



**Environmental criteria for sustainable public
procurement of**

Vessels

Version 30 March 2017

1. Scope/definition

The product group Vessels includes:

- design, construction and procurement of vessels for use at sea and on inland waterways, including public transport ships, such as ferries;
- maintenance and overhaul of vessels. Maintenance and overhaul are not included as a service in this document. That does not alter the fact that the criteria are also useful if such work is tendered out.

The scope of this product group does not include:

- the procurement of services or work in which vessels are used, such as dredging activities, passenger transport over water and transport over water;
- the purchase and/or maintenance of small vessels (< 15 m or < 15 tonnes). These are vessels that under Dutch law are regarded neither as inland waterway vessels (according to the Inland Waterway Vessels Act (Binnenschepenwet), the Dutch regulation for building materials BSB or Regulations for the Inspection of Ships on the Rhine (Reglement Onderzoek Schepen op de Rijn)) nor as seagoing ships. The government's purchasing volume for this group is limited. It is also an extremely diverse group in terms of composition, which makes the formulation of criteria for this group difficult (a definition of this group is included in Annex 2).

The following products, with their corresponding CPV codes, are part of this product group. This list of products is non-exhaustive

Products	CPV code
Ships and boats	34500000-2
Ships	34510000-5
Ships and similar vessels for passenger or goods transport	34512000-9
Ferries	34512100-0
Tugboats	34513200-8
Dredgers	34513250-3
Seaworthy floating docks	34513300-9
Diving support vessels	34513350-4
Floating cranes	34513400-0
Production vessels	34513450-5
Vessels for seismic research	34513500-1
Research vessels	34513550-6
Pollution control vessels	34513600-2
Fire extinguishing vessels	34513650-7
Rescue vessels	34513700-3
Floating constructions	34515000-0
Boats	34520000-8
Special purpose boats	34521000-5
Surveillance boats	34521100-6
Customs patrol boats	34521200-7
Police patrol boats	34521300-8

This document describes the environmental criteria. Information about the other elements of sustainable public procurement, such as social conditions and social return, may be found on the PIANOo website, on the specific product group page: <https://www.pianoo.nl/document/10844/productgroep-vaartuigen>.

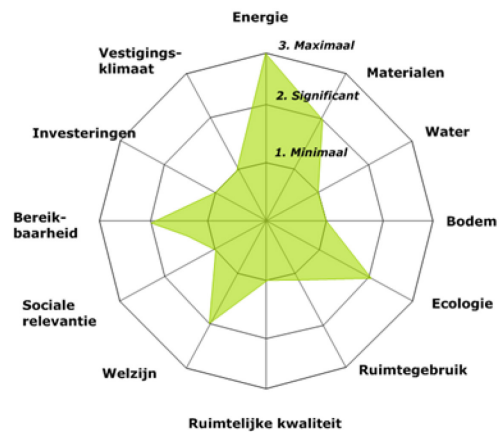
2. Criteria documents and approach to sustainable groundwork, road and hydraulic engineering

The core of the Sustainable Groundwork, Road and Hydraulic Engineering Approach is to allow sustainability aspects to be a consideration from an early planning stage, with a focus on the whole life cycle of the infrastructure or object(s) to be built. This is the approach that facilitates the biggest gains in sustainability, and it allows a good and broad-based consideration of People, Planet and Profit to be made in every project (see also <http://duurzaamgww.nl/>).

The AmbitionWeb has a key role in the Sustainable Groundwork, Road and Hydraulic Engineering Approach. It helps clarify ambitions at an early stage of a project, so they can then be maintained throughout the entire project process, from start to finish. For more information about the Sustainable Groundwork, Road and Hydraulic Engineering Approach and AmbitionWeb, see <http://duurzaamgww.nl/ambitiweb>.

The AmbitionWeb revolves around a number of sustainability themes, each with three ambition levels:

1. insight into the biggest impactors and flows for the theme in question, with the achievement of a minimum level, “state of the art”;
2. drafting specific reduction targets and achieving a significant improvement on the theme in question;
3. adding value, instead of just making things “less bad”. Not only is the impact on people/planet/profit zero, but a positive contribution is made.



Part of level 1 is meeting the suitability requirements, minimum requirements and contract provisions of the Sustainable Procurement criteria documents. The award criteria may be used to make a contribution to levels 2 and 3.

The following table presents the themes, based on the classification used in the criteria documents, on which the buyer can actually have an impact by using the requirements and criteria in this criteria document. It should be noted that a slightly different classification is used in the AmbitionWeb.

Below is a list of the requirements and criteria broken down by the individual themes. The criteria documents identify a total of five themes (the corresponding theme from the AmbitionWeb is shown in brackets):

- energy and climate (AmbitionWeb: “energy”);
- supplies and raw materials (AmbitionWeb: “supplies”);
- water and soil (AmbitionWeb: “water” and “soil”);
- living environment (AmbitionWeb: “welfare”);
- nature and space (AmbitionWeb: “ecology”).

The following table presents the themes on which the buyer can actually have an impact by using the requirements and criteria in this criteria document.

Themes	Level 1 AmbitionWeb Selection criteria (SC) Technical specifications (ME) Contract provisions (CB)	Level 2 AmbitionWeb Award criteria (GC)
<i>Energy and climate</i>	ME4. Energy consumption of the vessel	GC4. Energy consumption of the vehicle

Supplies and raw materials	CB1. List of environmentally hazardous substances	GC1. Environmental performance of groundwork, road and hydraulic engineering works GC2. Soil balance
Water and soil	ME1. Waste water ME2. Oil and grease	GC1. Antifouling GC2. Avoiding sacrificial anodes
Living environment	ME3. Emissions and engines	GC3. Emissions and engines

3. Assignment of criteria to project phases

The criteria in this document pertain to design, construction, purchase, maintenance and overhaul. In the following table, the criteria are assigned to the individual phases to which they apply.

Criterion	Area of application	Design	Completion	Management and Maintenance	Demolition
Technical specifications					
1. Waste water		x	-	-	o
2. Oil and grease		x	-	x	x
3. Emissions and engines		x	-	-	o
4. Energy consumption		x	x	-	x
Award criteria					
1. Antifouling		o	o	o	o
2. Avoiding sacrificial anodes		o	o	-	o
3. Emissions and engines		o	o	-	o
4. Energy consumption		o	o	-	o
Contract provisions					
1. List of environmentally hazardous substances		x	-	x	x

x = include in this phase

- = do not include in this phase

o = optional

4. Selection criteria

Not defined for this product group.

5. Technical specifications

No.	Technical specifications (ME)
ME1	Waste water This ship is equipped with: a. leak collectors for leaked water and oil;

	<ul style="list-style-type: none"> b. a separate collection system and storage system for leaked water and oil; c. a grey water tank with connection for onshore discharge if the system is not closed or treatment does not take place on board; d. a dirty water tank with connection for onshore discharge; e. if the ship is equipped with more than one fuel bunker, these must be equipped with an overflow safety, which shuts off the trim pump in the event of overflow. <p><i>Explanation</i> This requirement can be wholly or partly applied in the event of overhaul if there is sufficient room in the ship.</p> <p><i>Verification</i> The tenderer may be asked to provide technical specifications or blueprints of the ship, which should make clear whether the requested facilities are present.</p>
ME2	<p>Oil and grease</p> <ul style="list-style-type: none"> a. For new construction, water lubricant and/or recovered grease lubricant is used so that no oil or grease ends up in the water during operation. b. Maintenance must use motor oils with a low viscosity or regenerated lubricants, with at least 25% regenerated base oils. Lubricants with a low viscosity are in the category SAE 0W30, SAE-5W30 or equivalent. c. Hydraulic fluids and greases must not be classified with an environmental or health hazard or a warning sentence (R sentence) at the time of use (lowest classification limit in Council Regulation (EC) no. 1272/2008 or Directive 99/45/EC of the Council). d. No deviation is permitted from the prohibition in article 6, paragraph 6, of Council Regulation (EC) no. 66/2010 for substances considered to be of serious concern and included on the list referred to in article 59 of Council Regulation (EC) no. 1907/2006, insofar as present in concentrations in excess of 0.010% by weight in mixtures. e. The carbon content from renewable resources must be ≥ 45 %. f. The cumulative mass concentration of component substances that are both non-biodegradable and bioaccumulative may not exceed 0.1% by weight. <p>Upon delivery, a maintenance plan must be provided for the hydraulic oil. This contains at least a description of the maintenance intervals to be observed, with accompanying instructions.</p> <p><i>Verification</i> The tenderer may be requested to provide the technical data on the lubricants. Products with a relevant Type I environmental label answering to the listed criteria will be assumed to be in compliance. Other appropriate forms of evidence, such as a technical file or approval report from an independent institution, will also be accepted.</p> <p>Products with the European Ecolabel will be assumed to be in compliance with requirements b through f. A list of oils and greases that are in compliance with the requirements of the European Ecolabel can be found at http://www.rvo.nl/sites/default/files/2014/12/Olielijst.pdf. For an explanation of the Type I environmental label, see http://nen.nl/NEN-Shop/Norm/NENENISO-140242000-en.htm.</p> <p><i>Source: EU GPP</i></p>
ME3	<p>Emissions and engines</p> <ul style="list-style-type: none"> 1. An inland vessel with a diesel engine that satisfies emission standard CCR-2 is provided with a fuel consumption meter that can be read by the individual in charge of the power while the ship is sailing. 2. The ship is provided with an onshore power connection. <p><i>Explanation</i> The criterion does not apply for example to hydrogen, LPG or electric engines. Alternative fuels and propulsions are actually always cleaner.</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above.</p>
ME4	<p>Energy consumption of the vessel</p> <p>The energy consumption of the vessel may be maximum [X] kWh or [X] tonnes of diesel [per year or per operating hour per deployment] for a period of [X] years after delivery.</p> <p>[The contracting authority fills in the maximum energy consumption in kWh or tonnes of diesel per year, or per operating hour per deployment].</p>

	<p>[The contracting authority can stipulate a period in which the consumption must be guaranteed in order to avoid consumption not being achieved because of pollution, for instance. Guarantee measurements and a penalty provision may be included in the contract].</p> <p><i>Explanation</i></p> <p>The deployment profile may be used in calculating consumption per year. Important values from this profile are: the number of hours/year [X] that the ship is deployed, how often and at what speed it will sail in km/h or knots for [X] hours/year, what deviation from the speeds given is acceptable, in km/h or knots, where the vessel will sail (inland waters or at sea), whether or not there are waves and if so, height of the waves [X] in metres for [X] hours/year, etc.</p> <p>An alternative and more direct approach is to link the standard to the type of deployment of the vessel, i.e., patrol, disaster management, etc. Often the fuel consumption per deployment per operating hour can be calculated quite easily and is easy to monitor in work practice.</p> <p>When using a fuel other than diesel, the energy content can be calculated using the table on the RVO website at the following link: http://www.rvo.nl/subsidies-regelingen/omrekenfactoren-voor-energiebesparing.</p> <p><i>Verification</i></p> <p>The tenderer may be asked to submit documentation demonstrating compliance with the criteria above.</p> <p>Guarantee measurements after delivery in combination with a penalty provision can prevent unrealistic numbers from being given.</p>
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6. Award criteria

No.	Award criteria (GC)
GC1	<p>Antifouling</p> <p>If the antifouling used is biocide-free and non-toxic to water organisms and the PEC/PNEC ratio is not more than 1 for at least two water organisms normative for the ecosystem, determined in accordance with Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products, this section of the tender is scored as follows: [XXX].</p> <p><i>Verification</i></p> <p>The tenderer may be asked to submit the product data sheets demonstrating compliance with the antifouling criteria above.</p>
GC2	<p>Avoiding sacrificial anodes</p> <p>If systems to prevent against corrosion are used that contain no sacrificial anodes, this section of the tender is scored as follows: [XXX].</p> <p><i>Explanation</i></p> <p>With respect to anodes, zinc and aluminium are sacrificial anodes in any event.</p> <p><i>Verification</i></p> <p>The tenderer may be asked to submit documentation demonstrating compliance with the criteria above.</p>
GC3	<p>Emissions and engines</p> <p>The greater the degree to which the engines for inland waterway vessels produce particulates and NOx below the level of the CCR-2 emissions standard, the higher the tender may be rated.</p> <p>The greater the degree to which the engines for seagoing vessels produce particulates and NOx below the level of Tier II of MarPol Annex VI, the higher the tender may be rated.</p> <p><i>Verification</i></p> <p>The tenderer may be asked to submit documentation demonstrating compliance with the criteria above.</p>
GC4	<p>Energy consumption of the vessel</p> <p>The lower the vessel's energy consumption is below the energy consumption required in technical standard 4, the higher the tender may be rated.</p>

	<p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above.</p> <p>The contract can include a test measurement, possibly in accordance with a proposed testing procedure. A penalty provision could be included for the event that this requirement is not satisfied after delivery.</p>
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7. Contract provisions

No.	Contract provisions (CB)
CB1	<p>List of substances that are hazardous for the environment ("Green Passport") Upon delivery of the vessel, the contractor will submit a new, or in the case of a maintained or overhauled vessel, updated, list of substances and materials used, with which the vessel is equipped and which may be hazardous for the environment. This must be structured as stipulated in the most recently valid version of the Guidelines for the Development of the Inventory of Hazardous Materials of the International Maritime Organisation (International Maritime Organization, IMO) (Appendix 1 of the MEPC 197(62) Annex 3, page 12; see http://www.imo.org/OurWork/Environment/ShipRecycling/Documents/Resolution%20MEPC.197(62).pdf).</p> <p>When in doubt as to whether a material or substance used should be on the list, Council Regulation (EC) No. 1013/2006 should be consulted, in particular Annexes III and IV. It applies here that materials and substances from Annexes III and IV must be included on the list.</p> <p><i>Explanation</i> When a ship is constructed, materials are used that could harm the environment, in particular when the ship is scrapped or repaired. This includes paints, tank coatings, insulation materials, materials containing chlorine, batteries, lubricating and hydraulic oils, etc.</p> <p>By listing which materials are used where, the vessel can be more easily repaired and scrapped; and dangerous substances can be handled and removed with as little impact on the environment as possible. After being drawn up, this list comprises part of the ship's papers, is updated whenever the ship is maintained and is handed over to the new owner when the vessel is sold. Compiling such lists and ensuring that they are kept up to date is the responsibility of the IMO.</p>