



Green Award for Inland Navigation

Reader's Guide to Programme of Requirements 2023

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1. Introduction

This is the Reading Guide to the **2023 Programme of Requirements** for Green Award for Inland Navigation. It is the 4th edition since its inception in 2011. The objective of Green Award and the parties rewarding certificate holders (hereinafter referred to as incentive providers) is to **recognise, acknowledge and encourage cleaner inland shipping**. At the time of compiling this reader guide, the counter stood at around 1,150 certified European inland navigation vessels and over 50 incentive providers. These parties give certificate holders discounts on port fees, products and services. In addition, certificate holders also use their Green Award certificate in tenders.

The world does not stand still and neither does Green Award. That is why we are constantly working to improve our programme of requirements. We are in close contact with inland navigation entrepreneurs, governments, industry, ports and many other experts. Based on the information obtained, we have compiled a List of Requirements that is up-to-date and also provides inspiration as to how sustainability can (sometimes easily) be achieved. The programme works simply: points must/can be scored for various achievements and voluntary measures. This is assessed by an inspector who comes to the vessel, supplemented by administrative check by an employee at the Green Award office. The programme is composed of two parts: A. Engine performance and B. Additional requirements. Depending on the scores, this can lead to a Green Award certificate at the bronze, silver or gold level with a platinum label in some cases. The certificate is valid for 3 years from the inspection date.

The main changes from the previous edition of the Programme of Requirements are:

- Connection to the technologies considered by the CCNR
- Increased focus on alternative fuels/energy carriers
- Increased focus on renewable energy generation
- New elements in safety
- New elements with regard to pollution prevention
- Two types of platinum labels: one for propulsion and one for operations
- A separate programme for river cruises
- A CO₂ calculation record
- An overhaul of point allocation

In this reading guide, we explain the above elements plus all other requirements and voluntary measures.

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2. Background

Green Award Foundation (1994) is an independent, autonomous organisation that steers its own course, while keeping a keen eye on (legal) developments and European ambitions. Green Award is a co-signatory of the [Green Deal Seagoing, Inland Navigation and Ports](#), which agreed in 2019 to reduce emissions from inland navigation. In addition, Green Award has a good relationship with the Central Commission for the Navigation of the Rhine (CCNR). In line with the mandate in the Mannheim Ministerial Declaration of 17 October 2018, the CCNR has prepared the [Roadmap for reducing emissions from inland navigation](#). The aim of the roadmap is to reduce greenhouse gas and air pollutant emissions from inland navigation as much as possible by 2050, which is also the long-term vision of the European Union (EU). The roadmap outlines transition paths for new and existing vessels. We have applied the technologies and emission limit values taken into account in our Programme of Requirements in our quest for uniformity.

3. Programme of requirements

3.1. Motor performance (sheet A)

Technologies considered

Using the CCNR Roadmap and the technologies considered therein as a starting point, we assign a point rating. This depends on the emission limit values achieved by the main and auxiliary engines. We also award incentive points for innovative measures that reduce emissions. The table below shows the technologies considered with the Green Award point rating for emission performance and measures taken.

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CCR Roadmap and Green Award

Technologies considered by CCNR	Description	Emission reduction potential (Source: CCNR)			Green Award points rating									for measure **
		CO ₂	NO _x	PM	for emission performance*									
					CCNR 2 level			Stage V level			Zero emission			
					NO _x	PM	Totaal	NO _x	PM	Totaal	NO _x	PM	Totaal	
CCNR 2 or below***, diesel	<i>Fossil diesel in an internal combustion engine which complies with the emission limits CCNR 2 or older engine.</i>	0%	0%	0%	100	100	200							
CCNR 2 + SCR + DPF, diesel	<i>Fossil diesel in an internal combustion engine which complies with the emission limits CCNR 2 and equipped with an additional Selective Catalytic Reduction.</i>	0%	82%	54%										
	CCNR 2 + DPF				100	200	300							
	CCNR 2 + SCR				200	100	300							
CCNR 2 + DPF + SCR				200	200	400								
Stage V, diesel	Fossil diesel in an internal combustion engine which complies with the emission limits EU Stage V.	0%	82%	92%				200	200	400				
LNG	Liquefied Natural Gas in an internal combustion engine which complies with the emission limits EU Stage V.	100%	81%	97%				200	200	400				30
Stage V, HVO	HVO in an internal combustion engine which complies with the emission limits EU Stage V. HVO stands for hydrotreated vegetable oil itself (without blending with fossil fuels) and all comparable drop-in biofuels (including e-fuels) as well as synthetic diesel made with captured CO ₂ and sustainable electric power.	100%	82%	92%				200	200	400				40
LBM	Liquefied Bio Methane (or bio-LNG) in an internal combustion engine which complies with the emission limits EU Stage V.	100%	81%	97%				200	200	400				40
Battery	Battery electric propulsion systems, with fixed or exchangeable battery systems.	100%	100%	100%							300	300	600	60
H ₂ , FC	Hydrogen stored in liquid or gaseous form and used in fuel cells.	100%	100%	100%							300	300	600	60
H ₂ , ICE	Hydrogen stored in liquid or gaseous form and used in internal combustion engines.	100%	82%	92%				200	200	400				40
MeOH, FC	Methanol used in fuel cells.	100%	100%	100%							300	300	600	60
MeOH, ICE	Methanol used in internal combustion.	100%	82%	92%				200	200	400				40

Abbreviations

DPF	Diesel particulate filter
FC	Fuel Cell
H ₂	Hydrogen
ICE	Internal Combustion Engine
LBM	Liquefied Bio Methane
LNG	Liquid Natural Gas
MeOH	Methanol (CH ₃ OH)
PM	Particulate Matters
SCR	Selective Catalyst Reduction

- * As main and auxiliary engines may have different emission levels and different running hours, the number of kWh per year per engine is determined and then the share per engine. See Sheet A. Engine performance.
- ** To be obtained in sheet B. Additional requirements
- *** A CCNR 1 main engine or main engine with unknown certification without aftertreatment is not certifiable by Green Award

Table 1

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Emission limits

Green Award applies the emission limits in accordance with CCNR, with the understanding that

- EU - Stage IIIa main engines are excluded at Green Award. This is in connection with the emission limit values on PM allowed by CCNR. If measurement reports show that the engines do meet the emission limits of CCNR 2 or better, the engines will be rated.
- The maximum emission limits that main engines may meet to qualify for certification:
 - NO_x 6.0 g/kWh
 - PM 0.2 g/kWh

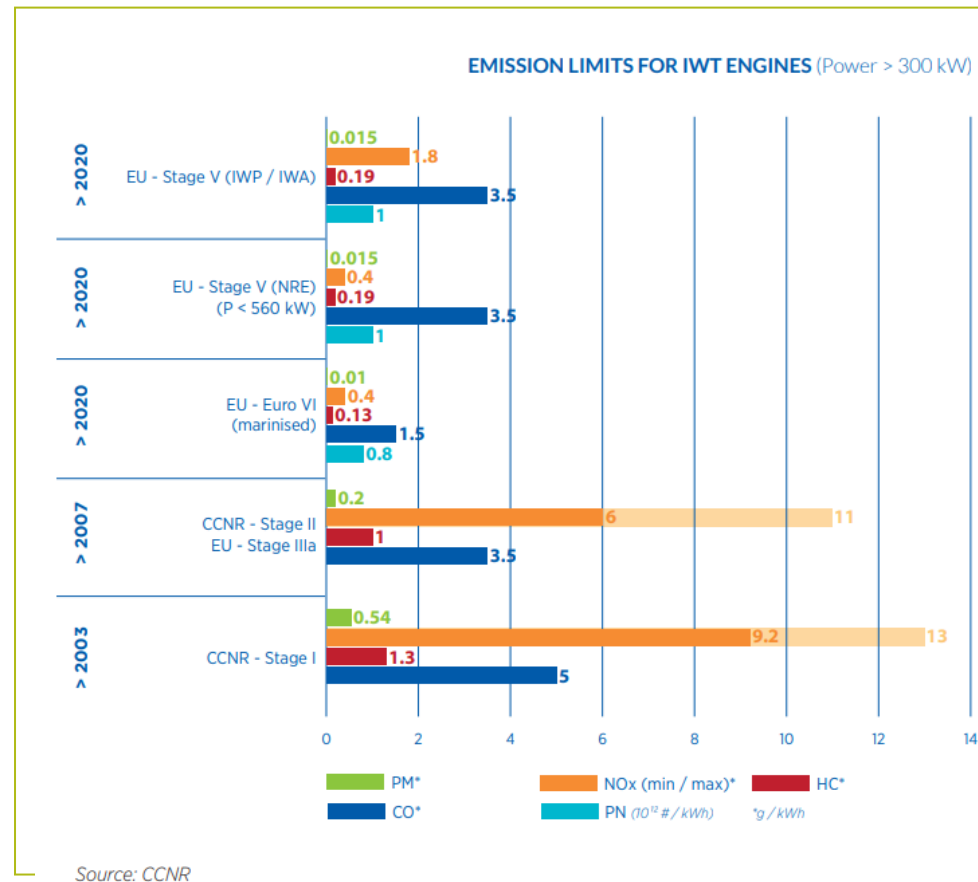


Table 2

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Minimum CCNR emission stage II (CCNR 2)

To qualify for a Green Award certificate, main engines must meet at least the emission requirements on NO_x and PM belonging to CCNR emission stage 2. This condition was brought in by the incentive ports. Ships with CCNR 2 and Stage V engines can therefore qualify for a Green Award anyway. Ships with other engines may also qualify if the emissions due to aftertreatment or other measures are at least equal to the requirements of CCNR emission stage 2. This has to be proven by the applicant with emission measurement reports. The measurements must be carried out by an independent and accredited measurement company in accordance with CCNR protocols. For all vessels, in addition to points for the engines, they must also achieve a certain minimum score on the additional requirements.

Additive/alternative fuel

For engines or after-treatment systems using an additive/alternative fuel indispensable for achieving the intended emission standards, the following shall apply:

- Closed records must be presented, showing conclusively that the product has been purchased and used.
- Ships seeking renewal of the Green Award certificate must submit procurement and consumption records for the past three years.
- For ships applying for their first Green Award certificate, records from the previous year must be submitted.
- For newly built ships, recently converted ships, or ships that have just started using an additive or alternative fuel, one year after the inspection date, they must send proof of closed records to Green Award.
- In all cases, a digital log of the installation is also valid.

Registration and verification

Part A of the programme of requirements should record all engines and their corresponding emission levels on NO_x and PM. For each engine, the type and any post-treatment is verified and a score is assigned.

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Weighting

As engines on ships can have different emission levels and different running hours, the contribution per engine is calculated. To do this, the number of kWh per year are determined and then the share per engine. This means, that if there are relatively many running hours with clean generators, this weighs positively. An example of the weighting and calculation of points:

Engine	Application	Emission level NO _x	Points	Emission level PM	Points	kWh/year	Share/ motor	Points/ motor
1	Main engine	CCR 2	100	CCR 2	100	12.000	40%	80
2	Main engine	CCR 2	100	CCR 2	100	12.000	40%	80
3	Generator	EU Stage V	200	EU Stage V	200	4.000	13%	53
4	Generator	CCR 1	0	CCR 1	0	2.000	7%	0
						30.000	100%	213

Table 3



3.2. Additional requirements (sheet B)

We have formulated a set of additional requirements (and suggestions) that contribute to environmental and safety improvements. Not all elements need to be scored, but the degree of scoring does affect the level of the certificate. Below is an explanation for each requirement/suggestion, plus the proof required. Unless otherwise stated, the Green Award inspector verifies on board whether and to what extent the requirement is met.

B10 Fuels	
B10a-i	Alternative fuels
<i>Notes</i>	Alternative fuels help reduce greenhouse gas emissions and environmental pollutants.
<i>Proof</i>	Visible on board.
B20 Energy-saving measures on propulsion/hull	
B20a+b	Diesel-electric or LNG-electric main drive or bow thruster
<i>Notes</i>	A diesel-electric drive is an indirect transmission in which a diesel engine drives a generator, which in turn provides power for one or more electric motors. Depending on the power required, a generator is either switched on or off. This can result in energy savings. In LNG-electric propulsion, the generator is driven by an engine running on LNG.
<i>Proof</i>	Visible on board.
B20c	Bow thruster powered by batteries
<i>Notes</i>	A battery-powered bow thruster produces no emissions on site.
<i>Proof</i>	Visible and audible on board.
B20d	Energy-saving rudder system
<i>Notes</i>	There are rudder systems that provide less resistance and therefore save energy.
<i>Proof</i>	Invoice or certificate.
<i>Verification</i>	Options: enquiry by Green Award with the supplier, official reports from e.g. Marin/Wageningen, DST Duisburg, subsidies granted or lists Ministry of Infrastructure and Water Management or CCNR.

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B20e	Hydraulic shaft generator or alternative
<i>Notes</i>	A shaft generator is a generator driven by the propeller shaft of a vessel. The propeller shaft runs from the main engine to the propeller intended for propulsion. The shaft generator is used to provide electrical power to the ship while underway. This is energy-saving because the larger main engines have lower relative consumption than auxiliary engines and because maintenance costs of auxiliary engines can be saved.
<i>Proof</i>	Shaft generator is visible on board. The inspector may ask to demonstrate the operation on site.
B20f	Counter-rotating rudder propeller
<i>Notes</i>	The counter-rotating rudder propeller is a system in which two counter-rotating propellers driven by a vertical shaft are mounted on a single tailpiece, usually each on one side. It replaces the conventional marine propeller, consisting of a single propeller driven by a horizontal axis. It also replaces the conventional rudder system, in that the propeller itself functions as a rudder. The counter-rotating rudder propeller can rotate 360 degrees. The application of the counter-rotating rudder propeller can lead to fuel savings.
<i>Proof</i>	Copy of invoice, to be submitted with Green Award application form.
<i>Verification</i>	Visual inspection by Green Award inspector and by Green Award office.
B20g	Nozzle
<i>Notes</i>	The nozzle increases the propulsive power of the propeller, allowing a vessel to sail a greater distance per propeller revolution (at the same fuel consumption) than without the nozzle. This leads to fuel savings and hence emission reductions.
<i>Proof</i>	Copy of invoice, to be submitted with Green Award application form.
<i>Verification</i>	By office Green Award.
B20h	Energy-saving propeller
<i>Notes</i>	Modifications to propeller blades allow a propeller to cut more sharply through the water, reducing drag. This allows a vessel to reach the same speed on average with fewer propeller revolutions per minute, which can result in fuel savings and emission reductions, respectively.
<i>Proof</i>	Copy of invoice, to be submitted with Green Award application form.
<i>Verification</i>	By office Green Award.

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B20i	Resistance-reducing hull modifications
<i>Notes</i>	<p>For example:</p> <p><i>Air lubrication system under the hull:</i> the application of air bubbles under the hull in order to reduce the friction between the water and the hull. Depending on sailing speed, load factor and weather conditions, this results in fuel savings and hence emission reduction.</p> <p><i>Collapsible tunnel system integrated in the hull</i></p> <p>Fold-out: when a vessel is high in the water unloaded, the propellers rise above the water, reducing efficiency. If a fold-out tunnel system is applied, the air supply is cut off and the water is literally sucked towards the propellers. This allows a vessel to sail longer at low tide or load deeper.</p> <p>Collapsed: if a tunnel system can be retracted when not operationally needed (loaded deep in the water), the vessel moves through the water with less resistance. This can save fuel and thus reduce emissions.</p> <p><i>Flow plate, spoiler, bulbous bow and waterline extension.</i></p> <p>Up to 20 points can be obtained on this element, depending on the saving(s). This is at the discretion of the inspector.</p>
<i>Proof</i>	Invoice, reports from Marin, DST, grant approval.
<i>Verification</i>	By inspector on board, cross check by Green Award office.
B20j	Non-toxic hard hull coating (100% free of tin, copper and biocide)
<i>Notes</i>	Hard marine coatings are resistance-reducing, do not react with water and do not contain biocides. They do not gradually dissolve, have anti-corrosion properties and do not contain silicones or other contaminating elements.
<i>Proof</i>	Invoice.
<i>Verification</i>	By office Green Award.
B20k	Biocide-free antifouling
<i>Notes</i>	<p>Antifouling protects the hull and prevents micro-organisms, mussels and algae from attaching to a ship's hull below the water surface. These organisms can negatively affect a vessel's manoeuvring characteristics, loading capacity and resistance. To protect the marine environment, it is important that antifouling is free of biocides such as tributyltin (tbt).</p> <p>Examples: approved antifouling systems.</p>
<i>Proof</i>	Invoice showing make and type.
<i>Verification</i>	By office Green Award.



B30 Fuel saving	
B30a	Certificate on board of a fuel economy course (Alternative: e-learning course, 5 points)
<i>Notes</i>	This refresher course is aimed at experienced skippers and inland waterway operators. Participants save up to 7% fuel on average after attending this course. Green Award recognises the courses of the VoortVarend Besparen programme and DST's Topo-Fahrt training course in Duisburg. The course from VoortVarend Besparen is honoured with 5 points, the course from DST with 10 points. This is because the latter course is more in-depth.
<i>Proof</i>	Certificate on board.
<i>Verification</i>	By inspector on board, cross check by Green Award office.
B30b	Fuel consumption meter(s) on main engine(s)
<i>Notes</i>	Greater insight into consumption will allow more efficient use of fuel.
<i>Proof</i>	Presence of meter(s).
B30c	Intelligent consumption meter (cruise control, A-tempomat combined with fuel consumption meter)
<i>Notes</i>	With <i>cruise control</i> , the skipper has the option of choosing a fixed set cruising speed or a fixed fuel consumption per kilometre sailed. Fuel savings are made possible by hardware measuring the load of the main engine(s) via existing (or supplied) electronic sensors and controlling it as efficiently as possible. In addition, automatic control ensures that changing speed will be much more efficient than using the regulator. Also, the user has the option of completing the route to be sailed over an exact time schedule. This avoids arriving at the destination uneconomically early. Finally, awareness of fuel consumption will contribute to sailing more economically. The <i>A-tempomat</i> is a device intended to influence a vessel's fuel consumption by setting the right position of the regulator based on a number of preconditions. Although the idea behind the <i>Tempomat</i> is sound, at many times it turns out that it is not desirable for the device itself to set the position of the regulator and thus the engine speed. Reasons for this include local traffic situations and possible urgency of transport, which means, for example, that only the highest position of the regulator is sufficient, regardless of fuel costs. To overcome these problems, the Advising Tempomat was developed, a device that does not determine the regulator setting itself, but indicates the desired position of the regulator to the helmsman, as a kind of fully automatic advice.
<i>Proof</i>	Meter on board.

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B30d	Track pilot or similar system with deadman alarm with sensors monitoring human movements
<i>Notes</i>	A track pilot is a fully automated heading system that allows a vessel to sail on a predetermined line (a 'track'). Here, the steering of the autopilot is controlled by the course system's software. It makes sailing less intensive and requires fewer steering movements. The ship sails the most optimal route through the fairway, so to speak, which saves fuel.
<i>Proof</i>	Presence of trackpilot.
B30e	Heat exchanger
<i>Notes</i>	A heat exchanger is a device that separately transfers heat from a fluid or gas to another medium. Through the application of the heat exchanger, heat is recovered so that savings can be made on cooling or heating air or liquids. Example: using heat from the engine to heat water.
<i>Proof</i>	Device on board.
B30f	Spud pole(s)
<i>Notes</i>	A spud pole is a telescopic tubular structure that allows a ship to anchor itself stably and safely. With spud poles, mooring a ship becomes a quick, safe and simple operation. It also allows the ship to moor in more places, such as upstream in front of a lock. With spud poles, the engines do not need to turn as much/less to keep the vessel in place.
<i>Proof</i>	On-board installation.
B30g+h	Batteries for min. 24 hours domestic use / Batteries for min. 6 hours domestic use
<i>Notes</i>	If, when stationary, the on-board network can be powered by batteries, this reduces the use of generators, saving fuel and emissions.
<i>Proof</i>	On-board batteries.
B30i	Use of shore power, i.e. 10 hours p/w or at least 500 hours per year
<i>Notes</i>	If, when stationary, the onboard grid can be powered by shore power, this reduces the use of generators, saving fuel and emissions.
<i>Proof</i>	Proof of invoicing/payment.
<i>Verification</i>	Inspector/office Green Award.

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B30j+k	Registration of CO₂ emissions per journey/tonne/kilometre according to the Green Award CO₂ calculation form or alternative
<i>Notes</i>	CO ₂ emissions in the Netherlands and the rest of the world are responsible for global warming. Global agreements have been made to reduce these emissions substantially. That way, we can pass on the planet to future generations in a good way. But how much CO ₂ does a ship emit? To find out, we have created a calculation model. CO ₂ is easy to calculate, because it has been established how much CO ₂ is released per litre of fuel, the so-called emission factor. We use the List of emission factors CO₂ emission factors . In our spreadsheet, empty or loaded sailings can be chosen for each trip. With the loaded voyage, a figure per tonne-kilometre also comes out. The registration is a first step and is meant to create awareness, not (yet) to set and realise savings targets. An alternative method of registration may also be eligible for scoring. This is at the discretion of office Green Award.
<i>Proof</i>	Registration to be viewed on board.
<i>Verification</i>	Inspector/office Green Award.
<i>Extra</i>	Upon registration, 15 points are awarded. If registration is submitted to Green Award every 12 months during the 3-year certification period, an additional 10 points will be awarded once. If submission is neglected, 10 points will be deducted. This may have an effect on the certification level.

B40 Waste and maintenance

B40a	Is the ship certified to ISO 14001?
<i>Notes</i>	ISO 14001 is an internationally accepted standard with requirements for an environmental management system. It is used to develop an environmental policy appropriate to organisations and ensure its implementation. Using an environmental management system according to the ISO 14001 standard, the environmental risks of business operations can be controlled and, if possible, reduced.
<i>Proof</i>	Valid certificate.
B40b	Alternative to B40a: is the Ship Environmental Plan (SMP) (or equivalent) being followed on board?
<i>Notes</i>	The ship environmental plan is a means of contributing to environmental care in inland navigation. Using a questionnaire, the skipper/owner/manager can easily draw up a plan for his/her own ship. This allows the ship and its crew to meet all requirements that guarantee environmentally friendly operations.
<i>Proof</i>	Plan on board or new-build vessel: later by mail to Green Award office.
<i>Verification</i>	By Green Award inspector/office Green Award.
<i>Information</i>	https://sabni.nl

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B40c	Mandatory alternative to B40a/b: is there a record of the delivery of bilge waste (bilge book) and other waste, split into plastic, domestic waste, ship's waste and small chemical waste?
<i>Notes</i>	A different registration of waste disposal is also seen by Green Award as contributing to environmental care. Registration must have started at least six months prior to the inspection date.
<i>Proof</i>	Plan on board or new-built vessel: later by mail to Green Award office.
<i>Verification</i>	By Green Award inspector/office Green Award.
<i>Information</i>	A sample Hazardous Waste Safety Checklist and Non-Hazardous Waste Safety Checklist is available at http://isgintt.org/
B40d	Are proper and appropriate drip trays available under the engines?
<i>Notes</i>	Drip trays catch any leakage from the engine, preventing fuel, oil or oil-contaminated water from entering the bottom of the vessel, which can cause environmental pollution. Drip trays help in the responsible disposal of environmentally polluting waste and contaminated water.
<i>Proof</i>	Presence of bins under the engines or truss compartments that cannot pass through or overflow into the rest of the bilge.
B40e	Is the bilge clean (free of oil, grease and other materials)?
<i>Notes</i>	A clean bilge prevents fuel, oil or oil-contaminated water from accumulating at the bottom of the vessel, which can cause environmental pollution.
<i>Proof</i>	Condition of the bilge.
B40f	Is there a microfiltration system in use for lubricating oil?
<i>Notes</i>	Such a system extends the life of the lubricating oil and therefore reduces release of waste lubricating oil. It can also prevent failure due to contamination.
<i>Proof</i>	Presence of working system on board.



B40g	Does the ship have a Green Award approved system for planned maintenance? (IVR Loss Prevention Inspection or alternative, score depends on extent of implementation)
<i>Notes</i>	This survey was developed on the initiative of insurers by the International Association the Rhine Vessel Register (IVR) to prevent damages and thus the insurability of inland navigation. The checklist and related survey mainly concern engines, installations and their state of maintenance. By means of a damage prevention survey, the aim is to introduce maintenance systems on board, based on simple procedures, which will make maintenance demonstrable to the insurer. A better maintained ship is less likely to cause environmental damage.
<i>Proof</i>	Presence of "IVR Loss Prevention Inspection".
<i>Verification</i>	By Green Award inspector and cross check by Green Award office at IVR.
<i>Information</i>	IVR

B50 Prevention of pollution	
B50a	Does the vessel have certified propeller shaft seals (inside and outside)?
<i>Notes</i>	A propeller shaft seal (with seals) keeps the outside water out and the lubricant in, preventing oil or grease from entering the water. Or an equivalent alternative (e.g. water-lubricated seals). This minimises the risk of environmental pollution.
<i>Proof</i>	Certificate/statement from the supplier of propeller shaft seals. Certificate/statement to be submitted with the application.
<i>Verification</i>	Certificate by Green Award office and visual observation on board by Green Award inspector.
B50b	Is the propeller shaft lubricated with eco-friendly lubricants (EALs) or lubricants complying with the European Ecolabel (EEL) (grease or oil)?
<i>Notes</i>	Products with the European Ecolabel have a guaranteed, independent and verified low impact on the environment. To obtain the EU Ecolabel , goods and services must meet high environmental standards throughout their life cycle: from raw material extraction through production and distribution to disposal. Choosing and promoting products with the EU Ecolabel makes a real contribution to the biggest environmental challenges of our time identified in the European Green Deal, such as achieving climate neutrality by 2050, moving to a circular economy and achieving the ambition of zero pollution for a toxin-free environment.
<i>Proof</i>	Invoices.
<i>Verification</i>	By Green Award inspector.

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B50c	Is the vessel equipped with certified water-lubricated propeller shaft(s)? (alternative to 50 a+b)
<i>Notes</i>	A water-lubricated propeller shaft system rotates in a stern tube that fills with outside water. It is a cost-free and environmentally friendly alternative to a grease-lubricated propeller shaft.
<i>Proof</i>	Invoice.
B50d	Does the vessel have certified rudder-trunk seals(s)?
<i>Notes</i>	A rudder seal keeps the outside water out and the lubricant in, preventing oil or grease from entering the water. An equivalent alternative such as water-lubricated seals is also eligible for scoring.
<i>Proof</i>	Invoice/statement from supplier, to be submitted with the application.
<i>Verification</i>	By office Green Award.
B50e	Regarding B50d, are environmentally friendly lubricants (EALs) or lubricants with a European Ecolabel (EEL) applied?
<i>Notes</i>	See B50b
<i>Proof</i>	Idem
<i>Verification</i>	Idem
B50f	Are the bunker tanks equipped with a permanent high level alarm?
<i>Notes</i>	Overflows during bunkering are prevented by the BOBS (Bunker Overfill Security System). However, overflows can also occur during internal fuel transfer. A permanent high-level alarm warns if the fuel level in one of the tanks is too high. Connecting the trim pump to the BOBS is also a solution.
<i>Proof</i>	Working system on board.
B50g	Has a safety checklist for bunkering the vessel's fuel been implemented?
<i>Notes</i>	Oil spills and leaks during bunkering operations are a primary source of oil pollution. Experience has shown that many of the bunkering floods and oil spills can be attributed to human error. The use of a bunker safety checklist contributes to safe operations.
<i>Proof</i>	Completed and signed bunker safety checklists covering a period of at least 3 months prior to the inspection.
<i>Information</i>	http://isgintt.org/



B50h	Is a closed greywater circuit operational on board, including release point?
<i>Notes</i>	Intended to collect and reuse greywater on a vessel in a closed system to prevent untreated discharges to surface water. In anticipation of legislation.
<i>Proof</i>	Separate piping system running to/from holding tank, plus drop-off point allowing water to be dispensed to shore/ship.
B50i	Is a wastewater treatment system operational on board?
<i>Notes</i>	A water treatment plant can be used to ensure that 'cleaner' dirty water goes overboard. Consists of: a holding tank, a treatment plant, a sludge collection facility, a pressure vessel, a secondary water system and a pump. No installation to make drinking water is meant here.
<i>Proof</i>	Working installation on board.

B60 Safety

B60a	Are fire drills held every six months?
<i>Notes</i>	A fire-fighting drill is designed to ensure rapid and targeted action during a fire. Practice teaches automatism so that no time is lost in an emergency. The exercise may include the following items: limiting and fighting incipient fires, extinguishing, extinguishing agents and extinguishers, hazardous substances, electrical cabinets.
<i>Proof</i>	Description of most recent exercise, attendance list with date of exercise and signatures participants.
B60b	Are drills simulating a man-overboard situation held every six months?
<i>Notes</i>	A man-overboard manoeuvre is used to rescue a person who has fallen into the water quickly, efficiently and safely. It is important to cultivate automatism so that everything is done with a minimum of orders. This involves discussing and simulating different scenarios (think of types of waterways in relation to vessel characteristics). It is therefore advisable to practice simulation of man-overboard manoeuvres regularly. It is important that the vessel can quickly and safely return to the drowning person and assume a good position in relation to the drowning person such that he/she can be easily rescued.
<i>Proof</i>	Description of most recent exercise, attendance list with date of exercise and signatures participants.

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B60c	Is the ship participating in the Platform Zero Incidents (PZI)?
<i>Notes</i>	Platform Zero Incidents (PZI) contributes to a widely supported effort to achieve zero incidents in inland navigation. Here, chartering offices, shipping companies and ship owners share and develop knowledge about incidents in the inland shipping industry to prevent recurrence in the future. PZI is an initiative for and by the inland shipping industry.
<i>Proof</i>	Login for the reporting system.
<i>Verification</i>	By Green Award inspector, cross check by Green Award office at PZI.
B60d	Is there demonstrable use of personal protective equipment (such as helmet, life jacket, hearing protection)?
<i>Notes</i>	To manage risks on board and reduce the risk of injury or health damage, the use of personal protective equipment is necessary.
<i>Proof</i>	Presence of helmet, life jacket, hearing protection for each crew member and visitors.
B60e	Are conventional batteries placed in acid-resistant containers? (charging capacity >0.2 kW and <3.0 kW)
<i>Notes</i>	These containers protect the batteries from external influences and prevent unintentional acid spills.
<i>Proof</i>	Presence of bins.
B60f	Are maintenance-free gel batteries in use? (charging capacity >0.2 kW and <3.0 kW)
<i>Notes</i>	In batteries requiring maintenance (non-maintenance-free), the water in the battery evaporates when charging and discharging. This is because acid and hydrogen are formed that can escape. In a maintenance-free battery, this is impossible because the battery is 'sealed' and the battery acid is often contained in a gel or glass mat (AGM battery).
<i>Proof</i>	Presence of batteries.
B60g	Are there fill-level indicators on the side ballast tanks or stability software?
<i>Notes</i>	Using fill-level indicators on the side ballast tanks will enable the crew to assess whether any ballast tanks that are not fully filled could pose a danger to the stability of the ship during navigation or transshipment. <i>Alternative:</i> is there a stability software programme in use?
<i>Proof</i>	Working installation on board.

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B60h	Is there a railing to protect the crew from falling overboard?
<i>Notes</i>	External edges of decks and workplaces where the drop height may exceed 1 m must be provided with guardrails of at least 0.70 m in height or guardrails complying with European standard EN 711:1995, consisting of a hand rail, an intermediate rail at knee height and a foot rail.
<i>Proof</i>	Railing present on board.
B60i	Is there a bridge height measurement sensor that triggers an alarm in case of insufficient airdraft?
<i>Notes</i>	The bridge height measurement sensor measures the clearance height and sounds an alarm if the clearance height is too low. This increases alertness and safety on board and reduces the risk of bridge collisions.
<i>Proof</i>	Working installation on board.
B60j	Is there a second radar on board?
<i>Notes</i>	A radar (RAdio Detection And Ranging) on a ship uses radio waves to search for objects around the ship. The radio waves are transmitted in a circle and reflected by objects around the ship. A second radar provides a better view around the ship and is a backup if the other radar fails.
<i>Proof</i>	Working installation on board.
B60k	If B30d not present: a deadman's alarm system in wheelhouse with sensors monitoring human movements
<i>Notes</i>	Research commissioned by the European Inland Waterway Transport Platform found that in 70 to 80 per cent of incidents in inland navigation, the human factor was a major element. A deadman alarm system can reduce the risk of incidents due to fatigue or the person at the helm becoming unwell.
<i>Proof</i>	Working installation on board.



B70 Emission reduction	
B70a	Shore power installation
<i>Notes</i>	If a ship can use shore power, generators need to be used less. This means less noise pollution and better air quality for the port.
<i>Proof</i>	Presence of connection according to NEN-EN 15869-1,2,3:2019 < 125 A or NEN-EN 16840:2017 if > 250 A (ESTRIN)
B70b	Solar panels supplying electricity to batteries
<i>Notes</i>	Generating solar energy on board saves on fuel and shore power.
<i>Proof</i>	Solar panels on board.
<i>Points</i>	5-10-15 points, depending on capacity and need, at the inspector's discretion.
B70c	Wind turbines supplying electricity to batteries
<i>Notes</i>	Wind power generation saves on fuel and shore power.
<i>Proof</i>	Wind turbines on board.
B70d	Energy-efficient indoor and outdoor lighting
<i>Notes</i>	LED lighting uses less energy, requires less maintenance, is more reliable and less prone to failure.
<i>Proof</i>	Working lights on board.
B70e	Vapour lock valves
<i>Notes</i>	On tankers, cargo vapours can be released during sampling, gas measurements, temperature measurements and additive injections, among others. A system with vapour valves on the butterwash hatch or on the tank deck penetrations that provide airtight access to cargo tanks can prevent this. This ensures a safer and healthier working environment for ship's crew, cargo inspectors and terminal operators. Semi-permanent on 'butterwash hatch' of all cargo tanks: 5 points Permanent on tank deck penetrations on all cargo tanks: 10 points
<i>Proof</i>	Working installation on board.

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4. Point allocation and certification level

4.1. Bronze-silver-gold

- ✓ There are three levels of certification: 'bronze', 'silver' and 'gold'. The level depends on the number of points achieved.
- ✓ The number of points obtained is composed of the score in 'A. Engine Performance' and 'B. Additional Requirements'. This is not the sum of the points, see the table opposite.
- ✓ Ships do not have to meet all additional requirements. The degree of scoring on the additional requirements affects the level of the certificate.
- ✓ To qualify for a Green Award certificate at the 'bronze' or 'silver' level, main engines must at least meet the emission requirements belonging to CCNR 2. This has been negotiated by ports that give discounts on port fees.
- ✓ To qualify for Green Award certification at the 'gold' level, main engines must at least meet the emission requirements belonging to EU Stage V. This is also a condition of ports that give discounts on port fees.

Engines	Points		
	A. Engine performance	B. Additional requirements	
CCNR2	170-199	≥ 168	a
	200-299	169 - 219	b
		≥ 220	c
	300-349	115-167	d
		≥ 168	e
EU Stage V	≥ 350	115-138	f
		139-167	g
		≥ 168	h
Electric	≥ 450	115-138	i
		139-167	j
		≥ 168	k

Bronze	Silver	Gold
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Table 4



4.2. Platinum label

Ships with a Green Award certificate at the bronze, silver or gold level may qualify for an additional platinum label. There are two types of platinum labels:

A. Platinum label 'Propulsion'	
<i>Target</i>	Ships sailing emission-free, i.e. with no emissions of CO ₂ , SO _x , NO _x and PM.
<i>Example</i>	Ships with battery packs, battery containers, H ₂ as energy carrier.
<i>Performance</i>	At least 3 hours emission-free, or 50% of the time if less than 6 sailing hours.

B. Platinum label 'Operations'	
<i>Target</i>	Crane ships whose cranes operate emission-free, i.e. with no emissions of CO ₂ , SO _x , NO _x and PM.
<i>Crane ship</i>	Barge equipped with crane to carry out dredging work.
<i>Example</i>	Electrically powered cranes or hybrid cranes. Electricity is not generated by diesel engines.
<i>Performance</i>	At least 50% of crane hours.
<i>Proof</i>	Registration on board, to be verified by inspector and with quarterly reporting to Green Award.

The conditions of the platinum label are formulated by the incentive providers and can be changed in the interim. This is beyond Green Award's control. A change may have an effect on the renewal of a platinum label in case of recertification and the level of incentives.

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5. List of ship types

Owners of the following ship types can apply for certification by Green Award:

- Dry cargo vessels
- Container ships
- Barge
- Crane ships
- Roro ships
- Tankers
- Pusher craft
- Ferries
- Inspection vessels
- Day passenger ships

A separate programme of requirements has been developed for river cruise ships.



6. Procedures

6.1. Certification procedure

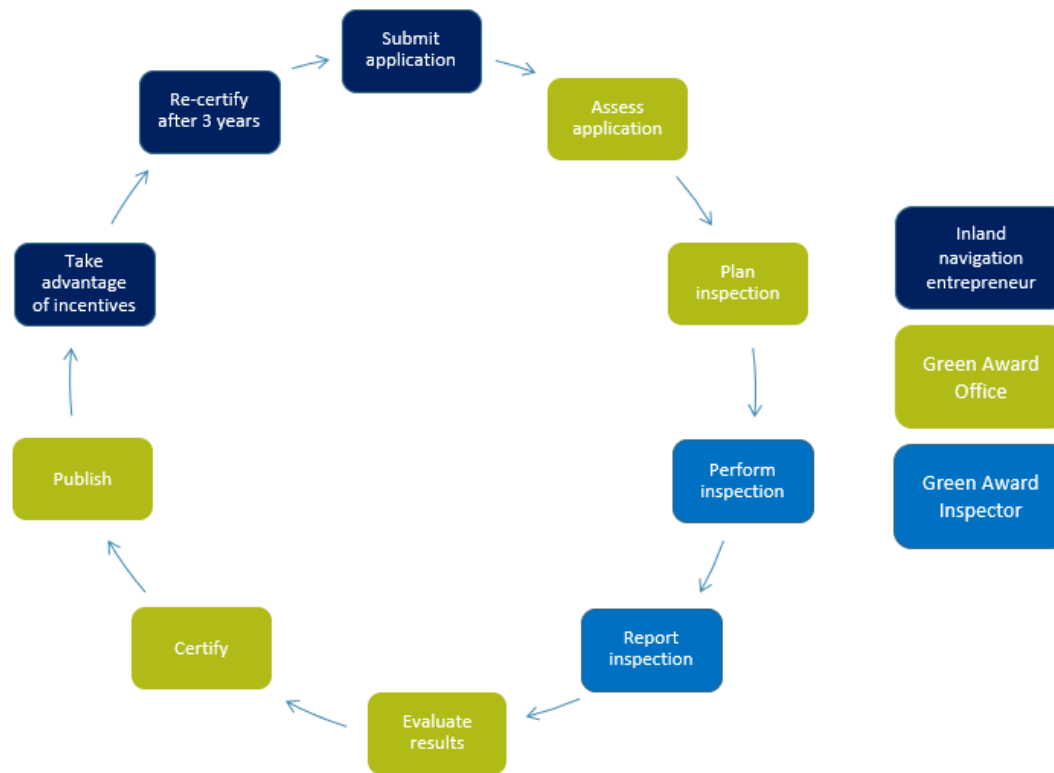


Figure 1



6.2. Procedure for developing Programme of Requirements

Times change, techniques change and requirements change. Therefore, we regularly update the Programme of Requirements, as a rule every three years. We evaluate the functioning of the existing programme and amend and supplement it where necessary and relevant. We closely monitor developments and work in close consultation with and input from barge operators, industry associations, ports and many others. To ensure the quality and relevance of our programme of requirements, we work as follows:

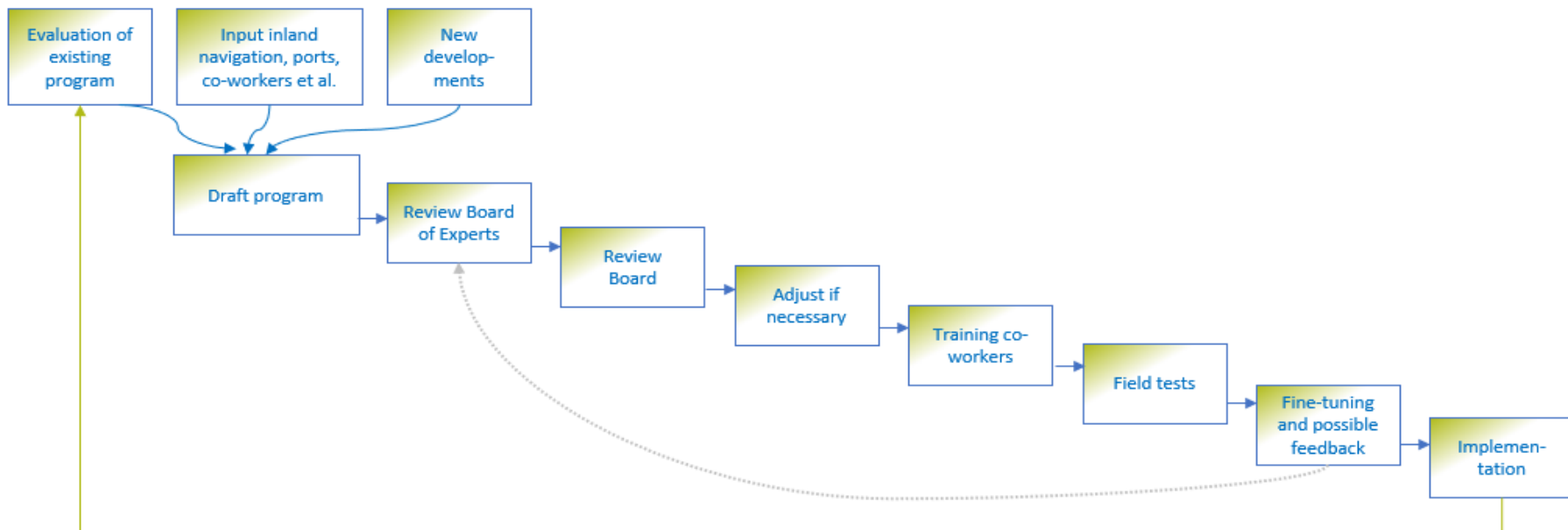


Figure 2

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7. Finally

Green Award aims to provide a challenging but achievable programme of requirements that will further advance the sustainability of inland navigation. Questions, comments and suggestions for improvement are always welcome at inlandshipping@greenaward.org. An expert team of people with experience in inland navigation will be happy to help.

Green Award Foundation
Westerkade 7B
NL-3016 CL ROTTERDAM
+31 10 21 70 200



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