technology providers and science								●	

Table 2: Examples of relevant partnerships

OCEAN HEALTH AND PRODUCTIVITY

CHALLENGES AND OPPORTUNITIES FOR THE SECTOR

The ocean provides raw materials, energy, food, employment, a place to live and a place to relax. Shipping is just one of many stakeholders benefitting from the use of the ocean and this must not come at the expense of ocean and marine ecosystem health and productivity.

The environmental impacts of maritime activities are well known and many issues that affect shipping today and in the future are already regulated by the IMO, notably:

- Air emissions, including SOx, NOx and Particulate Matter (PM)
- Discharge of waste to sea (sewage, grey water, solid waste)
- Transportation of dangerous goods and noxious liquid substances
- Transportation of invasive species in ballast water and through hull-fouling
- Designation of Particularly Sensitive Sea Areas (PSSAs) and Areas to Be Avoided (ATBAs)
- Operations in the polar regions through the Polar code
- Accidental spills of oil
- Underwater noise

In addition, regulations on the following issues are being revised:

- Marine litter, especially plastics
- Greenhouse gas emissions
- Transportation of dangerous goods

The global shipping industry is essential for a sustainable future and maritime activities themselves need to be sustainable and not exceed the ocean's capacity to remain healthy and productive. Higher standards of safety and environmental performance provide opportunities for the long-term sustainability of the shipping sector such as:

- Contribution to ocean science and the understanding of ocean health and productivity through participation in ocean monitoring programmes
- Research, innovation and deployment of new and novel technologies to reduce environmental impacts of maritime activities; for example, clean energy sources
- Operational practices to improve efficiency and reduce operating costs while protecting ocean health
- Collaboration and sharing best practices across all ocean industries which are competing for space, access and use

PRINCIPLE 1.

ASSESS THE SHORT- AND LONG-TERM IMPACT OF THEIR ACTIVITIES ON OCEAN HEALTH AND INCORPORATE SUCH IMPACTS INTO THEIR STRATEGY AND POLICIES.

GUIDANCE AND PRACTICAL TOOLS

- Ensure a clear ambition statement and strategy from executive management is embedded within the organization;
- Take an integrated supply chain approach to assessing short- and long-term impacts of business activities on ocean health, working with the risk department, and how the sum of the business activities can positively contribute to mitigate climate change and preserve ocean health and productivity;
- Quantify the most material issues and take a programmatic approach that links the ambition and strategy to business operations and embed responsibility with relevant functional areas to drive action and achieve ambitions. For example:
  - Invest in net-zero carbon fuels and technologies; and
  - Use new and innovative finance mechanisms for the uptake of new and sustainable technologies.
- Set targets that are scientific and impactful and put measurements in place for accurate accounting of impacts;
- Incorporate sustainability metrics, reporting and monitoring in supply chains to assess and evaluate commercial relationships;
- Communicate about sustainable ocean use and potential impacts with internal stakeholders in business decision-making processes and progress towards achieving targets;
- Support multi-stakeholder dialogues, together with clients, partners and other stakeholders like cargo-owners, charterers, ports and harbours to foster a sustainability driven culture;
- Participate in collaborative forums, consortiums, joint industry projects or public-private partnerships to research and develop solutions to address shared marine environmental problems and solve complex multi-stakeholder challenges. Examples are provided in Table 2 on pg. 8: Partnerships to be Considered;
- Share best practice with other ocean users.

CASE STUDY

A.P. Moller - Maersk: Accelerating ambitions to decarbonize shipping

Scientific assessments leave no doubt that the world must embark on an all-encompassing transformation away from the reliance on fossil fuels. Decarbonizing shipping is no longer a moonshot goal, but a strategic imperative for the industry that requires ambitious targets, strategic focus and cross-sectoral collaboration.

In 2018, A.P. Moller - Maersk set high ambitions to reduce shipping's relative CO_2 emissions by 60 per cent compared to 2008 by 2030 and to net-zero by 2050. To accelerate progress towards this target, the company has made decarbonization the most important strategic sustainability priority and dedicated a Decarbonization function tasked to collaborate across functions to develop carbon-neutral fuels, vessels and products.

By 2020, A.P. Moller - Maersk had achieved relative CO_2 reductions of 46 per cent (2008 baseline). In 2021, the company committed to operate the first carbon-neutral liner by 2023.

A.P. Moller - Maersk Sustainability Report 2020, page 16-22; First carbon-neutral liner vessel by 2023.

PRINCIPLE 2.

CONSIDER SUSTAINABLE BUSINESS OPPORTUNITIES THAT PROMOTE OR CONTRIBUTE TO RESTORING, PROTECTING OR MAINTAINING OCEAN HEALTH AND PRODUCTIVITY AND LIVELIHOODS DEPENDENT ON THE OCEAN.

GUIDANCE AND PRACTICAL TOOLS

- Ensure responsible business practices are in place as a foundation to pursue sustainable business opportunities;
- Seek certification to demonstrate the ability to meet internally recognized standards of performance;
- Engage with supply chains including ports and local communities to understand concerns and explore new business opportunities. For example:
  - Manage port operations to prioritize and optimize productivity to make best use of land, equipment, fuel, human resources, etc.;
  - Work in collaboration with ports to improve ship-shore communications to reduce waiting time and apply just-in-time arrival, therefore reducing fuel consumption and associated air emissions and GHGs;
  - Work in collaboration with charterers and cargo owners to optimize voyages and speed, therefore reducing fuel consumption and associated air emissions and GHGs; and
  - Renew or retrofit fleets to improve carbon intensity (tons of fuel consumed / cargo carried per ton / mile), thereby also reducing fuel costs.
- Undertake habitat restoration projects, which improve ecological function and create sustainable tourism and marine goods and services opportunities;
- Explore maritime partnerships which meet strategic corporate objectives and benefit the environment and local communities. For example, algae seeding for blue carbon credits;
- Engage suppliers (i.e. procurement) in coastal regions (for food, technology and services) who observe responsible ocean business practices.

PRINCIPLE 3.

TAKE ACTION TO PREVENT POLLUTION AFFECTING THE OCEAN, REDUCE GREENHOUSE GAS EMISSIONS IN THEIR OPERATIONS TO PREVENT OCEAN WARMING AND ACIDIFICATION, AND WORK TOWARDS CIRCULAR ECONOMY.

GUIDANCE AND PRACTICAL TOOLS

Pollution affecting the ocean

- At sites / assets under company management, ensure that regular monitoring takes place to assess impacts on local environments and communities, as part of a comprehensive Environmental and Social management system (ESMS);
- Explore, develop and implement solutions for minimizing plastic waste in own operations and supply chain;
- Adopt policies for single-use plastic / use of recyclable packaging — an example from the United Kingdom Chamber of Shipping is here: UK Chamber of Shipping Single-use Plastic Charter;
- Ensure systems are in place to sort and compact waste generated on board so that material can be offloaded and recycled wherever facilities exist onshore;
- Contribute to the protection of marine and coastal ecosystems through waste and wastewater management, land remediation, habitat protection and restoration;
- Mitigate risk of spills and leakages through monitoring and use of best available technology that is checked and maintained regularly;
- Establish routines for crisis management and incident response and actively mitigate accidents;
- Develop a ship recycling policy that upholds and prioritize international environmental protection measures in line with the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (the Hong Kong Convention);
- Consider operational and technical efficiency measures to improve energy efficiency of operations;
- Explore the possibility using cleaner fuels that are less polluting than Heavy Fuel Oil (HFO);
- Consider using voyage optimization technology in order to reduce fuel consumption — a relevant practical tool is the GIA Just in Time Arrival Guide

Reduce greenhouse gas emissions

- Engage in policy development to transition the sector to net-zero[2] carbon fuels;
- Track and report GHG emissions (CO2, CH4, N2O) over time using the Science-Based Targets Initiative methodology for the maritime transport sector;
- Understand how operations and facilities may need to adapt to the impacts of climate change, for example, looking at the Resilience4Ports initiative;
- Explore and cooperate with other transport providers to use multi-modalism and inter-modalism as means to shift freight to net-zero modes of transport and to create better efficiencies in freight movement;
- Collaborate both across the maritime value chain and across sectors to enable the transition to net-zero carbon fuels through market incentives, such as carbon pricing, and development of supply chains for low-zero carbon fuels — a relevant informative tool is the ''Getting to Zero'' Blueprint for first mover zero-emission shipping projects;
- Invest in pilot and prototype net-zero carbon fuels and technologies.

Transition towards a circular economy

- Build traceability to assure and verify sustainability claims and ensure sustainable practices in the supply chain. For example, fuel supply chains;
- Understand waste generated due to business practices and adopt waste hierarchies;
- Extend responsibility for own services / assets to design, build, operate and recycle through life strategies to transition to a circular economy — a relevant tool is the Chamber of Shipping (ICS) Transition Measures.

CASE STUDY

A.P. Moller - Maersk: Supporting the Ocean Cleanup's mission to remove plastic waste from the oceans
Plastic trash accumulates in the ocean garbage patches and harms the ocean's ecosystems. Solving this challenge requires both closing the source and cleaning up what has already accumulated in the ocean.
A.P. Moller - Maersk is supporting The Ocean Cleanup with offshore and logistics support to trial and scale up clean-up systems to collect and recycle plastic from the ocean with the Ocean Cleanup's advanced technologies.
The first trial of the ocean system in the Great Pacific Garbage Patch was successfully completed in 2019, and scale-up is in progress. The ultimate goal is reaching a 90 per cent reduction of floating ocean plastic by 2040.
Maersk and the Ocean Cleanup partnership; The Ocean Cleanup website.

The Global Industry Alliance for the GreenVoyage2050 project of the IMO has developed the Ship-Port Interface Guide Practical Measures to reduce GHG emissions.

2. IPCC's definition for net-zero: net-zero emissions are reached when anthropogenic (i.e. human-caused) emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. From a company's perspective, the Science Based Target Initiative considers the two following steps for a company to be ''net-zero'': 1. Achieving a scale of value chain emissions reductions consistent with the depth of abatement in pathways that limit warming to 1.5°C with no or low overshoot and; 2. Neutralizing the impact of any source of residual emissions that is unfeasible to eliminate by permanently removing an equivalent volume of atmospheric CO^2.

Technology and leading to more efficient routes (Pacific Basin and StormGeo)

In order to optimize fuel efficiency and reduce emissions, Pacific Basin partnered with StormGeo to develop a new way to optimize fuel efficiency and reduce greenhouse gas emissions without compromising arrival windows. This new method, Strategic Power Routing from StormGeo, allows the vessel to operate at an optimum RPM to maintain the vessels engine on constant power, ensuring a predictable and constant fuel consumption. This is a contrast to the traditional method of ordering the vessel to sail at a set speed despite the weather conditions en route. The trials were conducted with Pacific Basin for more than six months and have proven that maintaining constant power through the encountered weather resulted in approximately a 3 per cent reduction in fuel and GHG emissions.

Joint Development Project (JDP) on ammonia-fuelled tanker (MISC)

Without viable deep sea zero carbon vessels available commercially by 2030, it will be challenging for the shipping industry to achieve the IMO targets. This challenge is calling for collaborative efforts across the industry.
Initiated by MISC, the JDP is a collaboration of various maritime industry leaders (ship owners, classification societies, shipyards, engine makers, fuel producers and port authorities). The collaboration aims to tackle the issues related to the ammonia supply chain, such as fuel cost and logistic. The collaboration also addresses the challenges of regulatory as well the safe working guidelines of transporting ammonia and usage as fuel on board.

Green ammonia to the Arctic

Shipping needs new carbon-free energy sources. Through the Zeeds initiative, an industry project between Aker Clean Hydrogen and Varanger Kraft, the objective is to produce green ammonia in the north of Norway. Wärtsilä and Grieg Edge have partnered up to develop an ammonia-fuelled ammonia distribution tanker, the MS Green Ammonia, to transport the green ammonia to the market. The project will also be an important part of developing technology for future deep-sea solutions. MS Green Ammonia is set to sail in 2024.

Klaveness new combination carriers with up to 40 per cent lower CO_2 emissions

The challenge is that in many trades, standard tanker and dry bulk vessels sail empty over long distances and have large CO_2 emission without doing any transportation work. Klaveness introduced in the period 2019 to 2021 a new series of vessels, the CLEANBUs, which fix these inefficiencies. These vessels are built to efficiently combine a tanker cargo in one direction and a dry bulk cargo in the opposite direction with minimum empty time in between. By replacing less efficient standard vessels in these trades, the CLEANBUs cut CO_2 emission by 30 to 40 per cent.
Klaveness delivery of the sixth cleanbus vessel

Investing in zero emission technology

The Norwegian company Wilh. Wilhelmsen has, in the Edda Wind project, ordered four vessels for use in the offshore wind market. These vessels will most likely be the first zero emission vessels in this market. The problem the companies are solving is reduced emissions. It is estimated that GHG emissions will initially be reduced by more than 30 per cent with battery packs for hybrid operation, but the vessels are also already prepared for future use of zero emission technology based on hydrogen operation. Renewable energy company Edda wind

Breakthrough fuel cell solutions

Hydrogen and battery solutions are currently not suitable for operating ships that sail long distances. Other solutions must be used and one such solution is the fuel cell project from the Norwegian company Odfjell SE and partners. A prototype is under construction focusing on machinery rather than on one type of fuel. The technology allows for many different types of fuel, including ammonia and LNG, to be used on a single vessel. https://alterainfra.com/articles/stella-maris-ccs-carbon-capture-and-storage. Odfjell fuel cell project develops groundbreaking fuel solution for ships

PRINCIPLE 4.

PLAN AND MANAGE THEIR USE OF AND IMPACT ON MARINE RESOURCES AND SPACE IN A MANNER THAT ENSURES LONG-TERM SUSTAINABILITY AND TAKE PRECAUTIONARY MEASURES WHERE THEIR ACTIVITIES MAY IMPACT VULNERABLE MARINE AND COASTAL AREAS AND THE COMMUNITIES THAT ARE DEPENDENT UPON THEM.

GUIDANCE AND PRACTICAL TOOLS

- Identify and assess short- and long-term impacts at the local, regional and global level, through an Environmental and Social Impact Assessment (ESIA), in consultation with relevant experts and local stakeholders to identify the material impacts of business activities;

  Relevant practical tools include:

  For Environmental and Social Impact Assessments (ESIA):

  - IUCN Guidance Note: Environmental and Social Impact Assessment (ESIA)
  - IFC Guide: The Social and Environmental Impact Assessment Process

  For Environmental and Social Management Systems (ESMS):

  - IFC Guide: Environmental and Social Management System (ESMS) Implementation Handbook

- Ensure an environmental and social management plan is developed and agreed on with internal and external stakeholders to address areas of concern or impacts in a manner commensurate of the sensitivity of the local ecosystem;

- Select targets that are scientific and impactful to measure and communicate progress against stated environmental and social goals and ambitions;

- Ensure employees and suppliers are aware of the company's environmental and social management plan and how their role may contribute to achieving corporate goals;

- Publicly disclose and report impacts, targets and progress;

- Explore new sustainable technological solutions that can reduce impacts. For example, provide warnings if a vessel is sailing in shallow waters or approaching an environmentally sensitive area;

- Effectively engage in the marine spatial planning (MSP) processes in countries and regions where business activities are;

- Ensure that the MSP needs and interests of responsible shipping businesses are addressed and the business benefits are optimized.

CASE STUDIES

Not using the new Arctic route

New shipping routes in the Arctic may offer time and cost savings. Casualties, including spills, will have a larger effect on the environment considering the Arctic conditions. Shipping companies should take into consideration the risks to the environment when considering sailing in sensitive and remote areas. CMA CGM decided not to use the Northern Sea Route for their ships due to concern that any casualty in the arctic would cause significant damage due to pollution by fuel oil, which is very difficult to clean in ice conditions.

Project Cerulea: developing a low-cost, low-tech, low-carbon sail assisted cargo ship

Up to 30 per cent of GDP of some Pacific Island Countries and Territories (PICT) goes towards importing fossil fuel, including for inter-island cargo ships. This leads to green house gas emissions when there is plenty of wind energy available and which has been used by the Pacific Islanders over many previous millennia. The lack of viable main shipping routes to small outlying islands means no export of cash crops and this leads to depopulation by young people heading to main islands and hollowing out of communities. The China Navigation Company. Pte. Ltd – CNCo funds the design and operation of a low-cost, low-tech and low-carbon sail assisted cargo ship (~ 220t dwt) to serve non-trunk trade routes to prove the concept, and then massively scale this up. CNCo is completing the design at time of writing. The launch is expected at the end of Q1 2022. The pilot project will aim at proving commercial and technical viability. Project Cerulea

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Moana Taka Partnership: Ship operations to support islands waste management

There is excess recyclable domestic, commercial and industrial waste, much of it hazardous, generated in the PICT and carried into the central Pacific by the China Navigation Company Pte Ltd (CNCo). The problem is compounded by the insufficient or inappropriate landfill space to store it and/or lack of or inadequate waste facilities to treat it locally and the financial inability to ship the small parcels of recyclable waste to the few current centres generally at the edge of the PICT region. CNCo formed the Moana Taka Partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP) at the UN Environment Programme. CNCo provides both the containers and ocean freight carriage on a free-of-charge basis to move recyclable waste out of the Pacific to countries with competent and sustainable recycling plants. The scheme aims to strengthen national, regional and international mechanisms for management of ship-generated waste, marine plastic litter and other marine debris. It also enhances coordination and systematic sharing of information between UN Environment and SPREP.

GOVERNANCE AND ENGAGEMENT

CHALLENGES AND OPPORTUNITIES FOR THE SHIPPING SECTOR

From geopolitics and ocean pollution to seabed resource extraction, ocean governance is becoming increasingly complex. There is a multitude of legislative policies and drivers, which vary from country to country and region to region in their interpretation and implementation, ultimately leading to significant transboundary issues.

Although international shipping is regulated globally by the IMO through the enforcement of international conventions by port and flag States as shown in ANNEX I: List of international regulations, ocean policies are rapidly moving forward on a range of issues, with long-term implications and risks and opportunities for the ocean business community, notably:

- The UN negotiations on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ)
- The Convention on Biological Diversity (CBD)

Specifically, for the shipping industry:

- Global regulation creates a “level playing field” in an international industry;
- International policy may take time to develop and enter into force; therefore, guidance documents for implementation — which are often developed in advance of the entry into force date — can be used thereby enabling early voluntary compliance;
- In some instances, regional regulations fill gaps when there is no international regulation in place. For example, the European Union Sulphur Directive (Directive (EU) 2016/802) entered into force before the ‘IMO 2020’ sulphur regulations under the revised MARPOL Annex VI, and then was subsequently aligned to be equivalent;
- However, in some cases, regional regulation may be more stringent and may not align to international regulation, which creates additional requirements for ships operating in regions where these apply. For example, the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (the Hong Kong Convention) that regulates the safe and environmentally sustainable recycling of ships has not come into force; therefore, the European Union ship recycling regulations with respect to ships flagged in Europe have entered into force and these regulations are more stringent than the Hong Kong Convention;
- Financial institutions, insurers and shipping customers through private governance mechanisms and market incentives can assist to move the global shipping industry to sustainable practices in addition to global mandatory regulations;
- Both regulators and customers and financiers of shipping are driving expectations and the environmental and social performance of shipping, creating a complex landscape of standards and frameworks.

PRINCIPLE 5.

ENGAGE RESPONSIBLY WITH RELEVANT REGULATORY OR ENFORCEMENT BODIES ON OCEAN RELATED LAWS, REGULATIONS AND OTHER FRAMEWORKS.

GUIDANCE AND PRACTICAL TOOLS

- Engage and comply with regulatory requirements — both internationally by IMO and ILO and regionally by national legislation — and support the uniform enforcement to discourage substandard shipping and create a level playing field;
- Promote, through industry bodies, the ratification from member States of international conventions such as the Hong Kong Convention and the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, which are developed by IMO but have not yet entered not force;
- Work with regulatory bodies and trade associations to address safe, environmentally and socially responsible shipping;
- Support the development of policy and regulation that drives innovation and encourages and rewards leadership and first movers;
- Individually and collectively encourage actions that go beyond compliance, such as ambitious GHG targets aligned to climate science and net-zero by 2050;
- Work with seafarer rights organizations and unions to enhance practices and standards related to human rights, welfare and well-being and labour'
- Promote ambitious policy and regulations that create long-term value.

PRINCIPLE 6.

FOLLOW AND SUPPORT THE DEVELOPMENT OF STANDARDS AND BEST PRACTICES THAT ARE RECOGNIZED IN THE RELEVANT SECTOR OR MARKET CONTRIBUTING TO A HEALTHY AND PRODUCTIVE OCEAN AND SECURE LIVELIHOODS.

GUIDANCE AND PRACTICAL TOOLS

- Develop and provide incentives that support and reward the transition to a more sustainable global shipping industry;
- Seek solutions that create shared value across the value chain;
- Design solutions that work internationally and are scalable;
- Collaborate across sector and learn and exchange best practices across industrial sectors.

CASE STUDIES

Responsible Ship Recycling Standards

Started by the Dutch banks ABN AMRO Bank, the ING Group and NIBC Bank N.V. in 2017 to address the issue of unsustainable ship recycling and engage the banking industry in influencing the shipping industry to raise the standards in a field with insufficient global regulations. The coalition now consists of 12 international shipping banks who aim to promote the issue to the industry, engage their clients on the topic and on a best efforts basis, require their clients to recycle ships in a responsible manner via covenants in the financing agreements. Although unsustainable ship recycling remains a challenge in the shipping industry, the recycling covenants have become standard practice in most ship financing transactions, and the banks have registered a noticeable change in policies and practices around ship recycling in their client bases.
The Responsible Ship Recycling Standards

Going beyond ship recycling regulations

In jurisdictions with limited ship recycling regulations, ship recycling practices can have negative consequences, resulting in environmental damage, occupational health and safety risks as well as harm to the health of local communities. Shipping is a global business and a uniform practice in terms of ship recycling is essential to level the playing field and reduce the financial incentives to undertake practices that endanger people and the environment. In the absence of an effective global regulation to ensure a consistent approach to sustainable ship recycling, Gard recommends that its members and clients comply with the Hong Kong Convention. Gard also supports the Ship Recycling Transparency Initiative to accelerate a voluntary market driven approach to responsible ship recycling practices through transparency, which will inform decision-making and create fair competition across the shipping industry.The Norwegian Shipowners' Association has also adopted practical guidance on ship recycling.

PRINCIPLE 7.

RESPECT HUMAN-, LABOUR, AND INDIGENOUS PEOPLES' RIGHTS IN THE COMPANY'S OCEAN RELATED ACTIVITIES, INCLUDING EXERCISE APPROPRIATE DUE DILIGENCE IN THEIR SUPPLY CHAIN, CONSULT AND ENGAGE WITH RELEVANT STAKEHOLDERS AND COMMUNITIES IN A TIMELY, TRANSPARENT AND INCLUSIVE MANNER, AND ADDRESS IDENTIFIED IMPACTS.

GUIDANCE AND PRACTICAL TOOLS

Shipping companies should respect human and labour rights, including by implementing human rights due diligence using the UN Guiding Principles on Business and Human Rights. Human rights due diligence is about companies taking a systematic approach to identifying and addressing human rights and labour rights risks, including through engaging with relevant workers and communities. These processes are particularly important when entering new markets and embarking on new projects including in the context of the green transition in order to identify risks and manage them early on; however, due diligence can and should also be carried out on an on-going basis.

Examples of measures to ensure respect for the human rights of seafarers and workers listed below are adapted from Danish Shipping's "Navigating Human Rights - A Guide to Human Rights Due Diligence and Salient Human Rights Issues in Shipping". The Guide provides further guidance on how shipping companies can take a systematic approach to addressing human rights impacts, including with respect to other activities (such as when ordering vessels, as part of supply chain management, interactions with ports and terminals, etc.):

- Ensure ships are registered to flag States that have ratified the ILO Maritime Labour Convention (MLC) and where labour and human rights standards are in line with international standards (including ILO core labour standards concerning freedom of association, collective bargaining, forced labour, child labour, non-discrimination). See Lloyd's Register Pocket Checklist for checking compliance with MLC;
- Take extra human rights precautions when using "non-white" flagged ships, since those are considered higher risk based on the numbers of non-conformances and detentions made. See ICS' Flag State Performance Table;
- Develop clear policies concerning salient human rights risks for seafarers identified by the company, such as wages (see ITF's Seafarers Wage Scale and MLC standards);
- Conduct due diligence on third-party manning agencies as part of efforts to address issues such as debt bondage caused by recruitment fees and lack of understandable and clear contracts (see Responsible Recruitment Toolkit);
- Follow best practice on eliminating harassment and bullying. This includes following MLC amendments on the topic and the ICS and ITF Guidance on eliminating harassment and bullying;
- Safeguard the general welfare and mental health of seafarers. Follow the ICS and ITF Guidelines for implementing the welfare aspects of the MLC, INTERTANKO's Crew Welfare Management and Mental Wellness; provide seafarers with the Seafarer's Health Information Programme's publication on Psychological Wellbeing;
- Pay particular attention to gender diversity aboard ships, with a particular focus on how to attract and retain talent (see Danish Shipping's 10 recommendations for the industry and recommendations in the ICS Diversity Tracker);

- Adapt the MLC-required onboard complaint procedure for seafarers and ensure that it fulfils the eight effectiveness criteria set out in the UN Guiding Principle 31;
- Women are underrepresented in the shipping industry. Ship owners, ship management and crewing agencies should consider cooperation with international professional groups, such as Women's International Shipping & Trade Association (WISTA), that advocate and support gender diversity and equality in shipping, trade and logistics companies. WISTA has observer status at the IMO.

Relevant tools for assessing and managing human rights risks (in addition to the above) include:

- Mapping a Maritime Just Transition for Seafarers: This 10-point action plan outlines key recommendations for Industry to ensure the transition to green shipping is fair and leaves no seafarer behind.
- Maritime Transport and the COVID-19 Crew Change Crisis: A Tool to Support Human Rights Due Diligence by the UN Global Compact, the International Labour Organization and the Office of the High Comissioner for Human Rights
- International Labour Organization's Maritime Labour Convention (MLC) and related conventions
- Navigating Human Rights - A Guide to Human Rights Due Diligence and Salient Human Rights Issues in Shipping by Danish Shipping;
- "The Ship Lifecycle – Embedding Human Rights from Shipyard to Scrapyard" from the Institute for Human Rights and Business, the Danish Institute for Human Rights and the Rafto Foundation for Human Rights;
- Coronavirus (COVID-19) Guidance for Ship Operators for the Protection of the Health of Seafarers by the International Chamber of Shipping;
- Related national regulations covering human rights are provided in Annex I – Principle 7: Examples of relevant national regulations

CASE STUDIES

Health and well-being of seafarers

ForMare is a unique project for seafarers, providing services to improve the health and well-being of the seafarer. The program has a value of EUR 2000 but the seafarer only pays EUR 150 to participate. The 2 year program includes info days, presentations, training and exercises with a personal trainer. Personal advice is given to improve the well-being of the seafarer. ForeMare is provided by the Finnish Seamen's Service and the Finnish Seafarer's Pension Fund in cooperation with Alandia Insurance and the Finnish Seaman's Mission.

Columbia CrewCare package

Seafarer wellness is essential to safe shipping. Shipping companies and crewing agents may consider increasing benefits beyond what is required by a regional collective bargaining agreements (CBA). For example, Columbia Shipmanagement provides seafarers and other staff life insurance and an investment plan for pension planning and medical costs and disability after leaving sea service. This is in addition to the health-care and disability provisions required by the CBA and covers the seafarer while they are on non-contractual leave. Columbia Shipmanagement also promotes seafarer mental and physical well-being by providing access to exercise equipment and facilities on board as well as classes in fitness, yoga, relaxation and meditation techniques.

Crew changes during COVID-19

In 2020, many of A.P. Moller - Maersk's seafarers experienced prolonged stays on the vessel, which challenged labour rights commitments as crew changes were hindered by Government restrictions due to COVID-19. Maersk set up a cross-functional task force to create agreements with Governments, airlines, airport operators, hotels and port authorities that would enable crews to obtain essential worker status to safely travel, and offered special Maersk charter flights. Maersk created its own quarantine safe centres where crew could be tested and certified as healthy to travel to reach their destinations. By the end of 2020, Maersk had succeeded in helping overdue crew members leave the vessels.
A.P. Moller - Maersk Sustainability Report 2020, page 26; AP Moller – Maersk Modern Slavery Statement 2020, p. 4

DATA AND TRANSPARENCY

CHALLENGES AND OPPORTUNITIES FOR THE SHIPPING SECTOR

Digitalization, big data and new technologies such as artificial intelligence and robotics are crucial in enabling a sustainable shipping industry. Increased data collection, processing and interconnectivity capabilities — thereby enabling automated systems to be controlled remotely or through artificial intelligence — has the potential to increase safety, improve environmental performance and enable more cost-effective shipping.

The adoption of such technologies that increase the connectivity and efficiency of working practices in maritime transport and ship management — be it in marine communications or the exchange of information in the ship-to-ship as well as the ship-to-shore interfaces — requires cooperation between shipping, ports, logistics partners and customers. Technologies are also vital to enhance the efficiency and sustainability of shipping and therefore, facilitate trade and foster economic recovery and prosperity.

Shipping is already collecting a large amount of data, but there is untapped potential with regards to collection, sharing and processing of data in order to make informed business decisions and to improve the quality of the data that is collected. In order to provide the best possible grounds for management of resources, the environment and general stakeholder interests, not the least for better risk assessments, responsible businesses can facilitate the collection and sharing of available data.

PRINCIPLE 8.

WHERE APPROPRIATE, SHARE RELEVANT SCIENTIFIC DATA TO SUPPORT RESEARCH ON AND MAPPING OF RELEVANCE TO THE OCEAN.

GUIDANCE AND PRACTICAL TOOLS

- Carry out real-time monitoring of data relevant to their own business impacts;
- Contribute towards the data collection for scientific and conservation programmes;
- Take part in ocean and environmental data gathering programmes to contribute to our understanding of ocean health, whether individually or through partnerships with research facilities, non-governmental organizations or other interested parties. For example:
  - Crew observational programmes (e.g. whale sighting);
  - Installation of automated devices that capture information on spatial and temporal data.

Practical standards and specifications are provided by the International Hydrographic Organization (IHO) to maximize the use and best practice of hydrographic data https://iho.int/en/iho-technical-standards

CASE STUDIES

Vessel Insight and Maritime Digital Ecosystem

Kongsberg developed a technology aimed at providing a vessel-to-cloud data infrastructure, capturing and aggregating quality data in a cost-effective and secure way for the broad maritime market.

Kongsberg has created a standardized vessel-to-cloud data infrastructure, Vessel Insight, and an open maritime digital ecosystem based on cross-industrial partnerships. Vessel Insight, a software as a service (SaaS) solution, aggregates and moves contextualized data from vessel to cloud and gives the fleet owner or operator full control, ownership and access to their data. It can be installed by vessel crew in less than a day and enables instant access to fleet overview, vessel specific dashboards, data analysis tools and value enhancing applications. The applications are part of the open ecosystem and are provided by Kongsberg or expert partners, including original equipment manufacturers or software vendors.

Links:

https://www.kongsberg.com/digital/solutions/vessel-insight/

https://www.kongsberg.com/no/digital/solutions/kognifai/

Contributing to ocean science

To better understand climate change — and help to protect ocean life — climate scientists require data on meteorological conditions. A.P. Moller – Maersk committed the fleet of 300 owned vessels to be part of the global Voluntary Observing Ship (VOS) scheme, run by the World Meteorological Organization and the Intergovernmental Oceanographic Commission of the UN Educational, Scientific and Cultural Organization (UNESCO). By mid-year 2021, the installation of fully automated weather stations on 50 vessels will be finalized. AP Moller – Maersk Sustainability Report 2020, page 39.

PRINCIPLE 9.

BE TRANSPARENT ABOUT THEIR OCEAN-RELATED ACTIVITIES, IMPACTS AND DEPENDENCIES IN LINE WITH RELEVANT REPORTING FRAMEWORKS.

GUIDANCE AND PRACTICAL TOOLS

- Carry out real-time monitoring of business impacts;
- Identify and use the most appropriate channels for ensuring transparency and disclosure, incorporating existing industry frameworks and established policies. Commonly used general sustainability frameworks such as the UN Global Compact Communication on Progress, GRI Guidelines and SASB represent global best practice for reporting on a range of economic, environmental and social impacts. The Guidelines – ESG reporting in the shipping and offshore industries by the Norwegian Shipowner's Association also provide examples of frameworks which can be used;
- Make stored data available to interested stakeholders;
- Incorporate metrics in internal and external reporting;
- Share best practices and case studies across stakeholders;
- Use Table 1: Examples of relevant reporting regimes, standards and certifications provided in this guidance document to identify the most appropriate reporting regimes for your business.

ANNEX 1

PRINCIPLE 7: EXAMPLES OF RELEVANT NATIONAL REGULATIONS

The list below is provided based on the knowledge of the participants in the working group and is not intended to be a comprehensive list.

The United Kingdom and Australian modern slavery bills require organizations to annually disclose information on the steps taken to identify and address potential human rights risks related to "modern slavery" in their own operations and supply chains. However, shipping companies can affect a wider set of human rights than the rights covered under the term "modern slavery" and therefore, nesting attention to modern slavery inside wider human rights due diligence provides for more effective and efficient processes.

- **United Kingdom: Modern Slavery Acts**
  The Act requires "commercial organizations" who carry on a business or part of a business in the United Kingdom supplying goods or services with a minimum annual turnover of £36 million to publish a slavery and human trafficking statement each financial year. The statement should include steps taken to identify and address potential human rights risks in their own operations and supply chains.

- **Australia: Modern Slavery Acts**
  Requires entities based or operating in Australia which have an annual consolidated revenue of more than $A 100 million to report annually on the risks of modern slavery in their operations and supply chains, and actions to address those risks.

- **France: Corporate Duty of Vigilance Law**
  The law, which only applies to the largest French companies, requires that companies assess and address the adverse impacts of their activities on people and the planet by carrying out appropriate due diligence and publishing annual public vigilance plans. This includes impacts linked to their own activities, those of companies under their control and those of suppliers and subcontractors with whom they have an established commercial relationship.

ANNEX 2

ACRONYMS

BBNJ	Biodiversity beyond national jurisdiction
CBD	Convention on Biological diversity
CH4	Methane
CO2	Carbon Dioxide
ESMS	Environmental & Social Management System
GHG	Greenhouse Gas Emissions
GIA	Global Industry Alliance
IHRB	Institute for Human Rights and Business
MSP	Marine Spatial Planning
N2O	Nitrous Oxide
NOx	Nitrogen Oxides
OECD	Organization for economic cooperation & development
PSSAs	Particularly Sensitive Sea Areas
RSRS	Responsible Ship Recycling Standard
SRTI	Ship Recycling Transparency initiative
SSI	Sustainable Shipping Initiative
UN	United Nations