



Environmental criteria for sustainable public  
procurement of

# Vending Machines

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# 1. Scope/definition

The product group Vending Machines includes vending machines for:

- hot beverages
- cold beverages/mineral water
- snacks/sweets

This product group covers:

- the vending machine
- the delivery of the vending machine
- the contents and supplies, such as:
  - coffee, tea, chocolate milk and soup
  - milk and sugar
  - drink systems
  - cold beverages/soft drinks
  - snacks/sweets
- the delivery of contents and supplies
- maintenance of the vending machine

This product group comprises both a delivery and a service, or a combination of the two. The following products (with their corresponding CPV codes) are part of the Vending Machines product group. This list of products is not intended to be exhaustive.

Products	CPV code
Beverage Vending Machine	42968100-0
Items for vending machines	15894500-6
Vending machines	42933300-8
Vending machines	42933000-5
Installation of beverage processing machines	51542200-5

Excluded from the scope of this product group are:

- coffee and tea served during meetings. These are often included in the contract with the caterer (see Catering product group).
- the supply of power for the beverage vending machine (see Electricity product group).
- the supply of water to the beverage vending machine.

## 2. Most significant environmental effects

The following tables list the sustainability themes and describe the approach to each theme for the product group. The "Approach" column presents a statement indicating the influence of sustainable purchasing and its criteria on the "sustainability" of the theme. This column also includes a reference to any requirements, award criteria or points of attention/suggestions that may be useful in implementing the approach. The product group can also have an impact on other environmental themes, but these are (at least at present) less relevant or of a much less significant level of concern, or do not as yet have a suitable set of standard criteria.

Themes:	Approach:	No. of requirement/criterion
<b>Energy and climate</b> Energy consumption of vending machines and corresponding CO <sup>2</sup> emissions, energy consumption and emissions from transport of raw materials for contents and processing of raw materials into contents	<ul style="list-style-type: none"> <li>Reduce energy consumption of beverage vending machines</li> </ul>	ME1, AS5, AS9
	<ul style="list-style-type: none"> <li>Use of sustainable products</li> </ul>	AS7
<b>Supplies and raw materials</b> Energy consumption of vending machines and corresponding CO <sub>2</sub> emissions, energy consumption and emissions from transport of raw materials for contents and processing of raw materials into contents	<ul style="list-style-type: none"> <li>Avoid unnecessary products by placing fewer vending machines per number of users</li> </ul>	AS1, AS2, AS3
	<ul style="list-style-type: none"> <li>Use beverage vending machines designed for future reuse</li> </ul>	GC1
	<ul style="list-style-type: none"> <li>Use refurbished machines</li> </ul>	AS1
	<ul style="list-style-type: none"> <li>Separate, collect and reuse single-use drink systems and packaging material</li> </ul>	GC2
	<ul style="list-style-type: none"> <li>Use bio-based products</li> </ul>	AS8

## 3. Points of attention/suggestions

Devoting attention to the opportunities and possibilities for the most sustainable procurement possible in the preparation phase will lead to specifications that are more ambitious or of different types than the standard minimum requirements and award criteria set out in this document. The following table presents points for attention and suggestions for promoting sustainability in procurement within this product group.

No.	Points of attention/suggestions (AS)
AS1	<b>Avoid purchasing new vending machines</b> Avoid the unnecessary purchase of beverage vending machines. 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.
AS2	<b>Optimise number of vending machines</b>

	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.
AS3	<b>Request improvement plan for deployment of vending machines</b> Consider asking the supplier to provide an annual improvement plan for a more efficient deployment of the vending machine park.
AS4	<b>Integrate cold water</b> Integrate cold water into hot beverage machines. If you plan to procure cold water as well (which, from an environmental perspective, should be avoided), 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.
AS5	<b>Place vending machine at effective location</b> When considering the placement of the vending machine, do not install a beverage vending machine that dispenses hot beverages near a food or beverage vending machine that dispenses cold products and avoid placing a machine that dispenses hot products near a cold, draughty area.
AS6	<b>Catalogue use of drink systems</b> Survey how employees use the drink 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? Choose the right drink system based on the results.
AS7	<b>Use organically produced contents</b> Consider stocking the vending machines with organically produced contents (e.g. coffee, chocolate milk, tea).
AS8	<b>Introduce bio-based products</b> Explore the options for giving priority to bio-based supplies (like drinking cups). This could initially be done on a small scale, to gain experience in a test environment and to not overburden the market in this as yet not fully developed segment. Consult the "Bio-based Procurement Guide" for more information. See: <a href="http://www.pianoo.nl/themas/duurzaam-inkopen/biobased-inkopen/">http://www.pianoo.nl/themas/duurzaam-inkopen/biobased-inkopen/</a> <a href="#">wegwijzer-biobased-inkopen</a>
AS9	<b>Apply performance-based energy criteria</b> Consider including a criterion that sets a limit on a vending machine's energy consumption per product unit.

## 4. Selection criteria

Not defined for this product group.

## 5. Technical specifications

No.	Technical specifications (ME)
ME1	<p><i>(Applicable to vending machines)</i></p> <p><b>Energy-saving measures</b></p> <p>The vending machines must at a minimum incorporate the following energy-saving measures:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• The lighting must comply with the following requirements: <ul style="list-style-type: none"> <li>○ The machine must not have any lighting other than that needed for providing information for making a choice of beverages.</li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>○ 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.</li> </ul> </li> </ul>

	<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>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><i>Verification</i> The tenderer may be requested to provide a statement concerning the set requirements.</p>
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## 6. Award criteria

No.	Technical specifications (ME)
GC1	<p><i>(Applicable to vending machines)</i> <b>Design focused on future reuse</b></p> <p>The greater the proportion of materials used in the vending machine that can be recycled at the end of the life cycle, the higher this portion of the tender will be rated.</p> <p>A higher rating can be awarded if:</p> <ol style="list-style-type: none"> <li>1. There is a complete inventory of all materials incorporated into the product.</li> <li>2. At least 80% of the materials used can be recycled at the end of the product's life cycle without losing their original quality.</li> </ol> <p>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><i>Verification</i> The tenderer may be requested to supply a materials list stating the material types, weights and recyclability.</p>
GC2	<p><b>Collection and recycling of products supplied</b></p> <p>The higher the degree to which the tenderer will handle the collection and recycling of a higher percentage of the aspects supplied as listed below, the higher this portion of the tender will be rated.</p> <ul style="list-style-type: none"> <li>• Drink systems and/or</li> <li>• Packaging materials and/or</li> <li>• Coffee grounds</li> </ul> <p><i>Verification</i> The tenderer may be asked to produce a work plan outlining the method of collection and recycling of drink systems, packaging materials and/or coffee grounds collected. The tenderer may also be requested to produce an annual statement of collected volumes and method of processing.</p>

## 7. Contract provisions

Not defined for this product group.