



Climate and environmental requirements for the City of Oslo's construction sites

Version 1.0

The Agency for Improvement and Development
Department for corporate services

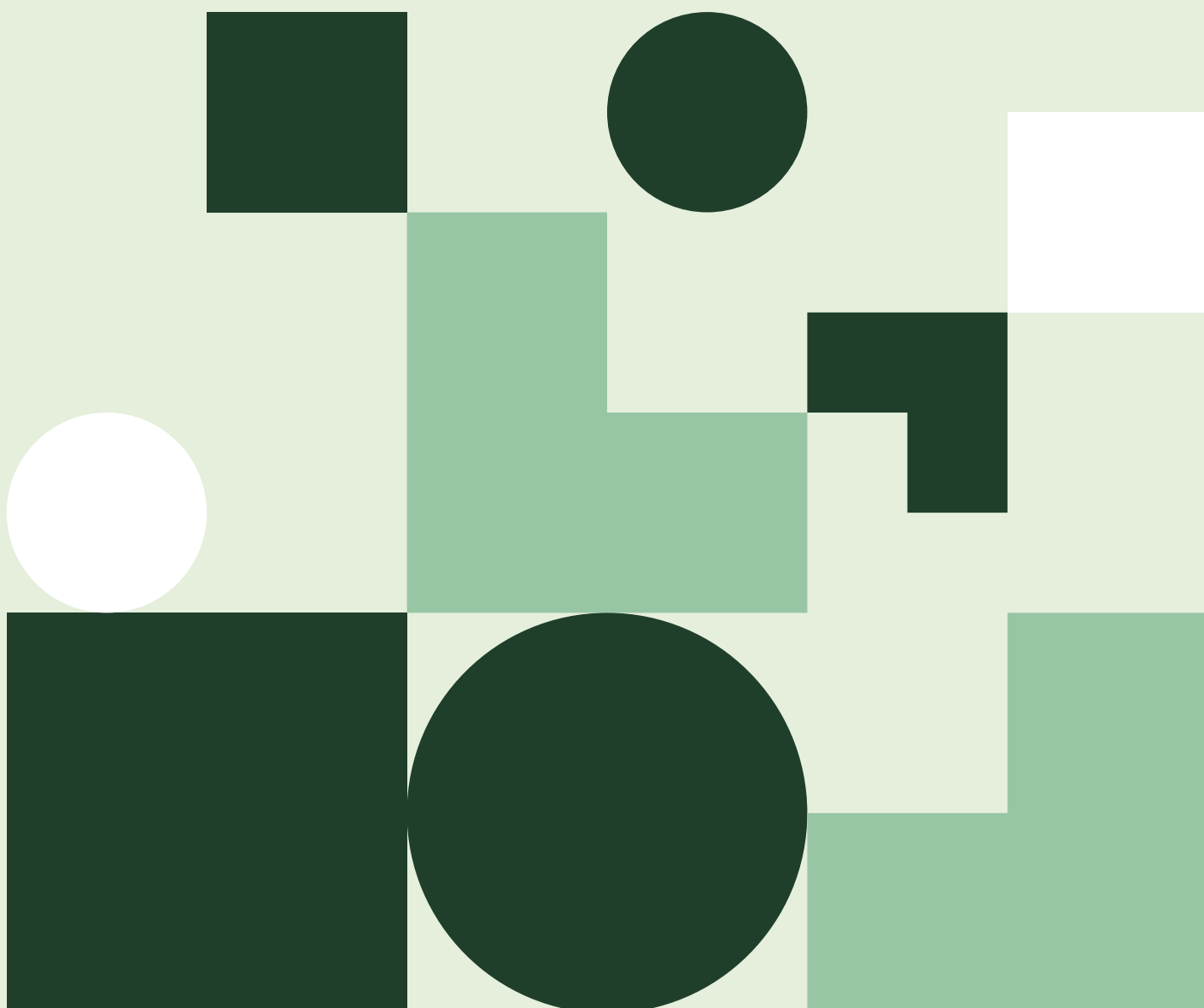


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1 Introduction

This document contains standard climate and environmental requirements for the City of Oslo's construction sites, as part of the City's ambitions to have fossil-free and, with time, zero-emissions construction sites. Emissions from construction sites form part of the total environmental impact with construction contracts. This document only comprises requirements to help reduce the direct emissions during building and construction, and must be read in the context of the other environmental requirements for an individual procurement.

This document will be updated regularly in light of experience gained and technological developments.

The text with a light-green background is only intended as guidelines for purchasers and shall not be used in competition documents. Text in red must be amended to fit other text used in competition documents.

| Definitions | |
|--------------------------------------|---|
| Fossil-free | Energy carriers that do not emit new CO ₂ to the atmosphere during use. Fossil-free energy carriers in this context are biodiesel, bioethanol, biogas, pellets, electricity, hydrogen and district heating. |
| Emissions-free/zero-emissions | Energy carriers with no form of emissions during use, either CO ₂ or other gases that affect local air quality (such as particle emissions and dust in suspension). Zero-emissions energy carriers are electricity, hydrogen and district heating. Zero-emissions machines/vehicles include battery-electric and plug-in electric machines/vehicles or machines/vehicles that use hydrogen or other zero-emissions technology. |
| The Machine registry | The Machine registry (Maskinregisteret) is a register for all types of machinery and equipment. A complete online list of machines, with relevant information on fuel type and consumption. |
| European emission standards | Type approval for all new vehicles and new vehicle engines. The European requirements specify maximum emissions for new engines in heavy vehicles in order to gain approval for sale in EU member states. European emission standards only make requirements on emissions mainly affecting local air quality (such as particle emissions and dust in suspension). It does not include requirements on greenhouse gas emissions (CO ₂). It is incorporated in chapter 25 of the Regulation relating to vehicles. |
| Stage | Type approval for all new machines. Stage specifies maximum emissions for new machines in order to gain approval in EU member states. It is incorporated in chapters 25-26 of the Regulation relating to vehicles. Stage corresponds to European emission standards for vehicles. |
| Minimum requirements | Description of the properties required in the product/service to be procured. |
| Award criteria | The most important criteria when evaluating tenders in a competition. |

| Definitions | |
|-------------------------------------|---|
| Contractual requirements | The general and special provisions to apply for the contract. |
| Best Value Procurement (BVP) | Best Value Procurement (BVP) is a method for purchasing and project management, which helps the Principal identify the correct expertise and ensure good performance by the suppliers during the assignment. The method emphasises exploitation of the suppliers' expertise and delegating responsibility to the suppliers for solutions and execution, while the Principal plays the role of quality supervisor. |
| Partnering contract | A method of collaboration for a building/construction project, where all parties are involved at an early stage. The parties collaborate on e.g. choice of solution and/or execution. The project is conducted according to joint objectives and joint economic interests. |

The following chapters contain the minimum requirements, award criteria and contractual requirements applied in procurement processes.

- The contractual requirements shall apply to all procurement with a value of NOK 500,000 and above.
- For procurement with an estimated value of more than NOK 5 million excluding VAT, the contractual requirements and award criteria in paragraph 3.1 shall apply.
- For procurement with an estimated value of less than NOK 5 million excluding VAT, the contractual requirements shall apply, and the award criteria are optional. For smaller procurements, a simplified set of award criteria can also be used, ref. paragraph 3.2 (optional).
- For procurement with an estimated value of more than NOK 51 million excluding VAT, the minimum requirements shall apply in addition to the contractual requirements and award criteria.

| Procurement value | > NOK 500,000 | > NOK 5 million | > NOK 51 million |
|---------------------------------|---------------|-----------------|------------------|
| Contractual requirements | X | X | X |
| Award criteria | | X | X |
| Minimum requirements | | | X |

2 Requirement specification: minimum requirements

GUIDELINES:

Requirements to be utilised in the requirement specification for building/construction procurement > NOK 51 million

| Requirement no. | Requirement | Documentation |
|-----------------|---|---|
| 1 | Heating Heating and drying shall be carried out with zero emissions, for example by using electricity, district heating or other zero-emissions technology. | The supplier shall attach a brief, written report on how heating and drying can be carried out with zero emissions. |

GUIDELINES:

All energy consumed for heating purposes shall be zero-emissions. The minimum requirement applies throughout the entire construction period. The Principal must contact the infrastructure owner during the planning stage (Hafslund/Fortum) in order to ensure that infrastructure is ready in time.

Contact Hafslund/Fortum. Submitting a "Melding om installasjonsarbeid" (Notification of installation work)

For certain procurement processes, when the necessary infrastructure for zero-emissions heating is not available in time, exemptions may be made from the minimum requirement for zero-emissions heating.

3 Competition specification: award criteria Environment

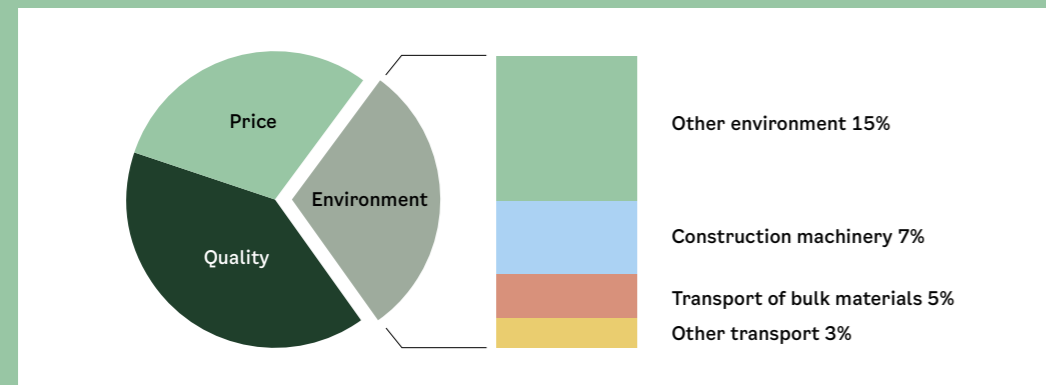
The following text shall always be included in the competition specification:

The Supplier with the highest score on aggregate in the sub-criteria for the Environment award criteria is awarded 10 points, while a lower score is awarded to other tenders reflecting relevant differences in the tender. The score is then multiplied by the specified weighting of XX%.

GUIDELINES:

The award criteria for Environment shall as a minimum have 20% weighting for building and construction competitions (as a main rule, the Environment criterion should be weighted 30%). Minimum 50% of the total weighting for Environment shall be attributed to construction machinery and transport to/from the building/construction site. This only relates to the sub-criteria related to the award criteria for Environment, comprising direct emissions from building/construction machinery and transport in connection with building/construction work, and which shall represent minimum 50% of the award criteria for Environment, which in turn shall be weighted as minimum 20% of the entire weighting.

The other sub-criteria under the award criteria for Environment may, for example, relate to greenhouse gas emissions from production of materials (LCA/EPD), geographic location, the building's energy consumption, measures to prevent acute pollution during construction, extra protection of biotopes, greenhouse gas estimates for the entire life cycle or other relevant factors for the building/construction project in question.



If there are no plans to add on further environmental requirements, the environmental requirements for building/construction work may be assigned a higher weight.

In situations with strict minimum requirements on the environment, such as requirements for zero-emissions construction sites or strict minimum requirements on the building's environmental performance throughout its life cycle, the award criteria for Environment may be assigned a lower weight or ignored.

3.1 Award criteria for procurement with estimated value exceeding NOK 5 million excl. VAT

GUIDELINES:

The award criteria to be utilised in the competition specification for building/construction procurement > NOK 5 million.

For procurement with an estimated value of less than NOK 5 million excluding VAT, the Principal may decide whether or not to apply the award criteria. There is also an optional, simplified version for minor procurement processes.

| Recommended weighting | Criterion | Documentation requirements |
|-----------------------|---|--|
| 50% | <p>Zero-emissions machinery</p> <p>The Supplier is awarded points for the ratio of zero-emissions and/or biogas-based machines to be used when performing the contract.</p> <p>Ref. "Appendix xx: List of machines and vehicles".</p> | <p>The Supplier shall enclose the completed version of "Appendix xx: List of machines and vehicles".</p> |
| 30% | <p>Transport of bulk materials</p> <p>The Supplier is awarded points for the ratio of zero-emissions and/or biogas vehicles used to transport bulk materials to/from the building/construction site.</p> <p>The Supplier is also awarded points for reduced transport of bulk materials, based on the number of kilometres and the number of tonnes of materials.</p> <p>Ref. "Appendix xx: List of machines and vehicles" for further information.</p> | <p>The Supplier shall enclose the completed version of "Appendix xx: List of machines and vehicles".</p> |
| 20% | <p>Other transport and other measures</p> <p>The Supplier is awarded points for their ability to reduce use of fossil vehicles for transport of materials, waste, equipment, personnel etc. at or to/from the building/construction site.</p> <p>The Supplier shall describe other measures to be implemented in order to reduce local pollution and greenhouse gas emissions for execution of the contract. Points are awarded according to estimated reduction in emissions.</p> | <p>The Supplier's description. The description shall have maximum 3,500 characters.</p> |

GUIDELINES:

The sub-criteria for direct emissions on construction sites are categorised as follows; zero-emissions machinery, transport of bulk materials and other transport.

The recommended weighting for these three is 50%, 30% and 20% respectively of the sub-criterion for emissions related to building and construction work. Weighting for these sub-criteria is a recommendation only.

The points are calculated as follows:

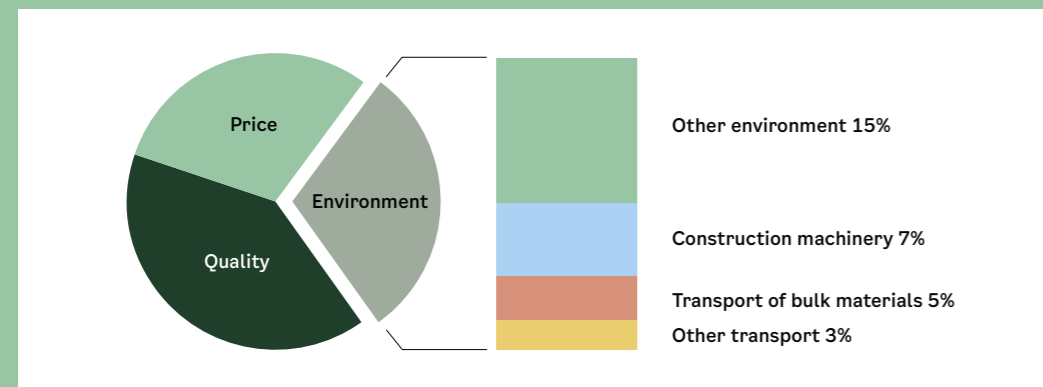
The evaluation method is described in detail in appendix XX "List of machines and vehicles", sheet X

Zero-emissions machinery: The supplier is awarded points for the machines that make use of zero-emissions or biogas technology. The highest score is awarded for zero-emissions technology.

The machine categories are divided into three weight classes; small (less than 10 tonnes), medium (10-20 tonnes), large (more than 20 tonnes). The heaviest machines have the highest weighting.

Transport of bulk materials: The supplier is awarded points for the vehicles that make use of zero-emissions or biogas technology. The highest score is awarded for zero-emissions technology.

The points are calculated on the basis of number of kilometres and tonnes carried to/from the building/construction site using zero-emissions or biogas-operated vehicles. Suppliers who carry the materials over short distances using zero-emissions technology are awarded the highest score. The Principal defines in advance the number of tonnes of material to be carried in connection with the project.



The figure illustrates how weighting can be distributed for the Environment award criteria

3.2 Simplified award criteria for procurement with estimated value of less than NOK 5 million excl. VAT (optional)

GUIDELINES:

For procurement with an estimated value of less than NOK 5 million excl. VAT, the Principal may choose whether or not to apply the award criteria. The simplified award criteria below may be included in the competition specification.

| Recommended weighting | Criterion | Documentation requirements |
|-----------------------|--|--|
| 50% | Zero-emissions machinery The Supplier is awarded points for the ratio of zero-emissions and/or biogas-based machines to be used when performing the contract. | List of machines and vehicles to be used on the contract |
| 30% | Transport of bulk materials The Supplier is awarded points for the ratio of zero-emissions and/or biogas vehicles used to transport bulk materials to/from the building/construction site. | List of machines and vehicles to be used on the contract |
| 20% | Other transport and other measures The Supplier is awarded points for their ability to reduce use of fossil vehicles for transport of materials, waste, equipment, personnel etc. at or to/from the building/construction site. The Supplier shall describe other measures to be implemented in order to reduce local pollution and greenhouse gas emissions for execution of the contract. | The Supplier's description. The description shall have maximum 3,500 characters. |

4 Standard contractual requirements: Environment

GUIDELINES:

The contractual requirements below shall be included in all relevant contracts.

The Supplier guarantees compliance with the contract's environmental requirements and with the prevailing environmental legislation. The Supplier shall take active measures to reduce environmental impact when fulfilling the contract.

4.1 Environmental requirements that apply during the contractual period

The following environmental requirements apply to this contract:

I. Fossil-free construction machinery and vehicles

All machines used on the building/construction site shall be fossil-free. All machines used shall have CE type approval and be registered in the Machine registry.

All vehicles used for transport of bulk materials and waste to/from the building/construction site shall as a minimum comply with Euro 6/VI emission standard and make use of fossil-free fuel.

GUIDELINES:

Re. the co-purchase agreement for biofuel in the City of Oslo:

In certain situations, it may be appropriate to assist the Supplier when purchasing biofuel. The City of Oslo is taking action to establish a dynamic co-purchase agreement for biofuel primarily used in own machines and vehicles, but also in relation to the City's building and construction procurement processes.

II. Requirement for zero-emissions construction sites by 2025

The Supplier shall take active measures to make maximum use of zero-emissions solutions on the construction site from start of construction and up to commissioning. All machines and equipment used on the construction site shall be zero-emissions by 2025. The transition to zero-emissions machines and equipment shall be included in the price for the assignment.

III. Requirement for zero-emissions and biogas vehicles for transport of bulk materials by 2025

The Supplier shall take active measures to reduce emissions from transport of bulk materials. By 2025, all vehicles for transport of bulk materials to/from building/construction sites shall be carried out using zero-emissions vehicles (i.e. battery-electric or hydrogen) or biogas vehicles that as a minimum meet the requirements for Euro 6/VI. The transition to vehicles with the above-mentioned fuel technologies shall be included in the price for the assignment.

GUIDELINES:

Fulfilment of contractual requirements II and III will be discussed during contractual fulfilment meetings

IV. General information for machines and vehicles

The Supplier is obliged to make use of the machine and vehicle technologies and/or fuel types specified in the tender (cf. Tender appendix XX). New vehicles or fuel types introduced during the contractual period shall as a minimum be equally eco-friendly and climate-friendly as stated in the original agreement. In the event of unforeseen events outside the control of the Supplier, the Supplier may be exempt from contractual requirements provided that the Supplier can provide documentation to show that corresponding replacements are not available. Any exemption from the requirements is conditional upon approval by the Principal.

V. Fuel

The Supplier shall at all times be able to present documentation regarding what types of fuel have been purchased and used during the contractual period. This documentation shall include, e.g. the following information: fuel manufacturer, fuel supplier, volume, origin and certification.

For this contract, the Supplier has committed to making use of fuel that meets the EU's sustainability criteria* for biofuel.

The Supplier shall at all times be able to present documentation that the biofuel meets the sustainability criteria.

If the Supplier is engaged on several simultaneous projects, they must document procurement of the volume of fossil-free fuel required to carry out the assignment for the City of Oslo for the duration of the contractual period. If the Supplier has committed to making use of biogas vehicles and/or biogas machinery, a mix of natural gas will only be accepted if 100% pure biogas is not available on the market. The Principal shall be notified if this occurs.

VI. Running on idle

Running on idle is not permitted at the Principal's addresses. This applies to all machines and vehicles.

VII. Provisions regarding exemptions

The Principal may award exemptions from all or parts of the environmental provisions if the Supplier is able to document that it is not practically possible to meet the requirements. Exemption shall be issued in writing and shall describe, e.g., time and scope for the exemption.

GUIDELINES:

Other types of requirements

For innovative procurement processes, such as Best Value Procurement (BVP) and partnership contracts, the procurement process is different. As a result, the requirements for these processes must be adapted to the procurement process. They must, however, be based on the minimum requirements and contractual requirements, but the award criteria do not apply. The premises for the agreement must be that zero-emissions solutions shall be utilised.

* Regulations relating to restrictions on the manufacture, import, export, sale and use of chemicals and other products hazardous to health and the environment [Product Regulations]sections 3-6 to 3-9

4.2 Breach of environmental provisions

Can be included together with the other provisions regarding breach in the contract, if more appropriate. The appropriate daily fine must be assessed specifically for each procurement.

If the Supplier is not able to meet one or more of the environmental requirements or does not deliver in accordance with the tender (agreed performance), the Principal is entitled to claim a proportionate daily fine for the period of time during which the breach lasts.

The rate for the daily fine per working day for breach of environmental provisions is up to [XX]% of the contractual amount, but not less than NOK 1,000 excl. VAT.

In the event of repeated or severe breaches of the environmental provisions, the Principal is entitled to terminate the contract with immediate effect.



Notes



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