



Environment and Spatial Planning
*Ministry of Housing, Spatial Planning and
the Environment*

Criteria for the Sustainable Public Procurement of **Beverage Vending Machines**

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1 Introduction

The Dutch government wants to take concrete steps towards a sustainable society, and to set a good example. Each year, government organisations spend more than EUR 50 billion on the purchase of supplies, services and public works. By purchasing sustainably, the government can significantly boost the market for sustainable products. Governmental authorities have set clear objectives to achieve this: the central government is aiming for 100% Sustainable Public Procurement in 2010, while the municipalities aspire towards 75% in 2010 and 100% in 2015. Provincial governments and water boards have set themselves the target of at least 50% in 2010. 100% Sustainable Public Procurement is understood to mean that all purchases meet the minimum requirements that have been set for the relevant product groups at the time of purchase. More information on this topic is available from the website Sustainable Procurement (www.agentschapnl.nl/sustainableprocurement).

NL Agency supports government authorities in various ways to help reach these objectives. These include developing criteria for supplies, services and public works procured by these authorities. This document focuses on the criteria for the Beverage Vending Machines product group, the elaboration of the criteria in specification texts and a more detailed assessment of the criteria, as well as a number of points for attention in the pre- and post- procurement stages. Additional background information and considerations regarding the content of the criteria can be found in the criteria document on the website www.agentschapnl.nl/duurzaaminkopen/criteria, available in Dutch only.

1.1 Definition of the product group

The Beverage Vending Machines product group comprises vending machines that at a minimum dispense warm beverages, the warm beverage itself and may also provide the possibility of dispensing cold water.

This product group includes:

- The Beverage Vending Machine
- The supply of the vending machine
- The ingredients and related materials, such as:
 - Coffee, tea, chocolate milk and soup
 - Milk and sugar
 - Drinking systems
- The supply of ingredients and related materials
- Maintenance of the vending machine

This product group excludes:

- Vending machines for cooled beverages
- Vending machines for water/mineral water
- Snack/sweets vending machines
- Vending machines for health foods

- Coffee and tea served during meetings. These are often included in the contract with the caterer. See the Catering product group¹
- The supply of power for the vending machine. See the Electricity product group²
- The supply of water for the Beverage Vending Machine.

This product group comprises a supply as well as a service, or a combination of the two. For the benefit of the contracting authority, a number of CPV codes that might be of relevance to this product group have been included in this document. This selection is by no means exhaustive or complete. The contracting authority retains responsibility for compiling the correct set of CPV codes that matches the relevant tender.

The following CPV codes apply to this product group:

42968100-0	Beverage Vending Machine
51542200-5	Installation of beverage processing machines

¹ <http://www.agentschapnl.nl/duurzaaminkopen/Criteria/catering.asp> (Dutch)

² <http://www.agentschapnl.nl/duurzaaminkopen/Criteria/elektra.asp> (Dutch)

2 Sustainability in the procurement process

The criteria in this document have been classified in the various steps of the public procurement process. More information about these steps and how to combine them with sustainability can be found in the Sustainable Public Procurement Manual. This manual can be downloaded from the website Sustainable Procurement www.agentschapnl.nl/sustainableprocurement.

2.1 Preparatory stage (points for consideration)

Every purchase or call for tender starts with drawing up the inventory of the needs of the internal or external customer. Sustainability can be incorporated into this stage by considering whether the purchase is truly necessary and whether a more sustainable alternative might be available. Specific points for consideration regarding procurement for the Beverage Vending Machines product group are:

Supply of vending machine/services

- Is it truly necessary to install a (new) machine? Is it possible to repair or overhaul the existing machines? Or is it possible to extend the existing contract by a year? This could also be discussed with the supplier. Also see Appendix 5 (In Dutch document only).
- Conduct a critical assessment to determine the number of vending machines required to prevent unnecessary energy use. The placement of the machines within the building can affect the number of machines to be acquired.
- Consider asking the supplier to provide an annual improvement plan for a more efficient deployment of the vending machine park.
- If you plan to procure cold water as well (preferably not from an environmental perspective), be aware that there are warm Beverage Vending Machines with an integrated cold water dispensing facility. That saves space, energy and an additional water tap in the pantry.
- Prepare a Total Cost of Ownership (TCO) and a Life Cycle Analysis (LCA) for the various forms of procuring Beverage Vending Machines and determine the best option for your specific situation. Also see Appendix 2 (In Dutch document only).
- Pay attention to the location when placing the vending machine: do not install a Beverage Vending Machine that dispenses warm beverages near a food or Beverage Vending Machine that dispenses cold products and avoid placing a machine that dispenses warm products near a cold, draughty area.

Vending machine

- Analyse the current situation in the marketplace concerning the total life cycle of water filters. If positive, include a water filter as a minimum requirement.

Drinking systems

- Survey how employees use the drinking system. Are they usually at the office and do they often drink from the same cup, or are they often on the road with short periods at the office?

2.2 Specification stage (criteria)

During the specification stage, the internal or external customer's needs are translated into a tender document. This stage entails the formulation of:

- Criteria for supplier qualification. These could include grounds for exclusion and suitability requirements, i.e. requirements with regard to suppliers, and, in the case of restricted procedures, optional selection criteria, i.e. wishes with regard to suppliers.
- A description of the minimum requirements pertaining to supply, service or public works (the Schedule of Requirements).
- Award criteria, i.e. wishes regarding supplies, services and public works. These are only applicable when the tendering process is based on the principle of the Most Economically Advantageous Offer ('Economisch Meest Voordelige Inschrijving' or EMVI).
- The contract stipulating the contract provisions.

More information on the various types of criteria and the various tender options can be found in the Sustainable Public Procurement Manual. Innovation is also included in the award criteria, where relevant. Innovation is oriented towards the development and introduction of new ideas and products.

The criteria in this document have been formulated to support the purchaser in the Sustainable Public Procurement of Beverage Vending Machines. The criteria have been subjected to legal review. However, every procurement and tender process is unique. For that reason, the drafting of a tender document remains the responsibility of the purchaser.

2.2.1 Supplier qualifications

No specific criteria have been formulated for this specific product group with regard to supplier qualification. More information on the possibilities of incorporating sustainability at this stage of the process can be found in the Sustainable Public Procurement Manual.

2.2.2 Schedule of requirements

Minimum requirements

<p>Minimum requirement no. 1</p>	<p><i>(Applies to Beverage Vending Machines)</i></p> <p>Energy-saving measures</p> <p>The vending machines must at a minimum incorporate the following energy-saving measures:</p> <ul style="list-style-type: none"> • The vending machine must be equipped with a suspended mode and/or time switch so that the vending machine can be shut off during periods when employees are not making use of the machine. Food safety must be maintained during such periods. • The lighting must comply with the following requirements: <ul style="list-style-type: none"> - The machine must not have any lighting other than that needed for providing information for making a choice of beverages. <p>AND</p> <ul style="list-style-type: none"> - The lighting present must be energy efficient and is automatically shut off using a light switching system during periods when employees are not making use of the vending machine. <p>'A period' is defined in any event as: the weekend (Friday evening from [X] hours to Monday morning [Y] hours and during the week, each evening from [X] hours to [Y] hours the next morning.</p> <p>'Energy efficient' lighting is defined as lighting that emits more than 40 lumen per Watt or lighting at a minimum equipped with a C label.</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. Statement to be included in the tender by the tenderer to confirm compliance with this minimum requirement. 2. The technical description of the equipment to be included in the tender demonstrating that the equipment complies with this minimum requirement.
<p>Notes for purchaser</p>	<p>The identification of suitable intervals and times at which the equipment can be placed in suspended mode or shut off is the responsibility of the procuring organisation.</p> <p><u>Verification of means of proof:</u></p> <ol style="list-style-type: none"> 1. The technical description of the equipment to be included in the tender demonstrating that the equipment complies with this minimum requirement. 2. No further verification.

Minimum requirement no. 2	<p><i>(Applies to Beverage Vending Machines)</i></p> <p>Replacement parts</p> <p>Replacement parts must remain available for at least 6 years after the date of delivery of the Beverage Vending Machine.</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. Statement to be included in the tender by the tenderer to confirm compliance with this minimum requirement.
Notes for purchaser	<p><u>Verification of means of proof:</u></p> <ol style="list-style-type: none"> 1. No further verification.

2.2.3 Award criteria

Award criteria

Award criterion no.1	<p><i>(Applies to Beverage Vending Machines)</i></p> <p>Design focused on future reuse</p> <p>To the extent that the products to be applied/supplied meet a higher number of the aspects listed below, the tender is awarded a higher rating:</p> <ol style="list-style-type: none"> 1. The availability of a complete listing of all materials used to manufacture the product, classified by components derived from the technical and biological cycles¹. 2. If components from the technical and biological cycles are used, it is possible to separate them again without the need for using additional substances or materials that cannot be reused as part of the process. 3. The materials used can be recycled at the end of the product's life cycle without losing their original quality². <p>¹ The biological cycle comprises materials that are used by living organisms or cells to sustain living processes, such as growth, cell division, synthesis of carbohydrates or other complex functions. Biological materials generally consist of carbon-based compounds that can be safely composted and returned to the soil. The technical cycle comprises man-made materials, designed to circulate endlessly as part of technical and/or industrial processes.</p> <p>² Original quality is defined as the ability to use the material at the end of the product's lifespan for the same purposes as those for which it could be used before it was incorporated into the product.</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. The declaration submitted as part of the proposal identifying the aspects (1-3) the product meets. 2. List of the materials used to manufacture the product and a recycling plan.
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Notes for purchaser	<p>This award criterion is aimed at the 'Cradle-to-Cradle' design theory. See Appendix 1 for further explanation and definitions. The aspects identified facilitate the future reuse of the individually incorporated materials.</p> <p><u>Verification of means of proof:</u></p> <ol style="list-style-type: none"> 1. Request a list of materials used and the recycling plan. 2. No further verification. <p>You are responsible for fitting the criterion into the evaluation methodology and developing a point allocation scheme.</p>
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Award criterion no.2	<p><i>(Applies to the procurement of one-time drinking systems)</i></p> <p>Drinking systems</p> <p>This component is evaluated if the supplier is responsible for collecting and recycling the drinking systems that he supplies.</p> <p><u>Means of proof:</u></p> <ol style="list-style-type: none"> 1. Statement to be included in the tender by the tenderer to confirm compliance with this award criterion.
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Notes for purchaser	<p>You are responsible for fitting the criterion into the evaluation methodology and developing a point allocation scheme.</p> <p><u>Verification of means of proof:</u></p> <ol style="list-style-type: none"> 1. No further verification.
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2.2.4 Contract

Contract Provision no. 1	<p>Maintenance of Beverage Vending Machines</p> <p><i>(For rental/caterer)</i></p> <p>The Beverage Vending Machine must be accompanied by a maintenance schedule, prepared in the Dutch language, that identifies the maintenance necessary to ensure operation as agreed upon and that guarantees the agreed upon technical lifespan of the equipment. The required frequency of all maintenance activities must be stipulated and should include details on which of these tasks could be carried out by the user and which by a maintenance professional. The caterer as well as the supplier of the Beverage Vending Machine must adhere to this schedule.</p> <p><i>(For full service or rental/supplier or operation)</i></p> <p>Upon contract award, the supplier must prepare a maintenance schedule, prepared in the Dutch language, that identifies the maintenance necessary for the vending machine to ensure operation as agreed upon and that guarantees the agreed upon technical lifespan of the equipment. Starting 1 year after contract award, the supplier must provide information, each year, to the client on the basis of this maintenance schedule concerning the service and maintenance provided that demonstrates that the required activities were executed and that all</p>
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maintenance activities were carried out in accordance with the agreed upon frequency.

Maintenance activities include cleaning the vending machine, removing scale, replacing parts, and performing repairs and restoring malfunctions.

2.3 Utilisation stage (points for consideration)

Once the procurement stage has been concluded and a product or service has been purchased, there are opportunities for using the product in a sustainable manner. Specific points for consideration for this product group are:

- Informing personnel about the possibility of using their cup several times.
- Perform proper maintenance on the machine (i.e. in accordance with the activities identified in the maintenance schedule), so that the lifespan is extended. Proper and regular maintenance prevents malfunctions and the possible release of harmful substances.
- Adjust the equipment's settings properly. Make sure that during installation the supplier adjusts the equipment's 'power management' function to be as energy efficient as possible (including the sleep settings and the standby mode).
- Ensure the equipment is properly discarded. The manufacturer/supplier is legally obliged to guarantee the free-of-charge removal of the equipment and to provide information concerning the environmentally responsible processing of discarded machines. Follow the manufacturer's/supplier's directions.
- If the contract period has expired, verify whether it is possible to extend the contract by one more year. Or verify whether it is possible to renew the contract with the rental of the same vending machine park or with the rental of a portion of the vending machine park, by repairing or overhauling the vending machines (see Appendix 5 (In Dutch document only)).

Appendix 1 'Cradle-to-Cradle'-definitions and explanation

Biological nutrient

A material used by living organisms or cells to carry on life processes such as growth, cell division, synthesis of carbohydrates and other complex functions. Biological Nutrients are usually carbon-based compounds that can be safely composted and return to soil.

Technical nutrient

A material of human artifice designed to circulate within technical metabolism (industrial cycles)—forever.

Compostable

According to ASTM, a compostable material is one that is capable of undergoing biological decomposition in a compost site as part of an available program, such that the material is not visually distinguishable and breaks down into carbon dioxide, water, inorganic compounds, and biomass at a rate consistent with known compostable materials.

Easily separable

In order to be considered "easily separable," dissimilar materials must be able to be separated using nothing more complex than common hand tools, and the separation must be completed in a reasonable amount of time.

Recyclable

Able to be reused at a similar level of quality. For the sake of this program, materials are considered "recyclable" if it is technically possible to recycle them and at least one commercial recycling facility exists.

Complete ingredient formulations for all materials used in the product.

Applicant shall identify all homogeneous materials present in the finished product. This is typically done by breaking the product down into assemblies, then sub-assemblies, then components, and finally into pure homogeneous materials. Any homogeneous material present at 100 ppm or higher in the finished product must be reported.

Applicant shall define the product with respect to the appropriate cycle (i.e., technical or biological) and all components shall be defined as either biological or technical nutrients. If the product combines both technical and biological nutrients, they should be clearly marked and easily separable.

Recycled content and weight of all materials used in the product

Applicant shall demonstrate that the product has successfully been designed as either a Technical or Biological Nutrient (or both if materials are easily separable); hence, the appropriate materials and chemical inputs have been intentionally selected to support the metabolism for which the product was designed. In addition, the manufacturer is in the process of developing a plan for end of life product recovery.

Applicant shall demonstrate that there is a well-defined logistics and recovery system plan for this class of product. The elements of the plan include:

- Scope: how extensive the recovery effort will be
- Timeline: when the actual recovery will begin
- Budget: commitment of resources (e.g., money, labour, equipment, etc.)

The plan can include partners outside the traditional supply chain (e.g., recycling partners, recovery/transportation partners, etc.). This does not necessarily mean a product take-back program. That is one potential strategy for closing the loop on the materials/product but there are several other legitimate strategies as well. For example, utilizing design for disassembly (DfD) strategies along with third party regional recyclers may be more effective in recovering and reutilizing materials than a product take back program that requires potentially very disperse products to be sent back to the manufacturer.