

Annex 3b: Green Award Requirements (Bulk carrier) Version 2022

Checklists for Office Audits and Ship Surveys

Effective as of 1 May 2022



Annex 3b: Green Award Requirements (Bulk carrier)

Bulk carriers



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Legend for Checklists

	Indicates which crew/employee may be interviewed/questioned.
	Shows that a certain item is complied.
	Shows that a certain item is not complied.
	Indicates that an alternative is used, hence the score for that item is a "0".
	The checklist was filled in incorrectly, thus shows "error".
	Indicates that the whole element did not reach the minimum score, hence a finding is issued. The number shows the scores obtained.
	Shows which elements are minimum = maximum. Hence scores on all items is required to fully comply.
	Indicates that the minimum score for the relevant element is "0", hence a finding will not be issued.

* for detailed interpretations of the colours and the usage of the checklist, please refer to the pdf-file named "Instruction Notes" located on www.greenaward.org under "Certification/Download".


Revision codes


RN	Item/question is renumbered
RR	Rating score of item/question is changed
N	New item or question
D	Item/question is deleted
M	Text of item/question is modified


APPENDIX 1


CHECKLIST - BASIC CRITERIA - OFFICE AUDIT - BULK CARRIER


(BMC-06)

CHECKLIST - BASIC CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																										
Revision Code	Norm item		BASIC Office - Bulk		GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS- / CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	
100	MANAGEMENT ELEMENTS																									
101	GENERAL																									
101.1	Are the Management System (MS) Manuals maintained and updated?																									
102	SAFETY AND ENVIRONMENTAL PROTECTION POLICY																									
102.1	Is a company policy concerning safety and the environment and which is signed by the Man. Dir., available?																									
102.2	Are objectives concerning safety and the environment described?																									
102.3	Is this policy maintained and implemented at all shore-based levels as well as all ship-based levels?																									
103	COMPANY RESPONSIBILITIES AND AUTHORITY																									
103.1	Is the entity who is responsible for the operations of the ship clearly defined? (Owner or entity)																									
103.2	Are shore-ship communications, defined levels of authority and lines of communication established?																									
103.3	Are responsibilities and authorities of all office personnel clearly defined ?																									
103.4	Is the designated person provided with shore-based support and adequate resources?																									
104	DESIGNATED PERSONS																									
104.1	Is/are (a) designated person(s) assigned in the office?																									
104.3	Is objective evidence available that the safety and environmental aspects of the operation of each ship is monitored and that required adequate resources and shore-based support is applied?																									
105	MASTER'S RESPONSIBILITY AND AUTHORITY																									
105.1	Is the responsibility of the master clearly defined and documented?																									
105.6	Does the company have the overriding authority of the master clearly defined? (ISM Code 2002 5.2)																									
105.7	Are master's reviews reported and evaluated?																									

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	106	RESOURCES AND PERSONNEL AND STCW						o					o														
	106.1	Does the company have a procedure to verify the integrity of the sea staff certification and medical fitness before being assigned to the ship?																									
	106.2	Have the owners/managers established documented policies concerning shore/ship personnel?																									
	106.3	Has the level of competency been defined and documented for office personnel performing functions pertinent to safety and the environment?																									
	106.4	Do arrangements include a provision for masters and officers to receive an adequate introduction and continuous update of the company's safety and environmental system?																									
	106.5	Do arrangements include training and an introduction to the quality system for the executive management ?																									
	106.6	Do office personnel receive training/courses with regard to the ISM Code and are they consistent with the MS manuals?																									
	106.7	Are records of this training/courses available?																									
	106.8	Are internal audits held on board the ships?																									
	106.9	Is standard composition of crew documented in company policy?																									
	106.10	Is personnel promotion policy (ship & office) documented in company procedures?																									
	106.11	Is the working language between the office and the vessels defined?																									
	106.12	Are all senior and deck officers conversant with the English language for maritime communication ?																									
	106.13	Are operational instructions on board written in a language understood by officers and shipboard personnel ?																									
	106.14	Is the working language monitored and checked by the ship's staff and verified during internal audits ?																									
	106.17	Is the Master of a vessel fully conversant with the Company's Management Systems ?																									
	107	DEVELOPMENT OF PLANS FOR SHIPBOARD OPERATIONS						o		o		o		o		o		o					o				
	107.1	Does the company have procedures for the preparation of plans and instructions for key shipboard operations concerning safety of the ship and prevention of pollution?																									
	107.3	Are tasks, qualifications and responsibilities defined in the manuals and in the job descriptions?																									
	108	EMERGENCY PREPAREDNESS				o		o		o		o		o		o		o			o		o				
	108.1	Does the system cover the arrangements needed to ensure that the company, day and night, is prepared to respond effectively to hazards, accidents or emergencies involving their ships?																									
	108.2	Are tasks, qualifications and responsibilities described in the manuals and in the job descriptions?																									
	108.3	Is communication with media included in the emergency procedures?																									
	108.4	Are procedures for an "Emergency room" in the office defined?																									

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109	REPORTS AND ANALYSES OF NON-CONFORMITIES, ACCIDENTS AND HAZARDOUS OCCURENCES																										
109.1	Are safety and environmental inspections carried out, documented and reported?																										
109.2	Does the company have instructions/procedures for the reporting of non-conformities/ near misses?																										
109.3	Are non-conformities, accidents and hazardous occurrences reported to the office?																										
109.4	Are corrective and/or preventive actions taken ?																										
109.5	Does the company have objective evidence to show their support of the shipboard personnel in reporting of non-conformities / near misses?																										
110	MAINTENANCE OF THE SHIP AND EQUIPMENT																										
110.1	Are ship inspections held at defined intervals? (minimum of twice a year or equivalent)																										
110.2	Are non-conformities reported including their possible cause?																										
110.3	Is appropriate corrective action taken?																										
110.4	Are records of these activities maintained?																										
110.5	Does the MS require ship-critical equipment and systems to be identified?																										
110.6	Does the MS provide for specific measures aimed at promoting the reliability of ship-critical equipment and systems?																										
111	DOCUMENTATION																										
111.1	Does the company have procedures to control documents and data relevant to the Man.System?																										
111.2	Are valid documents available at all relevant locations?																										
111.3	Are changes to documents reviewed and approved by authorised personnel?																										
111.4	Are obsolete documents removed promptly?																										
112	COMPANY VERIFICATION, REVIEW AND EVALUATION																										
112.1	Are internal audits carried out to verify whether safety and pollution-prevention activities, and other procedures, comply with the Management System (MS)?																										
112.2	Does the company periodically evaluate the efficiency of the MS and review the MS , in accordance with procedures established by the company ,when necessary?																										
112.3	Is a management review done?																										
112.4	Are the results of audits and reviews brought to the attention of all personnel having responsibility in the area involved?																										
112.5	Have the management personnel, responsible for the area involved, taken timely corrective actions on deficiencies found?																										


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		IMO ELEMENTS																								
	200	SOLAS 1974																								
	201	SOLAS, General Provisions																								
	201.1	Compliance with General Provisions																								
	211	Enhanced Surveys																								
	211.1	Are enhanced surveys performed and approved by the Classification Society ?																								
	212	SOLAS Certificates																								
	212.1	Is an overview of the valid certificates per ship available and is the overview updated?																								
	215	Additional Safety Measures for Bulk Carriers																								
	215.1	Does the bulk carrier comply with the requirements of Ch. XII?																								
	217	Safety of Navigation / SOLAS chart carriage requirements																								
		ECDIS (Compulsory carriage of ECDIS)																								
	217.1	If carriage of ECDIS is compulsory, is it a company policy for the ECDIS to be type-approved according to Res A 817(19) as amended by MSC 64 (67) and MSC 86 (70) or MSC.232(82)?																								
	217.3	Is it a company policy that an acceptable back-up arrangement is in place? (an independent type-approved ECDIS with an independent position fixing system using official Electronic Navigational Charts (or a combination of official ENCs and Raster Navigational Charts) or a full / reduced folio of up-to-date paper charts, as relevant to the ship's voyage)																								
		Training & Onboard Use of ECDIS (Compulsory carriage of ECDIS)																								
	217.5	Is it a company policy that all officers and masters that use ECDIS for primary navigation are to complete generic training based on IMO model course 1.27?																								
	217.7	Is it a company policy that a risk assessment is carried out for the operation of ECDIS which identifies and controls the hazards when using ENCs and (if used) when ECDIS is in RCDS mode?																								
	217.9	Is the risk assessment and relevant onboard procedures + instructions reviewed on a regular basis (at least once a year or if circumstances require a review) ?																								
	218	Noise Levels On Board Ships																								
		(Only applicable to new ships (ships contracted to build on or after 1st July 2014) of a gross tonnage of 1,600 and above.)																								
	218.1	Is it company policy that the ships are surveyed for the measurement of noise level and the results recorded in the noise survey report in accordance with the Res MSC.337(91)?																								
	218.2	Is it company policy to identify areas of the vessels based on the noise levels and to place relevant visible warning notices at the entrance to these areas? (IMO noise symbols)																								


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300	MARPOL 73/78																											
301	Provisions concerning Reports on Incidents Involving Harmful Substances (Protocol 1)																											
301.1	Does the company have a procedure in order to report an incident to the nearest coastal state in the event of the ship being abandoned or if a report from the ship is incomplete or unobtainable?																											
310	Prevention of pollution by oil																											
310.1	Is a shipboard oil pollution emergency plan developed?																											
310.3	Is training and testing of the oil pollution emergency plan done?																											
310.4	Is the plan reviewed? (periodic and event review)																											
310.5	Is an updated list of persons to be contacted available? (coastal States, port contacts, company interest contacts)																											
310.6	Is office personnel familiar with the shipboard oil pollution emergency plan?																											
310.7	Does the company have a policy concerning the retention and disposal of oil residues (sludge)?																											
350	Prevention of pollution by garbage																											
350.2	Has the company developed a ship specific garbage management plan detailing the specific ship's equipment, arrangements and procedures for the handling of garbage?																											
350.4	Is it a company policy to designate a person responsible for execution of the garbage management onboard?																											


APPENDIX 2


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER


(BMC-07)


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																													
Revision Code	Norm item		RANKING Office - Bulk		GENERAL MAN.	Doc. & Impl.	QUALITY DEPT.	Doc. & Impl.	TECHNICAL DEPT.	Doc. & Impl.	NAUTICAL DEPT.	Doc. & Impl.	PERSONNEL DEPT.	Doc. & Impl.	OPER./CHART DEPT.	Doc. & Impl.	PURCHASING DEPT.	Doc. & Impl.	FINANCIAL DEPT.	Doc. & Impl.	IT DEPT.	Doc. & Impl.	INS-/CLAIM DEPT.	Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE		
	1000	GENERAL																											
	1200	Enclosed Space Entry & Hot Work																											
	1200.1	Is there an Enclosed Space Entry and Hot Work permit to work system, taking account of IMO and industry guidelines and where relevant local port / terminal requirements?																								0	10		
	1200.6	Is company approval of the Hot Work permit required before work can begin?																								0	10		
	1200.7	Is an evaluation of the Hot Work permit made (permit shows the appropriate safety precautions relevant to the location of work)?																								0	20		
	1200.12	Is the HSQ Manager designated to authorise hot work?																								0	20		
	1200.2	Is crew on board provided with suitable personal protective equipment and suitable equipment for testing the atmosphere of an enclosed space? (e.g. breathing apparatus, protective clothing and approved + calibrated atmosphere testing equipment)																								0	5		
	1200.8	Are all personnel entering an enclosed space provided with a personal gas detector which can measure HC, oxygen and relevant toxic vapours?																								0	10		
	1200.9	Is it company policy that a safety meeting, attended by all personnel involved, is held prior to entering the space or commencement of hot work in order to review procedures and PPE (including those specific for the intended work) ?																								0	10		
	1200.10	Does the company require a responsible officer to be designated for all aspects of the operation?																								0	5		
	1200.3	Is ship's crew trained and drilled periodically according to enclosed space entry procedures ?																								0	5		
	1200.4	Does training also include rescue and first aid?																								0	5		
				Total score																								0	100
				Minimum ranking score required for element 1200 = 100																									
	1300	Compressor for the refilling of air cylinders for breathing apparatus or alternative, Additional Green Award Requirement																											
	1300.1	Is it company policy that the vessels have a compressor for the refilling of air cylinders for breathing apparatus?																								0	20		
	1300.2	<u>Alternative for 1300.1:</u> sufficient number of air cylinders for the sole purpose of safety drills																								0	10		
				Total score																								0	20
				Minimum ranking score required for element 1300 = 10																									


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																	
Revision Code	Norm item	 <div style="border: 1px solid black; padding: 10px; text-align: center;"> <h2 style="margin: 0;">RANKING</h2> <h3 style="margin: 0;">Office - Bulk</h3> </div>	GENERAL MAN. Doc. & Impl.	QUALITY DEPT. Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT. Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT. Doc. & Impl.	FINANCIAL DEPT. Doc. & Impl.	IT DEPT. Doc. & Impl.	INS-/CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE		
	1400	Control of drugs & alcohol onboard															
	1400.2	Are all seafarers subject to an unannounced alcohol testing on board as initiated by the office? (Approved test equipment to be available on board)												0	10		
	1400.1	Are all seafarers subject to shore-based drug and alcohol testing at least once in last 12 months?												0	15		
	1400.5	Are all fleet vessels subject to unannounced drug and alcohol testing at least once every year (not exceeding 18 months between two consecutive tests) by an external organisation?												0	10		
	1400.6	Alternative to 1400.1 & 1400.5: In case crew members are not subject to shore-based drug and alcohol testing at least once in last 12 months, are all fleet vessels subject to unannounced drug and alcohol testing at least twice in 12 months by an external organisation?												0	25		
	1400.7	Does the company contract an external drug and alcohol test organization to monitor fleet vessels for next due vessel tests such that the organization can appropriately decide themselves location and date of attendance?												0	10		
			Total score											0	45		
			Minimum ranking score required for element 1400 = 20														
	1500	Emergency Response System															
	1500.4	Are company vessels in receipt of an evaluation report of an annual drill between company, ERS service provider (class) and a company vessel ?												0	10		
	1500.5	Is an annual ERT drill performed at the office which includes participation by the ERS service provider (class) and one company vessel ?												0	15		
	1500.9	Is an updated list of national & local authorities, as required in the SOPEP & the emergency response plan, available in the office ?												0	10		
	1500.10	Do relevant ERT member(s) participate in an ERS training course as provided by the ERS service provider (class) ?												0	10		
			Total score											0	45		
			Minimum ranking score required for element 1500 = 25														
	1510	Emergency Oil Recovery															
	1510.1	Does the company equip its vessels (GA-certified) with a system providing emergency access to cargo tanks and bunker tanks (for example, from the vessel deck), should the vessel be submerged?												0	5		
	1510.2	Does the company ensure that its ships (GA-certified) carry an oil skimmer or a similar device that can be used in an emergency situation of oil spill overboard?												0	5		
			Total score											0	10		
			Minimum ranking score required for element 1510 = 0														


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																												
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	1600	Computer Systems, Networks, Data Security and Training						0													0							
	1600.1	Are arrangements for shore and vessel systems documented ? (configuration scheme)																								0	10	
	1600.2	Are adequate system back-up's for office administrative PC systems made (where applicable) and are procedures for this documented ?																								0	5	
	1600.7	Is there a policy that system back-ups for vessel computer-based systems are made (where applicable)?																								0	5	
	1600.8	Is there a policy that system back-ups for vessel administrative PC systems are made?																								0	5	
	1600.3	Is training provided at a level required to effectively operate and maintain the system and cover normal, abnormal and emergency conditions?																								0	10	
	1600.4	Is the internal audit scheme applicable to the IT department?																								0	10	
	1600.5	Are computer systems, in relation to IMO MSC/Circ.891, certified by a recognised organisation?																								0	10	
	1600.6	Is a system administrator designated for administrative PC systems in the office ?																								0	10	
						Total score																		0	65			
						Minimum ranking score required for element 1600 = 40																						
	1610	Cyber Risk Management																										
	1610.1	Does the company have plans and procedures of cyber risk management (cyber risk policy) incorporated within its Safety Management System (SMS)?																								0	20	
	1610.3	Does the cyber risk policy differentiate between IT (information technology) and OT (operational technology) systems?																								0	10	
	1610.4	Does the cyber risk policy focus on elements such as third-party access and bring your own device (BYOD) in the office?																								0	5	
	1610.5	Does the company designate and train personnel as appropriate to identify and respond to cyber threats to the company's information technology systems?																								0	5	
	1610.6	Does the company have a policy in place to build new ships equipped with cyber secure systems and components?																								0	5	
	1610.7	Does the company have a set of clear and unambiguous cyber risk requirements that reflect the company's expectations to vendors and agents?																								0	5	
	1610.8	Does the company have a policy to carry out cyber risk assessments on its ships (at an interval deemed suitable by the company) using either of the following: - self-assessments followed by third party risk assessments - penetration tests of critical IT and OT infrastructure performed by external experts simulating cyber attacks?																								0	5	
	1610.9	Does the company provide its ships with contingency plans and related information in a non-electronic form that need to be followed in the event of a cyber attack?																								0	5	
	1610.10	Is it a company policy to involve IT department while preparing to purchase OT systems for ships?																								0	5	
	1610.11	Does the company use the information from investigations of previous identified cyber incidents to improve the technical and procedural protection measures and response plans on board and ashore?																								0	5	
	1610.12	Does the company forbid remote access by technicians and manufacturers to on-board systems without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?																								0	5	
						Total score																		0	75			
						Minimum ranking score required for element 1610 = 35																						


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	1700	Noise and Vibration Management																									
		Noise/Vibration Monitoring and Measures																									
	1700.1	Is it company policy to verify the noise survey report every 5 years?																							0	15	
	1700.2	Is it company policy that the crew entering spaces where noise levels exceed 85db(a) should wear hearing protectors which meet the requirements of the HML(High-Medium-Low) method (ISO 4869-2:1994)?																							0	5	
	1700.3	Is it company policy to periodically inspect the noise and vibration of all machinery equipment and rectify any abnormalities?																							0	5	
	1700.4	Is it company policy to take appropriate measures in order to protect the crew from cargo handling equipment noise if it exceeds 85db(a) (by taking into account technical solutions and/or exposure limits)?																							0	10	
		Noise Mitigation and Health Hazards																									
	1700.5	Does the SMS include the following? 1.Hearing protection; 2.Exposure limits; 3.Training regarding noise and health hazards.																							0	5	
	1700.6	Does the company provide the crew with a hearing conservation programme which includes the following: 1.Hazards of high and long duration of noise exposure; 2.Maintenance of audiometric test records; 3.Periodic analysis of records and hearing acuity of individuals with high hearing loss.																							0	5	
	1700.7	Does the company assess the risks associated with distractions to onboard operations, communication and rest hours caused by exposure to high levels of noise?																							0	10	
	1700.8	Is it company policy to determine the noise exposure level of each rating/officer by taking into account the job profile, time spent by each crew member in different work spaces? (ISO 9612:2009 procedure)																							0	10	
						Total score																					
						0																					
						Minimum ranking score required for element 1700 = 25																					
	1710	Underwater Noise and Vibration Management																									
	1710.1	Is it company practice to design a newbuild ship in such a manner to attenuate/reduce underwater noise?																							0	10	
	1710.2	Does the company take any of the following measures to reduce underwater noise and vibration: 1.Installation of state of art propellers (With reduced cavitation); 2.Wake conditioning devices; 3.Installation of air injection propeller; 4.Vibration isolators mounted on the diesel generators; 5. Installation of propeller boss cap with fins; 6. Others = *fill during audit*?																							0	10	
		If others =				*fill during audit*																					
	1710.3	Does the company take any additional maintenance routines (e.g. polishing/coating) to reduce cavitation from the propeller?																							0	5	
	1710.4	Does the company opt for re-routing or slow steaming where possible and practicable to protect whale sensitive areas?																							0	5	
						Total score																					
						0																					
						Minimum ranking score required for element 1710 = 0																					


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	1800	Social Dimension / Sustainability																							
		A. Good Health & Well-Being																							
	1800.1	Does the company ensure that all vessels under its control have an ITF or similar agreement in place?																					0	10	
	1800.2	Does the company have procedure regarding relieving shipboard personnel on compassionate grounds? (For example, in case of a family emergency)																					0	5	
	1800.3	Is the company subscribed to any digital platform (web or app) that can be referred to by shipboard staff for seeking medical advice?																					0	5	
	1800.4	Does the company ensure that the shipboard staff is aware of platforms (online/offline) providing access to emotional support networks to tackle mental health issues?																					0	5	
	1800.5	Does the company provide access to the internet at all times for shipboard personnel on board all ships under its control?																					0	5	
		B. Reduced Inequalities / Equal Opportunities / Diversity																							
		B.1 General																							
	1800.6	Does the company have a policy focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc. to prevent and eliminate discrimination at workplace (office and ship)?																					0	10	
	1800.7	Does the company have confidential reporting procedures enabling all employees to report harassment & discrimination?																					0	5	
	1800.8	Does the company take steps to create awareness among its staff (on shore & off shore) and to ensure effective implementation of its policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?																					0	5	
		B.2 Gender-specific																							
	1800.10	Does the company take steps to promote and achieve gender diversity/equality at office and on board vessels (at all levels)?																					0	10	
	1800.11	Does the company provide the following specific facilities for its women seafarers: – feminine hygiene items (in bonded stores) & separate disposal facilities on board – separate washrooms with sanitary facilities on board – suitable sized (gender specific) safety and protective clothing on board – access to medical supplies without having to consult male colleagues on board																					0	5	
		C. Sustainability Reporting																							
	1800.12	Does the company prepare and publish its performance on environmental, social and governance criteria annually (in line with internationally recognised frameworks, such as GRI, IIRC and SASB standards)?																					0	20	
																							0	85	
			Total score																			0	85		
			Minimum ranking score required for element 1800 = 15																						


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2000	NAVIGATION / BRIDGE OPERATIONS																
2100	Navigation																
2100.6	Does the company have a contract for automatic supply of new hydrographic publications?															0	10
2100.7	Does the company have a contract for electronic update of hydrographic publications? (eg. Temporary and Preliminary NtM)															0	10
2100.8	Is it a company policy to include navigational equipment in electronic Planned Maintenance System?															0	10
2100.9	Are masters entitled to use non-compulsory pilot services? (must be stated in a company procedure)															0	10
2100.12	Is the company aware of the vessel's critical areas transiting?															0	10
2100.13	Does the company use weather routing services for ships on long haul voyages?															0	10
2100.18	Is it a company policy to enrol the vessels in a meteorological & oceanographic service in a form of a software application?															0	10
2100.19	Alternative to 2100.18: Do the vessels have a capability to receive comprehensive weather information from the office or from coastal stations / platforms?															0	5
2100.14	Does the company have instructions for navigating in sensitive areas? (IMO SN/Circulars)															0	10
2100.15	Is it a company policy to equip vessels with the multi constellation GNSS receivers?															0	10
2100.16	Is it a company policy to equip vessels with the eLoran receivers?															0	10
2100.17	Is it a company policy that the position for all stages of voyage is compared with a different method of positioning than GPS?															0	20
																0	120
																	Minimum ranking score required for element 2100 = 50


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	2110	Electronic chart display & information systems / ECDIS																									
		Only applicable to the companies with the fleet for which the implementation date is still in the future																									
	2110.3	Is it a company policy to have ECDIS available onboard the vessels for training purpose at least 12 months ahead of implementation date?																						na	0	0	
	2110.2	Does the company have an introduction programme for the crew in relation to usage of ECDIS?																						na	0	0	
						Total score																					
						Minimum ranking score required for element 2110 = 0																					
	2111	Electronic chart display & information systems / ECDIS																									
		Applicable to the companies with ships for which carriage of ECDIS is compulsory and Bulk Carriers which choose to use ECDIS as primary means of navigation on voluntary basis																									
	2111.3	Does the company provide navigational procedures concerning the use of ECDIS?																							0	10	
	2111.4	Is it a company policy to list ECDIS as critical equipment and integrate into PMS? (hardware and software)																							0	5	
	2111.5	Is it a company policy that ECDIS is tested according to IHO ECDIS data presentation and performance check with a use of test data set after every update of the software (including back up)?																							0	5	
	2111.6	Is it a company policy that regardless of the generic training the crew is familiarised with the ECDIS unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?																							0	15	
	2111.7	Is it a company policy to provide structured ECDIS training(s) for all officers on top of the generic training (besides the familiarization onboard in R2111.6)?																							0	5	
	2111.8	Does the company have a contract / agreement with ECDIS manufacturer in relation to the maintenance of the software?																							0	5	
	2111.11	Does the company have a standard for display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?																							0	5	
	2111.12	Is it a company policy that the vessels have a basic folio of paper charts (in case second ECDIS is a back up system)?																							0	10	
						Total score																					
						Minimum ranking score required for element 2111 = 35																					
	2120	Fuel Change Over / Ballast Water Exchange																									
	2120.1	Is it company policy that the voyage plan (checklist) include when fuel change over <u>should</u> be carried out?																								0	10
	2120.2	Is it company policy that the voyage plan (checklist) include when ballast water exchange <u>can</u> be carried out?																								0	10
						Total score																					
						Minimum ranking score required for element 2120 = 20																					
	2300	Mooring Operations																									
	2300.1	Does the company have procedures/instructions for mooring/unmooring operations?																								0	10
						Total score																					
						Minimum ranking score required for element 2300 = 10																					


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	3000	MACHINERY / ENGINE OPERATIONS																	
	3100	Bunker Operations																	
	3100.1	Does the company MS specify a safe-maximum percentage fill for bunker tanks? (max. limit 95%)														0	10		
	3100.2	Is a checklist used for bunker operations (company format) ?														0	10		
	3100.3	Does the bunker procedure include a bunker plan (company format) ?														0	10		
	3100.4	Are there procedures/instructions for the internal transfer of fuel oil between main storage tanks?														0	10		
	3100.5	Is there an instruction that all persons involved are to be familiar with the intended bunker operation and/or internal transfer operation and their duties?														0	10		
		Total score															0	50	
		Minimum ranking score required for element 3100 = 50																	
	3101	Bunker Operations - LNG																	
	3101.1	Does the company SMS specify that only a relevant IAPH LNG bunkering checklist must be used?														0	10		
	3101.2	Is it company policy to ensure that LNG-fuelled ships are equipped with LNG specific PPEs such as protective cryogenic gloves and safety goggles with side protection?														0	10		
	3101.3	Does the company install CCTV on LNG bunker stations for the purpose of observing the bunkering operation from the bridge or operation control room?														0	10		
	3101.4	Is it company policy that ships are mandated to provide a dedicated watch (from a safe location) on bunker station during the entire duration of the LNG bunkering?														0	5		
	3101.5	Does the company provide thermal imaging camera/equipment for leakage detection during bunkering on board its LNG-fuelled ships (GA-certified only)?														0	5		
	3101.6	Does the company provide its shipboard personnel a shore-based training on LNG bunkering?														0	10		
		Total score															0	50	
		Minimum ranking score required for element 3101 = 25																	


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	3200	Fuel oil management																							
		A. Contracting / Procurement																							
	3200.14	N/A in case charterer is responsible for supplying bunkers (for all GA ships) Is it company procedure that bunker purchasing contracts state that the fuel oil be supplied with reference to ISO 8217 specifications (latest edition is recommended)?																					0	10	
	3200.15	N/A in case owner / manager or third party ship manager is responsible for purchasing bunkers (for all GA ships) Is it company procedure that the technical requirements of the ship and optimal fuel oil specifications are communicated to the charterer for their consideration?																					0	10	
	3200.13	Is an evaluation of all fuel oil suppliers carried out to identify "quality-oriented fuel oil suppliers" before signing the bunker purchasing contract with a chosen supplier and are the negative results brought to the attention of the charterer (where applicable)?																					0	10	
		B. Sampling & Testing																							
		B.1 MARPOL delivered fuel oil sampling																							
	3200.11	Is it company policy that fuel oil sampling (during bunkering) is carried out using an automatic sampler (time or flow proportional) in accordance with Marpol Annex VI?																					0	10	
		B.2 In-use fuel oil sampling																							
	3200.16	Is it company policy that fuel oil samples are drawn from the following designated sampling points at least once every four months for testing of catalytic fines & separator efficiency at a recognized fuel analysis organization ashore? 1. at engine inlet 2. before separator 3. after separator																					0	10	
		B.3 Testing																							
	3200.1	Is it company procedure that bunkered fuel oil is always tested (before use onboard) by a recognized fuel analysis organization ashore in accordance with the requirements of ISO 8217 standard (same edition for which the fuel was ordered)?																					0	40	
		C. Operational procedures																							
	3200.17	Does the company prohibits its ships to commingle two different bunkers (even of the same grade of fuel)?																					0	10	
	3200.18	For the situations where commingling of two different fuels is unavoidable, does the company have commingling procedure explaining the steps to be followed to determine the compatibility of two bunkers (including the reference test methods)?																					0	5	
		D. Additional questions																							
	3200.5	Are global bunker quality alerts received from company fleet experience and fuel analysis organisation shared with relevant ships by issuing technical bulletins or circulars?																					0	10	
	3200.19	Is it company procedure that bunker suppliers are asked to provide the copies of the product's valid certificate of quality (COQ) and associated laboratory analysis reports verifying the details on the COQ?																					0	5	
																							0	120	
			Total score																			0	120		
			Minimum ranking score required for element 3200 = 60																						


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	4000	CARGOES / CARGO OPERATIONS																	
	4600	Cargo Operations																	
	4600.2	Is company aware of cargo specifications which are required by the charterer of the ship?														0	10		
	4600.5	Does the charter party specify that the cargo to be loaded must be under the supervision and direction of the master?														0	20		
	4600.6	Does the charter party specify the action to be taken in the event of stevedores' damage?														0	10		
	4600.7	Does the charter party specify that the loading / unloading plan of the ship has to be followed?														0	10		
	4600.8	Does the charter party specify that cargo has to be provided with a certificate of transportable moisture limit?														0	10		
																0	60		
	4601	Preparation of loading / unloading plan																	
	4601.1	Does the company distribute relevant cargo instructions to the vessel? (i.e. is ship compatible for intended cargo?)														0	20		
	4601.2	Does the company provide the master with clear instructions about identity of charterer with respect to reporting and consultation? (especially when ship is chartered by sub-charterers)														0	10		
	4601.3	Does the shipbroker (or head office staff) contact the master to request his confirmation that a cargo can be safely carried and his calculations of the tonnage that the ship can carry between specified ports?														0	20		
	4601.4	Is the ship provided with information about the terminal in order to plan the loading and unloading plan?														0	10		
	4601.6	Is the master provided with information on the strength of the hull girder system for representative scenarios of loading and discharging under intended loading conditions?														0	20		
																0	80		
	4602	Cargo handling and operations																	
	4602.1	Is it company procedure that the ship shore safety checklist for loading or unloading dry bulk cargo carriers (MSC/Circ. 690) has to be used before loading/unloading operations?														0	10		
	4602.2	Does the company give procedures/instructions in relation to the entire cargo operations?														0	10		
	4602.6	Is it company policy that a written cargo declaration has to be issued before commencement of loading?														0	10		
	4602.7	Does the company have procedures / instructions regarding stevedore damage?														0	10		
	4602.13	Is it company policy that cargo which is liable to stick between frames is removed on time? (e.g. in order to prevent damage caused by pneumatic hammers, bulldozers etc.)														0	10		
																0	50		
	4606	Safety precautions during cargo operations																	
	4606.1	Does the company have instructions / procedures to control the access of unauthorised persons on board?														0	10		
	4606.2	Are there procedures to ensure that a sufficient number of personnel will be available in case of an emergency during port stay?														0	10		
																0	20		

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	5000	PREVENTION OF POLLUTION																								
	5100	Biofouling Management																								
N	5100.5	Does the company have ship-specific procedures/instructions (according to IMO guidelines) for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species?																								
N	5100.6	Does the company define frequency and timing of in-water inspection and proactive hull cleaning in consultation with coatings manufacturer and/or coatings consultant for each ship under its management?																								
N	5100.7	Is it a company policy to define potential trigger points for reactive hull cleaning – based on performance monitoring or other relevant datasets (such as increased drag or increased friction)?																								
N	5100.8	Is it a company policy to use in-water cleaning only in combination with capture and filtration of the cleaned material and subsequent waste treatment and disposal, when made available in ports?																								
		Total score																		0	30					
		Minimum ranking score required for element 5100 = 5																								


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	5410	NOx Emissions				O	O										
		A. Emission Monitoring															
	5410.10	Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording NOx emissions?														0	10
		B. Emission Reduction															
	5410.20	Does the company use any one of the following measures on board one or more of its vessels to reduce NOx emissions from main and/or auxiliary engines?														0	30
		Measures taken to reduce NOx emissions	If YES, choose from below options														
		Direct Water Injection															
		Fuel Water Emulsification															
		Intake Air Humidification															
		Slow Steaming															
	5410.21	Is it company policy to implement regulated slow steaming on some or all of the vessels within their fleet in an effort to reduce NOx emissions?														0	10
		C. Additional Questions															
		Exhaust Gas Recirculation (EGR)															
	5410.22	Are negative results from the continuous monitoring of exhaust gas recirculation bleed-off discharge water collected from the ship and addressed by the company? <i>*The guidelines set out in MEPC.259 (68) are applicable to EGR bleed-off discharge water as well.</i>														0	10
	5410.24	Does the company's PPE matrix include handling of caustic soda for exhaust gas recirculation?														0	5
	5410.25	Does the company provide the relevant crew with manufacturer training for the EGR unit? <i>*The manufacturer training should cover the normal operation of the EGR system including bunkering of any chemicals (consumables), calibration of sensors, routine maintenance as well as the procedures to be followed in case of system failure and deviation from normal operation.</i>														0	5
		Selective Catalytic Reduction (SCR)															
	5410.26	Does the company install a monitoring unit which monitors and measures any formation of ammonia slip? <i>*The monitoring unit should be capable of issuing a warning in the event of ammonia formation.</i>														0	10
	5410.27	Does the company take adequate measures to avoid the breakdown of the SCR unit? Measures should include (all of) the following: 1. Requisition's of materials 2. Redundancy 3. Effects of back pressure 4. Maintenance regimes of the SCR 5. Monitoring the condition of the catalyst.														0	10
	5410.28	Does the company provide the relevant crew with manufacturer training for the SCR unit? <i>*The manufacturer training should cover the normal operation of the SCR unit including bunkering of any chemicals (consumables), calibration of sensors, routine maintenance as well as the procedures to be followed in case of system failure and deviation from normal operation.</i>														0	5
			Total score													0	95
			Minimum ranking score required for element 5410 = 35														


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	5420	SOx Emissions			O		O								O										
		A. Emission Monitoring																							
	5420.11	Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording SOx emissions?																					0	10	
		B. Emission Reduction																							
	5420.12	Main and auxiliary engines: Does the company <u>voluntarily</u> burn low sulphur fuel (max. 0.10% sulphur) or use equivalent methodology during the ship's stay at every port ? <i>(If exhaust gas cleaning system is used, sulphur content is measured with SO2:CO2 ratio. Ratio of max 4.3 is equal to 0.10% sulphur content)</i>																					0	50	
		C. Additional Questions																							
		Exhaust Gas Cleaning System (EGCS)																							
	5420.13	Does the company use the requirements of Scheme B* (continuous emission monitoring with parameter checks) for testing, survey, certification and verification of EGC systems on board all its ships having such systems (EGC)? <i>* Under scheme B, the SOx emissions compliance plan (SECP) should present how the continuous monitoring of ship exhaust gas emissions will demonstrate that the total SO2(ppm)/CO2(%) ratio is comparable to the requirements of 14.1 and/or 14.4 of MARPOL Annex 6.</i> <i>* Ships should be in possession of EGC technical manual, scheme B (ETM-B).</i>																					0	20	
	5420.14	Are negative test results from the continuous monitoring of wash water discharge collected from the ship and addressed by the company? <i>*The wash water discharge criteria have been set out in MEPC.259 (68).</i>																					0	10	
	5420.16	Does the company take adequate measures to avoid breakdown of the EGCS unit? Measures should include (all of) the following: 1. Material requisitions 2. Redundancy 3. Risk of condensation 4. Safety process regarding handling and storage of caustic soda. 5. Noise prevention 6. Contingency plan for failure 7. Remote monitoring 8. Technical support from the manufacturer (Telephone helpline)																					0	20	
	5420.20	Does the company's PPE matrix include handling of caustic soda for closed-loop scrubbers?																					0	5	
	5420.21	Does the company provide relevant crew with manufacturer training course for the EGC unit?																					0	5	
			Total score																						
			Minimum ranking score required for element 5420 = 20																						


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	5421	Ships required to carry out Fuel Change Over to low sulphur MARINE DIESEL OIL or low sulphur MARINE GAS OIL (low sulphur Distillates)			0												
	5421.1	Has the company carried out a safety assessment with respective manufacturers, for any necessary modifications to the vessel's boilers and each fuel system onboard? (modifications should be class approved)												0	30		
	5421.2	Does company policy require updated fuel change over procedures (company approved) to be available onboard for the main engine, auxiliary engines and boilers? (procedures should be available for each fuel type used onboard)												0	10		
			Total score											0	40		
			Minimum ranking score required for element 5421 = 40														
	5430	Particulate Matter (PM) Emissions			0												
	5430.10	Does the company use any one of the following measures on board one or more of its vessels to reduce PM emissions from main and/or auxiliary engines?												0	30		
		Measures taken to reduce PM emissions	If YES, choose from below options														
		Diesel Particulate Filter												/			
		Diesel Oxidation Catalyst															
		Electrostatic Precipitator															
			Total score											0	30		
			Minimum ranking score required for element 5430 = 0														


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	5440	Greenhouse Gas (GHG) Emissions - CO₂ Emissions														
		A. Emission Monitoring														
	5440.10	Does the company use flow meters for monitoring and recording of fuel consumption? (Flow meter is to be calibrated and certified by for example a classification society)												0	10	
	5440.6	Is an energy efficiency baseline measured for each ship? *Using a calculation of fuel consumption (Unit = Fuel consumption per transport work expressed in grams per tonne-nautical mile or other relevant unit as applicable to relevant ship category) (or) *Using measurement of CO ₂ emissions from emission monitoring equipment (grams CO ₂ per tonne nautical mile or other relevant units as applicable to relevant ship category) (Baseline is a measurement of the ships average (operational) energy efficiency under normal operating conditions before energy efficient measures or policies are implemented).												0	5	
	5440.14	Does the company use a ship performance monitoring software to monitor and reduce energy consumption by operational measures for their entire fleet?												0	20	
		B. Emission Reduction														
		Short term goals (CO₂ reduction through energy efficiency measures)														
	5440.15	(Design and operational based measures) Energy efficiency measures implemented on-board company vessels?												0	20	
		For ease of use, measures are grouped according to the GLOMEEP Energy efficiency technologies information portal.	If YES, choose from below options and fill-in supplement CO ₂ - GloMEEP tab													
		Measures related to Machinery														
		Measures related to Propulsion and Hull Improvements														
		Measures related to Energy Consumers														
		Measures related to Energy Recovery														
		Measures related to Technical Solutions for optimizing the operations														
	5440.16	Has the company achieved an annual average reduction of at least 2.0% in CO ₂ emissions per transport work (gCO ₂ /tnm) since 1st Jan 2013?												0	30	
	5440.17	Alternative to 5440.16: Has the company achieved an annual average reduction of at least 1.0% in CO ₂ emissions per transport work (gCO ₂ /tnm) since 1st Jan 2013?												0	15	


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		Long term goals (CO₂ neutral operation through zero carbon fuels)																							
	5440.20	Main engines: Does the company have any vessels within their fleet which use zero carbon fuels such as: Zero carbon fuels Anhydrous Ammonia Hydrogen Fuel Cells (Powered by ammonia or hydrogen) Batteries Nuclear Other: *fill during audit* If others =																					0	25	
		Zero carbon fuels	If YES, choose from below options																						
		Anhydrous Ammonia																							
		Hydrogen																							
		Fuel Cells (Powered by ammonia or hydrogen)																							
		Batteries																							
		Nuclear																							
		Other: *fill during audit*																							
		If others =																							
	5440.21	Auxiliary engines: Does the company have any vessels within their fleet which use zero carbon fuels such as: Zero carbon fuels Anhydrous Ammonia Hydrogen Fuel Cells (Powered by ammonia or hydrogen) Batteries Nuclear Other: *fill during audit* If others =																					0	25	
		Zero carbon fuels	If YES, choose from below options																						
		Anhydrous Ammonia																							
		Hydrogen																							
		Fuel Cells (Powered by ammonia or hydrogen)																							
		Batteries																							
		Nuclear																							
		Other: *fill during audit*																							
		If others =																							
	5440.22	Does the company have any vessels within their fleet which use renewable energy sources for energy production such as: Renewable Energy source Wind *fill during audit* Solar Other: *fill during audit* Wind = If others =																					0	25	
		Renewable Energy source	If YES, choose from below options																						
		Wind *fill during audit*																							
		Solar																							
		Other: *fill during audit*																							
		Wind =																							
		If others =																							
N	5440.24	Does the company take steps to facilitate JIT Arrival of ships (for example, use of BIMCO's Virtual Arrival Clause for Voyage Charter Parties or speed decisions taken by the Master of owned ships to ensure JIT Arrival or implement measures from Port Information Manual by International Taskforce Port Call Optimization or other such measures)?																					0	10	
			Total score																			0	200		
			Minimum ranking score required for element 5440 = 0																						


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	5441	Greenhouse Gas (GHG) Emissions - Methane (CH₄) Emissions - Main Propulsion																							
		B. Emission Reduction																							
		Gas Turbine or High Pressure Dual Fuel engine																							
	5441.2	Does the company ensure that at least one of its LNG-powered ships operate on low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?																					0	20	
		Other Engine Types																							
	5441.3	Does the company take measures and is able to achieve annual reduction in Methane Slip from LNG-fuelled engines fitted on board its fleet of ships?																					0	10	
		A. Emission Monitoring																							
	5441.1	Does the company use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?																					0	10	
		C. Additional questions																							
	5441.4	Does the company provide awareness training to shipboard personnel on methane emissions from LNG-fuelled engines?																					0	5	
	5441.5	Does the company collaborate with engine manufacturers on research & development projects aiming to improve methane emissions from LNG-fuelled engines?																					0	10	
		Total score																				0	55		
		Minimum ranking score required for element 5441 = 0																							
	5450	Newbuild policy			0		0																		
	5450.1	Does the company policy for newbuilds implement additional measures to reduce harmful air emissions (NOx, SOx and PM) and improve energy efficiency (reduce CO2 or fuel consumption)?																					0	40	
		Total score																				0	40		
		Minimum ranking score required for element 5450 = 0																							
	5460	Environmental Ship Index (ESI)			0		0																		
	5460.1	Is it company policy for ships to participate in the Environmental Ship Index, where applicable? (The ESI is a project from the World Port Climate Initiative; its aim is to recognise ships whose air emissions are below regulatory limits and in doing so contribute to improvements in air quality and reduction of greenhouse gas emissions in the shipping sector).																					0	50	
		Total score																				0	50		
		Minimum ranking score required for element 5460 = 0																							
	5500	Sewage Management																							
		Sewage Treatment Plant																							
	5500.1	Is it company policy to treat the sewage with a sewage treatment plant which uses minimal or no harmful chemicals?																					0	10	
	5500.2	Is it company policy to sample and monitor the discharged effluent periodically (at least annually) for lab testing ashore to check the compliance with: 1. MEPC 159(55) for plants installed after 1st Jan 2010; 2. MEPC 227(64) for plants installed after 1st Jan 2016.																					0	10	
	5500.4	Does the company have a procedure to monitor and address any non-compliance in the effluent standards?																					0	10	
		For all ships: Sewage Holding Tank																							
	5500.6	Did the company perform a risk assessment to calculate the capacity of the holding tank?																					0	20	
		Total score																				0	50		
		Minimum ranking score required for element 5500 = 20																							


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	5510	Grey Water Management																									
	5510.1	Is it company policy to install a sewage treatment plant capable of treating grey water?																								0	15
	5510.2	Is it company policy to not discharge grey water within coastal and port areas?																								0	10
						Total score																			0	25	
						Minimum ranking score required for element 5510 = 0																					
	5700	Ballast Water Management																									
		For ships required to follow D-1 standard (as per International Ballast Water Management Certificate (IBWMC))																									
RR	5700.5	Are tasks & responsibilities of shipboard personnel assigned to ballast water exchange operations defined, documented & controlled ?																								0	5
RR	5700.6	Does the office support the master in cases where the ship cannot reasonably be expected to carry out ballast water exchange?																								0	5
N	5700.10	Does the company ensure that relevant ships voluntarily comply with D-2 ballast water management standard using a type-approved ballast water treatment system (BWTS)?																								0	10
		For ships required to follow D-2 standard (as per International Ballast Water Management Certificate (IBWMC))																									
N	5700.11	Does the company develop ship-specific contingency plans taking into account system design limitations, for example, - the UV-based BWTS cannot operate correctly in ports where the water is very muddy, - when operating in low salinity ports, the crew should plan to carry enough salt water or brine in order for the electrochlorination BWTS to function effectively.																								0	10
N	5700.12	Does the company ensure the following in order to keep the BWT systems on board in operable condition: - maintain full inventory of manufacturer recommended spare parts list on board - define & maintain safe-margin stock of consumables on board (such as chemicals with short shelf-life, UV lamps, etc. as required by the installed system)																								0	5
N	5700.14	Does the company train relevant crew to operate ship-specific BWT systems, for example, by means of computer-based training, training at the makers facilities or on a simulation BWMS that mimics real BWTS operations?																								0	10
N	5700.15	Does the company conduct on-board familiarization of relevant crew for the operation of the BWTS installed on board?																								0	10
N	5700.16	In addition to the relevant crew, does the company include shore-based management (ship managers/superintendents/port engineers) in the BWMS training programs?																								0	5
						Total score																			0	60	
						Minimum ranking score required for element 5700 = 20																					

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	5801	Protection of fuel oil tanks, lube oil tanks and hull																							
		For Owner / Managers only (Not applicable to 3rd-party ship managers)																							
	5801.4	Does the company require ship building yards to use advanced shipbuilding plates (highly ductile steel) or structural features to build (a part of) hull structure and/or fuel tanks of new ships (for example, sandwich plate structure)?																					0	30	
			Total score																						
			0																						
			30																						
			Minimum ranking score required for element 5801 = 0																						
		Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)																							
	5810	Stern tube lubrication					0								0										
	5810.1	Does the company install a class approved stern tube <u>water</u> lubricated system which uses <u>sea water</u> as a lubricant? (system includes water conditioning and monitoring equipment)																					0	60	
	5810.6	Alternative for 5810.1 & 5810.3: Does the company install a class approved stern tube <u>water</u> lubricated system which uses <u>fresh water</u> as a lubricant? (system includes water and conditioning and monitoring equipment) *Additives used to maintain the condition of the water should be environmentally friendly.																					0	50	
	5810.3	Alternative for 5810.1 & 5810.6: Is there a company policy to fit vessels with a class approved stern tube lubrication system with an <u>air type</u> or <u>void space seal</u> ?																					0	25	
			Total score																						
			0																						
			60																						
			Minimum ranking score required for element 5810 = 0																						


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	5811	Mooring wire lubrication					0					0							
	5811.1	Is it company policy to use a mooring wire lubricant / grease that is certified according to the EEL?														0	20		
				Total score												0	20		
				Minimum ranking score required for element 5811 = 0															
	5812	Deck equipment lubrication (use of oils)				0					0								
	5812.1	Is it company policy to use grease that is certified according to the EEL (all deck equipment)?														0	15		
	5812.2	Is it company policy to use gear oil that is certified according to the EEL (all deck equipment)?														0	10		
	5812.3	Is it company policy to use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?														0	10		
	5812.4	Is it company policy to use hydraulic oil that is certified according to the EEL in crane appliances?														0	10		
	5812.5	Is it company policy to use hydraulic oil that is certified according to the EEL in hatch closing system?														0	10		
	5812.6	Due to characteristics of environmentally friendly lubricants (EEL certified) are extra measures taken into account for the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)														0	10		
				Total score												0	65		
				Minimum ranking score required for element 5812 = 0															
	5820	Management of bilge water and sludge handling onboard			0	0	0	0	0	0									
	5820.3	Is it company policy to familiarize engine room personnel with on board sludge and bilge water management procedures?														0	10		
	5820.4	Is it company policy to ensure that all engine room personnel are familiar with the system layout, drawings and manuals?														0	5		
	5820.5	Is it company policy to include Sludge/Bilge and Soot collection tanks in the PMS for regular cleaning / inspection?														0	5		
	5820.6	Is it company policy to build vessels with bilge and sludge handling system in accordance with the MEPC.1/Circ. 642 guidelines?														0	5		
				Total score												0	25		
				Minimum ranking score required for element 5820 = 15															


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	5821	Outfitting of bilge water system															
		A. Clean Drains (Drains that are <u>normally not</u> contaminated by oil)															
	5821.1	Does the company have a policy that bilge water from the Clean drain tank (for the collection of "clean drains", as per MEPC.1/Circ.642) passes through 15 ppm oil content meter and alarm?											0	5			
	5821.17	Does the company have a policy of logging discharges from the Clean drain tank (tank used for the collection of "clean drains", as per MEPC.1/Circ.642) in the engine room logbook?											0	5			
		B. Soot Collection Tank arrangement															
	5821.2	Are management instructions regarding disposal of soot and soot-water mixtures available onboard for ships equipped with Soot separation / collection tank?											0	5			
		C. Oily bilge water tank arrangement															
	5821.4	Is it company policy to install Clean Water Tank (to enable Oily Bilge Water to be processed while in port and special areas)?											0	10			
	5821.5	Is it company policy to pump Oily bilge water from the Oily bilge water holding tank through the Oily Water Separator to the Clean water tank (rather than overboard discharge)?											0	5			
		D. Oily water separator / Oil content meter															
	5821.6	<u>N/A for vessels keel laid after 2005</u> Is it company policy to install an oil content meter with an automatic stopping device capable of measuring the difference in emulsifying particles and oil, as per IMO resolution MEPC.107(49)											0	5			
	5821.7	Are instructions available in the management system to avoid that the Oil Content Meter is flushed/diluted with clean water during Oily Water Separator operation or is an equipment or a protection system installed (e.g. White Box) to prevent illegal discharges of bilge water from machinery spaces?											0	10			
	5821.8	<u>N/A for vessels keel laid after 2005</u> Is it company policy to equip the Oily Water Separator with a re-circulating facility for testing purposes as per IMO resolution MEPC.107(49) 6.1.1. ?											0	5			
		5821.9 is an alternative to 5821.1 - 5821.8 & 5821.17 (all the above)															
	5821.9	Is it a company policy to always deliver all bilge water to reception facilities?											0	50			
													0	50			
			Total score										0	50			
			Minimum ranking score required for element 5821 = 20														


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	5822	Outfitting of sludge handling system															
	5822.1	Is it company policy to install a sludge collecting pump as per MEPC.1/Circ.642? (with the sole purpose of collecting the sludge from different ER tanks to the Oil Residue (Sludge) Tank)?												0	5		
	5822.2	Is it company policy to install a separate sludge discharge pump with the purpose of discharging the sludge to reception facility?												0	5		
	5822.3	Is it company policy to improve the efficiency and capacity of the sludge handling system by installing: - a tank or system with the sole purpose of removing large quantities of water from the sludge? - a separate tank or system with the sole purpose of evaporating water from the sludge? - a separate tank or system with the purpose of mixing the sludge while incinerated (in incinerator or boiler)												0	5		
	5822.6	Is it a company selection process to assign ships that always deliver all sludge to reception facilities?												0	5		
			Total score										0	20			
			Minimum ranking score required for element 5822 = 10														
	5900	Ship Recycling - Inventory of Hazardous Materials															
		New buildings - For Owner / Managers and 3rd-party Ship Managers For 5900.1, 5900.12 and 5900.2															
	5900.1	Does the company require the shipyard to develop an "Inventory of Hazardous Materials" (Part I) at the stage of design and/or construction? (requirement to be part of the building contract)												0	40		
	5900.12	Does the company require the shipyard to have procedures to require equipment-/machinery-suppliers to provide a "Material Declaration"? (used by the yard to develop the Inventory Part I) (requirement to be part of the building contract)												0	10		
	5900.2	Does the company require the shipyard to include in these procedures that the "Material Declaration" contains information on the safe removal of hazardous materials? (requirement to be part of the building contract)												0	10		
		Existing ships - For Owner / Managers and 3rd-party Ship Managers For 5900.10 and 5900.13															
	5900.10	Is each Green Award-certified company vessel in the possession of an "Inventory of Hazardous Materials" (Part I completed)?												0	40		
	5900.13	Alternative to 5900.10: Has the company started the process to prepare Part I of the "Inventory of Hazardous Materials" with a target completion date for each Green Award certified vessel in the fleet?												0	20		
			Total score										0	100			
			Minimum ranking score required for element 5900 = 40														

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	5910	Ship Recycling - Policy for ships due to be recycled				0		0		0																	
		For Owner / Managers only (Not applicable to 3rd-party ship managers)																									
	5910.8	Has a company policy been implemented within the Management System that end-of-life vessels will only be recycled at a recycling facility either compliant with the requirements of the Hong Kong Convention or on the EU-list? (regardless of being sold directly to a recycling facility or to a cash buyer)?																							0	20	
	5910.2	Has a company procedure been implemented within the Management System to audit a recycling facility before concluding a "contract of sale"?																							0	10	
	5910.4	Has a company policy been implemented that the "contract of sale" will include the requirement to develop a "Ship Recycling Plan" by the recycling facility (in consultation with the owner) or does the "contract of sale" with the cash buyer include the obligation to request such a plan upon sale to the recycling facility?																							0	20	
	5910.5	Has a company procedure been implemented within the Management System that a Final Survey, by an independent organization, will be carried out on the "Inventory of Hazardous Materials" (Part I, Part II and Part III) before delivery to either the recycling facility or cash buyer?																							0	20	
	5910.6	(Preparation of vessel before delivery) Has a company procedure been implemented to ensure that the vessel's cargo spaces & other compartments where possible, will be delivered to either the recycling facility or cash-buyer in a "gas-free & safe for entry and hot work" condition?																							0	20	
	5910.7	(Preparation of vessel before delivery) Has a company procedure been implemented to clearly mark all compartments which could have an oxygen deficient or dangerous atmosphere? (e.g. cofferdams, fuel oil tanks, waste oil tanks, black/grey water tanks, etc.)																							0	20	
	5910.9	Does the company disclose it's ship recycling policy in a public domain (such as company website) or via an environmental initiative such as SRTI (Ship Recycling Transparency Initiative)?																							0	10	
		Policy regarding monitoring the recycling of company vessels																									
	5910.10	Has a company procedure been implemented within the Management System to deploy a full-time personnel at the recycling facility for the entire duration of recycling of the company vessels (to monitor and report the recycling process)?																							0	20	
	5910.11	<u>Alternative to 5910.10 & 5910.12</u> Has a company procedure been implemented within the Management System to hire third-parties (consultants or cash buyers) for continuous monitoring and reporting of the recycling process employed by the recycling facility to dismantle the company vessels?																							0	10	
	5910.12	<u>Alternative to 5910.10 & 5910.11</u> Has a company procedure been implemented within the Management System to audit the recycling facility during the recycling of the company vessels?																							0	5	
						Total score																			0	140	
						Minimum ranking score required for element 5910 = 60																					


[illegible]


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																			
Revision Code	Norm item		RANKING Office - Bulk		GENERAL MAN. Doc. & Impl.	QUALITY DEPT. Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT. Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT. Doc. & Impl.	FINANCIAL DEPT. Doc. & Impl.	IT DEPT. Doc. & Impl.	INS-/CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE		
	6200	Mooring Equipment																	
	6200.1	Does the company have instructions for carrying out winch brake tests (to be carried out at least once a year or after an excessive load)?														0	10		
	6200.2	Does the company provide the ship with a winch brake test kit?														0	5		
	6200.5	Are inspection, maintenance and discard criteria for mooring wires and tails / fibre ropes established and carried out by a competent person? (time interval for inspection should be in the PMS)														0	10		
	6200.8	Do these criteria take manufacturer's recommendations into account ?														0	10		
	6200.9	Does the company give guidance for an additional examination after unusual events such as long periods of inactivity, excessive loads, heat exposure, loading/discharge at swell ports, etc?														0	5		
	6200.10	Does the company give instructions for internal inspections and do these inspections take manufacturer's recommendations into account?														0	10		
	6200.11	Are the lubricants & cleaning products compatible with the wire and approved by the wire manufacturer?														0	5		
	6200.6	Is a log for "workingdays" of mooring wires and tails / fibre ropes maintained? (to predict the point of discard & for evaluation of wire/rope performance)														0	10		
	6200.7	Does the company provide the ship(s) with an automatic wire rope lubricator?														0	10		
	6200.12	Alternative for 6200.7: (for fibre ropes) Are there procedures for care of fibre ropes?														0	10		
			Total score													0	75		
			Minimum ranking score required for element 6200 = 45																
	6300	Corrosion Prevention of Seawater Ballast Tanks																	
	6300.8	Is it company policy that ballast tanks of vessels delivered after 01-07-2012, are coated with a hard coating of a light colour?														0	20		
	6300.1	For existing vessels: Are ballast tanks coated with a hard coating of a light colour?														0	10		
	6300.6	For existing vessels: Are ballast tanks coated with dark epoxy maintained with a modified epoxy coating of a light colour, after safety benefit assessment is carried out?														0	5		
	6300.7	Is the coating approved according to the IMO performance standard? (type approval or statement of compliance according to Res. MSC 215(82) in Coating Technical File)														0	20		
	6300.4	Does the company have a system which ensures an adequate level of corrosion prevention of the seawater ballast tanks? (Protective coatings provided in ballast tanks has to be in a GOOD condition)														0	10		
	6300.5	Does the company require the corrosion prevention system to be part of the vessel maintenance system?														0	10		
			Total score													0	75		
			Minimum ranking score required for element 6300 = 40																


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																												
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	6400	Condition Assessment Program, Maintenance	Additional Green Award requirements		0				0																			
		For Owner/Managers																										
	6400.1	Is it company policy that a condition assessment for <u>Hull</u> will be carried out on vessels more than 15 years old, or by the end of the 3rd special survey, whichever is earlier?																							0	25		
	6400.8	Is it company policy that a condition assessment for <u>Cargo Systems</u> will be carried out on vessels more than 15 years old, or by the end of the 3rd special survey, whichever is earlier?																							0	20		
	6400.9	Is it company policy that a condition assessment for <u>Machinery</u> will be carried out on vessels more than 15 years old, or by the end of the 3rd special survey, whichever is earlier?																							0	20		
		6400.10, 6400.11 & 6400.12 are alternatives to 6400.1, 6400.8 & 6400.9																										
		For 3rd-party Ship Managers																										
	6400.10	Is it company policy to request ship owners to carry out condition assessment for <u>Hull</u> on vessels more than 15 years old, or by the end of the 3rd special survey, whichever is earlier?																							0	25		
	6400.11	Is it company policy to request ship owners to carry out condition assessment for <u>Cargo Systems</u> on vessels more than 15 years old, or by the end of the 3rd special survey, whichever is earlier?																							0	20		
	6400.12	Is it company policy to request ship owners to carry out condition assessment for <u>Machinery</u> on vessels more than 15 years old, or by the end of the 3rd special survey, whichever is earlier?																							0	20		
	6400.3	Is it company policy that maintenance meetings are carried out on board? (e.g. each month and at (all) sections on board)																							0	10		
	6400.4	Is a maintenance checklist used regarding the (monthly) maintenance inspection?																							0	10		
	6400.5	Is an evaluation report of vessel's performance sent to the company?																							0	20		
	6400.6	Is an annual technical report made by the Company's superintendent?																							0	15		
				Total score																								
				0 120																								
				Minimum ranking score required for element 6400 = 60																								
	6600	Bulk Carrier Practice						0							0		0											
	6600.1	Does the company provide sufficient spare parts for deck maintenance on board? (rubber gaskets, fittings, cleats etc.)																							0	20		
	6600.2	Is the number of spare parts required increasing as the ship grows older?																							0	20		
				Total score																								
				0 40																								
				Minimum ranking score required for element 6600 = 40																								


CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																			
Revision Code	Norm item		RANKING Office - Bulk		GENERAL MAN. Doc. & Impl.	QUALITY DEPT. Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT. Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT. Doc. & Impl.	FINANCIAL DEPT. Doc. & Impl.	IT DEPT. Doc. & Impl.	INS-/CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE		
	7000	CREW																	
	7100	Employment of Personnel							0										
	7100.1	Is it company policy to employ all ship-personnel on a permanent basis?														0	30		
		Alternatives for 7100.1																	
	7100.2	Is it company policy to employ senior officers on a permanent basis?														0	10		
	7100.3	Is it company policy to employ officers on a permanent basis?														0	10		
	7100.4	Is it company policy to employ ratings on a permanent basis?														0	10		
			Total score														0	30	
			Minimum ranking score required for element 7100 = 0																
	7200	Extra Personnel, Additional Green Award Requirement				0			0										
	7200.1	Is it company policy to employ extra deck officers onboard in addition to what is required by minimum safe manning document?														0	10		
	7200.7	Is it company policy to employ extra engine officers onboard in addition to what is required by minimum safe manning document?														0	10		
	7200.2	Is it company policy to employ extra deck ratings onboard in addition to what is required by minimum safe manning document?														0	10		
	7200.8	Is it company policy to employ extra engine ratings onboard in addition to what is required by minimum safe manning document?														0	10		
	7200.3	Is it company policy to have a ship administrator onboard ? (In addition to the standard complement and extra deck-officers and -ratings above)?														0	10		
	7200.4	Is it company policy to employ riding squads to carry out extensive maintenance jobs ?														0	10		
	7200.9	Is it company policy that manufacturer service engineers routinely attend the vessel or provide remote monitoring assistance for maintenance/repair of technical equipment or systems ?														0	10		
	7200.6	Is it company policy to hire an electrical officer in addition to the engine officers required by the safe manning document?														0	10		
			Total score														0	80	
			Minimum ranking score required for element 7200 = 40																

[illegible]







CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																	
Revision Code	Norm item		RANKING Office - Bulk		GENERAL MAN. Doc. & Impl.	QUALITY DEPT. Doc. & Impl.	TECHNICAL DEPT. Doc. & Impl.	NAUTICAL DEPT. Doc. & Impl.	PERSONNEL DEPT. Doc. & Impl.	OPER./CHART DEPT. Doc. & Impl.	PURCHASING DEPT. Doc. & Impl.	FINANCIAL DEPT. Doc. & Impl.	IT DEPT. Doc. & Impl.	INS-/CLAIM DEPT. Doc. & Impl.	NOT APPLICABLE	RANKING SCORE	RANKING MAX. SCORE
	7400	Familiarisation, Additional Green Award Requirement															
	7400.1	Is it company policy that the shipboard crew after a period of absence or leave has been provided with familiarization of changes with regard to the operations/machinery which is related to their position ?														0	20
	7400.2	Is it company policy that newly employed personnel are provided with familiarization with regard to operations/machinery which is related to their position ?														0	20
	7400.9	Does the company have a method in which senior officers are deployed onboard within the company fleet? (eg. Senior officers returning to the same vessel)														0	10
	7400.8	Does the company have a method in which junior officers are deployed onboard within the company fleet? (eg. Junior officers rotating among the companies fleet)														0	10
	7400.10	In those cases when junior or senior officers are transferred to another class of ship that differ considerably from where their experience lie, is an onboard appropriate operational experience with previous off-signing officers implemented for a specific minimum period?														0	10
	7400.4	Is it company policy that a company format handover report is requested from all off-signing officers onboard ?														0	10
				Total score												0	80
				Minimum ranking score required for element 7400 = 50													
	7500	Safe Manning and Fatigue Management															
		A. General - managing work/rest hours															
	7500.1	Is it a company policy that the work/rest hours performed by the individual seafarer are recorded using a software program and such records are accessible and regularly updated?														0	5
	7500.4	Are reports of work/rest hours reviewed on regular basis ?														0	10
	7500.2	Is there a company policy to monitor and address non compliance on STCW 2010 Manila amendments of work/rest hours ?														0	10
		B. Fatigue management															
RR	7500.5	Is there a company specific fatigue mitigation and control strategy (or similar document) available within the Safety Management System (SMS) to ensure the health and wellbeing of the seafarers?														0	30
RR	7500.9	Does the fatigue mitigation and control strategy consist of the following (both): - framework to assess the hazards associated with fatigue (hazard assessment) - strategies to mitigate the risk of fatigue (risk mitigation)														0	15
RR	7500.10	Does the company ensure that any one of the following fatigue management tools (as described in IMO MSC.1/Circ1598) is used on board GA certified ships: - Sleep Diary - Self-monitoring through fatigue and sleepiness ratings - Fatigue self-assessment tool - Fatigue event reporting														0	15
		C. Additional questions - reporting, training & awareness															
	7500.7	Does the company have a system in which crew members are able to report to a designated person on fatigue related issues <u>without fearing any action against them for such communication</u> ?														0	5
	7500.11	Does the company conduct fatigue management training and awareness campaigns for shipboard crew on an initial and recurrent basis?														0	5
				Total score												0	95
				Minimum ranking score required for element 7500 = 60													

CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022																												
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	9000	REQUIREMENTS ACCORDING TO ISO Standards																										
	9421	ISO Certification																										
	9421.1	Is the company certified for the latest edition of ISO 9001 (quality management systems)?																								0	10	
	9421.2	Is the company certified for the latest edition of ISO 10015 (quality management – guidelines for competence management and people development)?																								0	10	
	9421.3	Is the company certified for the latest edition of ISO 14001 (environmental management systems)?																								0	10	
	9421.4	Is the company certified for the latest edition of ISO 22301 (societal security – business continuity management systems)?																								0	10	
	9421.5	Is the company certified for the latest edition of ISO 27001 (information security management systems)?																								0	10	
	9421.6	Is the company certified for the latest edition of ISO 30401 (knowledge management systems – requirements)?																								0	10	
	9421.7	Is the company certified for the latest edition of ISO 45001 (occupational health and safety management systems)?																								0	10	
	9421.8	Is the company certified for the latest edition of ISO 50001 (energy management systems)?																								0	10	
	9421.9	Does the company perform audits at planned intervals to demonstrate the conformity to the requirements of the EnMS (Energy management system) in accordance with ISO 50001:2011?																								0	10	
	9421.10	Has the company established an energy baseline using the methodology from ISO 50001:2011 with the aim to reduce the energy consumption of the organisation?																								0	5	
				Total score																							0	95
				Minimum ranking score required for element 9421 = 0																								

CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022					
Norm item	 <div> TOTAL SCORE REVIEW OFFICE AUDIT - BULK CARRIER </div>	OFFICE RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
1000	GENERAL				
1200	Enclosed Space Entry & Hot Work	0	100	100	
1300	Compressor for the refilling of air cylinders for breathing apparatus or alternative, Additional Green Award Requirement	0	20	10	
1400	Control of drugs & alcohol onboard	0	45	20	
1500	Emergency Response System	0	45	25	
1510	Emergency Oil Recovery	0	10	0	
1600	Computer Systems, Networks, Data Security and Training	0	65	40	
1610	Cyber Risk Management	0	75	35	
1700	Noise and Vibration Management	0	65	25	
1710	Underwater Noise and Vibration Management	0	30	0	
1800	Social Dimension / Sustainability	0	85	15	
2000	NAVIGATION / BRIDGE OPERATIONS				
2100	Navigation	0	120	50	
2110	Electronic chart display & information systems / ECDIS	0	0	0	
2111	Electronic chart display & information systems / ECDIS	0	60	35	
2120	Fuel Change Over / Ballast Water Exchange	0	20	20	
2300	Mooring Operations	0	10	10	
3000	MACHINERY / ENGINE OPERATIONS				
3100	Bunker Operations	0	50	50	
3101	Bunker Operations - LNG	0	50	25	
3200	Fuel oil management	0	120	60	
4000	CARGOES / CARGO OPERATIONS				
4600	Cargo Operations	0	60	20	
4601	Preparation of loading / unloading plan	0	80	80	
4602	Cargo handling and operations	0	50	40	
4606	Safety precautions during cargo operations	0	20	20	
5000	PREVENTION OF POLLUTION				
5100	Biofouling Management	0	30	5	
5200	Waste Management / Garbage Handling Onboard	0	100	50	
5410	NOx Emissions	0	95	35	
5420	SOx Emissions	0	120	20	
5421	Ships required to carry out Fuel Change Over to low sulphur MARINE DIESEL OIL or low sulphur MARINE GAS OIL (low sulphur Distillates)	0	40	40	
5430	Particulate Matter (PM) Emissions	0	30	0	
5440	Greenhouse Gas (GHG) Emissions - CO2 Emissions	0	200	0	
5441	Greenhouse Gas (GHG) Emissions - Methane (CH4) Emissions - Main Propulsion	0	55	0	
5450	Newbuild policy	0	40	0	
5460	Environmental Ship Index (ESI)	0	50	0	
5500	Sewage Management	0	50	20	

CHECKLIST - RANKING CRITERIA - OFFICE AUDIT - BULK CARRIER - VERSION 2022						
Norm item		TOTAL SCORE REVIEW OFFICE AUDIT - BULK CARRIER	OFFICE RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
5510	Grey Water Management		0	25	0	
5700	Ballast Water Management		0	60	20	
5801	Protection of fuel oil tanks, lube oil tanks and hull		0	30	0	
5810	Stern tube lubrication		0	60	0	
5811	Mooring wire lubrication		0	20	0	
5812	Deck equipment lubrication (use of oils)		0	65	0	
5820	Management of bilge water and sludge handling onboard		0	25	15	
5821	Outfitting of bilge water system		0	50	20	
5822	Outfitting of sludge handling system		0	20	10	
5900	Ship Recycling - Inventory of Hazardous Materials		0	100	40	
5910	Ship Recycling - Policy for ships due to be recycled		0	140	60	
6000	MAINTENANCE / SURVEYS					
6100	Programme of Inspections & Cargo Hold Inspection / Maintenance		0	110	80	
6110	Critical and Stand-by Equipment		0	75	30	
6200	Mooring Equipment		0	75	45	
6300	Corrosion Prevention of Seawater Ballast Tanks		0	75	40	
6400	Condition Assessment Program, Maintenance Additional Green Award requirements		0	120	60	
6600	Bulk Carrier Practice		0	40	40	
7000	CREW					
7100	Employment of Personnel		0	30	0	
7200	Extra Personnel, Additional Green Award Requirement		0	80	40	
7300	Training / Courses for Personnel Additional Green Award Requirements & IMO Model Courses		0	130	50	
7400	Familiarisation, Additional Green Award Requirement		0	80	50	
7500	Safe Manning and Fatigue Management		0	95	60	
9000	REQUIREMENTS ACCORDING TO ISO Standards					
9421	ISO Certification		0	95	0	
	TOTAL SCORES		0	3590	1510	

LEGEND

	Indicates which crew/employee may be interviewed/questioned.
	Shows that a certain item is complied.
	Shows that a certain item is <i>not</i> complied.
0	Indicates that an alternative is used, hence the score for that item is a "0".
	The checklist was filled in incorrectly, thus shows "error".
0	Indicates that the whole element did not reach the minimum score, hence a finding is issued. The number shows the scores obtained.
	Shows which elements are minimum = maximum. Hence scores on all items is required to fully comply.
	Indicates that the minimum score for the relevant element is "0", hence a finding will <i>not</i> be issued.

* for detailed interpretations of the colours and the usage of the checklist, please refer to the pdf-file named "Instruction Notes" located on www.greenaward.org under "Certification/ Download".

ENERGY EFFICIENCY TECHNOLOGIES INFORMATION PORTAL

TECHNOLOGY GROUPS

[IMO GLOMEEP Website](#)

GA Code:

Certificate Holder name:

Date of Office Audit:

MACHINERY TECHNOLOGIES

This technology group includes measures that improve the energy efficiency of main and auxiliary engines. These include measures such as auxiliary systems optimization, optimizing heat exchangers, waste heat recovery systems, electronic auto-tuning, batteries and other solutions.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Auxiliary systems optimization	Optimizing auxiliary systems to actual operational profiles, not design conditions	Semi-mature	All vessels
	Engine de-rating	De-rating an engine for reduction of the vessel's maximum speed to increase its efficiency by limiting the potential power output	Semi-mature	Vessels sailing 10-15% slower than design speed
	Engine performance optimization (automatic)	Automatic increase of engine efficiency through testing and tuning according to actual operational load and conditions	Semi-mature	Mainly for two stroke engines
	Engine performance optimization (manual)	Manual increase of engine efficiency through testing and tuning according to actual operational load and conditions	Mature	All vessels
	Exhaust gas boilers on auxiliary engines	Exhaust gas boilers recover the heat from the exhaust gas of auxiliary engines to generate steam, hot water or heat for process heating	Semi-mature	Vessels without shaft generator
	Hybridization (plug-in or conventional)	Use of electricity to replace various modes of power consumption	Semi-mature	Vessels with large fluctuations in power output (ferries, offshore vessels, tugs)
	Improved auxiliary engine load	Increase of the auxiliary engines' load and efficiency by reducing the number of auxiliary engines running	Semi-mature	All vessels
	Shaft generator	Produce electricity from the main propulsion engine	Mature	All vessels with high power needs and long transits
	Shore power	Use of cold ironing in ports to reduce fuel consumption on power producing engines	Semi-mature	For smaller vessels and in ports with developed solutions for larger vessels
	Steam plant operation improvement	Improve operations and maintenance of steam plant system saving fuel on oil fired boiler	Mature	Mainly crude and product tankers
	Waste heat recovery systems	Recover thermal energy from the exhaust gas and convert it into electrical energy	Semi-mature	All vessels with engines above 10 MW

PROPULSION AND HULL IMPROVEMENTS

Technologies in this group focus on improving the hydrodynamic performance of the vessel. This includes solutions that reduce the resistance of the vessel and/or also improve the propulsive efficiency of the vessel. Examples include measures such as propeller polishing, hull cleaning, PIDs (Propulsion Improving Devices), air lubrication and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Air cavity lubrication	Use of air injection on the wetted hull surfaces to improve a ship's hydrodynamic performance	Semi-mature	Most vessels in deep sea trade
	Hull cleaning	Removal of fouling on the hull to increase the vessel's hydrodynamic performance	Mature	All vessels
	Hull coating	Reduction of the hull's resistance through water	Mature	All vessels
	Hull form optimization	Optimizing the hull for lower resistance through water	Mature	All vessels
	Hull retrofitting	Retrofitting of the bulbous bow, optimizing thruster tunnels or bilge keel to reduce resistance	Mature	All vessels
	Propeller polishing	Removal of fouling on the propeller	Mature	All vessels
	Propeller retrofitting	Retrofitting the propeller to increase efficiency	Semi-mature	All vessels
	Propulsion Improving Devices (PIDs)	Installation of propulsion improving devices	Mature	All vessels

ENERGY CONSUMERS

Consumers are equipment or devices that use energy when operated. Technologies in this group focus on minimizing the energy consumption by improving the device or optimizing the utilization of the device. Examples of measures in this group are frequency controllers, cargo handling systems, low energy lighting and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Cargo handling systems (Cargo discharge operation)	Reduction of energy consumption while discharging crude oil by use of model-based studies of the discharge operation	Semi-mature	Tankers
	Energy efficient lighting system	Use of energy efficient lighting equipment, such as LED light, to increase efficiency and remove heat loss from light devices	Mature	All vessels
	Frequency controlled electric motors	Regulating the frequency of the motors in order to adapt the motor optimized load	Mature	All vessels

ENERGY RECOVERY

Technologies in this group focus on capturing energy from the surroundings of the vessel and using or transforming this to useful energy for the vessel. This involves measures such as application of kites, fixed sails or wings, Flettner rotors, or solar panels.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Fixed sails or wings	Use sails or wings to replace some of the propulsion power needed	Not mature	Vessels with enough place on deck (general cargo, tankers, bulkers)
	Flettner rotors	Use Flettner rotors to generate power from wind energy	Not mature	Dependent on trading area and sufficient free deck-surface
	Kite	Use a kite to replace some of the propulsion power needed	Not mature	All vessels
	Solar panels	Install solar panels for conversion of solar energy to electricity	Not mature	Dependent on trading area and sufficient free deck-surface

TECHNICAL SOLUTIONS FOR OPTIMIZING OPERATION

Technologies in this group focus on improving the operation of the vessel more than improving the vessel itself. The list of suggested measures includes both technologies and suggestions for best practice (without direct application of a technology). Measures in this group include trim and draft optimization, speed management, autopilot adjustment and use, combinator optimizing, and others.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Autopilot adjustment and use	Use of an automatic system to control the vessel's rudder in a more energy efficient manner	Mature	All vessels
	Combinator optimizing	Use of optimized pitch settings and propeller speed for optimized efficiency of propulsion system	Mature	For vessels with controllable pitch propeller
	Efficient DP Operation	Optimize the operation in DP mode	Semi-mature	Vessels with DP mode
	Speed management	Management of the vessel's speed in the most efficient manner	Semi-mature	All vessels
	Trim and draft optimization	Optimizing the trim and draft to reduce the vessel's water resistance	Semi-mature	All vessels
	Weather routing	Including weather conditions when planning a voyage	Mature	All vessels

Definitions of maturity levels according to uptake across the maritime industry, and degree of proven technology/principle

Mature	Proven, new or existing technology/principle, with high uptake across the industry.
Semi-mature	Proven, new or existing technology/principle, but with limited uptake across the industry.
Not mature	New unproven-, unproven existing-, or proven existing technology/principle but with very few installations and little to no operational experience.

*This Information Portal is still under development and further images will be added.

This Energy Efficiency Technologies Information Portal was developed in cooperation with DNV GL.


This webpage serves as an Information Portal for Energy Efficiency Technologies for Ships. IMO does not make any warranties or representations as to the accuracy or completeness of the information provided.


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APPENDIX 3


CHECKLIST - BASIC CRITERIA - SURVEY - BULK CARRIER


(BMC-08)

CHECKLIST - BASIC CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																					
Revision Code	Norm item		BASIC Ship - Bulk		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE
	100	MANAGEMENT ELEMENTS																			
	101	GENERAL																			
	101.1	Are the Management System (MS) Manuals maintained and updated?																			
	102	SAFETY AND ENVIRONMENTAL PROTECTION POLICY																			
	102.1	Is the company policy concerning safety and the environment available, posted and implemented at all levels ?																			
	103	COMPANY RESPONSIBILITIES AND AUTHORITY																			
	103.1	Are the responsibilities and authorities of all shipboard personnel clearly defined and implemented?																			
	103.2	Are shore-ship communications, defined levels of authority and lines of communication documented and working effectively ?																			
	104	DESIGNATED PERSONS																			
	104.2	Is (are) (a) designated person(s) known on board?																			
	104.3	Is objective evidence available that safety and environmental aspects of the operation of the ship are monitored and that the required adequate resources and shore-based support is applied ?																			
	105	MASTER'S RESPONSIBILITY AND AUTHORITY																			
	105.1	Is the responsibility of the master clearly defined and documented?																			
	105.2	Does the master implement the Company's safety and environmental-protection policy on board?																			
	105.3	Does the master motivate the crew in the observation of that policy?																			
	105.4	Does the master verify that specified requirements are observed?																			
	105.5	Does the master review the MS and are its deficiencies reported to the shore-based management?																			
	106	RESOURCES AND PERSONNEL AND STCW																			
	106.1	Does the company have a procedure for the Master to ensure that assigned sea staff are in possession of necessary certificates when joining the vessel?																			
	106.4	Are shipboard personnel informed about new/revised rules, regulations, codes and guidelines?																			
	106.6	Does ship's personnel receive training/courses which are required in support of the MS?																			
	106.11	Is the working language between the office and the vessels defined?																			
	106.12	Are all senior and deck officers conversant in the English language for maritime communication?																			
	106.13	Is relevant information on the MS written in a working language or languages understood by officers and shipboard personnel?																			
	106.14	Is the working language monitored and checked by the ships staff?																			
	106.15	Are new personnel and personnel transferred to new assignments given proper familiarisation with their duties?																			
	106.16	Are instructions, which are essential prior to sailing, identified, documented and given to the new personnel?																			
	106.17	Is the Master fully conversant with the Company's Management Systems?																			

CHECKLIST - BASIC CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																					
Revision Code	Norm item		BASIC Ship - Bulk		MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE
	107	DEVELOPMENT OF PLANS FOR SHIPBOARD OPERATIONS				<input checked="" type="radio"/>		<input checked="" type="radio"/>					<input checked="" type="radio"/>						<input checked="" type="radio"/>		
	107.2	Are plans and instructions for key shipboard operations concerning safety of the ship and prevention of pollution, evaluated and reviewed?																			
	107.3	Are tasks, qualifications and responsibilities defined in the manuals and in the job descriptions?																			
	108	EMERGENCY PREPAREDNESS				<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>	
	108.1	Does the system cover the arrangements needed to ensure that the company, day and night, can be notified if a hazard, accident or emergency involving the ship occurs ?																			
	108.2	Are tasks, qualifications and responsibilities evaluated during drills and exercises as described in the emergency procedures?																			
	108.3	Is communication with media described in the emergency procedures and is shipboard personnel aware of these instructions?																			
	108.5	Is the shipboard personnel prepared to respond to emergency shipboard situations?																			
	109	REPORTS AND ANALYSES OF NON-CONFORMITIES, ACCIDENTS AND HAZARDOUS OCCURENCES				<input checked="" type="radio"/>		<input checked="" type="radio"/>					<input checked="" type="radio"/>						<input checked="" type="radio"/>		
	109.1	Are safety and environmental inspections carried out, documented and reported?																			
	109.2	Does the ship have instructions/procedures for the reporting of non-conformities/ near misses?																			
	109.3	Are non-conformities, accidents and hazardous occurrences reported to the office?																			
	109.4	Are corrective and/or preventive actions taken?																			
	109.5	Does the company have objective evidence to show their support of the shipboard personnel in reporting of non-conformities / near misses?																			
	110	MAINTENANCE OF THE SHIP AND EQUIPMENT				<input checked="" type="radio"/>		<input checked="" type="radio"/>					<input checked="" type="radio"/>						<input checked="" type="radio"/>		
	110.1	Are ship inspections held at defined intervals? (minimum of twice a year or equivalent)																			
	110.2	Are non-conformities reported including their possible cause?																			
	110.3	Is appropriate corrective action taken?																			
	110.4	Are records of these activities maintained?																			
	110.5	Are ship-critical equipment and technical systems identified ?																			
	110.6	Does the MS provide for specific measures aimed at promoting the reliability of critical equipment and systems ?																			
	111	DOCUMENTATION				<input checked="" type="radio"/>		<input checked="" type="radio"/>					<input checked="" type="radio"/>								
	111.1	Does the company have procedures to control documents and data relevant to the MS?																			
	111.2	Are valid documents available at all relevant locations?																			
	111.3	Are changes to documents reviewed and approved by authorised personnel?																			
	111.4	Are obsolete documents promptly removed ?																			

CHECKLIST - BASIC CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																							
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	112	COMPANY VERIFICATION, REVIEW AND EVALUATION				<input checked="" type="radio"/>		<input checked="" type="radio"/>					<input checked="" type="radio"/>										
	112.1	Are internal audits carried out to verify whether safety and pollution-prevention activities and other procedures comply with the MS?																					
	112.4	Are results of the audits and reviews brought to the attention of all shipboard personnel having responsibility in the area involved?																					
		IMO ELEMENTS																					
	200	SOLAS 1974																					
	201	SOLAS General Provisions				<input checked="" type="radio"/>							<input checked="" type="radio"/>										
	201.1	Compliance with General Provisions																					
	211	Enhanced Surveys				<input checked="" type="radio"/>							<input checked="" type="radio"/>										
	211.1	Is an enhanced survey performed and endorsed by a Classification Society?																					
	213	Certificates and documents on board				<input checked="" type="radio"/>							<input checked="" type="radio"/>										
	213.1	Are all regulatory certificates valid ?																					
	200	SOLAS 1974																					
	215	Additional Safety Measures for Bulk Carriers				<input checked="" type="radio"/>		<input checked="" type="radio"/>															
	215.1	Does the bulk carrier comply with the requirements of Ch. XII?																					
	216	Maritime security				<input checked="" type="radio"/>																	
	216.1	Does the ship have a valid (interim) International Ship Security Certificate?																					
	216.2	Is the ship's crew familiarised in general with the principles of the ISPS Code (ship related) ?																					


CHECKLIST - BASIC CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																			
Revision Code	Norm item	 <div style="border: 1px solid black; padding: 10px; text-align: center;"> <h1 style="margin: 0;">BASIC</h1> <h2 style="margin: 0;">Ship - Bulk</h2> </div>	MASTER	Doc. & Impl.	CHIEF OFFICER	Doc. & Impl.	DECK OFFICER	Doc. & Impl.	DECK RATING	Doc. & Impl.	CHIEF ENGINEER	Doc. & Impl.	ENGINEER OFFICER	Doc. & Impl.	ENGINEER RATING	Doc. & Impl.	CATERING PERSONNEL	Doc. & Impl.	NOT APPLICABLE
	217	Safety of Navigation / SOLAS chart carriage requirements	●				●												
		Alternative 1 (217.1 - 217.4) : Compulsory carriage of ECDIS, with full official ENC coverage																	
	217.1	Is the ECDIS type-approved according to Res A 817(19) as amended by MSC 64 (67) and MSC 86 (70) or MSC.232(82)?																	
	217.3	Is an acceptable back-up arrangement in place? (an independent type-approved ECDIS with an independent position fixing system using official Electronic Navigational Charts (ENC's), or a full / reduced folio of up-to-date paper charts as relevant to the ship's voyage)																	
	217.4	Are all official ENCs up-to-date?																	
		Alternative 2 (217.1 - 217.4): Compulsory carriage of ECDIS, Navigation with official ENCs where available and official RNCs where ENCs are not available																	
	217.1	Is the ECDIS type-approved according to Res A817 (19) as amended by MSC 64 (67) and MSC 86 (70) or MSC.232(82)?																	
	217.2	Is the supplementary folio of paper charts acceptable for that part of the voyage where official RNCs are used ?																	
	217.3	Is an acceptable back-up arrangement in place? (an independent type-approved ECDIS with an independent position fixing system using official ENCs and Raster Navigational Charts where needed, or a full / reduced folio of up-to-date paper charts, as relevant to the ship's voyage)																	
	217.4	Are all official ENCs and RNCs up-to-date?																	
		Training & Onboard Use of ECDIS (Compulsory carriage of ECDIS)																	
	217.5	Have all deck officers and the master completed generic training in the use of ECDIS based on the IMO model course 1.27?																	
	217.7	Is a risk assessment carried out for the operation of ECDIS which identifies and controls the hazards when using ENCs and (if used) when ECDIS is in RCDS mode?																	
	217.8	Are results from the assessment evident in the onboard procedures + instructions for ECDIS?																	
	217.9	Is the risk assessment and relevant onboard procedures + instructions reviewed on a regular basis (at least once a year or if circumstances require a review) ?																	
	218	Noise Levels On Board Ships																	
		(Only applicable to new ships (ships contracted to build on or after 1st July 2014) of a gross tonnage of 1,600 and above.)																	
	218.1	Is the noise survey report available onboard?																	
	218.2	Are noise areas marked by placing relevant visible warning notices at the entrance to these areas? (IMO noise symbols)																	


CHECKLIST - BASIC CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																					
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	300	MARPOL 73/78																			
	301	Provisions concerning Reports on Incidents Involving Harmful Substances (Protocol 1)	<input checked="" type="radio"/>		<input checked="" type="radio"/>																
	301.1	Does the Master have a procedure in order to report an incident to the nearest coastal state?																			
	310	Prevention of pollution by oil	<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		
	310.2	Is the shipboard oil pollution emergency plan maintained and updated?																			
	310.5	Are updated contact lists of coastal States, port contacts and ship interest contacts available?																			
	310.6	Does the company have a policy concerning the retention and disposal of oil residues (sludge)?																			
	310.8	Are actions and responsibilities of the shipboard personnel clearly described in the SOPEP ?																			
	310.9	Does the plan provide procedures for the removal of oil spilled and contained on deck?																			
	310.10	Does the plan provide guidance to ensure proper disposal of removed oil and clean-up materials?																			
	310.11	Does the plan include a list of information required for making damage stability and damage longitudinal strength assessments ?																			
	350	Prevention of pollution by garbage	<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		
	350.2	Does the vessel have a ship specific garbage management plan detailing the specific ship's equipment, arrangements and procedures for the handling of garbage?																			
	350.3	Are records kept according to the garbage management plan?																			


APPENDIX 4


CHECKLIST - RANKING CRITERIA - SURVEY - BULK CARRIER


(BMC-09)


CHECKLIST - RANKING CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																								
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1000	GENERAL																							
1200	Enclosed Space Entry & Hot Work																							
1200.1	Is there an Enclosed Space Entry and Hot Work permit to work system, taking account of IMO and industry guidelines and where relevant local port / terminal requirements?																					0	10	
1200.6	Is company approval of the Hot Work permit required before work can begin?																					0	10	
1200.7	Does the Hot Work permit show the appropriate safety precautions to be taken relevant to the location of work?																					0	5	
1200.2	Is crew on board provided with suitable personal protective equipment and suitable equipment for testing the atmosphere of an enclosed space? (e.g. breathing apparatus, protective clothing and approved + calibrated atmosphere testing equipment)																					0	5	
1200.8	Are all personnel entering an enclosed space provided with a personal gas detector which can measure HC, oxygen and relevant toxic vapours?																					0	10	
1200.9	Is a safety meeting, attended by all personnel involved, held prior to entering the space or commencement of hot work in order to review procedures and PPE (including those specific for the intended work) ?																					0	10	
1200.10	Is a responsible officer designated for all aspects of the operation?																					0	5	
1200.3	Is ship's crew trained and drilled periodically according to enclosed space entry procedures ?																					0	5	
1200.4	Does training also include rescue and first aid?																					0	5	
1200.11	Is a rescue / back-up team assigned and ready for immediate action upon call?																					0	5	
																						0	70	
1300	Compressor for the refilling of air cylinders for breathing apparatus or alternative, Additional Green Award requirement																							
1300.1	Does the vessel have a compressor for the refilling of air cylinders for breathing apparatus?																					0	20	
1300.2	Alternative for 1300.1: sufficient number of air cylinders for the sole purpose of safety drills.																					0	10	
																						0	20	
1400	Control of drugs & alcohol onboard																							
1400.2	Is evidence of an unannounced alcohol testing initiated by the office available on board? (Approved test equipment to be available on board)																					0	10	
1400.1	Have all current crew members been subjected to shore-based drug and alcohol testing at least once in last 12 months?																					0	15	
1400.5	Has the vessel been subjected to unannounced drug and alcohol testing at least once every year (not exceeding 18 months between two consecutive tests) by an external organisation?																					0	10	
1400.6	Alternative to 1400.1 & 1400.5: In case crew members are not subject to shore-based drug and alcohol testing at least once in last 12 months, has the vessel been subjected to unannounced drug and alcohol testing at least twice in 12 months by an external organisation?																					0	25	
																						0	35	


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1500	Emergency Response System																
1500.4	Is the vessel in receipt of evaluation reports of the annual ERS drill(s) between company, (class) and vessel?													0	5		
1500.11	Is the evaluation report of the annual ERS drill discussed in a safety meeting?													0	10		
1500.5	Is an annual drill performed on board which includes ERS-procedures?													0	15		
					Total score								0	30			
					Minimum ranking score required for element 1500 = 10												
1510	Emergency Oil Recovery																
1510.1	Is the vessel equipped with a system providing emergency access to cargo tanks and bunker tanks (for example, from the vessel deck), should the vessel be submerged?													0	5		
1510.2	Does the ship carry an oil skimmer or a similar device that can be used in an emergency situation of oil spill overboard?													0	5		
					Total score								0	10			
					Minimum ranking score required for element 1510 = 0												
1600	Computer Systems, Networks, Data Security and Training																
1600.1	Are arrangements for vessel systems documented ? (configuration scheme)													0	10		
1600.7	Are adequate system back-up's for vessel computer-based systems made (where applicable) and are procedures for this documented ?													0	5		
1600.8	Are adequate back-ups for administrative PC systems made and are procedures for this documented ?													0	5		
1600.3	Is training provided at a level required to effectively operate and maintain the system and cover normal, abnormal and emergency conditions?													0	10		
1600.4	Is the internal audit scheme applicable to the IT elements and vessel computer-based systems?													0	10		
1600.5	Are computer systems, in relation to IMO MSC/Circ.891, certified by a recognised organisation?													0	10		
1600.6	Is a system administrator designated onboard for administrative PC systems on the ship?													0	10		
					Total score								0	60			
					Minimum ranking score required for element 1600 = 30												
1610	Cyber Risk Management																
1610.1	Is shipboard crew aware of plans and procedures of cyber risk management (as described in SMS) and their implementation on board?													0	10		
1610.4	Does the cyber risk policy focus on elements such as third-party access and bring your own device (BYOD) in the office?													0	5		
1610.5	Is there a designated shipboard crew member on board appropriately trained to identify and respond to cyber threats to the ship's information and operational technology systems?													0	5		
1610.8	Does the vessel undergo cyber risk assessment (at an interval deemed suitable by the company) by means of either of the following: - self-assessment followed by third party risk assessment - penetration tests of critical IT and OT infrastructure performed by external experts simulating cyber attacks?													0	5		
1610.9	Does the vessel have access to contingency plans and related information in a non-electronic form that need to be followed in the event of a cyber attack?													0	5		
1610.12	Are on-board systems forbidden to be remotely accessed by technicians and manufacturers without authorization by the vessel's senior leadership team (For example, by following a two-step digital authorization process)?													0	5		
					Total score								0	35			
					Minimum ranking score required for element 1610 = 15												


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	1700	Noise and Vibration Management																					
		Noise/Vibration Monitoring and Measures																					
	1700.2	Is the crew wearing hearing protectors which meet the requirements of the HML(High-Medium-Low) method (ISO 4869-2:1994) when entering spaces where noise levels exceed 85db(a)?																		na		0	0
	1700.3	Does the PMS have the routine to inspect and rectify any abnormalities in terms of noise and vibration from a machinery equipment ?																				0	5
	1700.4	Are appropriated measures implemented onboard in order to protect the crew from cargo handling equipment noise if the noise exceeds 85db(a) (by taking into account technical solutions and/or exposure limits)?																				0	10
		Noise Mitigation and Health Hazards																					
	1700.8	Is the noise exposure limit of each rating/officer recorded and available onboard?																				0	5
	1700.9	Is the crew restricted towards prolonged exposure in spaces where noise limits exceed 110 db(a)?																				0	5
	1700.10	Are all engine exhaust pipes insulated with ship specific suitable silencers to attenuate noise?																				0	5
	1700.11	Is the ship installed with noise cancelling equipment such as active mufflers/mounts, resilient mounts, vibration dampers where practically possible?																				0	10
	1700.12	Are noise cancelling measures such as mineral wool/silencers being installed in the ventilation ducts or fan rooms to reduce the noise level?																				0	10
						Total score																0	50
						Minimum ranking score required for element 1700 = 15																	
	1710	Underwater Noise and Vibration Management																					
	1710.1	Were any measures implemented periodically to reduce cavitation from propeller?																				0	5
	1710.4	Does the ship opt for re-routing or slow steaming where possible and practicable to protect whale sensitive areas?																				0	5
						Total score																0	10
						Minimum ranking score required for element 1710 = 0																	

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	1800	Social Dimension / Sustainability																					
		A. Good Health & Well-Being																					
	1800.1	Does the vessel have an ITF or similar agreement in place?																				0	10
	1800.3	Is an electronic device available on board specifically to access digital platform (web or app) subscribed by the company for seeking medical advice?																				0	5
	1800.4	Has the shipboard staff been familiarized with platforms (online/offline) providing access to emotional support networks to tackle mental health issues?																				0	5
	1800.5	Do all shipboard personnel have access to the internet at all times?																				0	5
		B. Reduced Inequalities / Equal Opportunities / Diversity																					
		B.1 General																					
	1800.7	Have all ship board personnel been made aware of confidential reporting procedures to report harassment & discrimination?																				0	5
	1800.8	Have steps been taken to create awareness among shipboard staff and to ensure effective implementation of policies focusing on subjects such as equal opportunities, equality and diversity, inclusion, anti-discrimination, anti-harassment, etc.?																				0	5
		B.2 Gender-specific																					
	1800.10	Does the vessel have women seafarer(s) working either as officers or ratings?																				0	10
	1800.11	Is the ship equipped with the following specific facilities for women seafarers: – feminine hygiene items (in bonded stores) & separate disposal facilities – separate washrooms with sanitary facilities – suitable sized (gender specific) safety and protective clothing – access to medical supplies without having to consult male colleagues																				0	5
																						0	50
						Total score																0	50
						Minimum ranking score required for element 1800 = 10																	


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	2000	NAVIGATION / BRIDGE OPERATIONS																					
	2100	Navigation																					
	2100.3	Does the voyage or passage plan include contingency planning?																				0	10
	2100.6	Is the vessel automatically supplied with new hydrographic publications?																				0	10
	2100.7	Is the vessel electronically updated for hydrographic publications? (eg. Temporary and Preliminary NtM)																				0	10
	2100.8	Is navigational equipment included in the electronic Planned Maintenance System?																				0	10
	2100.9	Are masters entitled to use non-compulsory pilot services? (must be stated in a company procedure)																				0	20
	2100.13	Is the vessel using weather routing services while on long haul voyage?																				0	10
	2100.18	Is the vessel enrolled in a meteorological & oceanographic service in a form of a software application?																				0	10
	2100.19	Alternative to 2100.18: Does the vessel have a capability to receive comprehensive weather information from the office or from coastal stations / platforms?																				0	5
	2100.15	Is the vessel equipped with the multi constellation GNSS receiver?																				0	10
	2100.16	Is the vessel equipped with the eLoran receiver?																				0	10
	2100.17	Is the position for all stages of voyage compared with a different method of positioning than GPS?																				0	20
				Total score																			
				Minimum ranking score required for element 2100 = 40																			
	2110	Electronic chart display & information systems / ECDIS																					
		Only applicable to ships for which implementation date is still in the future and which do NOT use ECDIS as primary means of navigation																					
	2110.1	Is the ship equipped with ECDIS (type approved, using only official ENC's, and/or RNC's, master & all navigating officers shall have completed generic training & have been familiarized with ECDIS unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?																			na	0	0
	2110.2	Are master & all navigating officers part of the introduction programme for usage of ECDIS?																			na	0	0
				Total score																			
				Minimum ranking score required for element 2110 = 0																			


CHECKLIST - RANKING CRITERIA - SHIP SURVEY - BULK CARRIER - VERSION 2022																								
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2111	Electronic chart display & information systems / ECDIS																							
	Applicable to ships for which carriage of ECDIS is compulsory and Bulk Carriers which choose to use ECDIS as primary means of navigation on voluntary basis																							
2111.4	Is ECDIS hardware maintained and software updated?																					0	5	
2111.5	Is ECDIS tested according to the IHO ECDIS data presentation and performance check with a use of test data set after every update of the software (including back up)?																					0	5	
2111.6	Is the crew regardless of the generic training familiarized with the ECDIS unit(s) installed onboard according to the Industry Recommendations for ECDIS Familiarisation?																					0	15	
2111.7	Have all the officers completed structured ECDIS training(s) on top of the generic training (besides the familiarization onboard in R2111.6)?																					0	5	
2111.10	Does the voyage planning include checking if all needed charts are up-to-date (latest edition official chart updated and corrected to the latest available updates and NtM)?																					0	5	
2111.11	Does the ECDIS procedure suggest display settings (layers) of ECDIS for various navigation conditions (arrival / departure - coastal - deep sea)?																					0	10	
2111.12	Does the vessel have a basic folio of paper charts (in case second ECDIS is a back up system)?																					0	10	
					Total score																	0	55	
					Minimum ranking score required for element 2111 = 30																			
2120	Fuel Change Over / Ballast Water Exchange																							
2120.1	Does the voyage plan (checklist) include when fuel change over <u>should</u> be carried out?																					0	10	
2120.2	Does the voyage plan (checklist) include when ballast water exchange <u>can</u> be carried out?																					0	10	
					Total score																	0	20	
					Minimum ranking score required for element 2120 = 20																			
2200	Helicopter / Ship Operations																							
2200.1	Are crew members who are involved in helicopter/ship operations trained in standards and procedures?																					0	10	
2200.2	Is an action plan in case of a helicopter accident available?																					0	10	
					Total score																	0	20	
					Minimum ranking score required for element 2200 = 20																			
2300	Mooring Operations																							
2300.1	Does the company give procedures/instructions for mooring/unmooring operations?																					0	10	
2300.2	Is new crew familiar with the operation and capabilities of the ship's mooring equipment?																					0	10	
2300.3	Are specific mooring plans, which have been used at certain terminals, recorded?																					0	20	
2300.4	Is a drawing of the mooring arrangement readily available on the bridge?																					0	10	
					Total score																	0	50	
					Minimum ranking score required for element 2300 = 30																			


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3000	MACHINERY / ENGINE OPERATIONS																						
3100	Bunker Operations																						
3100.1	Does the company MS specify a safe-maximum percentage fill for bunker tanks? (max. limit 95%)																						
3100.2	Is a checklist used for bunker operations (company format) ?																						
3100.3	Does the bunker procedure include a bunker plan (company format) ?																						
3100.4	Are there procedures/instructions for the internal transfer of fuel oil between main storage tanks?																						
3100.5	Is there an instruction that all persons involved are to be familiar with the intended bunker operation and/or internal transfer operation and their duties?																						
																					Total score	0	50
																					Minimum ranking score required for element 3100 = 50		
3101	Bunker Operations - LNG																						
3101.1	Is the ship mandated to use only a relevant IAPH LNG bunkering checklist - either by company SMS or by instructions from charterer / port authority?																						
3101.2	Do shipboard personnel make use of LNG specific PPEs such as protective cryogenic gloves and safety goggles with side protection during LNG bunkering operations?																						
3101.3	Are ship's LNG bunker stations equipped with CCTV for the purpose of observing the bunkering operation from the bridge or operation control room?																						
3101.4	Does a designated shipboard personnel provide a dedicated watch (from a safe location) on bunker station during the entire duration of the LNG bunkering?																						
3101.5	Does the ship use thermal imaging camera/equipment for leakage detection of LNG during bunkering?																						
3101.6	Have relevant shipboard personnel completed a shore-based training on LNG bunkering?																						
																					Total score	0	50
																					Minimum ranking score required for element 3101 = 25		

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	3200	Fuel oil management																						
		B. Sampling & Testing																						
		B.1 MARPOL delivered fuel oil sampling																						
	3200.11	Is all fuel oil sampling (during bunkering) carried out using an automatic sampler (time or flow proportional) in accordance with MARPOL Annex VI?																				0	10	
		B.2 In-use fuel oil sampling																						
	3200.16	Are fuel oil samples drawn from the following designated sampling points at least once every four months for testing of catalytic fines & separator efficiency at a recognized fuel analysis organization ashore? 1. at engine inlet 2. before separator 3. after separator																				0	10	
		B.3 Testing																						
	3200.1	Is bunkered fuel oil <u>always</u> tested (before use onboard) by a recognized fuel analysis organization ashore in accordance with the requirements of ISO 8217 standard?																				0	40	
		C. Operational procedures																						
	3200.17	Is the commingling of two different bunkers (even of the same grade of fuel) prohibited?																				0	10	
	3200.18	For the situations where commingling of two different fuels is unavoidable, does the relevant ship crew implement the company prescribed <u>commingling procedure</u> to determine the compatibility of two bunkers (including the reference test methods)?																				0	5	
		D. Additional questions																						
	3200.19	Are the copies of valid certificate of quality (COQ) and associated laboratory analysis reports for the recently bunkered fuel oil available on board?																				0	5	
																						0	80	
	3300	On-shore Power Supply																						
	3300.1	Is the vessel fitted with On-shore Power Supply equipment?																				0	20	
	3300.2	Is the crew familiarised with the operation and safety aspects of On-shore Power Supply?																				0	5	
																						0	25	


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	4000	CARGO OPERATIONS																						
	4500	Hull Stress Monitoring System																						
	4500.1	Does the vessel have a hull stress monitoring system which provides real-time information with readouts both in the CCR and on the bridge?																				0	20	
			Total score																			0	20	
			Minimum ranking score required for element 4500 = 0																					
	4601	Preparation of loading / unloading plan																						
	4601.1	Does the company distribute relevant cargo instructions to the vessel? (e.g. is ship compatible for intended cargo)																				0	20	
	4601.2	Does the master receive clear instructions about identity of charterer with respect to reporting and consultation?																				0	10	
	4601.3	Does the shipbroker (or head office staff) contact the master to request his confirmation that a cargo can be safely carried and his calculations of the tonnage that the ship can carry between specified ports?																				0	20	
	4601.4	Is the ship provided with information about the terminal in order to plan the loading and unloading plan?																				0	10	
	4601.5	Has the master received the details of the nature of the cargo from the shipper of the intended cargo?																				0	10	
	4601.6	Is the master provided with information on the strength of the hull girder system for representative scenarios of loading and discharging of intended loading conditions?																				0	20	
			Total score																			0	90	
			Minimum ranking score required for element 4601 = 70																					
	4602	Cargo handling and operations																						
	4602.1	Is it company procedure that the ship shore safety checklist for loading or unloading dry bulk cargo carriers (MSC/Circ. 690) has to be used before loading/unloading operations?																				0	20	
	4602.2	Does the company give procedures/instructions in relation to the entire cargo operations?																				0	20	
	4602.3	Is ship's stability and loading information readily available, accurate and easy for the officers to use?																				0	10	
	4602.4	Is the ship's officer in charge informed about remaining amount of cargo on the conveyor belt that must be loaded after a "STOP" ?																				0	10	
	4602.5	Is the ship's officer in charge provided with loaded cargo weight at frequent intervals & at the end of each pour?																				0	10	
	4602.6	Has the master received a written cargo declaration, before commencement of loading?																				0	10	
	4602.7	Does the company give procedures / instructions for handling of stevedores' damage?																				0	10	
	4602.8	Is damage to the hatch covers, hatch coamings and associated fastenings directly reported with a written notice? (in order to make the person who caused the damage more careful in avoiding further damage)																				0	20	
	4602.9	Is an effective deck watch in attendance on deck during cargo operations?																				0	10	
	4602.10	Does the master have readily accessible information on the total quantity loaded, as well as the quantities per hour?																				0	10	
	4602.11	Is a working procedure available with regard to deviations in the loading / unloading plan?																				0	20	
	4602.12	Are hatch identification numbers clearly visible to the operator of the loading or unloading equipment? (e.g. location, size and colour)																				0	10	
	4602.13	Is it company policy that cargo which is liable to stick between frames is removed on time? (e.g. in order to prevent damage caused by pneumatic hammers, bulldozers etc.)																				0	10	
			Total score																			0	170	
			Minimum ranking score required for element 4602 = 130																					

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4603	Safe work facilities during cargo operations				0	0	0										
4603.1	Are potentially hazardous objects or objects which are likely to be damaged during discharging, indicated? (e.g. adjacent fuel tanks, position and type of hold ladders, position of projecting pipes, steeply receding sloping sides)													0	10		
4603.2	Are stevedores informed about the potentially hazardous objects which are indicated?													0	10		
4603.3	Are opened hatches surrounded by a safe, sturdy rail with stanchions?													0	10		
4603.4	Is access to holds safe and well maintained? (e.g. fixed hold ladders on both sides, access to hold via enclosed shafts free of harmful gasses and with adequate ventilation, access shafts must have adequate sufficient illumination)													0	10		
4603.5	Is sufficient lighting in hold working area available?													0	10		
					Total score								0	50			
					Minimum ranking score required for element 4603 = 50												
4604	Communication during cargo operations, GA requirement for all cargoes				0	0	0										
4604.1	Is the terminal representative made aware of the loading / unloading plan?													0	10		
4604.2	Is the terminal's representative made aware of the requirements for harmonisation between deballasting and cargo loading rates for his ship? (e.g. times at which loading may need to be suspended, etc.)													0	10		
4604.3	Are names and procedures readily available for contacting the terminal personnel or shipper's agent who have responsibility for the loading or unloading operation and with whom the master will have contact?													0	10		
4604.4	Are communication arrangements between ship and terminal capable of responding to requests for information on the loading/unloading process and prompt compliance in the event that the master orders loading/unloading to be suspended?													0	10		
					Total score								0	40			
					Minimum ranking score required for element 4604 = 40												
4605	Inspections during cargo operations				0	0	0		0								
4605.1	Are inspections of cargo holds conducted before all loading and after all unloading operations?													0	20		
4605.2	Are inspections of the cargo done in way of the hatch coaming immediately upon opening the hatches at the end of a sea voyage?													0	10		
4605.3	Is any detected damage (after completion of unloading) recorded and is this agreed on by the terminal?													0	20		
4605.4	Are damages to frames, brackets and plating recorded so that new damage can be detected? (cover plates for manholes or grating for bilge wells are not missing?)													0	20		
					Total score								0	70			
					Minimum ranking score required for element 4605 = 40												


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	4606	Safety precautions during cargo operations				0		0																
	4606.1	Does the company provide instructions / procedures to control the access of unauthorised persons on board?																				0	20	
	4606.2	Are there procedures to ensure that a sufficient number of personnel is available in case of emergency during port stay?																				0	10	
	4606.4	Is a terminal emergency plan available on board? (Deck office)																				0	10	
						Total score																0	40	
						Minimum ranking score required for element 4606 = 20																		
	4800	Cargo Operations, Additional Green Award requirements						0																
	4800.1	Are list indication lights fitted and are these tested prior to loading or unloading and proved operational?																				0	10	
	4800.2	Is vessel equipped with an approved electronic system for measuring the draught with remote readouts?																				0	10	
	4800.3	Is the measuring system for bunker and ballast tanks on line with the loadicator?																				0	10	
	4800.4	Is a cargo drain tank installed? (e.g. drainage of cargo moisture, calculation of cargo weight)																				0	30	
	4800.5	Is the cargo drain tank provided with an approved filter system between tank and sea valve? (e.g. to prevent pumping overboard of cargo residues during stay in ports)																				0	10	
						Total score																0	70	
						Minimum ranking score required for element 4800 = 0																		


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	5000	PREVENTION OF POLLUTION																				
	5100	Biofouling Management																				
N	5100.5	Are there ship-specific procedures/instructions (according to IMO guidelines) for the control and management of ship's biofouling to minimize the transfer of invasive aquatic species?																			0	10
N	5100.6	Does the ship undergo in-water inspections and proactive hull cleanings as per the frequency and timing defined in consultation with coatings manufacturer and/or coatings consultant?																			0	5
N	5100.7	Does the ship communicate to the office data points that are pre-defined as indicators for reactive hull cleaning (For example, based on performance monitoring or other relevant datasets such as increased drag or increased friction)?																			0	5
N	5100.9	Is the vessel's hull coated with non-toxic hard coating to mitigate bio-fouling?																			0	10
				Total score																	0	30
				Minimum ranking score required for element 5100 = 5																		


[illegible]

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	5410	NOx Emissions																													
		A. Emission Monitoring																													
	5410.10	Does the ship use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording NOx emissions?																											0		10
		B. Emission Reduction																													
		For ships keel laid between 01-01-2000 and 31-12-2010 (Tier I mandatory ships)																													
	5410.11	Does the ship reach the NOx tier 2 limits on the <u>main engines</u> ?																											0		10
	5410.12	Does the ship reach the NOx tier 2 limits on the <u>auxiliary engines</u> ?																											0		10
		For ships keel laid on / after 01-01-2011 (5410.13 - 5410.18)																													
	5410.13	Does the ship reach NOx emissions 15% below the tier 2 limits on their <u>main engine</u> ?																											0		5
	5410.15	ALTERNATIVE 1 to 5410.13 Does the ship reach NOx emissions 30% below the tier 2 limits on their <u>main engine</u> ?																											0		10
	5410.17	ALTERNATIVE 2 to 5410.13 Does the ship reach NOx emissions 50% below the tier 2 limits on their <u>main engine</u> ?																											0		15
	5410.14	Does the ship reach NOx emissions 15% below the tier 2 limits on their <u>auxiliary engine</u> ?																											0		5
	5410.16	ALTERNATIVE 1 to 5410.14 Does the ship reach NOx emissions 30% below the tier 2 limits on their <u>auxiliary engine</u> ?																											0		10
	5410.18	ALTERNATIVE 2 to 5410.14 Does the ship reach NOx emissions 50% below the tier 2 limits on their <u>auxiliary engine</u> ?																											0		15
		For ALL ships (5410.19)																													
	5410.19	Do all the ship's engines (main and auxiliary) ALWAYS operate at NOx Tier 3 levels in all ports and contiguous zones (24 nm from the nearest land)?																											0		30
		C. Additional Questions																													
		Exhaust Gas Recirculation (EGR)																													
	5410.22	Does the ship communicate negative test results from the continuous monitoring of exhaust gas recirculation bleed-off discharge water to the company? * The guidelines set out in MEPC.259 (68) are applicable to EGR bleed-off discharge water as well.																											0		10
	5410.23	Is the treated wash water discharged from the EGR unit as bleed-off water collected for sampling periodically and communicated communication made to the company for the below parameters? 1. Heavy metals 2. Wash water additives. *Above two values are on top of the mandatory monitoring of pH, PAH, turbidity values set by IMO.																											0		15
	5410.24	Is appropriate PPE being used by the crew during the handling of caustic soda which is used as an additive for EGR?																											0		5
		Selective Catalytic Reduction (SCR)																													
	5410.26	Does the shipboard crew monitor the catalyst condition continuously to make sure injected urea is fully utilized to avoid ammonia slip?																											0		20
													Total score											0		140					
													Minimum ranking score required for element 5410 = 35																		


[illegible]

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	5421	Ships required to carry out Fuel Change Over to low sulphur Marine Diesel Oil or low sulphur Marine Gas Oil (low sulphur Distillates)																				
	5421.1	Has the company carried out a safety assessment with respective manufacturers, for any necessary modifications to the vessel's boilers & each fuel system onboard? (modifications should be class approved)																			0	20
	5421.2	Are updated fuel change over procedures (company-approved) available for the main engine, auxiliary engines & boilers? (procedures should be available for each fuel type used onboard)																			0	10
	5421.3	Are crew familiarised with updated fuel change over procedures?																			0	10
	5421.4	If modifications to fuel system are required, are updated detailed fuel system diagrams for fuel change over available?																			0	10
	5421.5	Is an additional inspection carried out according to documented instructions, to check for leakages during distillate fuel operation ?																			0	10
	5421.6	Is there an agreed procedure to manage related problem areas? (e.g. spares, maintenance due wear & tear)																			0	10
	5421.7	For cases where the vessel must use low sulphur fuel for a prolonged period Are there instructions from the engine manufacturer, for use of appropriate (cylinder) lube oil for main & auxiliary engines?																			0	5
				Total score																	0	75
				Minimum ranking score required for element 5421 = 55																		
	5430	Particulate Matter (PM) Emissions																				
	5430.7	Does the ship have a Diesel Particulate Filter (DPF) for both main and auxiliary engines?																			0	10
	5430.8	Does the ship have a Diesel Oxidation Catalyst (DOC) for both main and auxiliary engines?																			0	10
	5430.9	Does the ship have an Electrostatic Precipitator (ESP) for both main and auxiliary engines?																			0	10
				Total score																	0	30
				Minimum ranking score required for element 5430 = 0																		


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	5440	Greenhouse Gas (GHG) Emissions - CO₂ Emissions																					
		A. Emission Monitoring																					
	5440.10	Does the ship use flow meters for monitoring and recording of fuel consumption? (Flow meter is to be calibrated and certified by for example a classification society)																				0	10
	5440.11	Applicable to ships contracted for building on or after 1st January 2013, or delivered on or after 1st July 2015: Is the "attained EEDI" data for the ship available onboard?																				0	5
		Attained EEDI of the ship =																					
	5440.14	Does the ship use a ship performance monitoring software to monitor and reduce energy consumption by operational measures on-board?																				0	5
		B. Emission Reduction																					
		Short term goals (CO₂ reduction through energy efficiency measures)																					
	5440.15	(Design and operational based measures) Energy efficiency measures implemented on-board the vessel?																				0	20
		For ease of use, measures are grouped according to the GLOMEEP Energy efficiency technologies information portal.				If YES, choose from below options and fill-in supplement CO₂ - GloMEEP tab																	
		Measures related to Machinery																					
		Measures related to Propulsion and Hull Improvements																					
		Measures related to Energy Consumers																					
		Measures related to Energy Recovery																					
		Measures related to Technical Solutions for optimizing the operations																					


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		Mid term goals (CO ₂ reduction through the use of low carbon fuels)																					
	5440.18	Main engines: Does the ship burn low carbon fuels such as:																				0	15
		Low carbon fuels				If YES, choose from below options																	
		LNG (Liquefied Natural Gas)																					
		LPG (Liquefied Petroleum Gas)																					
		GTL (Gas to liquid fuel)																					
		Bio-diesel																					
		Bio-LNG (Bio-methane)																					
		Methanol																					
		Ethanol																					
		Dimethyl Ether																					
		Other: *fill during survey*																					
		If Other=																					
	5440.19	Auxiliary engines: Does the ship burn low carbon fuels such as:																				0	15
		Low carbon fuels				If YES, choose from below options																	
		LNG (Liquefied Natural Gas)																					
		LPG (Liquefied Petroleum Gas)																					
		GTL (Gas to liquid fuel)																					
		Bio-diesel																					
		Bio-LNG (Bio-methane)																					
		Methanol																					
		Ethanol																					
		Dimethyl Ether																					
		Other: *fill during survey*																					
		If Other=																					

5440.20	Main engines: Does the ship use zero carbon fuels such as:											0	25
	Zero carbon fuels	If YES, choose from below options											
	Anhydrous Ammonia												
	Hydrogen												
	Fuel Cells (Powered by ammonia or hydrogen)												
	Batteries												
	Nuclear												
	Other: *fill during survey*												
	If Other=												
5440.21	Auxiliary engines: Does the ship use zero carbon fuels such as:											0	25
	Zero carbon fuels	If YES, choose from below options											
	Anhydrous Ammonia												
	Hydrogen												
	Fuel Cells (Powered by ammonia or hydrogen)												
	Batteries												
	Nuclear												
	Other: *fill during survey*												
	If Other=												
5440.22	Does the ship use renewable energy sources for energy production such as:											0	25
	Renewable Energy source	If YES, choose from below options											
	Wind: *fill during survey*												
	Solar												
	Other: *fill during survey*												
	Wind=												
	If Other=												
	C. Additional Questions												
5440.23	Have shipboard personnel received training for energy efficiency measures and related monitoring systems on board?											0	10
		Total score										0	155
		Minimum ranking score required for element 5440 = 15											


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5441	Greenhouse Gas (GHG) Emissions - Methane (CH ₄) Emissions - Main Propulsion																						
	B. Emission Reduction																						
	Alternative 1 - Gas Turbine or High Pressure Dual Fuel Engine																						
5441.2	Is the ship powered by low (or no) Methane Slip technology, for example, Gas Turbine or High Pressure Dual Fuel (HPDF) Engine?																				0	20	
	Alternative 2 - Other Engine Types																						
5441.3	Has the ship achieved annual reduction in Methane Slip on its LNG-fuelled engines?																				0	10	
	A. Emission Monitoring																						
5441.1	Does the ship use a continuous emission monitoring system (in-situ or extractive) for monitoring and recording Methane Slip?																				0	10	
	C. Additional questions																						
5441.4	Have shipboard personnel received awareness training on methane emissions from LNG-fuelled engines?																				0	5	
																					0	35	
5460	Environmental Ship Index (ESI)												0										
5460.2	Does the ship participate in the Environmental Ship Index (ESI) and are ESI points above 30?																				0	20	
5460.3	Does the ship participate in the Environmental Ship Index (ESI) and are ESI points above 40?																				0	20	
5460.4	Does the ship participate in the Environmental Ship Index (ESI) and are ESI points above 50?																				0	20	
																					0	60	
5500	Sewage Management																						
	Sewage Treatment Plant																						
5500.1	Is the sewage treated with a sewage treatment plant which uses minimal or no harmful chemicals?																				0	10	
5500.2	Are samples of treated discharged effluent from the sewage treatment plant collected periodically (at least annually) for lab testing ashore to check the compliance with relevant MEPC standards?																				0	10	
5500.3	Is the ship in possession of the periodical sample testing report/certificate from a laboratory ashore confirming the compliance with the relevant MEPC standards?																				0	10	
5500.8	Is the sewage treatment plant regularly checked and maintained as per manufacturer's guidelines?																				0	5	
	For all ships: Sewage Holding Tank																						
5500.7	Is the sewage holding tank regularly checked and maintained?																				0	20	
																					0	55	
5510	Grey Water Management																						
5510.1	Is the sewage treatment plant capable of treating grey water before being discharged?																				0	15	
5510.2	Is the grey water never discharged within the coastal and port areas?																				0	10	
																					0	25	


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	5800	Accidental Bunker Oil Pollution Prevention Measures (overflow prevention systems)											0											
	5800.5	Are <u>all</u> fuel oil bunker tanks fitted with a high-high level alarm?																				0	15	
	5800.6	Are <u>all</u> fuel oil bunker tanks fitted with an overflow line that is connected to an overflow tank?																				0	5	
	5800.7	Are overflow lines of <u>all</u> fuel oil bunker tanks arranged with a flow alarm?																				0	5	
	5800.8	Are high level alarms and/or (over) flow alarms given on the location where the person in charge of the bunkering or transfer operation will normally be located?																				0	5	
						Total score																0	30	
						Minimum ranking score required for element 5800 = 5																		
	5801	Protection of fuel oil tanks, lube oil tanks and hull											0											
	5801.1	Are any tanks intended for fuel-oil or other substances, with a minimum capacity of 20m³, constructed at least B/15 or 2 metres above the keel level ?																				0	10	
	5801.2	Are tanks for fuel oil protected by a double side ? (for ships below 20,000gt, width of double side to be at least 0.76m ; for 20,000gt and above, width to be at least 2 metres)																				0	40	
	5801.3	Are all lubrication oil tanks constructed at least 0.76 metres above the keel line ?																				0	20	
	5801.4	Is the ship's hull and/or fuel tanks are built of advanced shipbuilding plates (highly ductile steel) or structural features (for example, sandwich plate structure)?																			0	30		
						Total score																0	100	
						Minimum ranking score required for element 5801 = 20																		


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		Lubrication and Use of Oils (Element nr.: 5810, 5811 & 5812)																					
	5810	Stern tube lubrication																					
	5810.1	Is the vessel fitted with a class approved stern tube <u>water</u> lubricated system which uses <u>sea water</u> as a lubricant? (system includes water conditioning and monitoring equipment)																					
	5810.6	Alternative for 5810.1, 5810.3, 5810.4 and 5810.5 Is the vessel fitted with a class approved stern tube water lubricated system which uses <u>fresh water</u> as a lubricant? (system includes water conditioning and monitoring equipment) *Additives used to maintain the condition of the water should be environmentally friendly.																					
	5810.3	Alternative for 5810.1 and 5810.6: Is the vessel fitted with a class approved stern tube lubrication system with an <u>air type</u> or <u>void space seal</u> ?																					
	5810.4	Alternative for 5810.1 and 5810.6: Does the vessel use a stern tube lubricant that is certified according to the EAL/EEL or equivalent?																					
	5810.5	Alternative for 5810.1 and 5810.6: Is the crew aware of characteristics of the environmentally friendly stern tube lubricant (EAL/EEL certified or equivalent) with respect to maintenance & its effect on the system if needed? (e.g. condition of seals & filters, temperature & condition of oil etc.)																					
		Total score																				0	60
		Minimum ranking score required for element 5810 = 15																					
	5811	Mooring wire lubrication																					
	5811.1	Does the vessel use a mooring wire lubricant / grease that is certified according to the EEL?																					
		Total score																				0	20
		Minimum ranking score required for element 5811 = 0																					
	5812	Deck equipment lubrication (use of oils)																					
	5812.1	Does the vessel use grease that is certified according to the EEL (all deck equipment)?																					
	5812.2	Does the vessel use gear oil that is certified according to the EEL (all deck equipment)?																					
	5812.3	Does the vessel use hydraulic oil that is certified according to the EEL in mooring and anchor appliances?																					
	5812.4	Does the vessel use hydraulic oil that is certified according to the EEL in crane appliances?																					
	5812.5	Does the vessel use hydraulic oil that is certified according to the EEL in hatch closing system?																					
	5812.6	Is the crew aware of characteristics of environmentally friendly lubricants (EEL certified) with respect to maintenance & their effect on the applicable system if needed? (e.g. condition of seals & filters, temperature & condition of oil, prevention of humidity ingress etc.)																					
		Total score																				0	65
		Minimum ranking score required for element 5812 = 0																					
	5820	Management of bilge water and sludge handling onboard																					
	5820.3	Are engine room personnel familiarized with on board sludge and bilge water management procedures?																					
	5820.4	Are engine room personnel familiar with the system layout, drawings and manuals?																					
		Total score																				0	15
		Minimum ranking score required for element 5820 = 15																					


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5822	Outfitting of sludge handling system						0		0		0		0		0							0	5	
5822.1	Is a sludge collecting pump installed (with the sole purpose of collecting the sludge from different ER tanks to the Oil Residue (Sludge) Tank)?																					0	5	
5822.2	Is a sludge discharge pump installed with the purpose of discharging the sludge to reception facilities (with sufficient capacity to discharge the sludge within 8 hrs)																					0	5	
5822.8	Is a tank or system installed with the sole purpose of removing large quantities of water from the sludge?																					0	5	
5822.9	Is a separate tank or system installed with the sole purpose of evaporating water from the sludge?																					0	5	
5822.10	Is a separate tank or system installed with the purpose of mixing the sludge while incinerated (in incinerator or boiler)																					0	5	
5822.6	Alternative to 5822.8 - 5822.10 Is all the ship sludge always delivered to reception facilities?																					0	20	
			Total score																		0	30		
			Minimum ranking score required for element 5822 = 10																					
5900	Ship Recycling - Inventory of Hazardous Materials		0		0								0		0									
5900.10	Does the vessel have an "Inventory of Hazardous Materials" (Part I completed)?																					0	110	
5900.13	Alternative to 5900.10: Has the process been started to prepare Part I of the "Inventory of Hazardous Materials" with a target completion date?																					0	40	
			Total score																		0	110		
			Minimum ranking score required for element 5900 = 40																					


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	6000	MAINTENANCE / SURVEYS																						
	6100	Programme of Inspections & Cargo Hold Inspection / Maintenance																						
	6100.1	Does the ship have an internal technical inspection programme?																				0	10	
	6100.2	Are relevant previous survey and internal technical inspection reports available on board?																				0	10	
	6100.3	Does the ship have a repair history?																				0	10	
	6100.4	Does the company issue procedures/instructions for hull / ship's construction condition inspections to be carried out by the ship's personnel?																				0	20	
			Total score																			0	50	
			Minimum ranking score required for element 6100 = 50																					
	6110	Critical and Stand-by Equipment																						
	6110.5	Is a Computer Based Program installed to register failures, break downs and near misses in order to have a constant event report on the systems?																				0	10	
	6110.7	Is a Computer Based Program installed for spare parts management of critical equipment and stand- by equipment?																				0	10	
	6110.8	Is a safety stock available for critical equipment and stand-by equipment?																				0	10	
			Total score																			0	30	
			Minimum ranking score required for element 6110 = 10																					
	6200	Mooring Equipment																						
	6200.1	Are winch brake tests carried out and recorded at least once a year or after an excessive load?																				0	10	
	6200.2	Is a winch brake test kit on board?																				0	5	
	6200.3	Is an overview available with all details of mooring wires / fibre ropes, winches, inspections, maintenance, tests etc?																				0	10	
	6200.4	Is the ship provided with information on the design of the mooring system? (with examples to show the loads likely to be experienced under particular conditions and to illustrate those situations under which the limit of the system is likely to be reached)																				0	10	
	6200.5	Are inspection, maintenance and discard criteria for mooring wires and tails / fibre ropes established and carried out by a competent person? (time interval for inspection should be in the PMS)																				0	10	
	6200.8	Do these criteria take manufacturer's recommendations into account ?																				0	10	
	6200.9	Does an additional examination take place after unusual events, such as long periods of inactivity, excessive loads, heat exposure, loading/discharge at swell ports, etc?																				0	5	
	6200.10	Are internal inspections for wires + fibre ropes carried out & do these inspections take manufacturer's recommendations into account?																				0	10	
	6200.11	Are the lubricants & cleaning products compatible with the wire and approved by the wire manufacturer?																				0	5	
	6200.6	Is a log for "workingdays" of mooring wires and tails / fibre ropes maintained? (to predict the point of discard & for evaluation of wire/rope performance)																				0	10	
	6200.7	Is an automatic wire rope lubricator in use on board?																				0	10	
	6200.12	Alternative for 6200.7 : (for fibre ropes) Are there procedures for care of fibre ropes?																				0	10	
			Total score																			0	95	
			Minimum ranking score required for element 6200 = 65																					


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6300	Corrosion Prevention of Seawater Ballast Tanks																							
6300.1	Are ballast tanks of double-hulled vessel, coated with a hard coating of a light colour?																					0	20	
6300.6	Alternative to 6300.1 Are ballast tanks coated with dark epoxy maintained with a modified epoxy coating of a light colour, after safety benefit assessment is carried out?																					0	10	
6300.7	Is the coating approved according to the IMO performance standard? (type approval or statement of compliance according to Res. MSC 215(82) in Coating Technical File)																					0	20	
6300.2	Are ballast tanks maintained in a good condition?																					0	20	
6300.3	Are manufacturer's technical product data sheets and job specifications of the coatings on board?																					0	5	
6300.5	Is the corrosion prevention system, other than coating, included in the maintenance system?																					0	5	
																						0	70	
																						0	70	
																						0	70	
6400	Condition Assessment Program, Maintenance Additional Green Award requirements																							
6400.1	Does the ship hold a CAP rating for <u>Hull</u> with Rating / Grade 2 as a minimum? (When the vessel reaches <u>15 years</u> of age, or by the <u>end of the 3rd special survey</u> , whichever is earlier.)																					0	25	
6400.8	Does the ship hold a CAP rating for <u>Cargo Systems</u> with Rating / Grade 2 as a minimum? (When the vessel reaches <u>15 years</u> of age, or by the end of the <u>3rd special survey</u> , whichever is earlier.)																					0	20	
6400.9	Does the ship hold a CAP rating for <u>Machinery</u> with Rating / Grade 2 as a minimum? (When the vessel reaches <u>15 years</u> of age, or by the <u>end of the 3rd special survey</u> , whichever is earlier.)																					0	20	
6400.2	(Alternative to 6400.1, 6400.8 and 6400.9 above) Is the ship less than 15 years of age or has not reached the end of the 3rd special survey yet?																					0	25	
6400.3	Is it company policy that maintenance meetings are carried out on board? (e.g. each month and at (all) sections on board)																					0	10	
6400.4	Is a maintenance checklist used regarding the (monthly) maintenance inspection?																					0	10	
6400.5	Is an evaluation report of vessel's performance sent to the company?																					0	20	
6400.6	Is an annual technical report made by the Company's superintendent?																					0	15	
																						0	120	
																						0	120	
																						0	120	
6500	Certificates for Cargo Gear																							
6500.1	Is a register of cargo handling gear and lifting appliances issued? (CG1)																					0	10	
6500.2	Is a certificate of test and thorough examination of lifting appliances issued? (CG2)																					0	10	
6500.3	Is a certificate of test and thorough examination of loose gear issued? (CG3)																					0	10	
6500.4	Is a certificate of test and thorough examination of wire rope issued? (CG4)																					0	10	
																						0	40	
																						0	40	
																						0	40	
6600	Bulk Carrier Practice																							
6600.1	Are sufficient spare parts for hatch covers on board? (rubber gaskets, fittings, cleats etc.)																					0	20	
6600.2	Has the number of spare parts required increased as the ship grows older?																					0	20	
6600.3	Are hold bilges tested at appropriate intervals? (suction non-return valves, high level alarms, cleanliness of bilge wells)																					0	10	
6600.4	Is weathertightness of hatches tested at appropriate intervals? (e.g. hose test, chalk test, ultrasonic test, visual)																					0	10	
																						0	60	
																						0	60	
																						0	60	

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7000	CREW																							
7200	Extra personnel, Additional Green Award Requirement																							
7200.1	Are there extra deck officers onboard in addition to what is required by minimum safe manning document?																					0	10	
7200.7	Are there extra engine officers onboard in addition to what is required by minimum safe manning document?																					0	10	
7200.2	Are there extra deck ratings onboard in addition to what is required by minimum safe manning document?																					0	10	
7200.8	Are there extra engine ratings onboard in addition to what is required by minimum safe manning document?																					0	10	
7200.3	Is there a ship administrator onboard (In addition to the standard complement and extra deck-officers and -ratings above) ?																					0	10	
7200.6	Is there an electrical officer onboard in addition to the engine officers required by the safe manning document?																					0	10	
																						0	60	
																						0	60	
7300	Training / Courses for Personnel, Additional Green Award Requirements & IMO Model Courses																							
7300.4	Have the lower ranking deck officers completed advanced fire fighting (IMO2.03) ?																					0	5	
7300.18	Have the lower ranking engine officers completed advanced fire fighting (IMO2.03) ?																					0	5	
7300.5	Has the onboard management completed the onboard assessment/train the trainer course (IMO 1.30)?																					0	5	
7300.6	Have the officers involved in cargo and ballast handling completed a simulator based training/course ?																					0	10	
7300.7	Have the ship personnel completed "Marine Environmental Awareness" course (IMO 1.38)?																					0	5	
7300.8	Have all the deck officers completed bridge team management/bridge resource management training course (IMO 1.22) ?																					0	5	
7300.19	Have all the engine officers completed engine room resource management training course?																					0	5	
7300.20	Alternative to 7300.8 & 7300.19 Have all the officers completed maritime resource management course ?																					0	10	
7300.10	Is there a cadet currently onboard or has there been any in the last 6 months ?																					0	10	
7300.17	Have all the officers completed Security Awareness Training?																					0	5	
																						0	55	
																						0	55	









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	7400	Familiarisation, Additional Green Award Requirement				<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>		<input checked="" type="radio"/>					
	7400.1	Have all the ship board crew after a period of absence or leave has been provided with familiarization of changes with regard to the operations/machinery which is related to their position ?																				0	20	
	7400.2	Have all newly employed/engaged shipboard crew (first ship for that specific company) been provided with familiarization with regard to operations/machinery which is related to their position ?																				0	20	
	7400.10	In those cases when junior or senior officers are transferred to another class of ship that differ considerably from where their experience lie, is an onboard specific familiarisation with previous off-signing officers implemented for a specific minimum period?																				0	10	
	7400.4	Are the company format handover reports from all off - signing officers available onboard?																				0	10	
	7400.7	Are the on-signers aware of the content of the hand-over reports?																				0	10	
						Total score																0	70	
						Minimum ranking score required for element 7400 = 50																		
	7500	Safe Manning and Fatigue Management				<input checked="" type="radio"/>																		
		A. General - managing work/rest hours																						
	7500.1	Are work/rest hours performed by the individual seafarer recorded with the use of a software programme and the reports generated accessible for the office?																				0	5	
	7500.2	Is the master provided with instruction/procedure to monitor and address non compliance on STCW 2010 Manila amendments on work/rest hours onboard ?																				0	10	
		B. Fatigue management																						
RR	7500.5	Does the ship have fatigue mitigation and control strategy (or similar document) available within the Safety Management System (SMS) to ensure the health and well being of the seafarers?																				0	30	
RR	7500.9	Does the fatigue mitigation and control strategy consist of the following (both): - framework to assess the hazards associated with fatigue (hazard assessment) - strategies to mitigate the risk of fatigue (risk mitigation)																				0	15	
RR	7500.10	Does the Master implement the use of any one of the following fatigue management tools (as described in IMO MSC.1/Circ1598) by shipboard crew on board: - Sleep Diary - Self-monitoring through fatigue and sleepiness ratings - Fatigue self-assessment tool - Fatigue event reporting																				0	15	
		C. Additional questions - reporting, training & awareness																						
	7500.7	Does the ship have a procedure in which crew members are able to report to a designated person on fatigue related issues without fearing any action against them for such communication ?																				0	5	
	7500.11	Do all shipboard crew members undergo company fatigue management training and awareness campaigns on an initial and recurrent basis?																				0	5	
						Total score																0	85	
						Minimum ranking score required for element 7500 = 60																		

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	9000	REQUIREMENTS ACCORDING TO ISO Standards																					
	9421	ISO Certification																					
	9421.1	Is the ship certified for the latest edition of ISO 9001 (quality management systems)?																					
	9421.2	Is the ship certified for the latest edition of ISO 10015 (quality management – guidelines for competence management and people development)?																					
	9421.3	Is the ship certified for the latest edition of ISO 14001 (environmental management systems)?																					
	9421.4	Is the ship certified for the latest edition of ISO 22301 (societal security – business continuity management systems)?																					
	9421.5	Is the ship certified for the latest edition of ISO 27001 (information security management systems)?																					
	9421.6	Is the ship certified for the latest edition of ISO 30401 (knowledge management systems – requirements)?																					
	9421.7	Is the ship certified for the latest edition of ISO 45001 (occupational health and safety management systems)?																					
	9421.8	Is the ship certified for the latest edition of ISO 50001 (energy management systems)?																					
		Total score																					
		0																					
		80																					
		Minimum ranking score required for element 9421 = 0																					

CHECKLIST - RANKING CRITERIA - SURVEY - BULK CARRIER - VERSION 2022						
Norm item		TOTAL SCORE REVIEW SHIP SURVEY - BULK CARRIER	SHIP'S RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
1000	GENERAL					
1200	Enclosed Space Entry & Hot Work		0	70	70	
1300	Compressor for the refilling of air cylinders for breathing apparatus or alternative, Additional Green Award requirement		0	20	10	
1400	Control of drugs & alcohol onboard		0	35	20	
1500	Emergency Response System		0	30	10	
1510	Emergency Oil Recovery		0	10	0	
1600	Computer Systems, Networks, Data Security and Training		0	60	30	
1610	Cyber Risk Management		0	35	15	
1700	Noise and Vibration Management		0	50	15	
1710	Underwater Noise and Vibration Management		0	10	0	
1800	Social Dimension / Sustainability		0	50	10	
2000	NAVIGATION / BRIDGE OPERATIONS					
2100	Navigation		0	120	40	
2110	Electronic chart display & information systems / ECDIS		0	0	0	
2111	Electronic chart display & information systems / ECDIS		0	55	30	
2120	Fuel Change Over / Ballast Water Exchange		0	20	20	
2200	Helicopter / Ship Operations		0	20	20	
2300	Mooring Operations		0	50	30	
3000	MACHINERY / ENGINE OPERATIONS					
3100	Bunker Operations		0	50	50	
3101	Bunker Operations - LNG		0	50	25	
3200	Fuel oil management		0	80	40	
3300	On-shore Power Supply		0	25	0	
4000	CARGO OPERATIONS					
4500	Hull Stress Monitoring System		0	20	0	
4601	Preparation of loading / unloading plan		0	90	70	
4602	Cargo handling and operations		0	170	130	
4603	Safe work facilities during cargo operations		0	50	50	
4604	Communication during cargo operations, GA requirement for all cargoes		0	40	40	
4605	Inspections during cargo operations		0	70	40	
4606	Safety precautions during cargo operations		0	40	20	
4800	Cargo Operations, Additional Green Award requirements		0	70	0	
5000	PREVENTION OF POLLUTION					
5100	Biofouling Management		0	30	5	
5200	Waste Management / Garbage Handling Onboard		0	150	70	
5410	NOx Emissions		0	140	35	
5420	SOx Emissions		0	105	15	
5421	Ships required to carry out Fuel Change Over to low sulphur Marine Diesel Oil or low sulphur Marine Gas Oil (low sulphur Distillates)		0	75	55	
5430	Particulate Matter (PM) Emissions		0	30	0	
5440	Greenhouse Gas (GHG) Emissions - CO2 Emissions		0	155	15	
5441	Greenhouse Gas (GHG) Emissions - Methane (CH4) Emissions - Main Propulsion		0	35	0	

CHECKLIST - RANKING CRITERIA - SURVEY - BULK CARRIER - VERSION 2022						
Norm item		TOTAL SCORE REVIEW SHIP SURVEY - BULK CARRIER	SHIP'S RANKING SCORE	MAXIMUM OBTAINABLE RANKING SCORE	MINIMUM RANKING SCORE REQUIRED	ELEMENTS WITH NO MINIMUM SCORE
5460	Environmental Ship Index (ESI)		0	60	0	
5500	Sewage Management		0	55	20	
5510	Grey Water Management		0	25	0	
5700	Ballast Water Management (BWM)		0	85	50	
5800	Accidental Bunker Oil Pollution Prevention Measures (overflow prevention systems)		0	30	5	
5801	Protection of fuel oil tanks, lube oil tanks and hull		0	100	20	
5810	Stern tube lubrication		0	60	15	
5811	Mooring wire lubrication		0	20	0	
5812	Deck equipment lubrication (use of oils)		0	65	0	
5820	Management of bilge water and sludge handling onboard		0	15	15	
5821	Outfitting of bilge water system		0	70	20	
5822	Outfitting of sludge handling system		0	30	10	
5900	Ship Recycling - Inventory of Hazardous Materials		0	110	40	
6000	MAINTENANCE / SURVEYS					
6100	Programme of Inspections & Cargo Hold Inspection / Maintenance		0	50	50	
6110	Critical and Stand-by Equipment		0	30	10	
6200	Mooring Equipment		0	95	65	
6300	Corrosion Prevention of Seawater Ballast Tanks		0	70	40	
6400	Condition Assessment Program, Maintenance Additional Green Award requirements		0	120	60	
6500	Certificates for Cargo Gear		0	40	40	
6600	Bulk Carrier Practice		0	60	30	
7000	CREW					
7200	Extra personnel, Additional Green Award Requirement		0	60	20	
7300	Training / Courses for Personnel, Additional Green Award Requirements & IMO Model Courses		0	55	20	
7400	Familiarisation, Additional Green Award Requirement		0	70	50	
7500	Safe Manning and Fatigue Management		0	85	60	
9000	REQUIREMENTS ACCORDING TO ISO Standards					
9421	ISO Certification		0	80	0	
	TOTAL SCORES		0	3650	1620	

LEGEND

	Indicates which crew/employee may be interviewed/questioned.
	Shows that a certain item is complied.
	Shows that a certain item is <i>not</i> complied.
	Indicates that an alternative is used, hence the score for that item is a "0".
	The checklist was filled in incorrectly, thus shows "error".
	Indicates that the whole element did not reach the minimum score, hence a finding is issued. The number shows the scores obtained.
	Shows which elements are minimum = maximum. Hence scores on all items is required to fully comply.
	Indicates that the minimum score for the relevant element is "0", hence a finding will <i>not</i> be issued.

* for detailed interpretations of the colours and the usage of the checklist, please refer to the pdf-file named "Instruction Notes" located on www.greenaward.org under "Certification/ Download".

GA Code:

Ship name:

Date of Ship Survey:

SUPPLEMENT TO 5410 - NOx EMISSIONS

DATA FROM "SUPPLEMENT TO ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE -- RECORD OF CONSTRUCTION, TECHNICAL FILE, AND MEANS OF VERIFICATION"

Keel Laid (DD/MM/YYYY) (available on supplement to IAPP certificate)	
Vessel assigned to NOx Tier-3 ECA route (Y/N)	
Main propulsion type	DIESEL ENGINE
Electricity generation	DIESEL ENGINE
TIER	NA
Questions applicable (from 5410.11 - 5410.18)	NA

For DIESEL-ELECTRIC & DUAL FUEL (LNG / LPG) data, use "OTHER ENGINE" modules below

MAIN ENGINE 1	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

MAIN ENGINE 2	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

AUXILIARY ENGINE 1	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

AUXILIARY ENGINE 2	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

AUXILIARY ENGINE 3	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

AUXILIARY ENGINE 4	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

GA Code:

Ship name:

Date of Ship Survey:

SUPPLEMENT TO 5410 - NOx EMISSIONS

DATA FROM "SUPPLEMENT TO ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE -- RECORD OF CONSTRUCTION, TECHNICAL FILE, AND MEANS OF VERIFICATION"

Keel Laid (DD/MM/YYYY) (available on supplement to IAPP certificate)	
Vessel assigned to NOx Tier-3 ECA route (Y/N)	
Main propulsion type	DIESEL ENGINE
Electricity generation	DIESEL ENGINE
TIER	NA
Questions applicable (from 5410.11 - 5410.18)	NA

For DIESEL-ELECTRIC & DUAL FUEL (LNG / LPG) data, use "OTHER ENGINE" modules below

OTHER ENGINE	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

OTHER ENGINE	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

OTHER ENGINE	NA→		RPM	
		Tier 1	Tier 2	Tier 3
Applicable NOx emission limit (g/kWh)				
Engine's actual NOx emission value (g/kWh)				
Percentage reduction		NA	NA	NA
GA Compliance				

ENERGY EFFICIENCY TECHNOLOGIES INFORMATION PORTAL

TECHNOLOGY GROUPS

[IMO GLOMEEP Website](#)

GA Code:

Ship name:

Date of Ship Survey:

MACHINERY TECHNOLOGIES

This technology group includes measures that improve the energy efficiency of main and auxiliary engines. These include measures such as auxiliary systems optimization, optimizing heat exchangers, waste heat recovery systems, electronic auto-tuning, batteries and other solutions.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Auxiliary systems optimization	Optimizing auxiliary systems to actual operational profiles, not design conditions	Semi-mature	All vessels
	Engine de-rating	De-rating an engine for reduction of the vessel's maximum speed to increase its efficiency by limiting the potential power output	Semi-mature	Vessels sailing 10-15% slower than design speed
	Engine performance optimization (automatic)	Automatic increase of engine efficiency through testing and tuning according to actual operational load and conditions	Semi-mature	Mainly for two stroke engines
	Engine performance optimization (manual)	Manual increase of engine efficiency through testing and tuning according to actual operational load and conditions	Mature	All vessels
	Exhaust gas boilers on auxiliary engines	Exhaust gas boilers recover the heat from the exhaust gas of auxiliary engines to generate steam, hot water or heat for process heating	Semi-mature	Vessels without shaft generator
	Hybridization (plug-in or conventional)	Use of electricity to replace various modes of power consumption	Semi-mature	Vessels with large fluctuations in power output (ferries, offshore vessels, tugs)
	Improved auxiliary engine load	Increase of the auxiliary engines' load and efficiency by reducing the number of auxiliary engines running	Semi-mature	All vessels
	Shaft generator	Produce electricity from the main propulsion engine	Mature	All vessels with high power needs and long transits
	Shore power	Use of cold ironing in ports to reduce fuel consumption on power producing engines	Semi-mature	For smaller vessels and in ports with developed solutions for larger vessels
	Steam plant operation improvement	Improve operations and maintenance of steam plant system saving fuel on oil fired boiler	Mature	Mainly crude and product tankers
	Waste heat recovery systems	Recover thermal energy from the exhaust gas and convert it into electrical energy	Semi-mature	All vessels with engines above 10 MW

PROPULSION AND HULL IMPROVEMENTS

Technologies in this group focus on improving the hydrodynamic performance of the vessel. This includes solutions that reduce the resistance of the vessel and/or also improve the propulsive efficiency of the vessel. Examples include measures such as propeller polishing, hull cleaning, PIDs (Propulsion Improving Devices), air lubrication and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Air cavity lubrication	Use of air injection on the wetted hull surfaces to improve a ship's hydrodynamic performance	Semi-mature	Most vessels in deep sea trade
	Hull cleaning	Removal of fouling on the hull to increase the vessel's hydrodynamic performance	Mature	All vessels
	Hull coating	Reduction of the hull's resistance through water	Mature	All vessels
	Hull form optimization	Optimizing the hull for lower resistance through water	Mature	All vessels
	Hull retrofitting	Retrofitting of the bulbous bow, optimizing thruster tunnels or bilge keel to reduce resistance	Mature	All vessels
	Propeller polishing	Removal of fouling on the propeller	Mature	All vessels
	Propeller retrofitting	Retrofitting the propeller to increase efficiency	Semi-mature	All vessels
	Propulsion Improving Devices (PIDs)	Installation of propulsion improving devices	Mature	All vessels

ENERGY CONSUMERS

Consumers are equipment or devices that use energy when operated. Technologies in this group focus on minimizing the energy consumption by improving the device or optimizing the utilization of the device. Examples of measures in this group are frequency controllers, cargo handling systems, low energy lighting and more.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Cargo handling systems (Cargo discharge operation)	Reduction of energy consumption while discharging crude oil by use of model-based studies of the discharge operation	Semi-mature	Tankers
	Energy efficient lighting system	Use of energy efficient lighting equipment, such as LED light, to increase efficiency and remove heat loss from light devices	Mature	All vessels
	Frequency controlled electric motors	Regulating the frequency of the motors in order to adapt the motor optimized load	Mature	All vessels

ENERGY RECOVERY

Technologies in this group focus on capturing energy from the surroundings of the vessel and using or transforming this to useful energy for the vessel. This involves measures such as application of kites, fixed sails or wings, Flettner rotors, or solar panels.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Fixed sails or wings	Use sails or wings to replace some of the propulsion power needed	Not mature	Vessels with enough place on deck (general cargo, tankers, bulkers)
	Flettner rotors	Use Flettner rotors to generate power from wind energy	Not mature	Dependent on trading area and sufficient free deck-surface
	Kite	Use a kite to replace some of the propulsion power needed	Not mature	All vessels
	Solar panels	Install solar panels for conversion of solar energy to electricity	Not mature	Dependent on trading area and sufficient free deck-surface

TECHNICAL SOLUTIONS FOR OPTIMIZING OPERATION

Technologies in this group focus on improving the operation of the vessel more than improving the vessel itself. The list of suggested measures includes both technologies and suggestions for best practice (without direct application of a technology). Measures in this group include trim and draft optimization, speed management, autopilot adjustment and use, combinator optimizing, and others.

Y?	NAME	FUNCTION	TECHNICAL MATURITY*	APPLICABILITY
	Autopilot adjustment and use	Use of an automatic system to control the vessel's rudder in a more energy efficient manner	Mature	All vessels
	Combinator optimizing	Use of optimized pitch settings and propeller speed for optimized efficiency of propulsion system	Mature	For vessels with controllable pitch propeller
	Efficient DP Operation	Optimize the operation in DP mode	Semi-mature	Vessels with DP mode
	Speed management	Management of the vessel's speed in the most efficient manner	Semi-mature	All vessels
	Trim and draft optimization	Optimizing the trim and draft to reduce the vessel's water resistance	Semi-mature	All vessels
	Weather routing	Including weather conditions when planning a voyage	Mature	All vessels

Definitions of maturity levels according to uptake across the maritime industry, and degree of proven technology/principle

Mature	Proven, new or existing technology/principle, with high uptake across the industry.
Semi-mature	Proven, new or existing technology/principle, but with limited uptake across the industry.
Not mature	New unproven-, unproven existing-, or proven existing technology/principle but with very few installations and little to no operational experience.

*This Information Portal is still under development and further images will be added.

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APPENDIX 5


CHECKLIST - VISUAL INSPECTION - SURVEY - BULK CARRIER


(BMC-10)


Green Award Visual Inspection - Bulk Carrier				
Check Box	Norm item		Inspection Focus	Remarks
	10100	Machinery		
	10101	Reports		
	10101.1	Classification reports	Survey reports with recommendations and conditions of class, repairs	
	10101.2	State Authority reports	Survey reports, recommendations	
	10101.3	Company Reports	Inspection, repair, maintenance, planning, dry-dock reports by ship's staff and superintendents	
	10101.4	Inspection guidelines	Guidelines on the means of access to structures for inspection and maintenance of bulkers	
	10101.5	Other reports	Vetting reports by chartering companies and independent surveyors	
	10102	Engine Room		
	10102.1	Overall tidyness of E.R. space	Unsecured and loose material, tools and E.R. spare-parts	
	10102.2	General cleanliness of E.R.	Oil- & gas-free enviroment	
	10102.3	Storage E.R. equipment	Equipment stored at designated places	
	10102.4	Handling of general E.R. waste	General waste stored & handled properly	
	10102.5	Indication of E.R. emergency escapes	Clearly visible and not obstructed	
	10102.6	Save-alls	Oil, liquid and dirt free	
	10102.7	Workshop	Safety instructions near machinery (Grindstone, Lathe etc)	
	10103	Main Propulsion		
	10103.1	Exhaust gas lines	Leakage / condition of lagging, black spots and stripes / loose lagging	
	10103.2	Fuel lines H.P. & L.P.	H.P. pipes condition of protecting pipe/cover, L.P. pipes check leakage and heating tracings	
	10103.3	Cleanliness of cylinder heads	Fuel oil, cooling water, lub. Oil and exhaust gas leaks	
	10103.4	Instructions on emergency stand	Are there clear instructions available for changing over from normal to emergency conditions	
	10103.5	Condition of controllers / thermo couples & wiring	Loose wires, open doors of controllers	
	10103.6	Fuel oil system	Filters for leakage, purifiers cleanliness, area around purifiers	
	10103.7	Lub. Oil system	Filters and save-alls, purifiers condition	
	10103.8	Starting air system	Condition of starting air lines and valves	
	10103.9	Cooling water system	Condition of expansion bellows	
	10104	Auxiliary Engines		
	10104.1	General performance		
	10104.2	Leakage, condition of fuel oil, lub. oil lines	Cracks, corrosion and / or pipes connections not tight	
	10104.3	Auxiliary Engine bilge	Oil-, water-, corrosion- and dirt-free	
	10104.4	Emergency Generator	Condition and date last tested	
	10105	Boilers		
	10105.1	Steam or Thermal oil		
	10105.2	Condition of burner front	Oil leakage, and air leakage	
	10105.3	Lagging / isolation of fuel and steam lines	Condition of lagging	
	10105.4	Thermal Oil	Check possible leakages bellows / quick closing valves	
	10105.5	Boiler bilge / Save-all	Oil-, water-, corrosion- and dirt-free	


Green Award Visual Inspection - Bulk Carrier				
Check Box	Norm item		Inspection Focus	Remarks
	10100 Machinery			
	10106 Bilge System			
	10106.1	Cleanliness of bilges on every platform	Presence of oil, water, corrosion and / or dirt	
	10106.2	Bilge separator, position of all valves		
	10106.3	In port overboard valve sealed		
	10106.4	Condition and record regarding oily-bilge separator	Check Oil Record Book - Machinery Space Operations	
	10106.5	Bilge alarms	Alarms high level & high-high level in good condition	
	10106.6	Emergency Bilge Suction valve	Check condition / last time tested	
	10106.7	Double bottom sounding pipes	Check functioning self closing valves	
	10107 Ballast Pumps			
	10107.1	Condition of pumps	Check functioning of pumps	
	10107.2	Condition ballast-system	Functioning of all pumps combined	
	10107.3	Condition supports	Corrosion, cracks, deformation of pump-supports	
	10108 Piping Systems			
	10108.1	General condition	Check for leakage and / or temporary repairs	
	10108.2	Condition of piping supports	Check for corroded, broken and / or missing supports	
	10109 General Service Air Systems			
	10109.1	Condition of air and oil drains	Check good working	
	10109.2	Condition of pipe lines	Check for leakage and / or temporary repairs	
	10109.3	Condition of safety valves	Check free movement	
	10110 Chemicals			
	10110.1	Sufficient Personal Protecting Equipment available	Near storage place and users place	
	10110.2	Sufficient signboards available	Near storage place and users place	
	10110.3	Storage of chemicals according safety rules	According makers safety instructions	
	10111 Electrical			
	10111.1	Generator inspections during operation max. load		
	10111.2	Examination of cables without attachments	Cable supports bulkhead and deck penetrations	
	10111.3	Electrical equipments in acc. with danger zones	Zeners barriers etc.	
	10112 Inert Gas Plant (optional)			
	10112.1	Inert Gas system fully operational		
	10112.2	Condition of all instrumentation	Special O2 meter	
	10112.3	Condition of all alarms and trips	High and low level alarms etc.	
	10113 Sewage Plant			
	10113.1	Sewage Plant fully operational	Alarms, level switches etc.	
	10113.2	Position of valves correct	Check if the by-pass valves are closed	

Green Award Visual Inspection - Bulk Carrier


Check Box	Norm item		Inspection Focus	Remarks
	10100 Machinery			
	10114 Fire Pumps			
	10114.1	Position of firepump valves	Are instructions available for position of valves	
	10114.2	General check of emergency firepump	Position of Fuel valve, Content of fuel tank etc.	
	10114.3	Operating instructions of firepump and drive-unit	Clear instruction board available	
	10115 Emergency Electrical Stops			
	10115.1	Emergency stops of general service pumps	Last time tested	
	10115.2	Emergency stops of steering gear pumps	Last time tested	
	10115.3	Emergency stops of fans	Last time tested	
	10116 Quick Closing Valves			
	10116.1	Condition of closing valve station	Check for clear instructions	
	10116.2	Condition of closing valves E.R.	Check for obstructions or other objects	
	10117 Gauge Glasses			
	10117.1	Condition of gauge glasses closing valves	Check proper working and if they are normal closed	
	10117.2	Condition gauge glasses lub. oil tanks	Check proper working and if they are normal closed	
	10117.3	Condition gauge glasses chemical tanks	Check proper working and if they are normal closed	
	10117.4	Condition gauge glasses fuel tanks	Check proper working and if they are normal closed	
	10118 Ventilation			
	10118.1	Fire flaps in trunks engine room	Check markers open/close and proper working	
	10118.2	Fire flaps	Check proper working	
	10119 Exhaust gases of machinery			
	10119.1	Emission of main engines	Content NOX en SOX	
	10200 Steering Gear			
	10201 SOLAS requirements			
	10201.1	Steering gear unit complies with SOLAS		
	10201.2	Steering gear room complies with SOLAS		
	10201.3	Steering gear unit - and room cleanliness	Check for hydraulic leaks, presence of water and / or oil in drip-trays	
	10202 Change over procedures			
	10202.1	Emergency steering gear change over procedures	Signs posted with instructions for emergency change-over	
	10202.2	Procedures for emergency change-over visible	Clearly visible near controls of steering gear unit	
	10203 Testing			
	10203.1	Emergency-steering tested recently	Check records in engine / deck logbook	
	10203.2	Steering Gear	Check records in engine / deck logbook. Testing before arrival and departure.	

Green Award Visual Inspection - Bulk Carrier				
Check Box	Norm item		Inspection Focus	Remarks
	10200	Steering Gear		
	10204	Charging emergency header tank		
	10204.1	Emergency header tank fully charged		
	10204.2	Fixed storage tank installed		
	10205	Compass		
	10205.1	Compass present in steering gear room		
	10205.2	Compass clearly visible from control-station		
	10206	Bridge Communications		
	10206.1	Satisfactory communications with bridge		
	10206.2	Telephone available and working		
	10206.3	Sound powered telephone available and working		
	10207	Visibility of Rudder Angle Indicator		
	10207.1	Rudder angle indicator present		
	10207.2	Rudder angle indicator visible at steering position		
	10208	Access to Steering Gear		
	10208.1	Entrance door to steering gear room closed	Door to be kept closed at all times and not lashed or blocked in open position	
	10208.2	Access to steering gear unit unobstructed	Steering gear room should be uncluttered with easy access to all components of the system	
	10208.3	Safety and protection measures fitted	Vessels > 10.000 GT should have railings around the steering gear and deck non-slip surface	
	10208.4	Bilge alarms	Alarms high level & high-high level in good condition	
	10300	(Cargo) / Ballast System		
	10301	Drawings / Diagrams Layout in Control Room		
	10301.1	All relevant drawings and diagrams available	Pipe Line diagrams, mimic diagrams etc should be available	
	10301.2	Drawings visible	Drawings clearly visible and understandable for operation	
	10301.3	Loading manual / history reports	Check for typical loading / unloading sequences	
	10302	Functioning of (Cargo) / Ballast Pumps		
	10302.1	Is every separate pump working		
	10302.2	Ballast pumps with temperature sensors		
	10302.3	Is all equipment combined working		
	10303	Meters / Displays inside control room		
	10303.1	Hull bending / Shear force indicator (*)	Check of working, approved and commonly used	
	10303.2	Loading instrument	Check of working, approved and commonly used	


Green Award Visual Inspection - Bulk Carrier				
Check Box	Norm item		Inspection Focus	Remarks
	10400	Structural		
	10401	Drawings		
	10401.1	Review of all relevant structural drawings	Overview structural design and scantlings	
	10402	Reports		
	10402.1	Classification reports	Survey reports with thickness readings, recommendations and conditions of class, repairs	
	10402.2	State Authority reports	Survey reports, recommendations	
	10402.3	Company Reports	Inspection reports, repair, maintenance and dry-dock reports by ship's staff and superintendents	
	10402.4	Inspection guidelines	Guidelines on the means of access to structures for inspection and maintenance of oil tankers	
	10402.5	Other reports	Vetting reports by chartering companies and independent surveyors	
	10403	External Hull		
	10403.1	Condition shell plating	Check for indents, cracks, paint-condition / corrosion, pitting and / or cargo stripes	
	10403.2	Condition from deck to light-loadline	Check reverse side lower-end topside ballast tanks and intersection vertical frames	
	10403.3	Condition boottop and deep-loadline	Check reverse side upper-end double bottom ballast tanks and intersection vertical frames	
	10403.4	Condition deep-loadline and flat bottom	Check bilge keels for wrong designs and bad welds	
	10403.5	Condition flat-bottom	Check reverse sides of longitudinal girders / transverse webs & transverse stools under bulkheads	
	10404	Cargo Hold		
	10404.1	General condition main-strength structure		
	10404.2	Condition shell frame	Check for cracks, leakages connecting brackets at upper - and lower side tanks	
	10404.3	Condition corrugated bulkheads	Check connection with upper- and lower stools	
	10404.4	Condition hatch-coamings	Checks connections hatch end beams and longitudinal hatch coamings	
	10404.5	Condition corrosion protection systems	Check condition coating and / or sacrificial anodes	
	10404.6	Corrosion locations	Locate corrosion on frames/brackets, shell-plating, tanktop, bilges, hopper-surfaces	
	10404.7	Grab deformations / damage	Check for indents, cracks and / or deformations on all structural hold-parts	
	10404.8	Shovel/hydraulic hammer deformations / damage	Check for deformations and / or damages near bulkheads, brackets, stringers, webs, girders	
	10404.9	Condition access platforms, walkways and ladders	General condition of all supports (damages, corrosion and / or cracks)	
	10404.10	Condition pipelines and valves	Check for leakages / corrosion, temporary repairs and patches (also protection guards)	
	10404.11	Bilge wells and strainer	Check content bilge and free of cargo	
	10405	Hatch Covers and Coamings		
	10405.1	Condition structural integrity hatch	Check main-strength members and general condition	
	10405.2	Condition hatch-plating	Check for grab-damages, deformations on top-, side-, for- and aft-plating and connection-syst.	
	10405.3	Condition framing	Damages, corrosion inside frames of covers	
	10405.4	Condition rails, rollers, pins and supports	Greasing, usage of rollers, even support of rails and rollers (straight surface of support)	
	10405.5	Condition hatchcover clamping and securing devices	Greasing, working	

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Check Box	Norm item		Inspection Focus	Remarks
	10400	Structural		
	10405	Hatch Covers and Coamings		
	10405.6	Condition gaskets and channels		
	10405.7	Condition of watertightness	Visual check of weather- and watertightness of hatches (focus on hatches hold # 1 & # 2)	
	10405.8	Condition hatch-cover operating system	Check for hydraulic leakages at hydraulic motors & lines, condition of all supports, deformation	
	10406	Topside Ballast Tanks		
	10406.1	Condition structural integrity	Check main-strength members and general condition	
	10406.2	Condition brackets, stringers, webs and girders	Check for deformations, fractures, damages, leakages	
	10406.3	Condition webs	Check webs near connection with longitudinal at shell and bulkheads	
	10406.4	Condition brackets	Check connection brackets as support for transverse shell frames in cargo-holds	
	10406.5	Corrosion pattern	Locate corrosion in deckhead-, bulkhead (near bunkers) areas, bottom- and longitudinal-plates	
	10406.6	Condition pipelines and valves	Check for leakages and corrosion , temporary repairs and patches, hydraulic leaks overhead-area	
	10406.7	Condition access platforms, walkways and ladders	General condition of all supports, corrosion, cracks etc.	
	10407	Double Bottom Ballast Tanks (including hopper)		
	10407.1	Condition structural integrity	Check main-strength members and general condition	
	10407.2	Condition bulkhead-, bottom-plating, web, stiffeners	Check for deformations, fractures, damages, leakages	
	10407.3	Condition girders and transverse web-frames	Check intersection with longitudinal girders and transverse webs (focus area outer-shell)	
	10407.4	Condition girders and corrugated bulkheads	Check longitudinal girder under hopper and transverse stool under corrugated bulkhead	
	10407.5	Condition brackets	Check bracket-ends and toe-ends of stringers, webs and girders	
	10407.6	Condition webs	Check connection of webs with longitudinals at shell and bulkheads	
	10407.7	Corrosion protection	Check coating, sacrificial anodes	
	10407.8	Corrosion pattern	Locate corrosion near bulkhead stools, plating, surfaces and areas with sediment	
	10408	Void Spaces / Cofferdams / Pipe duct		
	10408.1	Condition structural integrity	Check main-strength members, any non-continuous structural material and general condition	
	10408.2	Condition brackets, stringers, webs and girders	Check for deformations, fractures, damages, leakages	
	10408.3	Corrosion pattern	Locate corrosion in deckhead-, bulkhead (near bunkers) areas, bottom- and longitudinal-plates	
	10408.4	Condition pipelines and valves	Check for leakages and corrosion , temporary repairs and patches, hydraulic leaks overhead-area	
	10408.5	Condition access platforms, walkways and ladders	General condition of all supports, corrosion, cracks etc.	
	10409	Bunker Oil Tanks		
	10409.1	Condition structural integrity	Check main-strength members, any non-continuous structural material and general condition	
	10409.2	Condition brackets, stringers, webs and girders	Check for deformations, fractures, damages, leakages	
	10409.3	Corrosion pattern	Locate corrosion in deckhead-, bulkhead areas, bottom- and longitudinal-plates	
	10409.4	Condition pipelines and valves	Check for leakages and corrosion , temporary repairs and patches, hydraulic leaks overhead-area	
	10409.5	Condition access platforms, walkways and ladders	General condition of all supports, corrosion, cracks etc.	

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Check Box	Norm item		Inspection Focus	Remarks
	10400	Structural		
	10410	Main Deck & Fittings		
	10410.1	Deck plating - deformations	May indicate problems from underneath, stiffeners or underneath deck-plating	
	10410.2	Deck plating - fractures	May indicate substantial corrosion and / or local stress areas	
	10410.3	Deck plating - damages	Caused by collisions and / or grab damage	
	10410.4	Coaming corners	Check corner areas and underneath bracket-supports for damage / corrosion	
	10410.5	Tank entrances and deck openings	Condition check covers and closing devices	
	10410.6	Pipeline couplings, flanges, branches and supports	Condition check, deformation, cracks, corrosion, tightness	
	10410.7	Closing appliances for ventilation	Condition check covers and closing devices	
	10410.8	Bunker and oil tank derating pipes	Check flame screens and coamings	
	10411	Accommodation & Machinery Spaces		
	10411.1	Structural integrity	General condition, damages & defects	
	10411.2	Doors, windows, ventilation ducts, closing devices	Condition check and water tightness	
	10411.3	Stairs and platforms	Condition check, corrosion / deformations	
	10411.4	Pipelines, valves, couplings, overboard connection	Condition check	
	10411.5	Safety equipment	Condition check CO2, Halon system, extinguishers, fire hoses, alarms etc.	
	10411.6	Certificates for safety equipment		
	10412	Mooring equipment		
	10412.1	Mooring lines	Condition mooring lines	
	10412.2	Winches	Foundation bolts firm, casing crack-, corrosion-free, no leakages and save-all	
	10412.3	Condition winch-brakes	Check last test report and thickness linings	
	10413	Anchoring equipment		
	10413.1	Anchors, anchor shackles and chain	Wear, corrosion, clearances inside hawser pipe	
	10413.2	Anchor winch and associated gear	Foundation, no leakages, condition of brakes, hinges and hinge plates	
	10413.3	Anchor securing	Condition and workable	

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Check Box	Norm item		Inspection Focus	Remarks
	10500	Safety / Rescue		
	10501	Safety equipment		
	10501.1	Certificates	Check certificates, reports and safety drills	
	10501.2	Safety plan	Check available and clearly visible	
	10502	Rescue equipment		
	10502.1	Life boat + davits	Check condition (incl. Kathodic wear) and working order	
	10502.2	Rescue boat + davits	Check condition (incl. Kathodic wear) and working order	
	10502.3	Life rafts + release system	Check condition (incl. Kathodic wear) and working order	
	10502.4	Accommodation ladders, pilot ladders and gangway	Check condition and working order	
	10502.5	Life jackets	Check condition and working order	
	10502.6	Life bouys	Check condition (incl. Kathodic wear) and working order	
	10503	Fire fighting		
	10503.1	CO2 / Halon system	Pressure gauges / indicators on bottles / pipelines / nozzles	
	10503.2	Foamtank	Content / Filling	
	10503.3	Fire control plans	Check available and clearly visible	
	10503.4	Portable fire extinguishers	Check ready for use	
	10503.5	Fireman's outfit	Check ready for use, easily accessible	
	10503.6	Breathing Apparatus charging compressor	Check ready for use, easily accessible	
	10503.7	International Ship/Shore Fire connection	Check available both sides	
	10503.8	Fire alarm system and detectors	Check test records, condition in accommodation, ER and boiler room	
	10503.9	Fire flaps and vent stops	Check condition on deck, accommodation, ER and boiler room and clearly marked	
	10503.10	Fire lines	Check condition on deck, accommodation, ER and boiler room	
	10503.11	Fire hoses	Check condition on deck, accommodation, ER and boiler room	
	10503.12	Fire system for scavenging air receiver and boiler front	Check condition and working order separate fire fighting system	
	10504	Escape routes		
	10504.1	Free access	Check free access without obstructions	
	10504.2	Indicators	Check clear markers / positioning	
	10504.3	Emergency lighting	Check clear markers / positioning	